

Forest Certification in Indonesia

Dwi Rahmad Muhtaman

LEI-The Indonesian Ecolabelling Institute
Bogor, Indonesia

Ferdinandus Agung Prasetyo

CIFOR-Center for International Forestry Research
Bogor, Indonesia

Paper presented at the Symposium

Forest Certification in Developing and Transitioning Societies:
Social, Economic, and Ecological Effects

Yale School of Forestry and Environmental Studies
New Haven, Connecticut, USA

June 10 & 11, 2004

TABLE OF CONTENTS

I. INTRODUCTION.....	3
II. BACKGROUND FACTORS.....	4
Ownership and Tenure	
Forest Licenses and Concessions	
Community Land Tenure	
Markets	
III. THE EMERGENCE OF FOREST CERTIFICATION.....	9
Initial Support	
Institutional Design	
Standards	
Forestry Problems	
Roadblocks and Challenges	
IV. THE REACTION TO CERTIFICATION.....	28
Forest Policy Community and Stakeholders	
Forest Owners	
Current Status of Forestland Certification	
Current Status of the Certified Marketplace	
V. EFFECTS OF FOREST CERTIFICATION.....	35
Power	
Social	
Economic	
Environmental	
VI. CONCLUSION.....	42
VII. REFERENCES.....	44

I. INTRODUCTION

Although it is often viewed as exclusively a market-driven tool for sustainable forest management, forest certification is actually much more: certification encourages collaboration, facilitates conflict resolution, builds confidence and trust, promotes partnership, and—of course—promises a premium price. These elements of a vision are a challenge for both private and communal forest managers. Certification, at least currently, may be a tool for breaking the impasse in forest management and moving gradually toward sustainable forest management for industrial and community forestry.

The implementation of certification in Indonesia has many unique features. Many stakeholders questioned its effectiveness when the notion was introduced into the forestry arena in the 1990s. Not many parties welcomed the certification idea. However, international pressures including boycotts of Indonesian wood products in Europe and the US pushed forest certification onto the national forestry agenda. Those who believed in the potential of certification to encourage better forest management established Kelompok Kerja Sertifikasi Lembaga Ekolabel Indonesia (Certification Working Group of Indonesia Ecolabel Institute). The initial goal of the Working Group was to develop a forest standard adapted to the Indonesian context. The Working Group officially became the Foundation of Lembaga Ekolabel Indonesia in 1998.

Certification has been underway in Indonesia for about 10 years. Challenges to its success include a difficult external environment that includes inconsistent government policy, poor law enforcement, and corruption. In this context, detractors conclude that certification cannot work in Indonesia unless there is fundamental change in existing arrangements, in particular land tenure arrangements and the policy environment.. Conversely, those who promote certification argue that at the local/practical/unit management level there are companies who are struggling to improve their performance and who are making progress.

Since 1998, 14 forest management units (FMU) have undergone a certification assessment out of a possible 300. Of the 14, one passed the LEI and FSC scheme with total area of 90,957 ha; four passed the expert panel II of LEI scheme (total area of 665,046 ha); two had a lower performance (total area of 557,173 ha); three passed only the screening process (total area of 493,900 ha); and four failed altogether (total area of 720,651 ha).

Those with experience in certification recognize its influence on technical forestry practices. To date, in Indonesia, certification has pointed the way toward better forestry practices. Its economic and policy benefits are, however, considered to be much less insignificant.

II. BACKGROUND FACTORS

Indonesia is one of many developing countries to experience significant decline in its forest resources. Landsat images for 2000 indicated that there is significant deforestation and degradation. Of more than 101.73 million ha, 59.62 million ha is under forest. Of this, 10.52 million ha is protected forest, 4.69 million ha is conservation forest, and 44.42 million ha is production forest. Deforestation rates during 1985-1997 were estimated to be 1.6 million ha/year, increased significantly during 1997-2000 to 3.8 million ha/year (Purnama, 2003). The causes of deforestation are illegal logging, log trafficking and forest conversion

The new national policy on *Otonomi Daerah* (local government autonomy) diminished the voice of the community and contributed to further forest resource degradation. The private sector, NGO community, academia and research community agree that the wealthy business communities have seized the opportunity to weaken the autonomy of the policy making system for their own benefit. Local governments focus on the quick extraction of timber to increase their local income.

Ownership and Tenure

The Government of Indonesia (GoI) designates three major categories of forest: (1) Conservation Forest area is about 19 million hectares, provided to conserve unique biodiversity, (2) Protection Forest area is about 31 million hectares with the primary function of supporting the living system, such as providing potable water and preventing erosion and flooding, and (3) Production Forest is about 64 million hectares intended to produce timber in sustainable manner. In addition to the above categories, GoI provides Conversion Forest designation for the non-forestry development of about 8 million hectares. About 43 million hectares of Indonesian forest has been degraded or deteriorated. Degraded forest is not only in the Production Forest but also in the Protection Forest and Conservation Forest areas.¹ This will leave the total forest about 122 million ha.² A common agreement about the forest areas is around 120 million ha. Forest Watch Indonesia provides data as in Table 1, which shows the decline in forest cover of 15% between 1986 and 2000 (more than 10 million ha loss in 14 years).

¹ Key-note speech entitled "Indonesian Forest Policies In The Era Of Conservation And Rehabilitation" by Mohammad Prakosa the Minister of Forestry of the Republic of Indonesia on the occasion of International Symposium on Illegal Logging. Tokyo, 24 June 2003. But the statistics mostly quote the areas of forest is about 120 millions ha.

² Head of Forestry Planning: "Indonesia endows with rich forest resources of 120,35 million ha which is 68% of the Indonesian forest land. The area consists of Protection forest 33,52 million ha, Production forest 66,33 million ha and conservation forest 20,50 million ha.

Table 1. Forest Area in Indonesia 1986-2000

Forest Classification	1986		2000		Change in 1986-2000	
	Area	%Total	Area	%Total	Area Change	% Change
Production forest	31,850,000	23	35,200,000	29	3,350,000	11
Limited production forest	30,520,000	22	21,800,000	18	-8,720,000	-29
Protected forest	29,680,000	21	31,900,000	27	2,220,000	8
Conservation forest	18,250,000	13	23,300,000	19	5,050,000	28
Conversion forest	30,540,000	22	8,200,000	7	22,340,000	-73
TOTAL	140,840,000	100	120,400,000	100	20,440,000	-15

Source: Forest Watch Indonesia-Global Forest Watch. Potret Keadaan Hutan Indonesia. 2001: 18

Forest Licenses and Concessions

There are three main forest production management systems in Indonesia: KPH, HTI and HPH. The KPH (Kesatuan Pemangkuan Hutan/Forest Stewardship Unit) system has been developed in Java following the long history of plantation forestry dating back to the colonial era.³

The second forest management system is HTI (Hutan Tanaman Industri Industrial Forest Plantation). The main purpose of HTI is “an activity to rejuvenate and revitalize in order to increase the potential of production forest to guarantee the availability of

³ The history of teak plantation in Java can be observed in “Pengelolaan Hutan Bersama Rakyat (*cooperative forest management*): Teori dan Aplikasi pada Hutan Jati di Jawa.” Hasanu Simon, 1999. Jogjakarta: Bigraf Publishing. Also see Hasanu Simon, “The Evolvement of Management of Teak Forest in Java. Paper presented at the Third Regional Seminar on Teak: Potential and Opportunities in Marketing and Trade of Plantation Teak, Challenge for the New Millenium, Jogjakarta-Indonesia, July 31-August 4, 2000. Through an enactment of PP 15/1972 (government decree) Perhutani officially become an independent state-own company managing forest in Central Java and East Java (See for example Perum Perhutani, The History and Current marketing and Trade in Perum Perhutani. Paper presented at the Third Regional Seminar on Teak: Potential and Opportunities in Marketing and Trade of Plantation Teak, Challenge for the New Millenium, Jogjakarta-Indonesia, July 31-August 4, 2000. In 1978 The Forest Service (Dinas Kehutanan) of West Java was made part of Perhutani through government decree No 2/1978. Perhutani legal status was strengthened through another government decree No 53/1999. With three provinces under the Perhutani forest management, today Perhutani manages approximately 2,5 million ha of out of 3,023 million ha forest land in Java and Madura.

industrial material and is an effort to rehabilitate unproductive production forest.” In practice, HTI establishment is a vehicle to getting more profits by cutting the logs in the HTI land clearing process.⁴

The third forest production system is HPH (Hak Pengusahaan Hutan/natural forest concession holders). Indonesian corporations or individuals are only granted forest concessions by the Ministry of Forestry in production forests and limited production forests. GoI established Peraturan Pemerintah (government decree) No. 21/1970, which grants rights to the private sector to manage HPH forest areas.⁵ The decree provided the HPH holders a non-transferable 20 year right and obliged the concessionaires to follow the principle of sustainable forest management as prescribed by the Indonesian selective logging and planting system (Tebang Pilih Tanam Indonesia, or TPTI) (World Bank, 2000: 21).⁶

After more than three decades of operation, the HPH system has failed to achieve sustainable forest management (Tim Fakultas Kehutanan IPB, 2002; Purnama, 2003). By June 1998, forest degradation from HPH operations had reached 16.57 million ha. From the 1970s to present, the government granted concessions to logging companies but failed to adequately enforce sustainable harvesting and replanting regulations.

Community Land Tenure

Article 33 of the 1945 Indonesian Constitution stipulates that the State controls forests and the utilization of the resources therein. Acting on this authority, the government of Indonesia controls, manages and administers the nation's forests under the provisions of the 1967 Basic Forestry Law (Act 5) and the supporting rules and regulations. In 1999, a new Basic Forestry Law No. 41/1999 was enacted, which helps strengthen forest conservation measures. Although recognized in the 1960 Agrarian Law,

⁴ This condition was maintained until 1989, such as in the Forestry Ministerial Decree No. 471/ Kpts-II/1989, where the prioritization of land for HTI development is apparent (Colchester, Martua and Boedi, 2003: 145). Unfortunately due to the lack of appropriate control, monitoring and law enforcement the HTI development induce and legitimate the degradation of natural forests. Furthermore, tree crop plantation developers request more land than they need to get added profits from the timber on lands to be cleared, overlapping and chaotic forest land use classification systems work to the benefit of private plantation developers at the expense of the rights and livelihoods of forest-dwelling people, and resolution of these problems is hampered by the persistence of the government top-down approach and nonrecognition of traditional land use rights (Kartodihardjo and Agus, 2000).

⁵ In 2002 the number of HPH was 351 covering 36,4 million ha of forest areas. This is greatly declining from 447 concessions had been allocated covering 54.09 million ha by 1997 (Tim Fakultas Kehutanan IPB, 2002: 1). For the complete reading of the forest concessionaires concentration of ownership please refers to the study by David W. Brown. Addicted to Rent: Corporate and Spatial Distribution of Forest Resources in Indonesia; Implication for Forest Sustainability and Government Policy. DFID/ITFMP. 7 September 1999. However the study does not cover the latest development from 1999-2004.

⁶ The system prohibits harvesting trees of less than 50 cm and to follow a 35-year rotation to permit adequate regeneration. The ministry and the HPH holder sign an agreement that contains rules for long term planning, harvest level based on approved annual work plans (Rencana Karya Tahunan, or RKT), land rehabilitation after harvests, and community development. The applicant guarantees the establishment of a vertically integrated forest industrial activity (sawmill or plymill) in association with the concession. The agreement is renewable, and in some cases renewables have been denied because of the poor performance. In many cases, however, HPHs have been renewed despite poor management (World Bank, 2000: 21).

customary land rights (*hak tanah adat*) were not clearly acknowledged in the 1967 Basic Forestry Law. However, they are given more emphasis in the new Basic Forestry Law of 1999.⁷ The 1967 Basic Forestry Law determines which land will be state forest and for which purposes the forests will be used. However, the government has been relatively powerless to enforce ownership rights and defend the legal status of forests.⁸ The lack of provision for the rights of local communities has resulted in many cases of conflicts between local communities and concession holders.

The prevailing conflict over forestry land tenure suggests that the existing laws and regulations mentioned above have not clearly recognized the community land tenure system and ownership. In principle, all land and forests are owned by the state.⁹ The rights of the community that have traditionally lived in and around the forests have been neglected or generally overruled.¹⁰ Officially there is a HKM (community forestry) program, which is basically provides the community access to state lands for planting trees.

Markets

A paper prepared by Forestry Team IPB (2002) revealed that during the past three years, there has been closure of HPH and HTI businesses.¹¹ The total production forest

⁷ Kartawinata, K., Riswan, S., Gintings, A. N. & Puspitojati, T. 2001. An overview of post-extraction secondary forests in Indonesia. *Journal of Tropical Forest Science* 13(4): 621-638 (2001) 621

⁸ Government of Indonesia through the State Ministry of Agraria/National Agrarian Board issued ministerial decree No. 5 Year 1999 on Guideline of Resolving Adat Land which highlight the principle of determining adat land (*ulayat*) and its claim implementation. This was introduced through Peraturan Menteri Negara Agraria/Kepala Badan Pertanahan Nasional No. 5 Tahun 1999 tentang Pedoman Penyelesaian Masalah Hak Ulayat Masyarakat Hukum Adat.

Under the current legal structure, ministerial decree does not have any teeth to implement at the local government level.

Since 1995, however, the government has encouraged local populations to take a more active role in forest management and the establishment of social forestry programs. This was supported by a decree in 1998 that authorised communities to undertake timber harvesting through cooperatives. Another similar programme is the Management of Forest Production by Traditional Societies, which involves non-government organizations (NGOs) working in partnership with local communities.

