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IMF Intervention in Indonesia:

Undermining Macroeconomic Stability and Sustainable Development by Perpetuating Deforestation

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for Sustainable Development
Program Office**

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Written by Heike Mainhardt

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Heike K. Mainhardt
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A Summary of the Issue

For decades, Southern governments and non-governmental organizations (NGOs) have contended that the International Monetary Fund's (IMF) policies and practices, especially the multi-billion dollar bailouts, have wide-ranging impacts reaching far beyond recipient countries' financial and international trade sectors. The IMF has consistently disregarded such claims, narrowly defining the scope of its operations by its Articles of Agreement. Those articles direct the IMF to promote international monetary cooperation, facilitate the expansion and balanced growth of international trade, promote currency exchange stability, assist in the establishment of a multilateral system of payments; and provide temporary financial resources to help correct balance of payments disequilibria. Within this narrow scope, a small group of economists and central bankers make technical decisions about macroeconomic targets, isolated from the environmental, social, and political ramifications of those decisions.

With the strengthening and widening of the NGO movement in the 1990s have come increasing calls for substantial changes to IMF operations. Specifically, the IMF has been asked to account for the potentially destructive impacts of its policies on indigenous communities, the environment, and the poor. As a result of largely NGO-led pressure campaigns, the IMF has recently begun to acknowledge its critics' broader concerns by voicing support for "high-quality growth." Such growth has been defined by a former IMF Managing Director as that which: "a) can be sustained and does not collapse in the face of the slightest external shock; b) is accompanied by appropriate domestic and external balances as well as by adequate investment, including in human capital, so as to lay the foundation for future growth; c) **is accompanied by policies that protect the environment**; and d) **is accompanied by polices that attempt to reduce poverty and improve the equality of opportunities**" (Camadessus, 1990).[1]

What has followed is a mix of soul searching and window dressing. One example of such window dressing occurred in September 1999 when the IMF nominally renamed its "Enhanced Structural Adjustment Facility" to "Poverty Reduction and Growth Facility." An example of more substantive change is the inclusion of some social and environmental measures among the IMF's loan conditionalities. In accordance with this broadened approach, the IMF could not ignore the central role that forests play in Indonesia's economy and society in preparing the 1997 Indonesian bailout. In an unprecedented measure, the IMF required the government of Indonesia (GOI) to undertake a number of forest sector reforms, the most remarkable being the demand for a moratorium on conversion of natural forestland (see Box 1. for details of the January 1998 GOI-IMF Letter of Intent).

However, no matter how eloquently the IMF emphasizes the necessity of "high-quality growth" and "policies that protect the environment," the fundamental operating principles and conventional policies of the IMF remain unchanged. This paper argues that, rather than protecting the forests with what may seem to be conservation-enlightened requirements by the IMF, the overall effect of IMF intervention perpetuates conditions responsible for rapid deforestation. Furthermore, the deforestation is associated with unsound financial practices, corruption, and social conflict, thereby prolonging unstable economic and political conditions in Indonesia.

THE MAIN THRUSTS OF THIS ARGUMENT INCLUDE:

■ **Through its failed efforts to address imbalances in the forestry sector, the IMF's policy interventions have undermined its principal objectives of stabilizing the Indonesian economy.** This outcome grows from two principal problems. First, the IMF's debt restructuring postpones addressing the general insolvency of the financial sector that, in turn, is partly dependent on correcting the lack of liquidity and corruption in the forestry sector. Second, deforestation and resulting social protests have discouraged foreign investment in the palm oil sector, a principal target of IMF reforms and a sector identified as central to future economic expansion. These problems are largely attributable to underlying institutional and governance weaknesses in Indonesia.

■ **The IMF's core economic polices for the Indonesian bailout undermine its forest sector targets by perpetuating deforestation.** The IMF-supported financial and corporate sector restructuring and investment/trade liberalization measures encourage timber extraction and accelerated conversion of forestland through the facilitation of unsound investments in Indonesia's wood-based and palm oil industries.

■ **The IMF's forest policy reforms do not correct the fundamental imbalance between timber demand and sustainable raw material supply.** The IMF requested of the GOI only conventional prescriptions for forest management such as removal of export taxes and market-based efficiency measures. These prescriptions fail to provide a credible plan to downsize excessive wood-processing capacity, control illegal logging, or ensure that sustainable practices are used in managing the forests.

■ **The IMF's economic policies have placed additional economic costs and institutional burdens on the rural poor.** The expansion of palm oil plantations and illegal logging has displaced rural communities and weakened their access to and control over traditional land and forest resources on which their livelihoods depend.

While the IMF's acknowledgement of the social and environmental dimensions of its operations represented an important step forward, the Indonesian experience highlights the difficulties the IMF has in translating policy into "high-quality" growth. This is because the IMF does not include environmental factors in its calculation of achieving macroeconomic stability and sustainable development. Currently, the IMF is in the process of retreating from its former declaration of "policies that protect the environment" claiming that it is straying too far from the IMF's core mandates.