Although not comprehensive, the new Forestry Law of 1999 does define some aspects of the property and other rights of local communities with regard to forest land. It defines a customary forest (*hutan adat*) as a state forest on the territory of a customary society (*masyarakat adat*) and acknowledges community rights 'as long as they are evidently in place and their presence is acknowledged and as long as their rights do not conflict with national interests'. Peraturan Menteri Negara Agraria/Kepala Badan Pertanahan Nasional No. 5 Tahun 1999 tentang Pedoman Penyelesaian Masalah Hak Ulayat Masyarakat Hukum Adat.

⁹ Maria Rita Ruwastuti. 2000. *Sesat Pikir Politik hukum Agraria: Membongkar Alas Penguasaan Negara Atas hak-hak Adat*. Jogjakarta: Insist Press, KPA, Pustaka Pelajar. P. 129-149. See also Dianto Bachriadi, Erpan Faryadi, dan Bonnie Setiawan. 1997. *Reformasi Agraria: Perubahan Politik, Sengketa, an Agenda Pembaruan Agraria di Indonesia*. Jakarta: KPA dan Lembaga Penerbit Fakultas ekonomi Universitas Indonesia.

¹⁰ The World Bank, 2000: 19.

¹¹ Tim Kehutanan IPB. 2002. *Conditions, Issues And Policies On Management Of Production Forest: Policy Recommendations to the Ministry of Forestry*. Executive Summary. Unpublished. This paper initially was intended to provide a general overview and specific recommendation for action of the latest situation for the Production Forest Director, Ministry of Forestry. It is hope that based on the overview and

managed by HPH has declined from 60.48 million ha HPH in 1991 to 36.4 million ha, or 60% of the 1991 amount, today.

The average legal log production (round wood) for the past 6 years, whether from HPH, HTI, or other sources has only been capable of supplying 37% of industrial raw material needs in 2001.¹² In the year of 2002, round wood production was about 8.14 million m³, consisting of 3.02 million m³ from HPH, 0.18 million m³ from IPK, and 4.93 million m³ from HTI. Round wood from privately owned forests are not covered in this statistic due to a lack of information. In 2002, reported production of sawn wood was approximately 415,751 m³, a decrease over recent years.¹³ Another product generated from the forest is plywood.¹⁴ The production of plywood has declined after the peak period in 1996/1997. In the year of 2002, reported plywood production was only 1.20 million m³. This figure represents a sharp drop after the year of 2001.

Other forest products included block board, veneer, particle board, chip wood, pulp, molding and dowels. Of these, veneer is the most important by volume at 4,361,044 m³ followed by plywood (1,202,040 m³) and sawn timber (415,751 m³).

Forest Products Export

The main forest products from Indonesia are sawn wood, plywood and other secondary forest products such as pulp, paper, and molding.

Volumes and revenues from forest product exports are presented in Table 2.

Forest products (plywood, sawn timber, woodworking, block board, pulp, paper and veneer) are exported mainly to Asian countries such as Japan, Singapore, Taiwan, Hong Kong, China, and South Korea. Other destinations are the European countries and the USA. In 2002, Taiwan was the major destination for sawn-wood exports, with 286,279 m³, or 73 % of total sawn-wood export. Japan is a consuming country for plywood followed by Middle East. Sawn timber is mostly exported to Asian countries.

recommendation, the Ministry of Forestry can quickly understand the critical and issues and take a necessary relevant policy. It was not clear how the recommendations drawn from the paper adopted by the policy maker.

¹² The main forest product. Round wood is all timber that felled or harvested for providing raw material of primary forestry industries (IPKH). The source of round wood may come from natural forest through forest concessionaires (HPH), forest felling license (IPK), forest product harvesting license (HPHH), plantation forest licence (HTI) and timber out side forest such as private owned forest, etc. In this forest product statistic are excluded fuel wood and wood chip.

¹³ Sawn wood is wood that has been produced either by sawing lengthways or by a profile- chipping process and that, with a few exceptions, no more than 6 cm in thickness and also having water moisture no more than 16 %. Sawn wood processed from round wood must be supported by legal forestry documents and also come from legal forest management unit.

¹⁴ Plywood is a panel consisting of an assembly of veneer sheets bonded together with the direction of the grain in alternate plies generally at right angles. The veneer sheets are usually placed symmetrically on both sides of a central ply or core which may itself be made from a veneer sheet or another material.

Plywood products are mainly exported to Japan, which took 1.29 million m³, equal to 26 % of total of the plywood export. Only a small portion of forest products are exported to Europe (UK, Netherlands, Belgium, Italy), with the USA the second largest export destination for sawn timber and paper.

Table 2. Processed Wood Exports by Products 1992-2001

Year	Sawn timber		Plywood		Wood working		Block board	
	1,000 m ³ (cuM)	Million US\$	1,000 m ³ (cuM)	Million US\$	1,000 m ³ (cuM)	Million US\$	1,000 m ³ (cuM)	Million US\$
1992/1993	9.45	3.59	9,761.00	3,549.11	1,199.46	590.82	-	-
1993/1994	5.04	3.98	9,626.00	4,752.42	1,597.05	1,114.92	-	-
1994/1995	2.37	2.04	7,333.09	3,372.87	648.76	418.24	-	-
1995/1996	0.80	0.85	8,338.82	3,854.17	649.10	454.62	-	-
1996/1997	0.06	0.05	9,366.57	4,429.48	206.83	143.41	-	-
1997/1998	0.30	0.48	4,800.74	2,320.38	142.11	75.62	120.63	37.10
1998/1999	15.90	22.00	4,863.38	1,300.53	1,130.49	480.77	511.74	109.39
1999/2000	20.50	68.76	3,372.88	1,276.41	849.14	379.71	436.66	114.72
2000*	9.87	40.52	3,096.24	881.00	1,190.40	309.71	368.78	70.56
2001	12.31	5.19	930.35	315.21	153.90	66.52	407.95	34.05
2002	392.588	1.91	4,983.025	440.91	6,676.796	222.83	464.218	31.61

Source: Directorate General of Forest Production Development 2001

Remark *) data on April-December 2000

However, it is surprising that the export data indicate some significant differences. Plywood export in 2002 (4,983,025 m³) were high compared to the production (1,202,040 m³). This is also the case with the volume of woodworking products and sawn timber. This may be because plywood production was not recorded properly, either because of illegal raw material or simply not being recorded, leading to a discrepancy in forest trade statistics in Indonesia. (Ministry of Forestry 2003)

III. THE EMERGENCE OF FOREST CERTIFICATION

Initial Support

Pre-Establishment of LEI Working Group (1990-1993)

There are few references available that document the early stages of certification development in Indonesia. The most comprehensive one is the work done by Elliot (2000). Certification started when there was an assessment of Perhutani by SmartWood in 1990. Since it was run by an NGO, certification was introduced into Indonesia through the NGO network. The early reaction was mixed. After decades of struggle both through field action and policy intervention to prevent more forest destruction due to logging operations, few NGOs felt that certification would provide a tool for change. National government efforts to influence the process towards improved forest management were

often seen as political in nature, thereby reducing their chances of success; NGO efforts even more so.

Supporters of certification believed that intervention was possible through a global market campaign that targeted wood from developing countries including Indonesia. Though committed to achieving ‘sustainable forest management’, Indonesia continues to have a lack of capacity to ensure that its efforts achieve fruition. This leads to a loss of credibility for Indonesian forest products in international markets.¹⁵ The idea behind certification was that those producers who did not harvest the logs in a sustainable way would have difficulty getting market access. The certification system would determine the sustainable harvest and provide a defined and required standard of performance that was non-political.

NGOs promoting certification argued that it was an effective instrument to push forest resources democratization: it would make practices on forest concessions more transparent, enhance public involvement in forest management through public consultation and monitoring. Furthermore, supporters of certification viewed it as providing a useful “level playing field” and “learning arena” for the sustainable forest management among interested parties including the private sector (concession and industries), government, NGOs, academics, and community.

NGOs saw certification as a means for the Indonesian forestry industry to change the way they harvest the forests and accept greater environmental and social responsibility. By not doing so, they would run the risk of difficulties in finding export markets. Supporters also claimed that certification has something to offer to forest managers in Indonesia. Forest managers who want to improve forestry practices often just do not know where to start, and the guidance laid down in certification standards could give them a place to start. In addition, a well-managed certification program would apply logic, method and planning to forest management activities. It would enable forest managers to legitimately justify their actions and lend credibility to a process that may well be in need of it (Rowland and Simpoha, 1999).

During ITTO meetings in 1990 members approved a set of "Guidelines for the Sustainable Management of Natural Tropical Forests" (ITTO 1990b) and agreed that producer members should develop national guidelines based on the ITTO model to encourage progress towards "Target 2000". Neither “Target 2000”, nor the ITTO guidelines, made reference to certification. However, both eventually served as “building blocks” for forest certification in Indonesia with the guidelines providing a technical basis for criteria and indicators, and the year 2000 being seen by the Ministry of Forestry as the date by which the program should be ready for implementation (Elliot, 2000). At this point, the Government of Indonesia developed an interest in establishing an agenda for certification development.

¹⁵ Ian Rowland and Max Simpoha. November 1999. Analysis of the Forest Management Certification Process, Indonesia. For use as a basic material not publish. Department for International Development (DFID), DFID Forestry Indonesia – UK. Draft 17/11/99

On the market side, wood products from Indonesia were challenged by environmental NGOs in European countries and the USA. They called for a boycott and pressured governments to ban the use of tropical timber in public construction in various municipalities in Germany, Holland, the UK and the USA (Elliot, 2000). The situation became more serious, however, in June 1992, when the Austrian parliament passed the "Federal Act on the Labelling of Tropical Timber and Tropical Timber Products as well as the Creation of a Quality Mark for Timber and Timber Products from Sustainable Sources". This act made labelling of tropical timber obligatory in Austria, although due to international pressure on Austria lead by Indonesia and Malaysia the act was revised in the spring of 1993, removing the obligatory nature of the timber labelling and extending voluntary labelling (Rametsteiner 1994 quoted in Elliot, 2000). Forest concession holders subsequently put certification on the agenda because 40% of total Indonesia exports were in product categories likely to be affected by an ecolabel. Both the Indonesian government and the private forestry sector, APHI, began to promote the establishment of certification. While some Indonesian NGOs supported this move, others argued that certification could not be effective within the political structure of the time.

Rowland and Simpoha (1999) identified several constraints and challenges for certification in Indonesia, which were of particular concern to NGOs. These included the perception that FSC required an absence of conflict over rights to forest concessions, an obligation that could rule out certification for nearly all the country's forestry concessions. But there was a policy problem as well. It is debatable whether Indonesia can afford to wait for certification to change attitudes and practices in the forestry sector in view of current deforestation rates and the extent of illegal logging. Influencing forest production indirectly through the global timber trade is a long-term process. It depends on whether a sufficient market for 'eco-timber' really exists, whether consumers in the North are serious about sustainability, and whether the profitable markets for 'ordinary' wood and wood products will remain.

To facilitate certification, changes to silvicultural policy in Indonesia are needed, as concessionaires are now required by the terms of their concessions to undertake practices that contradict certification requirements. It is questionable whether certification can stimulate a policy change of sufficient magnitude in Indonesia's forest management system.

Compounding these policy problems, there is a lack of community level institutions for forest management after 30 years of virtual exclusion from the forest. The legal framework for community forestry is still unclear. For example, *hutan adat* rights and options are untested. The legal obstacles to recognition of community rights are still quite great. It may be unrealistic to expect legal changes that bring them into line with certification standards in the near future.

While many NGOs were discussing certification at the side line, LATIN (Lembaga Alam Tropika Indonesia /the Indonesia Tropical Institute) got involved in a real certification assessment with the SmartWood program by taking part in the Perhutani

certification in 1990. Perhutani was granted certification in November 1990 with approximately 2 million hectares (over 4.9 million acres) of plantations in 54 forest management districts (KPH), mostly in teak.¹⁶

In 1992 and early 1993, MPI Masyarakat Perhutanan Indonesia / Indonesian Forestry Community created a working group to develop Indonesian criteria for sustainable forest management. The group was coordinated by APhi (the Indonesian association of forest concession holders). The standard (criteria and indicators) draws mostly from the ITTO standard. Professor Soerianegara from the Agricultural University in Bogor headed up the team that developed this standard, which included academics and representatives from concessionaires. The Ministry of Forestry and the Ministry of the Environment chaired the APhi GROUP. Preparatory work on this had apparently started informally within MPI in 1990 after the ITTO meeting in Bali. However, the group was formally constituted and the link made between criteria and certification in 1992. The analysis of MPI seems to have been that the development of criteria for sustainable forest management and timber labeling were going to be inevitable in future, and that they should take the lead in developing these criteria rather than run the risk of having them imposed on them (Elliot, 2000: 99). But, later the APhi certification system only applied as an internal measure to its concession members (LEI, no year, unpublished).

Establishment of LEI Working Group (1993-Feb 1998)

With backing from government and concession holders, environment certification was inevitable. There was general agreement that Indonesia should adopt certification as a tool to improve its forest management practices. Two options were debated at this time: join the FSC process already under way—or develop a national, independent certification process, system and standard separate from external processes. Stakeholders in Indonesia chose the second option and certification began as a producer-led initiative independent of other international initiatives, very much along the lines of Malaysia's National Timber Certification Council. However, both countries have since chosen to seek closer ties with international certification initiatives, most notably the FSC, in the aim of gaining international market recognition for their labels.

The reason behind this was that, if certification is on the way, the Indonesian timber trade preferred to be a market leader, participating in shaping the system, rather than having to adapt to a system once it is established. Second, there is a need for additional mechanisms for evaluating the quality of forest management in Indonesia, and this is fully recognized by the Ministry of Forestry. Thirdly, there was increased pressure from Indonesian civil society for changes to the forestry sector, where many forestry practices marginalize the role and rights of community as forest beneficiaries (Elliot, 2000: 100).

¹⁶ The Public Release of The Rainforest Alliance's SmartWood Program Suspends Certification Of Perum Perhutani's Teak Plantations In Indonesia. August 21st, 2001

At the end of 1993, on the Ministry of Forestry initiative, a working group was established. The Minister announced that he had asked Dr Emil Salim, former Minister of the Environment and Member of the Bruntland Commission to establish an independent body to control certification: LEI - the Indonesian Ecolabelling Institute. This began to take shape in early 1994 on the basis of a Memorandum of Understanding signed by Mr. Djamaludin and Dr. Salim which apparently provided for US\$500,000 funding from the Ministry to the LEI working group, and quarterly progress reports from the group to the Ministry (Elliot, 2000: 102). The working group was composed of NGOs and academics.¹⁷

There are three objectives of the Working Group (Kelompok Kerja Ekolabel Indonesia /Pokja LEI): a) to develop criteria and indicators of sustainable forest management, b) to design a decision making method in the timber certification process, and c) to design institutional arrangements for the formal establishment of the Indonesian Ecolabelling Institute.¹⁸ The basic principles of the LEI programme have been defined as follows (Suntana 1996, LEI 1996): to function as an independent, non-profit, third-party certification body; to focus on implementing the criteria and indicators and procedures for certification and making the final decision on issuing certificates; to ensure transparency throughout the certification process; to aim for mutual recognition of certification schemes internationally; to ensure that certification is seen as an incentive not a punishment for concessionaires; and to implement certification on a voluntary basis.

Certification has been recognized as a strategic tool for forest based industry export. However, beyond trade issue, certification in Indonesia has a substantial mandate as a way to provide guidance and incentive for sustainable forest management. At the macro level, there is no macro-economic policy that takes degradation of ecology/environment into account.¹⁹ Certification can be a powerful tool that pushes the social, ecological and forest management performance into the economic value.

Along the process Pokja LEI involved a variety of interest parties including APhi expert team, National Standardization Board (Dewan Standardisasi Nasional/DSN), NGOs, and expert from universities. LEI standard draws from international documents namely FSC as well as ITTO criteria and indicator. Before the establishment of the working group, the Ministry issued a Ministerial Decree, adopted in April 1993 on

¹⁷ In 1994 the membership of the group was as follows: Dr Emil Salim, Chair; Dr Riga Adiwoso, Professor of economics, University of Indonesia; Ir Hariadi Kartodihardjo, PhD candidate in forest policy, Agricultural University of Bogor; Ir., Haryanto R. Putro, forest conservation, Agricultural University of Bogor; Ir Zaim Saidi (NGO-Yayasan Lembaga Konsumen Indonesia, a consumer advocacy group); Ir Asep S. Suntana, RMI-Indonesian Institute for Forestry and Environmental Research, an NGO; Ir Tri Nugroho, LATIN, Indonesian Tropical institute, and NGO, and Ir Mia Siscawati, RMI (LEI. 1994:5). From 1994 to 1997 the membership of the group was essentially the same with one NGO representative (Nugroho) being replaced with another one.

¹⁸ Emil Salim, Upik Djalins, Asep Suntana. Forest product trade and certification: an Indonesian scheme. Paper presented at the World Forestry Congress

¹⁹ Hariadi Kartodihardjo. Lecturer Paper Unpublished. January 2003. MEMPERBAIKI RUMAH TANPA PONDASI: 10 Tahun Inisiatif Sertifikasi Ekolabel dalam Belenggu Sistem Pengelolaan Hutan

"Criteria and Indicator for the Sustainable Management of the Natural Production Forest". The decree specified that the management of natural production forests would be considered sustainable if it complied with specified national level and management unit level criteria and indicators, which request the establishment of independent and credible certification system (Elliot, 2000: 102). It is important to note that Pokja LEI make use of sustainable forest principles developed internationally. In addition, at the same time the government of Indonesia reviewed the implementation of environmental impact assessment (EIA); the weakness of the EIA was part of critical inputs along the establishment of the Ecolabel certification criteria and indicator system.²⁰

This was a critical period for LEI in terms of the capability to establish a credible certification system. Ministry of Trade and Industry and Ministry of Environment relied on LEI for further development of certification both forest and non-forest products. Heated discussions eventually led to consensus among the interest groups, mainly NGOs (who want the social and ecological aspects are taken into more serious consideration) and APhi (who has developed their own certification system). Logical harmonization has taken place, resulting in the certification system that now is implemented. Through the establishment of the working group, APhi criteria and indicators were no longer imposed as a national standard. In late 1993 the APhi initiative gradually evolved into an internal auditing system to help concessionaires prepare for certification (Elliot, 2000: 103). Even today the APhi criteria and indicators are still used for evaluating the performance of members' forest concessions.

In 1994 at the conference organized by LEI working group, FSC and CIFOR, the draft LEI criteria and indicators were discussed. In general LEI criteria and indicators had a stronger social and environmental component than that of APhi. At the conference Emil Salim indicated that the working group intended to be compulsory for all concession (Elliot, 2000: 104). At the later development LEI decided to be a voluntary certification scheme.

Consensus to harmonize the certification standard between C&I LEI Working Group and APhi was achieved during this period. By the end of 1996, the main elements of the LEI forest certification programme were in place and in April it was submitted to the Indonesian National Standards Body for approval as a national standard. In April 1997 a workshop was held between the Ministry of Forestry, APhi and LEI at which the three institutions agreed that the LEI criteria were acceptable.

Because of this agreement on the key issue of criteria and indicators, this workshop can be seen as marking a key point in the programme development phase (Elliot, 2000: 104-105)

Field tests and system improvement was conducted intensively during this period. Certifiers and assessors were not yet developed. Therefore, LEI's role was multiple as a

²⁰ Hariadi Kartodihardjo. Idem ditto.

certification institution as well as assessor. Several trainings for assessors and expert panel were conducted, infrastructure for accreditation processes were prepared.

The key issue of 1996 was the LEI criteria, and in 1997 the LEI institutional arrangements.

Table 3. FSC and LEI Comparison

Items	FSC	LEI
Standard	<ul style="list-style-type: none"> • More focus on conservation • Principle and criteria designed for global application • Certifiers develop generic and more specific criteria and indicator according to the local specific • Focus on the implementation of planning documents • Emphasize on the output for SFM principle compliances • <i>Planning & Monitoring should be accessible for public</i> 	<ul style="list-style-type: none"> • Focus on TPTI (selective cutting) and other forest management requirement set by government • Criteria and indicators is set and specifically for Indonesian forest condition <ul style="list-style-type: none"> – 57 criteria: 21 Production, 19 Ecology, 17 Social • Verifiers has been defined for checking the implementation of the forest management according to the standard • Emphasize on the system applied by the forest management unit
Assessment process	<ul style="list-style-type: none"> • Scoping is voluntary • Assessment directly conducted by the accredited certifiers • The weakest indicator is subject for pre-condition request 	<ul style="list-style-type: none"> • Penapisan oleh panel pakar I wajib • Scoping / penilaian wajib • Public meeting and certification monitoring is link with the established Regional Communication Forum (FKD) • The weakest indicator can be compensated by the stronger one • More criteria
Decision making	<ul style="list-style-type: none"> • Certification decision is certifiers business 	<ul style="list-style-type: none"> • Decision making done by an independent Expert

process	<ul style="list-style-type: none"> • At least two peer reviewers for decision verification • FSC does not involved in the decision making process 	<p>Panel II based open the data from the certifier assessment process</p> <ul style="list-style-type: none"> • Application of Analytical Hierarchy Process approach • Assessors as a data enumerator/data collector
---------	---	---

Establishment of LEI Foundation (Feb 1998-2003)

Pokja LEI was officially established as foundation on February 1998 as Lembaga Ekolabel Indonesia (LEI). On June 1998 certification system for natural forest management was adopted as Indonesia National Standard. A more articulated objectives are set in the Academics Text of LEI Certification on Sustainable Forest Management (2000?). Two main objectives are added included to develop the certification of other natural resources, and to improve colaboration with relevant institution nationally, regionally and iternationally. To achieve its objective LEI will conduct policy studies, and policy advocacy based on the certification processes, continue to develop certification system and its implementation.

Along with the legal establishment of LEI, certification body has been approved. The certification body application was started in 1998. There were 10 applications and four were approved as LEI accredited certification body. From 1998 and on all the assessment was conducted by the accredited certification body.

In 2000 in order to obtain public and international confidence as a credible system and to refine field assessment methods, LEI has conducted a workshop in cooperation with FSC. The result was the protocol of Joint Certification Program (JCP) in accordance with the Mutual Recognition Agreement (MRA). The JCP Program is still ongoing with the purpose of strengthening the bargaining position of LEI in facing other forest certification initiatives, FSC among others. This action was taken to convince foreign interests of the high degree of credibility of the national-based system. The LEI system intends to gain a status as a compatible certification system to an internationally recognized system as well as being acceptable to local views.

JCP was signed between LEI and FSC and their accredited certification bodies (CBs) operating in Indonesia in September 2000¹². The salient elements include

- the JCP meets all requirements under both FSC and LEI certification systems
- the C&I of LEI will be used by all certification bodies operating in the country; the FSC-CBs will use all LEI C&I, including those exceeding the requirements of FSC as well as any additional requirements, not included in the LEI C&I
- only FMU that passes both LEI and FSC system requirements will be certified (both certificates will be issued and both logos can be used)
- an FSC scoping is not compulsory and will be determined by the FSC-CB

- public consultation is a fundamental component of the JCP
- public summaries of the certification decision will be made available in Bahasa and English
- surveillance visits and appeal process will be according to each system's requirements (LEI 2002).

LEI 2004 and Beyond: Search for Transformation

Since its establishment as a working group LEI has been a major player for driving certification in Indonesia. Certification system has been operational. Certification standard for natural forest and plantation, and chain of custody are fully developed. Standard for community based forest is under development and field-tested. Although *de facto* the certification in Indonesia (LEI development included) has been 10 years, however, the practical implementation by using Indonesia certification system is only operational for 4-5 years.

What has been achieved? IS there any forest management improvement? With current forestry condition, many would expect that certification is likely faced huge constraints to be effective. One opponent demanded that the certification should be halted (certification moratorium) to prevent the legitimating of bad forest management by the certification processes.²¹ On the other hand the proponent of certification argues that there are few forest concession that make every effort to manage forest better. Certification should be a tool to reward and provide incentive towards better forest management. Certification can be a tool as well to influence the policy change processes.

During ten years of certification in Indonesia two major forest management certified by SmartWood certification program: Perhutani in 1990-1995 and 1998-2002. More than 30s CoC certificate was granted by SmartWood program and was suspended following the total suspension of Perhutani forest districts. There is a chain of custody certificate was sustain because the company imports the certified pinewood from New Zealand.

SmartWood certified a community forest management unit scheme (PT Xylo Indah Pratama/PT XIP) in Lubuk Linggau, Sumatera in 1999. PT XIP starting its involvement in certification program in December 1998 when there was a scoping visit from SmartWood. On July 25-1st August 1999 a team of SmartWood conducted a full assessment. May 2000 PT XIP awarded as a certified as a community forestry management. This is the first certification issued for its kind in Indonesia. An annual audit is regularly carried out by SmartWood to ensure the consistency of PT XIP to comply with certification standard. Annual audit of March 2003 was completed and concluded that some significant improvement is needed in order to comply with certification standard. PT XIP was suspended in June 2003.

The only certified management unit currently operational is PT Diamond Raya. The certification of PT Diamond Raya Timber's operations in Riau province, Sumatra, is the

²¹ See Moratorium Certification by WALHI

first certification of logging in natural forests in Indonesia. It is also the first certification to be carried out under FSC-LEI's Joint Certification Programme, agreed in late 2000. It was part of LEI's pilot certification scheme. PT Diamond Raya Timber was awarded LEI's first certification in 1999, albeit at the lowest pass grade. Since then, it has been visited twice by LEI and FSC certifiers SGS Qualifor, who reported that the company made further improvements in its management between December 1999 and mid-2000. The full assessment was approved in April 2001 (LEI, SGS pers com).²² AS of today PT DRT is the only certified forest management unit holding 100.000 ha out of approximately 2 million ha natural forest under certification assessment. This is not only new icon of the forest management in Indonesia; however, it is true that it is a bullet target for critics and debate over certification.²³

LEI itself often become a part of critics by many, both proponents and opponents of certification. This is because its failure to bring certification as part of the solution of forestry discourse. The influence of LEI is declining due to the lack of public appearance to respond any forestry issues or even issues related with certification. Its role as accreditation bodies has been not effective since some part of the important component of the certification system has not been maintained such as FKD and relation with its stakeholders. One evaluation about LEI situation highlighted the governance structure.²⁴

Other issue is related with the unclear constituent of LEI that put LEI at the position of having a floating supporter. Therefore the need of governance change is inevitable. The option is change governance structure LEI into constituent based organization (CBO). The idea of CBO is actually not new. Since the LEI establishment the supporting NGOs and its activists envision the LEI organization is a membership organization.

On June 6, 2003 LEI organized a workshop in search of institutional transformation of LEI. The workshop gave a mandate to Tim-4 (Team of 4) to formulate the new institutional format for LEI, which is, envision as a constituent based organization (CBO). On end February Tim-4 completed its tasks with the conclusion that LEI need to improve its internal managerial capacity before moving towards CBO.²⁵

Institutional Design

²² *DOWN TO EARTH, June 2001*. Certification In Indonesia: a Briefing

²³ Pandangan Badan Eksekutif LEI terhadap proses menuju revitalisasi kelembagaan sertifikasi sumberdaya alam menuju organisasi berbasis konstituen. Baca juga misalnya karya Hariadi Kartodihardjo, *Memperbaiki Rumah Tanpa Pondasi: 10 Tahun Inisiatif Sertifikasi Ekolabel dalam Belenggu Sistem Pengelolaan Hutan*. 2003.

²⁴ TIM-4. *Menjajagi Format Kelembagaan Baru LEI*, February, 2004. Unpublish.

²⁵ Team of 4 consisted of Dr. Hariadi Kartodihardjo (lecturer at Faculty of Forestry, Bogor Agricultural University/IPB), Dr. Agus Setyarso (WWF Indonesia), Ir. Dwi Rahmad Muhtaman, MPA (independent consultant associated with LATIN), Ir. Dyah Y. Rahardjo, MSc (independent consultant). The mandat was formise by the decree of LEI Board of Director No: 003/BP-DP LEI/VII/03 on Team of 4 nad its main task to CBO formulation. In addition the workshop formed Tim 10 as a wider representative to be part of Tim 4. Tim 10 consists of Tim-4 plus Ir. Abdon Nababan, Dr. Sofyan Warsito, Ir. Haryanto R. Putro, MS, Ir. Trijoko Mulyono, Ir. Purwadi, Ir. Heru Basuki, MS. Result of Tim 4 is discussed with Tim 10 for wider outputs.

The institutional design of the certification system in Indonesia has its own unique background and philosophy. Corruption, collusion and nepotism (KKN) were the worst heritage during the Government of Indonesia's New Order. KKN was one an important aspect that has been sustained from the 1959-65 Guided Democracy period, to the New Order.²⁶ Indonesia has been the most corrupt countries with low position in corruption efficiency index, legal and regulation index and judicial system index which highly contribute the deforestation for the last three decades.²⁷

Many auditing system such as environment impact assessment and the forest management monitoring system for forest concessions have been corrupted. The Indonesia certification system has a clear mandate to maximum prevention of the system manipulation. The challenge was clear: the certification system must be credible through a transparent process in the ocean of KKN glamour and many manipulations in the forest management. It was a complicated process.²⁸ Conteras and Hermosilla, 1997 quoted in Kartodihardjo (2002) identified three sources of corruption in forest industry practices which likely occurring in Indonesia: illegal logging (logging tree species protected by CITES, logging within protected forest and conservation areas), problem in assessment (reported production logs being lower that the actual amount) and bribery (to obtain forest utilization concessions, to get annual logging quotas, to expedite export).

In addition the trade issues is not the main target of Indonesian certification. The reason main because, instead, is the commitment to sustainable development and, with it, sustainable management of forests.²⁹ With such framework in mind, it is therefore crucial for Indonesia to develop a scheme that will advocate its main interest. Such a scheme should incorporate the local conditions and unique traits into its framework.

Why then does Indonesia choose a scheme that can only indirectly influence the forest managers to change their practices to attain sustainable forest management? The Indonesian ecolabelling scheme gives a third party the authority to assess concession's performance. Its independence from government authority puts it in an objective position not only to evaluate the concession performance based on a set of rigorous standards, but also to critically evaluate government regulations and practices that do not support the effort to achieve sustainable management of forests. Secondly, the voluntary approach of the ecolabelling scheme is expected to develop a partnership between certifier and forest management unit with common goals, rather than confrontation and an inspectorial

²⁶ Adam Schwarz. 1994. *A Nation in Waiting: Indonesia in the 1990s*. Boulder, San Fransisco: Westview Presss. P. 3

²⁷ Hariadi Kartodihardjo. *Pembaruan Kebijakan Kehutanan dan Pendidikan Tinggi Kehutanan Pencarian Intelektual Diantara Belunggu Kekuasaan*. Paper prepared for Darmaga Darmaga Informal Meeting (DIM)—an informal gropup for forest policy at the Faculty of Forestry, May 3rd 1996. Unpublished. See also press release FWI on forest and corruption.

²⁸ Hariadi Kartodihardjo. *Memperbaiki Rumah Tanpa Pondasi: 10 Tahun Inisiatif Sertifikasi Ekolabel dalam Belunggu Sistem Pengelolaan Hutan*. Paper written for Student Seminar on theme of "Revitalisasi Peran Instrumen Sistem Manajemen Lingkungan dalam Kondisi Krisis Multi Dimensi Menuju Era Pasar Bebas", 14 Januari 2003, di IPB, Bogor. Unpublish. Avalaible at www.yahoogroups.com/rimbawan-interaktif.archivefiles (?)

²⁹ Emil Salim, Upik, Asep.

approach. Thirdly, the result of a certification process will not only give recommendations of certification level, but, more important, will provide information for forest managers as to strategies to improve their forest management practices. Fourthly, the involvement of stakeholders will create a more transparent management of forests. With the ecolabelling scheme comes the empowerment of local stakeholders, as they are also involved in the final decision-making of certification.³⁰

The whole scheme of the Indonesian Ecolabel system is also to promote cooperation, mutual understanding and partnership among the various stakeholders of the forest. The fifth advantage is then wider access to the international market. Therefore the institutional arrangement of the Indonesia certification system is multilayer assessment: two expert panel (EP1 and EP2), assessor, public announcement and consultation, establishment of District Consultation Forum (FKD) and Certification Review Board (DPS).

The LEI programme consists of the following elements (LEI 1997):

- A procedure for the certification process;
- A logical framework for evaluating forest management;
- Criteria and indicators for sustainable forest management;
- An Analytical Hierarchy Process for decision-making.

The LEI certification process can be divided into four stages. The first stage is a preliminary assessment of the performance of the concession based on management plans and other documents. These documents are reviewed by the first certification panel, which is a small group made up of LEI staff and consultants, and a decision is made whether to proceed with certification. If this decision is positive, the process moves into the next stage: field assessment. In this stage a team of assessors with appropriate technical and regional experience visits the concession and makes a report to LEI. It should be noted that in the LEI system the assessment team couldn't directly issue certificates. To avoid corruption or conflict of interest this is a role reserved for the LEI itself. In the third stage of performance evaluation, a certification recommendation is made by the second LEI panel, based on the assessment report. This second panel is made up of the members of the first panel, with additional experts as necessary. If the recommendation is positive, a public consultation phase is begun, where the recommendations of the second panel are discussed with local stakeholders. If there are discrepancies between the views of the stakeholders and the second panel, a larger third panel bringing together the members of the first two panels and selected local stakeholders is convened. Finally, LEI may issue the certificate (Salim et.al 1997).

LEI's approach to certification is based on a "logical framework". The framework is made of two "dimensions" used to evaluate the quality of forest management in a concession. The first is the "sustainable forest management principles dimension", which covers the outcomes or results of forest management. The second is the "management

³⁰ Emil Salim, Upik and Asep

dimension” which addresses the inputs or strategies used to achieve sustainable forest management. The “sustainable forest management principle dimension” is divided into three functions: production, ecological and social. Similarly, the “management dimension” is viewed at three levels: forest resource management (at the level of the concession as a whole), forest stand management and institutional management. This framework has provided the basis of a set of criteria and indicators that are used for the evaluation of concessionaires’ performance in the field.

The final component of the LEI system is the use of the Analytic Hierarchy Process (AHP) for decision-making. AHP is used by Expert Panel II to weight the LEI criteria and indicators gathered by assessors in the field, according to local social, ecological and economic conditions.

The result of a LEI certification assessment is a grade on the certificate. The highest grade is gold that means the company guarantee the sustainable forest management practices. Lower passing grades (silver and bronze) are given to concessions with weaknesses in one “sustainable forest management principle dimension”, but weaknesses in two dimension means that the concession fails.

Standards

LEI has developed several certification mechanisms and procedures for natural forest certification, including; certification working mechanism (SNI 5000) and performance evaluation standard (LEI-01 and LEI02). Standard for forest plantation is also completed. Community based forest certification standard is under field-testing. Standard for natural forest management has been long developed, and therefore much of the focus of this section refers to this standard. In addition, natural forest certification system becomes a base for other system developed at a later stage.

Certification Standards are determined according to the certification activities. LEI 5000 Standards are based on a SFM system framework. Criteria, indicators and verifiers are discussed in more detail in LEI-01 standards, while the FMU performance values are determined using the LEI-02 document.

The LEI certification system works based on sustainable production forest management standards including:

Management Dimension:

- a. Area Management: Area Demarcation (Compulsory Requirements)
- b. Production Management: Performance (Core Activities)
- c. Organizational Management: Managerial Quality (Desired Requirements)

Performance Dimension:

1. Production Sustainability
2. Environment Sustainability
3. Social Sustainability

The matrix shows how the management and production dimensions are combined and that each indicator represents a combination of dimensions.

Table 4: Matrix showing the management and production dimensions of LEI.

Management Dimension (Strategies for Achieving Results)	Production Dimension (Principles)		
	Production Sustainability	Environment Sustainability	Social Sustainability
1. Area Management (Compulsory Requirements)	INDICATOR	INDICATOR	INDICATOR
2. Forest Management 2.1 Production M'ment 2.2 Environmental M'ment 2.3 Social M'ment (Core activities)	INDICATOR	INDICATOR	INDICATOR
3. Organizational Management (Desirable)	INDICATOR	INDICATOR	INDICATOR

Source: LEI 5000 Standards

LEI standards provide many documents related with the certification administration until the toolbox for assessment and decision making process for final certification decision. Assessor for, example, should understand LEI doc-1 and LEI doc-2 for field assessment. Assessor is accompanied with the detail indicators to be checking in the field as written in the LEI documents. This is quite different with the FSC certification body, which only provides the assessor with the generic standard which, then to be elaborated in the field as it required.

Table 5. Clarification of the main conditions for the social, environmental and production aspects in LEI.

No.	ASPECT	MAIN COND.	Clarification
		1. Tenure system	Land claims by local communities based on traditional ownership must be acknowledged.
		2. Economic development of local Community	If the local community relies on the forest for their livelihood, their activities should not be disturbed by the existence of the

I.	SOCIAL		FMU.
		3. Guarantee of Social /cultural integrity	No use of force (physical & non-physical) to solve problems with the workforce or the local community occurs.
		4. Guarantee of community nutrition and health	The FMU must be sensitive to the impact of its activities on the local community's health.
		5. Guarantee of workers rights	No unjust contract termination, health and safety should be provided, workers unions must be allowed, and salaries should be suitable to the local conditions.
II.	ENVIRO N- MENT	1. Condition of the vegetation	The structural composition of the forest stands should not change drastically, both within protected areas and other areas.
		2. Condition of the wild life	Logging activities should not disturb the biodiversity of animals and their habitats.
		3. Soil and water conservation	The level of erosion and water quality should not change as a result of forest exploitation. The FMU must have equipment for monitoring and evaluating its environmental impact.
III.	PRODU CTION	1. Area status and security	The area managed by the FMU must be free of land use conflicts in the long term. Both horizontal conflict with the local community (traditional land) and vertical conflicts due to inconsistent policies for land use allocation must be addressed. The FMU must be active in resolving conflicts.
		2. Planning and harvesting techniques	Harvesting should be well planned especially the yield schedule, and preparation of infrastructure must follow a set standard. Timber harvesting is done emphasizing environmentally friendly methods (RIL)
		3. Silvicultural system and	The FMU must implement post-harvesting activities in a realistic manner.

	rehabilitation	The silvicultural system used should guarantee continual production for the long term in accordance with the forest condition
	4. Timber management and reporting	Any logs at the felling site, log landing or log pond are clearly identifiable
	5. Organization and administration	The FMU operations are supported by a professional organization and Standard Operating Procedures (SOP) are prepared, especially in forest fire management

Forestry Problems

Forest fires, forest conversion, illegal logging, and mismanagement of forest are factors that bring about deforestation and forest degradation. These factors have also resulted in loss of biodiversity (Agung, 2001). Other factors, such as tenure conflict between the forest concession rights and other users (mining, agriculture, etc), as well as local communities have been significant problems being faced by the forestry sector. In addition, institutional weaknesses and improper implementation of forest management policy have contributed to the forest degradation.

Governance problems underlie many forest problems. The attainment of sustainable forest management (SFM) depends critically upon matters far from the forest itself, it depend on the extent and quality of enabling policy, legal and institutional condition (Mayers et al 2002). There are many problems that occurred in “pyramid” forest governance in Indonesia , such as forest area conversion, land tenure overlap, property right, market and investment condition, as well as social conflicts [**Foundation**]; policy failure [**Tier-2**] and no effective government incentive, heavy tax and bribery [**Tier-3**]. Those things are constraints for successful certification implementation. Good governance will contribute to solve many problems especially in foundations tier.

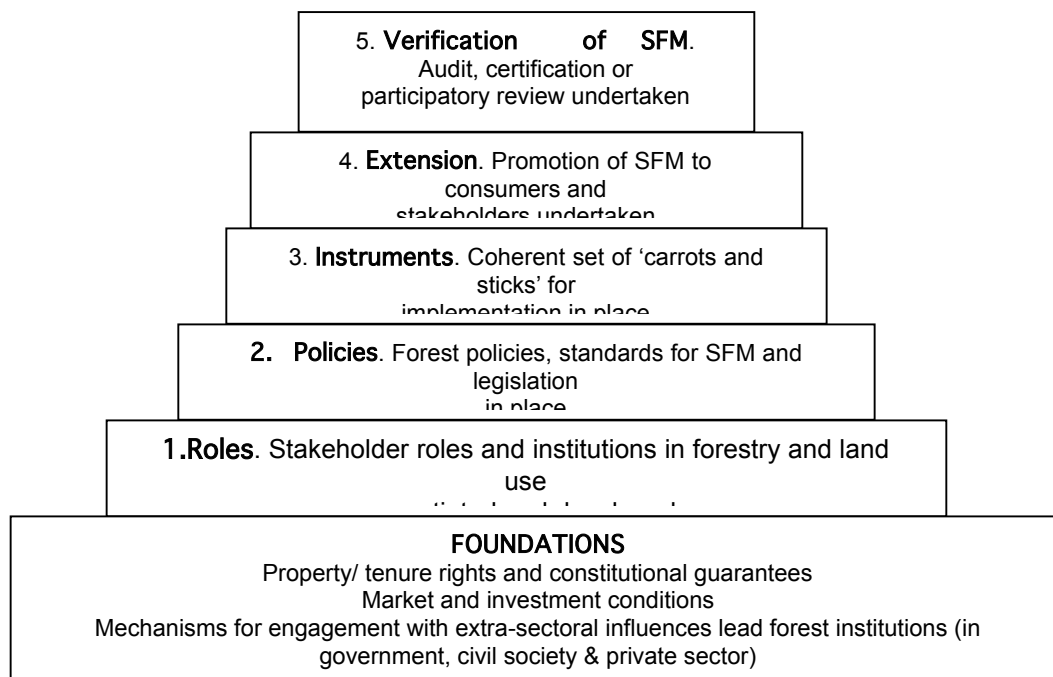


Figure 1. The pyramid of good governance

Note: Lower tier in this pyramid take more building- are important than upper; Foundation are important too, but largely hidden and not depend on the forest pyramid builder alone.

Illegal logging

For more than three decades, tropical timber has been one of the important commodities for Indonesia. This is demonstrated through significant figures of production, timber trade, and steady increasing income of the country (Netoux and Kuroda, 1989). The Government, however, has been a great concerned on the sustainability issues. Paying attention on this matter, the Government introduces various sustainability-related policies, among others is the Indonesian Selective Cutting system, which was enforced in 1972 (Ministry of Forestry, 1989). Nevertheless, due to improper implementation of the policies, the Indonesia’s forest has been experiencing over exploitation which severely destroy the forest (Barr, 1999, 2002; Brown 1999, 2001). One of the causes of forest degradation is illegal logging activities. It has been predicted that 70 percent of forest products produced at the timber processing mills comes from illegal source. This amount is valued at approximately US three billion in 2002 (Musthofid and Witjaksana, 2002). Obidinsky (2003) pointed out that patron client dependency in natural resource utilization system –including forest in Indonesia, is one of the reasons why illegal logging is very difficult to suppress.

Some of wood-based industries are taking advantages of using the illegal logs. This is reasonable since the log price is much cheaper compared to legal logs that require high production cost, fees and taxes. It has been estimated that the price of illegal logs is about US 50 per cubic meter cheaper as compared to the legal logs (Mir and Fraser,

2003). The lower production cost of illegal logs is considered disincentive for the legal one. Similarly, many illegal practices have been often practicing in forest concession scheme. Such practices are mainly caused by the weaknesses of law enforcement, controlling mechanism, and monitoring system of forest concession in Indonesia.

The role of certification in reducing the illegal logging

Illegal logging is such a complex problem which needs to be undertaken by involvement of eleven governmental institutions in Indonesia (Malolongan, 2003). As everyone aware, illegal logging takes place in almost all parts of forest land in the country, including national parks. Unfortunately, the role of sustainable forest certification in combating the illegal logging has not been touched the protected forests yet. The certification is limited only for a forest management unit level. In addition, it is not a mandatory, but rather a voluntary basis, and focusing more on internally management improvement. The certification users in Indonesia are generally the forest concession holders and Community-Based Forest Management (CBFM). As a result, outside of these area has been untouched by the certification process. According to the Criteria and Indicator of sustainable forest management developed by the Indonesian Ecolabel Institute (LEI), land security in the long term is an important prerequisite – a must to be met by the forest management unit. Meanwhile, the illegal logging often takes place in a forest management unit that it will directly affect to the reduction of standing stock, which, in turn, impacting the yield regulation.

A greater expectation is then relied on the Chain of Custody (CoC) certification. The CoC is basically a followed-up process for sustainable forest management unit certification that links to the industry, and is a tool to prove that the logs for the industry raw material come from the certified sustainable forest. With a minimum supply of certified logs in Indonesia, the role of CoC should be extended to verify the logs legality, and not merely a followed-up process of the certified forest management unit. This scheme has been practiced by some of the certifiers, such as GFTN-WWF, using a stepwise approach to certification. In such a scheme, a forest management unit that is being processed for obtaining the certificate could sell their products to the GFTN buyers group if the requirement of CoC legal of origin has been satisfied. If this practice continues, it will significantly reduce the use of illegal logs for wood-based industries in Indonesia.

Damaging Forest Practices

It has been recorded that in 1998, about 16.57 million of forest land under the concession was in a degraded condition. Some of the degraded areas were then converted into other land uses (Hariadi and Agus, 2000). The Ministry of Forestry data indicates that in 2002, there was approximately 4.7 million hectares of forest land changed its function to be a non-forestry cultivated land. There is a tendency of significant forest land reduction in the future due to various uses of land. Palm oil establishment is one of the biggest plantations currently underway using the converted forest area (Forestry Statistic, 2002). The number of forest concession in 1998 was recorded at 420, occupying a total

area of 51.58 million hectares. Presently, only 270 is in operation with the working area of 28.08 million hectares (Forestry Statistic, 2002). The figures demonstrated that improper forest management practices have been contributing to forest degradation in Indonesia.

Meanwhile, forest certification has been contributed a lot in improving the internal management. Reduce Impact Logging (RIL), for instance, which is a key indicator for forest management performance in the production aspects of criteria and indicator developed by LEI, has been prioritized in the assessment of forest management unit in its preparation toward the certification. By applying the RIL, the concession has made many changes in its exploitation practices, and this has made the RIL exposed because of the forest certification.

In many cases, certification has encouraged changes in management planning. The HCVF issue, for example, is a mandatory for the forest concession to be satisfied. This has made the concession aware as a must, and recalculate the forest area to be reserved for HCVF purposes. This demonstrates that certification helps protect biodiversity in the concession area.

Understanding the complexity of the forestry problem in Indonesia, the proponent of certification did not expect too much. At least there were some initial expectation raised to adopt the certification: promote public transparency of forest resources management, help communities by ensuring that large-scale commercial logging activities improve their practices with regards to local communities. This could include ensuring that local communities gain a more significant role in forest management decision making, and that customary use patterns established prior to the commercial forestry operations are not disrupted following the start of commercial activities (Rowland and Simpoha, 1999). Certification could also support rural communities living in and close to forests that choose to engage in forest management to find markets for those products or improve the quality and quantity of engagement.

Roadblocks and Challenges

The dispute over forestland tenure status, unsustainable forest management and un-conducive forest management policy has been the major problem of the forestry practices in Indonesia. It is worsen by the political, economic and social disruption have placed the efforts of sustainable forest management certification into a critical stage (Kartodihardjo, 2003). Besides, the distraction of in the implementation of regional autonomy, which creates a dispute between regional, and central government over forest management authority.

The entrance of certification in Indonesia has been attached to the establishment of LEI. For the last ten years, LEI practically does not contribute significantly to the public awareness and understanding of forest certification. The certification issues became very exclusive and only the concern of the certifying bodies, companies under assessment and assessors and other individual who are involved in the assessment

process. Meanwhile the FSC-accredited certifying bodies operation in Indonesia (SmartWood Program, and SGS Qualifor until 2003) view Indonesia as an important but could not expect many certified company because in reality not many good forest management companies, not to mention the social and policy environment around forestry sector.

Issues combined above are a great challenge for certification to be effective. Proponents to certification expect the certification institutional capacity should improve by transforming LEI into the constituent based organization. By new type governance it is expected that LEI will have a capacity to do its important mandate which is—among others—“...to evaluate the concession performance based on a set of rigorous standards, but also to critically evaluate government regulations and practices that do not support the effort to achieve sustainable management of forests.” (Salim, Djalins, Suntana, 1997). Elliot (2000: 111) NGOs, academics, international organizations and certifiers tend to stress the need for fundamental reform of forest policy. Adiwoso, an economics lecturer and member of the LEI working group wrote as follows in 1996:

IV. THE REACTION TO CERTIFICATION

Forest Policy Community and Stakeholders

The ITTO commitment in 2000 as a year of achieving sustainable production for all of ITTO members is of important part of the certification progress in Indonesia. The developing views at that time was focus more on Sustainable Forest Management (SFM), rather than the issue of certification. Nevertheless, the initiative to formulate criteria and indicators for sustainable forest management was clearly discussed in Agenda 21 of Earth Summit in 1992.

After ten years of its existence in Indonesia, the certification received wide criticism from various parties. The most critical certification stakeholder in Indonesia is actually NGOs community lead by WALHI and its international network such as The Rainforest Foundation, the Rainforest Action Network and Down to Earth. In March 2001 a workshop was held and organized by WALHI attended by several NGOs and individual. The main subject of the workshop was about certification. At the end of the workshop participant signed a statement to temporary halt scoping, assessment and issuance of certification to the forest concessions in Indonesia (forest certification moratorium). In its correspondence, WALHI does not, in principle, oppose certification but is opposed to the current certification activities in the situation that certification is not feasible. Its position is that no certification of any logging concessions (*HPH*) can be credible as long as the concession system and legislation (such as the Forestry Act No.41/99) do not grant local communities their rights to their land and resources. The whole concession system must be revised and the borders of indigenous peoples' lands clearly defined (Down to Earth, June 2001).

On September 2000 AruPA—a student of forest advocacy group in Jogjakarta—issued a position paper criticizing the certification of Perum Perhutani done

by SmartWood and LATIN-its partner in Indonesia. They viewed that based on their observation KPH Perum Perhutani were feasible to be certified due to the social conflicts and illegal logging. Some corrective actions requests (CARs) imposed to the Perhutani were considered unrealistic to be met. By quoted some national and local newspaper, ARuPA claimed that the log transport system was vulnerable of manipulation. Therefore, the issuance of CoC certificates for furniture industries in Jawa is not valid (Fuad and Astraatmaja, 2000). The complexities of the Indonesian bureaucracy relating to timber operations make it easy to mislead certifiers about the sources of timber used by 'chain-of-custody' companies. A field study by the Yogya-based forest NGO, ARuPA, indicates a variety of ingenious methods of illegally harvesting teak plantations and 'laundering' the timber so wood processors can claim they only use legal sources of wood. Local government officials, security forces and Perhutani staff and senior levels are implicated in this 'legalization' of illegal logging (DtE, June 2001).

Meanwhile, there are some NGOs working towards certification. RMI, LATIN and Skephi were those who champion for certification. LATIN and Skephi has been member of FSC. In its respond to the certification criticism, LATIN believes that certification is a useful tool to penetrate directly and practically to the heart of forest management companies. Certifications can also a useful tool to ensure that stakeholders are able to have access to the management unit concerning aspects important to stakeholders. It argues that Certification is not a panacea to a chronic problem of forest management in Indonesia. Certification has a limit. Therefore, in certain extent certification cannot be expected to be a conflict-mediating, consensus-building and power-sharing tool. Certification can be a bridge and a forum of dialogue for stakeholders to raise their respective concerns. It's up to the assessed company to find out how they will solve the conflict, build a consensus, and share its power to others. Failing to do so, the conflict will continue, the forest sustainability is not guaranteed. This could mean a failure to meet the certification requirement (LATIN, October 2000).³¹

Forest Owners

Private sector at the very early development of certification in Indonesia was very enthusiastic. This can be observed through the development of criteria and indicator initiated by the forest concession holders association (APHI) in 1993. APKINDO (Indonesian Wood Panel Association) believe ecolabelling will support the sustainable

³¹ Relationship between LATIN and SmartWood Program has been since 1990, LATIN officially became a SmartWood representative/collaborator in Indonesia in 1998. LATIN's role as a collaborator of SmartWood ended effectively in April 2002 in line with the closing of agreement between LATIN and Rainforest Alliance. A new position and strategy of LATIN in certification is to develop a certification discourse through preparation and empowerment of human resource, information and knowledge on certification, empowerment of forest managers and industries as users of forest products towards sustainable forest management through certification, encouragement of changes in policies on sustainable and just forest management and dissemination of information to related parties. This field is urgently needed and implemented today. To LATIN certification is a measured tool to encourage forest managers towards sustainable and just forest management (LATIN, April 5, 2002: Public Announcement).

forest management practices and provide economic incentive (APKINDO 1996:15 quoted in Elliot: 110)

To prepare concession for certification, APhi (Indonesian Forest Concession Holder Association) continue using its standard as an internal audit to identify preparedness of its members. APhi established commission for forest evaluation. Based on the APhi evaluation showed that among HPH under evaluation none of ready achieving certification standard toward sustainable forest management (Muhtaman, Tarumadevyanto, and Djatmiko, 2002). In addition APhi has been conducted training for certification to its members

Private Sector (Forest Concession)

Eight years after the year 2000 ITTO commitment in Bali, there have been a dynamic process resulting from the different standard uses and commitments of all involved parties, i.e. between the standard of sustainable forest management, the Government policy, and the concession performance, as can be illustrated in the following figure-2.

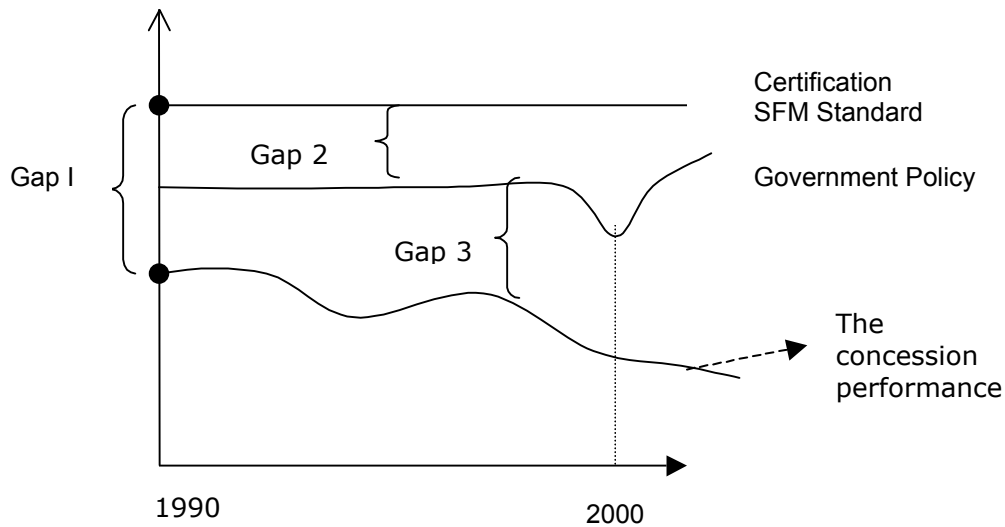


Figure 2. Gap between SFM standard, government policy and concession performance

The year 2000 is considered as a transition period since the government issued the law number 22 regarding the decentralization. There was unfavorable condition for the forestry sector at that time due to unavailability of forestry policy framework to support sustainable forest management practices (Agung and Hinrichs, 2000). The condition has made a wider gap between the concession performances against the standard of certification. The concession holders seemed to be skeptical to see the forestry-related businesses because of too many problems, including overlapping of land users, illegal logging, and price fluctuation of forest products. These have led to view certification as a less strategic issue.

Some of the concessions, however, remain committed to export their products to eco-sensitive markets, and that have made them stay on implementing the sustainable forest certification. They expect that in such uncertain situation, certification will be able to provide the forestry business assurance in the long run, because certified forest management reflects land security in the long term forestry businesses.

The tables below show progress of certification in forest concessionaires during 1990-2003.

Table 7. Number of HPH assessed by SmartWood/ other FSC certifier

<i>Year</i>	<i>Appli- cation</i>	<i>Scoping phase</i>	<i>Full assessment</i>	<i>Certified (area ha)</i>
1990				
1999	2	1		
2000	4	4		
2001	2	2	3	90,957
2002	1	1	1	
2003	4	3	2	

Table 8. HPH and the assessment results

<i>Name HPH/management units</i>	Number of			Status By January 2004		
	<i>precond ition</i>	<i>conditi on</i>	<i>Recom medati on</i>	<i>Preco nditio n</i>	<i>Condit ion</i>	<i>Reco mme ndati on</i>
PT. Sumalindo Lestari Jaya	8	35	26	8	35	26
PT. Erna Djuliawati	5	28	14	5	28	14
PT. Sari Bumi Kusuma	8	17	22	8	17	22
PT. Intracawood Manufacturing	7	32	18	0	32	18
PT. Inhutani I - Labanan	6	23	19	**	**	**
PT. Austral Byna	10	27	25	**	**	**

**** No longer in certification process**

Current Status of Forestland Certification

Certification has operated in Indonesia in at least three type of forest management: plantation forest (state-owned and private owned), natural forest (state-owned and private owned) and community-private partnership. Community forest has not yet undergone certification. However, WWF Indonesia has been working with LEI and other NGOs to develop and prepared community forests for certification.

In most cases private or state-owned companies pay the certification costs fully (no subsidy? How about the support from buyers?). However, prior to the certification assessment some companies work in partnership with other program that promotes sustainable forest management. This program included Reduce Impact Logging [in partnership with Tropical Forest Trust (TFF)], promotion of high-conservation value forests/HCVF [in partnership with The Nature Conservancy (TNC)], forest management improvement towards certification [in partnership with the Global Alliance to Promote Forest Certification and Combat Illegal Logging in Indonesia (WWF and TNC)].

Certification in Jawa

Perum Perhutani (a state-owned company in Jawa) was the first certified in Indonesia and in the world. It was certified by SmartWood certification program Nov 1990 and it was valid until 1995. The certification covers approximately 2 million ha of teak plantation (including few pine and mahony). There was no reassessment until 1998 when FSC decided that the scale for assessment was at the district level/KPH (not the entire plantation area as it was in 1990. Reassessment was conducted in 1998 for five KPHs of which three KPHs certified (KPH Cepu, Kebonharjo and Mantingan) in 1999. A new forest district assessment was conducted in March-April 1999 for eight KPHs of which three KPHs certified (KPH Madiun, Kendal and Lawu/pine) in April 2000.

In June 2000, SmartWood conducted audit for KPH Cepu, Kebunharjo and Mantingan. By July the certified teak KPH were Cepu, Kebonharjo, Mantingan, Kendal and Madiun with total certified area was 115,000 hectare and production of 100,000 m3. As of July 2000, there are 33 teak furniture industries got the certified *chain of custody*.

Table 9. COC certified industries 1998-2000

Year	Number of Certified industries
1998	9
1999	11
2000	13

Perhutani's certified districts were suspended in 2002 and in 2003 all certification status in the districts were withdrawn because not compliance with the timeline for the improvement. Until today there is no more certified management unit in Jawa. Three districts have been under improvement since 2003 in collaboration with Tropical Forest Trust. The three districts are Mantingan, Kebunhardjo and Randublatung.

A project under WWF Indonesia in collaboration with several NGOs has been underway to develop certification for community forests. One site is selected as a pilot project in Central Jawa where local community has been planting teak in the gardens for many years.

Certification in Sumatra and Kalimantan

Two main islands currently involved in certification: Sumatra and Kalimantan. There are two companies in Sumatra i.e. PT Xylo Indah Pratama and PT Diamond Raya Timber. The former was suspended in 2003. The later is still certified under SGS Qualifor (and its local partner PT Mutu Agung Lestari).

PT Xylo Indah Pratama (PT XIP) harvests and plants pulai (*Alstonia scholaris* and *Alstonia angustoloba*) for its use as raw material in the PT XIP pencil slat making factory at Muara Beliti, Musi Rawas District, South Sumatra.³² Currently, all slats are sent to XIP's pencil factory in Bekasi (PT Pencilindo, under a joint venture with Staedler. Pencil market prospects are said to be good for the consumer segments being developed by the company.

PT XIP sources over 80% of its current wood supply for its pencil slat processing plant from hundreds of lowland smallholder rubber plantations where pulai grows wild. Naturally occurring pulai in home gardens and other smallholdings account for the rest of the supply. XIP's Peoples Forest Development Project (*Proyek Pengembangan Hutan Rakyat, P2HTR*) has entered its eight years (by 2003) and will eventually cover 10,000 hectares, almost all of it in smallholder agroforestry plantations under joint management agreements. These smallholder agroforestry plantations have been established on former alang-alang (*Imperata cylindrica*) grassland (65%), on scrub brush land (25-30%), or past rubber gardens (5 – 10%), which are also distributed throughout south-eastern Musi Rawas District.

XIP currently harvests 30,000 m³ per year from rubber plantations and home gardens located in the southeastern part of the Musi Rawas district. XIP plans to maintain this volume of production. The current plan does not call for an increased harvest level as this is projected to supply sufficient raw material for their pencil factories.

While there is a potential of about 200,000 ha of rubber plantations in Musi Rawas from which PT XIP can harvest pulai, about 18,000 ha belonging to 2,464 farmers are commonly in the certified suppliers' pool, which signed agreement.

PT XIP starting its involvement in certification program in December 1998 when there was a scoping visits from SmartWood. On July 25-1st August 1999 a team of SmartWood conducted a full assessment. May 2000 PT XIP awarded as a certified as a community forestry management. This is the first certification issued for its kind in Indonesia. An annual audit is regularly carried out by SmartWood to ensure the consistency of PT XIP to comply with certification standard. Annual audit of March

³² Information of XIP mostly taken from the assessment/audit report of SmartWood Forest Management Annual Report of PT Xylo Indah Pratama (XIP), SW-FM/COC- 140. Official Audit Year: 2003, Audit Date: March 2003. Final Report Completed: May 2003. Auditors: Anne Gouyon and Dwi Rahmad Muhtaman

2003 was completed and concluded that some significant improvement is needed in order to comply with certification standard. PT XIP was suspended in June 2003.

The second important concession is PT Diamond Raya Timber (DRT).³³ It is a HPH forest concession in Riau province of Sumatra. A concession was previously issued in 1979. DRT is a subsidiary of the Uniseraya Group that now has 3 concessions in Indonesia. DRT was the first to be assessed for certification. Uniseraya Group operates in Riau Province where it has factory operations producing plywood, sawn timber and furniture.

The current license (1998) covers 90,956 ha of peat swamp forest, no more than a few meters above sea level at any point, and merging into mangrove forest to the northeast. The forest provides a habitat for a number of rare and endangered species, notably Ramin (*Gonystylus bancanus*). In addition forest provides habitat for Sumatran Tiger (*Panthera tigris sumatrae*) along with a number of important arboreal primates such as Gibbons.

SGS Qualifor undertook pre-assessment visits to DRT in November 1998 and June 1999. The main assessment then took place 9 -16 December 1999. This was the first evaluation in Indonesia to take place in cooperation with LEI (Lembaga Ekolabel Indonesia). A certificate was subsequently issued on the 27th March 2001, with a scope of round logs from species as follows; Meranti 30%, Ramin 20%, Durian burung 15%, Suntain 10%, Bintagur 10%.

Meanwhile in Kalimantan in year 2002, operating around 127 forest concessions with area equal to 10.763.852 ha (Forestry statistic 2002). There are only 5 HPH in the process of certification under Joint Certification Programme (JCP) between LEI and FSC.

Current Status of the Certified Marketplace

In 1990s there was a teak furniture boom in Jawa. The only teak supplier has been Perum Perhutani. With the increase of public campaign in Europe and the US about the Indonesian forestry issues many consumers demand for certified furniture. At the time Perhutani was certified. The demand for certified furniture increased from 1998-2000. The CoC certification application increased. However, the actual certified industries were limited because the certified teak was limited. When Perhutani was suspended most of the CoC industries were also suspended. Teak furniture export is still going on regardless the unavailability of certified sources. One CoC certified company is still keeping the certificate by importing certified pinewood from Australia.

Most of the reason behind the company's entrance to certification is because of the buyer's request. Currently the market for certified wood is not becoming especial

³³ information about DRT is accessed through assessment report FR main Assessment Report 1 April 2000, DtE June 2001, presentation material of PT. DIAMOND RAYA TIMBER Uniseraya Group Pengelolaan Hutan Alam Produksi Lestari (PHAPL PT. Diamond Raya Timber) PEKANBARU, RIAU, INDONESIA

problems. Most of forest concession that are following certification program was related to its own industries (plywood, Wood Working) so that the overall log production is destined for its Industries.

At present, PT. Diamond Raya Timber (DRT) is the only one certified log producer concession in Indonesia with an average annual production of about 60.000 cubic meters (SGS Qualifor 2001). All of the log products are supplied to the holding wood-based industries, namely PT. Uniseraya (SGS-CoC-0767) and PT. Panca Eka Bina. They produce exported products, such as Moulding and Garden Furniture

V. EFFECTS OF CERTIFICATION

Achieving SFM in Indonesia is often constrained with problems outside the forest itself, which to some extent is related to the forest governance problem, as illustrated by “Pyramid Mayers” in Figure 1. As discussed earlier, the certification initiators are hoping that certification in one of the entry points to make changes at the policy maker, forestry business practitioner, and field implementation levels, so that the benefits of the forest can be justly distributed to the local community surrounding the forest.

Power

Government

In 1970, the Indonesian government issued regulation locally called *Peraturan Pemerintah* (PP) No. 21/1970 that regulates the forest concession and the Forest Product Harvesting Rights. Of course the forest allocation for production is based only on the limited consideration of forest potential and the landscape condition, with less attention on the property right and tenure problems that exist in the land area. Lately it has been recognized that there are so many land use-related conflicts in the concession area.

There remains no fundamental changes in the government policy relative to the forest management, even though after the ITTO declaration in Bali in 1990, the government has issued a couple of forest management policies, intended to adjust the current standard and criteria of SFM (see box 1).

However, many of the regulations were not capable to solve the underlying causes (Foundation “Pyramid Mayers”) of failures in achieving the SFM. This is due to the weaknesses of control mechanism by the government, which mostly caused by collusion, corruption, and manipulation. As a result, the government fails to present the right facts on the forest management performance in Indonesia.

Box 1. Indonesian policies relevant to forest certification

1. Standard and criteria of SFM (Indonesian Ministry of Forestry decrees No. 252/Kpts-II/1993 and No. 576/Kpts-II/1993 Regulation of Sustainable Forest Management). As a response to the Earth Summit and the Bali ITTO meeting in 1990, implemented regulations that include the basic principle of sustainable forest management. However, the decrees do not incorporate social standards as part of the criteria for sustainable forest management.
2. Extraction and trade of Ramin (*Gonystylus bancanus*) (Ministry of Forestry decree No. 168/Kpts-IV/2001). Permission to harvest and trade ramin will be given to companies having a Sustainable Forest Management Certificate from the Indonesian Ecolabeling Institute (LEI). Ramin is listed in CITES Appendix III, which includes species protected in at least one country, which has asked other CITES parties for assistance in controlling the trade.
3. Reduction of the national annual allowable cut (AAC) (Ministry of Forestry decree No. 156/Kpts-II/2003 and Decree of Director General Forest Production No. 02/KPTS/VI-PHA/2003). These decrees reduce the total annual allowable harvest to the level of sustainable yield.
4. Forest product administration (Ministry of Forestry decree No. 126/Kpts-II/2003). This decree establishes administrative procedures to regulate the harvest and transport of logs within Indonesia.

With voluntary enthusiasm as the cause of market pressure, certification is more able to take part as SFM verification tools (**tiers-5 pyramida Mayers**). Certification has been able to make a more credible picture of forest management, in which forest management unit's problems caused by internal and external factors are exposed.

In general, this can be explained that the certification in Indonesia is still has partial effect on the forest management unit level, but it has not been able to make holistic changes toward SFM precondition especially in the forest governance. Certification is expected not only to take part as verification tools (tier-5), but it also used as instruments providing reward and punishment (Stick and Carrot) (tier-3). Furthermore, it will stimulate substantial changes in the government credible policies, and able to overcome underlying problem of SFM [Foundation]. Tabl

Local Community

At the community level the power dynamics is more interesting. Certification has pushed the forest management to work closely with local community. The forest managers invest more in building community relations through variety of improved community partnership activities. On the other hand community has more chance to channels their voice about the behavior of the company. Communication forum is developed, participatory approaches is now become a new culture in the company under certification program. Social aspect of forest management gets more emphasis.

Private sector

It recognized that the implementation of sustainable forest initiatives make compliance to the Government's SFM mandate systematic and straightforward. With forest certification, the Government—it is hoped—could grant incentives to the company in terms of reducing administrative requirements such as approval of the annual operations plan and favorable considerations.³⁴

Those who often use certification conditions for policy change are forest management units. This is the case with one the company in East Kalimantan. The forest management team lobbied the local government as well as Ministry of Forestry to set policy environment that enable the company to meet the certification conditions. There is few certification players/supporters play a significant role in policy change. This is partly because the certification supporters are not well organized and mostly emphasized on the technical aspect of certification. Certification has not been adopted as tool for policy changes.

Social

Some challenges encountered by forest management unit in the social aspect have been the failure to build better relationship with community in and around the concession. Certification in fact improve community consultation mechanism; the company design the conflict resolution and negotiation mechanism although the process to design is still not appropriate but the willingness to solve conflict in a better ways is a great impact of certification.

A company PT Xylo Indah Pratama (XIP) developed community-company partnership program. XIP's operation has been underway for more than 10 years. XIP's pulai planting program is focused on the grass and scrub bush lands owned by these transmigrant families, who generally would not otherwise have the economic resources to develop it. Most households in the rural areas of Musi Rawas are first and second generation transmigrants that have 2 to 5 hectares of land under village land entitlements. A typical household has 1 to 2 hectares of land in rice (padi) land and 2 to 4 hectares of land in a combination of alang grass, scrub bush land, and tree crops (rubber, coffee, coconut).

Under the joint management agreements, XIP finances site preparation, establishment and maintenance costs and has management control over the land until the trees are harvested in ten years time. Farmers are given the option of working as labourers on their land. Some take up this option. Most do not. They continue with their (presumably more attractive) other on-farm or off-farm activities. Note that before the arrival of XIP much of the candidate land was fallow, often because farmers did not have the resources to make it productive. This initiative has given farmers opportunity to make

³⁴ Personnal correspondence with PT Riau Andalan Pulp and Paper, March 2004.

the land productive, in the short term from agricultural crops and for the long term with the wood crop.

Companies continuously conduct training of employees and community-participants in various topics relating to sustainable development. Workers unions and other workers rights have been getting more attention from the management. In general one top management employee puts it “Environmental, social and economic objectives are included in the whole company organization and key performance indicators of every employee from supervisor and above positions, thus, awareness in addressing and balancing concerns for the profit, the planet and the people has widened, and concerns for the elements of sustainable development goes beyond compliance.”³⁵ Partnership was expanded with community, university, and credible environmental NGOs.

In most of the company under certification program land tenure issues should be considered priority to resolve. Many of them unsuccessful because land tenure issues very related with national policy and law enforcement. However, the companies initiate the discussion about the situation with the local community affected by the forestry operation. The company started to adopt participatory mapping, identification and protection of sites of significant importance for community, appropriate conflict resolution mechanism.

The community development program that initially was function as a charity program and designed to meet government regulation, has improved by the certification. Community program adopted more participative through community planning. Although this is not social innovation, however, the company starts to learn better and effective community approaches.

You may want to consider the effects of certification on the following factors. Relate effects to community members generally, women and children, indigenous peoples, other distinct local groups, and external groups such as industry associations and regional, national, and international NGOs.

Illegal logging is a critical forestry issue in Indonesia. Certification may contribute to the reduction of illegal logging but it is still questionable whether the reduction if any is caused by the certification implementation in the forest management unit. Most of the company under certification program has experience minimum level of illegal logging. The certification assessment evaluates the level of illegal logging as well as the effort of the company to prevent, monitor and reduce the illegal logging practices. Certainly the management unit develops every possible effort to prevent or reduce it. There are some approaches conducted by companies: local policy approach such as stop giving away of permit overlap with the forest concession; develop effective community development program; invite police and military to guard the main exit and entry points.

³⁵ Personal email correspondence with top management of Riau Andalan Pulp and Paper (RAPP), Riau, Sumatera.

Other company informed that “certification has reduced illegal logging significantly after they developed a Log Tracking System and Procedure for external wood supplies. The system and procedure do not only focus on the documents but rather include field assessment ensuring wood are sourced consistent with approved harvesting permits ensuring that wood are sourced from harvesting areas that are in accordance with approved land use plans (known origin) and wood are harvested and transported in accordance with existing forestry rules and regulations and in accordance with the organization’s Wood Purchase Policy. Along with the implementation of the log tracking system and procedure is the conduct of 3rd-Party Audit with WWF as observers.”

However, the reduction of illegal logging created another problem ... local suppliers of questionable wood intermittently blocked supply routes to the mill pressuring company to accept. Those who work with illegal logging needs to find alternative incomes.

Some buyers discriminate against buying products based from mixed hardwoods, others gave timelines as to supplying products based from sustainable wood sources. Still others asked for 3rd-Party audits particularly of wood supplies originating outside of APRIL concessions. As an offshoot of illegal logging issues in Indonesia, RIAUPULP’s major buyers required 3rd party audits on the origin and legal sources of wood – this has been done (in October 2002 and a surveillance audit in May 2003) with WWF (Indonesia) acting as observer. Other market are more interested of price.

Economic

Cost

Improvement cost is one of the serious problems faced by the concessionaires in Indonesia to obtain certification. The cost is vary depending on the problem typology in each region. The concessionaire that operates in a region with high accessibility will face the illegal logging and land encroachment, which result in high social cost. While in the heavy topographical regions the company needs to start redesigning the working area to be allocated for protected area. This sometimes decreases the concessionaire working area. In addition, there is a need to change the exploitation tools to comply with the topographic area (using the Skyline).

PT. Diamond Raya Timber (DRT), a concessionaire that has received FSC/LECI certification, admitted that they have spent a large amount of money to secure the area from illegal logging activities including the cost for patrolling by military/police officers, and also for making the guard posts. The concessionaire hopes there is a government involvement in solving this problem. However, up to the present the obligation for securing the area is still the burden and responsibility of the concessionaire.

PT. Sumalindo Lestari Jaya (SLJ) is one of the concessionaires in the process of obtaining certificate. The main problem faced by SLJ is the location of its working area, which is in the hilly area, and in order to reduce the felling impacts, they need to redesign

the area and the harvesting system (eg. Skyline). The concessionaire also needs to restructure the area, because part of the area is in the protected area category and HCVF, and this will reduce the AAC. The process of retooling/adjustment in exploitation tools and the Reduce Impact Logging application, as well as redesigning the working area will require almost five years, supported by significant amount of funds.

Market disincentive occurs because many countries still not put into effect the procurement policy of log certification. China, Korea, and Middle East countries are examples of the countries that have no attention on this matter. This is worsened by the source of illegal log trade in these countries, which is still in high frequency.

Benefit

PT. DRT is advantaged by the issuance of the Ministry Decree (SK) No. 168/Kpts-IV/2001 that allows *Ramin* (*Gonestylus bancanus*) to be felt (CITES Appendix III). So PT. DRT becomes the only legal Ramin Producer in Indonesia with the production of about 20% (12,000 cubic meter per year) from its forest potential. The government through the Ministry Decree No. 156/Kpts-II/2003 and the Decree of Director General of Forest Production No. 02/Kpts/VI-PHA/2003 provides incentives to the concession holders to have exception in reducing the Annual Allowable Cut (AAC). As a result, the concessionaire has an economic benefit because of no reduction on its Annual Allowable Cut.

According to the concessionaire, from the two economic advantages could cover the cost required for improving her working performance toward SFM. Attention from the government and international market are still needed remembering the cost of SFM will increase from time to time with the increasing problem as mentioned above.

Economic incentives is mix. Certified company claims that the economic incentive is not significant. The 15% premium price was gotten by Perhutani. There are economic and commercial imperatives why the Company is interested in implementing sustainable forest management.

The long-term benefits will be in the reduction of production cost, reduced environmental and social risks, increased productivity. A company interviewed believe that forest certification, shall be able to market the products and compete particularly in countries of advanced economies. It recognized that today it is not the certification itself that is important, rather of most concern to the company is the sustainable development of the business. Therefore certification standard, then was use to improve the way the company doing the business.

Standard operating procedures aimed at improving productivity and minimizing adverse environmental and social impacts are put in place and continuously disseminated amongst own employees and contractors; They have institutionalized the environmental management system (ISO 14001) and the continuous improvement approach in correcting and improving areas where major non-conformance are observed; They have

replaced the Annual Environmental and Social Report into a Sustainability Report that is following the framework of Global Reporting Initiative (GRI). Periodic independent 3rd-party audits particularly in environmental and social aspects became a regular activity, e.g. ISO 14001, land dispute resolution, Sustainability Report, where before focus has been on financial audits only.

Environmental

Most of companies under certification assessment have a low score in environment indicators, which includes biodiversity conservation area management, procedure and strategy for logging road construction, monitoring and evaluation, environmental impacts.

The most common forestry practices improvement is the application of reduce impact logging (RIL). Some companies get technical assistance from organization such as Tropical Forest Foundation. Companies face difficulties in understanding and to interpret the concept of high conservation value forests (HCVF). Some companies work with NGOs or other relevant organization to understand HCVF.

Companies believe that many of issues identified as the incompliance issues have been recognized before. Certification helps to specifically identify the weaknesses. With certification new knowledge and skill is needed to meet criteria and indicators. Internal and external trainings on the certification are acquired.

Certification contributes upon socialization of the environmental aspects through improvement of the log harvesting system that has low impact damage (RIL). A couple of concessionaires in East Kalimantan that are joined together in certification workgroup of concessionaires in East Kalimantan or also known as *Kelompok Kerja Sertifikasi Kalimantan Timur* (KKS) have received technical assistance from GTZ SFMP (Germany)

Sustainable Forest Management Project (SFMP-GTZ) recommended the government to make RIL as an important part in evaluating and monitoring the performance of concessionaires. The central government responded very well by issuing a circular letter from the Directorate General of Production Forest Management (No. 274/2001), stated that RIL needs to be implemented in the concessionaires.

Stimulation to establish forest conservation reserved in the forest management unit area also starts to grow as the cause of certification. For example, PT. Sumalindo Lestari Jaya II, has allocated an area for HCFV about 50.000 ha. Meanwhile, in doing the certification PT. Intraca Wood also cooperates with The Nature Conservancy (TNC) to help identify HCVF in their working area.

As precondition of certification, PT. Diamond Raya Timber, in cooperation with Indonesian Research and Science Institute (LIPI) and Bogor Agriculture University (IPB) implements mangrove ecosystem study. The study also covers the Ramin regeneration

system, wildlife monitoring system, growth analysis system, and taxonomy system. Certification has also stimulated PT. Diamond Raya Timber to conserve its forest area about 10% in every felling compartment area, as wildlife corridor and seeds sources for natural regeneration. This has been a significant impact upon the availability of the seedling trees as natural regeneration. As already been known, the survival rate for *ramin* manmade regeneration in swamp forest area is very low, so by allocating as many as possible the seedling resource, it is expected that natural regeneration becomes much better in the future.

Table 10. Explanation of certification impact in Indonesia

Element of good Governance Of Pyramida Mayers	Current Conditions in Indonesia
[Tier-5]. Verification of SFM:	Certification has been able to become credible verification tool to make a “picture” of forest management in Indonesia objectively.
[Tier -4]. Extension:	The Joint Certification Scheme Program FSC and LEI is a catalyst to promote and acknowledge the certification in Indonesia to the International Market.
[Tier-3]. Instrument:	Exception in decreasing the allowable cut and logging of Ramin (<i>Gonystilus bancanus</i>) were given to the PT. DRT in the form of incentive certification granted by the government. However, law enforcement does not implement properly, causing illegal logging and land conversion, and conflicts became economic disincentive and high cost of certification.
[Tier-2]. Policies:	ITTO, FSC, PEFC, and LEI have issued SFM standard. However, there is still a gap between SFM standard and the government policy, as shown in figure 2, especially with respect to property rights and land tenure-related problems. Up to the present, certification could not yet contribute toward substantial changes upon government policy.
[Tier-1]. Roles:	Certification has been able to make negotiations between interested stakeholders, and stimulate the concessionaires to pay more attention on the role of local community through community development program. Certification must keep moving toward Adaptive Collaborative Management.
Foundations	Not so many changes in the (tier-2) and (tier-2) level causing many of underlying problems remain unsolved, which will cause un-conductive investment in the long term forestry business especially in the era of decentralization transition.

VI. CONCLUSION

There are two level of the push behind the certification in Indonesia. First, the international pressure through market reaction to the destructive forestry practices. The reaction ranges from the import ban/boycott or/and the request of certification label of the wood product through the national policy of importing country. Second, the domestic pressure which demand government and forest companies to improve forestry practices and policy and promote certification as a tool for changes.

Expectation is relatively high for NGOs in particular for the effective use of certification to help forestry problem in Indonesia. The support from NGOs is key to the idea of certification. However, the support has been slow because of the national forestry policy does not supportive in practice with the certification. In addition the political and social crisis for the last few years make the effectiveness of certification is under heavy criticism. The regional autonomy policy worsen the forest management, the landtenural issues have not been resolved substantially. This is worsening with the slow respond of the certification supporters. FSC has no official representative to improve public understanding and support of certification. LEI is busy with the setting of the system and make it working in the ground as well as internal organization issues.

Few supporters are moving forwards. SmartWood Program was established as a PT SmartWood Indonesia, The Nature Conservancy (TNC) and WWF Indonesia developed program to support certification and combating illegal logging, LEI is preparing a constituent based organization format to make it more effective. Through WWF-TNC program, International buyers are channeled to work with forest management unit (forest concession as well as community forestry) to facilitate certification and get certified wood.

Because the unique forestry text, certification should not be meeting the market demand and only follow the market, the policy change is a critical agenda for certification to be effective. Therefore, in the future, the supporters of certification should work closely with those who involved in the policy change areas and link the certification outputs with the policy changes. Many national forestry policies do not in line with the certification/sustainable forest management although the SFM is also an official jargon through bureaucracy.

Social marketing of the certification knowledge is also critical. It is because the lack of understanding about certification has also been prevalent. Although certification has been ten years in Indonesia, however, the knowledge seems not much improve. What is the economic, social impact of certification for local government, unit management and community around the forest area? Who get and how much the benefits? Is the benefits is shared among stakeholders?

VII. REFERENCES

Agung Ferdinandus. (2001) Role of Credible Forest Management Certification for the Future of the Forest in East Kalimantan. Natural Resources Management in East Kalimantan with a frame of Decentralization. The Alliance of Natural Resource Policies Monitoring of East Kalimantan (APKSA-NGO). NRMP- USAID. ISBN: 979-96553-0-7

Agung Ferdinandus and Alexander Hinrichs. (2000) Self-scoping Handbook for Sustainable Natural Forest Management Certification in Indonesia. Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).

Bachriadi, D., E. Faryadi, and B. Setiawan. 1997. Reformasi Agraria: Perubahan Politik, Sengketa, an Agenda Pembaruan Agraria di Indonesia. Jakarta: KPA dan Lembaga Penerbit Fakultas ekonomi Universitas Indonesia.

Brown, David W. 7 September 1999. Addicted to Rent: Corporate and Spatial Distribution of Forest Resources in Indonesia: Implication for Forest Sustainability and Government Policy. DFID/ITFMP.

Campbell, Jeffrey Y. 2002. Differing Perspectives on Community Forestry in Indonesia. In *Which Way Forwards?: People Forests, and Policy Making in Indonesia*, edited by C.J.P. Colfer and I.A.P. Resosudarmo. Washington DC: Resources for the Future, CIFOR, Institute of Southeast Asian Studies. P.

Colchester, M., M. Sirait, and B. Wilardjo. 2003. Application of FSC Principles 2 & 3 in Indonesia: Obstacles and Possibilities. WALHI, AMAN, Rainforest Foundation

DOWN TO EARTH. June 2001. CERTIFICATION IN INDONESIA: A BRIEFING

Elliott, Christopher. 2000. Forest Certification: A Policy Perspective. Bogor, Indonesia: CIFOR

Fay, Chip and Martua Sirait. 2002. Reforming the Reformists in Post-Soeharto Indonesia. In *Which Way Forwards?: People Forests, and Policy Making in Indonesia*, edited by C.J.P. Colfer and I.A.P. Resosudarmo. Washington DC: Resources for the Future, CIFOR, Institute of Southeast Asian Studies.

Fuad, Faisal H. and Rama Astraatmaja. September 2000. Sertifikasi Hutan Perum Perhutani: Insentif bagi Sustainable Forest Management, Sekedar Hadiah, atau Blunder? Position Paper. Jogjakarta, Indonesia: Arupa.

Forest Watch Indonesia-Global Forest Watch. 2001. Potret Keadaan Hutan Indonesia. Bogor: Forest Watch Indonesia.

Mayers J, Bass S, Macqueen D. 2002. The Pyramid: A diagnostic and planning tool for good forest governance. IIED. (Draft)

Malolongan, A. Illegal Logging in West Kalimantan. Material presentation during Forest Law Enforcement Government and Trade (FLEG-T). Ministry of Forestry and European Commission. 2003.

Ministry of Forestry. Study on Discrepancy forest product trade statistic in Indonesia. Buklet Kehutanan 2003

Peraturan Menteri Negara Agraria/Kepala Badan Pertanahan Nasional No. 5 Tahun 1999 tentang Pedoman Penyelesaian Masalah Hak Ulayat Masyarakat Hukum Adat.

Perum Perhutani. The History and Current marketing and Trade in Perum Perhutani. Paper presented at the Third Regional Seminar on Teak: Potential and Opportunities in Marketing and Trade of Plantation Teak, Challenge for the New Millenium, Jogjakarta-Indonesia, July 31-August 4, 2000.

Prakosa, Mohammad. Key-note speech entitled “Indonesian Forest Policies In The Era Of Conservation And Rehabilitation” by Prakosa the Minister of Forestry of the Republic of Indonesia on the occasion of International Symposium on Illegal Logging. Tokyo, 24 June 2003

PT. DIAMOND RAYA TIMBER Uniseraya Group. 2003. Pengelolaan Hutan Alam Produksi Lestari (PHAPL PT. Diamond Raya Timber) PEKANBARU, RIAU, INDONESIA. Presentation material.

Salim, E., U. Djalins, A. Suntana. 1997. Forest product trade and certification: an Indonesian scheme. Paper presented at the World Forestry Congress, Antalya, Turki.

SGS Qualifor. 2000. Public Summary Report: main Assessment Report 1 April 2000. Accessed march 3, 2004 on www.sgsqualifor.com

Simon, Hasanu. 1999. Pengelolaan Hutan Bersama Rakyat (*cooperative forest management*): Teori dan Aplikasi pada Hutan Jati di Jawa. Jogjakarta: Bigraf Publishing.

Simon, Hasanu. “The Evolvment of Management of Teak Forest in Java. Paper presented at the Third Regional Seminar on Teak: Potential and Opportunities in Marketing and Trade of Plantation Teak, Challenge for the New Millenium, Jogjakarta-Indonesia, July 31-August 4, 2000.

SmartWood. May 2003. SmartWood Forest Management Annual Report of PT Xylo Indah Pratama (XIP), SW-FM/COC- 140. Official Audit Year: 2003, Audit Date: March 2003. Final Report Completed: May 2003. Auditors: Anne Gouyon and Dwi Rahmad Muhtaman

Jakarta Post, 4 September 1997

KARTAWINATA, K., RISWAN, S., GINTINGS, A. N. & PUSPITOJATI, T. 2001. An overview of post-extraction secondary forests in Indonesia. Indonesia has extensive areas of post-extraction. *Journal of Tropical Forest Science* 13(4): 621–638 (2001) 621

Kartodihardjo, Hariadi and A. Supriono. January 2000. The Impact of Sectoral Development on Natural Forest Conversion and Degradation: The Case of Timber and Tree Crop Plantations in Indonesia. OCCASIONAL PAPER NO. 26(E). CIFOR.

Kartodihardjo, Hariadi. January 2003. MEMPERBAIKI RUMAH TANPA PONDASI: 10 Tahun Inisiatif Sertifikasi Ekolabel dalam Belenggu Sistem Pengelolaan Hutan. Lecturer Paper Unpublished.

Kartodihardjo, Hariadi. 2002. Structural Problems in Implementing New Forestry Policies. In *Which Way Forwards?: People Forests, and Policy Making in Indonesia*, edited by C.J.P. Colfer and I.A.P. Resosudarmo. Washington DC: Resources for the Future, CIFOR, Institute of Southeast Asian Studies.

Kartodihardjo, Hariadi. 1996. PEMBARUAN KEBIJAKAN KEHUTANAN DAN PENDIDIKAN TINGGI KEHUTANAN PENCARIAN INTELEKTUAL DIANTARA BELENGGU KEKUASAAN. Paper prepared for Darmaga Darmaga Informal Meeting (DIM)—an informal group for forest policy at the Faculty of Forestry, May 3rd 1996. Unpublished.

LATIN. October 2000. Letter on capacitation certification for concessionaires in Indonesia: LATIN's Respond.

LATIN, April 5, 2002: Public Announcement. LATIN's Role as Certification Body with SmartWood Ends.

Ministry of Forestry. Statistical Data 2001 and 2002. Directorate General of Forest Production Development.

The Public Release of The Rainforest Alliance's Smartwood Program Suspends Certification Of Perum Perhutani's Teak Plantations In Indonesia. August 21st, 2001

Obidzinski, Krystof 2003. Logging in East Kalimantan Indonesia. Historical Expedience of Legality. Phd Thesis. University of Amsterdam.

Rowland, Ian and Max Simpoha. November 1999. Analysis of the Forest Management Certification Process, Indonesia. For use as a basic material not publish. Department for International Development (DFID), DFID Forestry Indonesia – UK. Draft 17/11/99

Ruwiastuti, Maria Rita. 2000. *Sesat Pikir Politik hukum Agraria: Membongkar Alas Penguasaan Negara Atas hak-hak Adat*. Jogjakarta: Insist Press, KPA, Pustaka Pelajar. P. 129-149.

Resosudarmo, Ida Aju Pradnja. 2002. *Timber Management and Related Policies: A Review*. In *Which Way Forwards?: People Forests, and Policy Making in Indonesia*, edited by C.J.P. Colfer and I.A.P. Resosudarmo. Washington DC: Resources for the Future, CIFOR, Institute of Southeast Asian Studies. P.

Nectoux, Francois and Kuroda, Yoichi. 1989. *Timber from the South Seas: An Analysis of Japan Tropical Timber Trade and its Environmental Impact*. Gland, Switzerland: WWF International.

Mir, J and A. Fraser. *Illegal Logging in the Asia Pacific Region: ADB perspective*. *International Forestry Review* 5 (3). 2003.

Musthohid and Wijaksana, Dada. 2002. *Effort to Curb Illegal Logging Hamper by Collusion*. Jakarta post, 19 September.

Schwarz, Adam. 1994. *A Nation in Waiting: Indonesia in the 1990s*. Boulder, San Fransisco: Westview Press. P. 3

Seymour, Frances J and Hariadi Kartodihardjo. 2000. *Indonesia*. In *The Right Conditions: The World Bank, Structural Adjustment, and Forest Policy Reform*, edited by Frances J Seymour and Navroz K. Dubash. Washington DC: World Resources Institute.

Tim Kehutanan IPB. 2002. *CONDITIONS, ISSUES AND POLICIES ON MANAGEMENT OF PRODUCTION FOREST: Policy Recommendations to the Ministry of Forestry*. Unpublished

TIM-4. February, 2004. *Menjajagi Format Kelembagaan Baru LEI*. Unpublish.

WALHI statement: *Seruan Ornop Indonesia untuk Penundaan Kegiatan Skoping, Penilaian dan Penerbitan Sertifikasi kepada HPH dan KPH di Indonesia*, 21 April 2001

Wibowo, D.H. No year. *Pandangan Badan Eksekutif LEI terhadap proses revitalisasi kelembagaan sertifikasi sumberdaya alam menuju organisasi berbasis konstituen*. Paper submitted to the Tim-4 for LEI transformation to the constituent based organization.