In order to achieve its professed policy orientations while staying focused on the core mandates, the IMF must alter its traditional economic prescription to integrate both social and environmental dimensions of macro-stability. To this end, the IMF must establish a comprehensive strategic environmental framework to guide its operations.

AS A MINIMUM, THIS FRAMEWORK SHOULD INCLUDE:

Country Surveillance

- Environmental indicators for country surveillance
- Strategic environmental crisis management framework

IMF-Supported Country Programs -

- Environmental impact assessments
- Environmental impact monitoring systems
- Corrective mechanisms

By and large -

- Enhanced cooperation with other organizations

This policy guidance brief begins by providing an overview of several topics important to the understanding of the main arguments, including: the significance of the Indonesian natural forest resource; the main drivers of deforestation; and the governance roots of the Asian financial crisis. The main body of the paper presents an assessment of IMF intervention in Indonesia, including: forest policy reforms; bank recapitalization and corporate debt resolution; and oil palm investment and trade liberalization. Lastly, the document draws out a range of policy recommendations and discusses the way forward for IMF operations.

Indonesia's Natural Forest

THE SIGNIFICANCE OF THE INDONESIAN FOREST

Indonesia contains 10 percent of the world's remaining tropical forests, making it second only next to Brazil. The Indonesian forests, however, are disappearing at an alarming speed and face an extreme threat from over-exploitation. Satellite imagery from 1997 shows a loss of more than 17 million hectares (ha) for a 12-year period on the islands of Kalimantan, Sulawesi, and Sumatra. This loss equals approximately 14 percent of the total Indonesian forest cover that existed in 1985. The rate of deforestation[2] over the last decade averaged 1.3 million ha per year (FAO, 2001). It is believed that this rate has increased since 1997. If the current rate is not arrested, it is estimated that all major natural forest stands in Indonesia will be significantly diminished within 10 to 15 years (FLB, 1999b).

It is important to protect, conserve, and sustainably manage Indonesia's forest resources for local and global populations. The natural forest is critical to the welfare of the rural poor and local forest communities of Indonesia. It is estimated that 100 million local people are dependent on the forests for their livelihoods (FLB, 1999b). The forests provide pollinators for crops and predators for crop pests and support the search for new medicinal and horticultural species. Moreover, the forests maintain water and soil quality, provide flood regulation, and preserve cultural heritage. Beyond rural areas, the forests are a significant component in the general development of the Indonesian economy. Throughout the Suharto period, Indonesia's forestry sector ranked second only to the petroleum sector in its contribution to GNP (World Bank, 1995). Indonesia's natural forests are also important to the world at large for the conservation of biodiversity and as a major component in the carbon cycle and regulation of global warming.

THE MAIN DRIVERS OF DEFORESTATION

The two main drivers of deforestation in Indonesia are:

- Unsustainable timber extraction, especially widespread illegal logging; and
- Forestland conversion for agricultural expansion, including associated forest fires.

Unsustainable timber extraction is a direct consequence of Indonesia's excessive industrial wood processing capacity. This over-capacity is a result of pervasive rent-seeking[3] and corruption linked to the Suharto regime. During Suharto's 32-year authoritarian rule, forest policy sought to maximize the timber output, government revenues, and private wealth. Much of the resource's rents were captured by a small group of well-connected businessmen who influenced policy and ignored sustainable forest management regulations (for a detailed account, see Barr, 2000a and Brown, 1999).

Recent GOI data reveal that the forests can sustainably supply only between 30 to 50 percent of the timber currently being processed. As shown in Table A, data indicates that in 1997 the aggregate roundwood consumption of the three major wood industries was approximately 55 million cubic meters (m^3).[4] By contrast, Indonesia's Ministry of Forests and Estate Crops' (MoFEC) statistics indicate that Indonesia's official log supply for 1997 was 26 million m^3 (Department Kehutanan, 1997), which is 29 million m^3 below the volumes estimated to have been consumed by the nation's wood processors.

The imbalance between sustainable raw material supply and industrial wood processing capacity is a major driver of illegal logging taking place in both production forests and conservation areas. In November 2000, provincial forestry officials in Bengkulu

Table A: Production Capacity of the Wood-Based Industries (1997)[5]

Industry	Units	Production Capacity (m^3)	Estimated Real Production (m^3)	Estimated Roundwood Consumption (m^3)
Sawnwood and Moulding	**2,345**	**18,975,000**	**13,300,000**	**24,180,000**
Plywood	**115**	**12,600,000**	**10,080,000**	**20,160,000**
Pulp	**15**	**3,900,000**	**3,400,000**	**10,965,000**
Total	**2,475**			**55,305,000**

Sources: Indonesian Sawmillers Association (ISA); Asosiasi Panel Kayu Indonesia (APKINDO); and Asosiasi Pulp Kertas Indonesia (APKI) as cited in Barr, 2000b

stated that 48,000 of conserved forest in the province had been damaged by illegal logging (*Jakarta Post*, 2000d). In addition to the illegal logging, large numbers of timber concession-holders are known to routinely violate sustainable forest management regulations by over-harvesting and failing to cultivate plantations as required by law (Resosudarmo, 2000).

The second significant driver of deforestation is forestland conversion, predominantly for agricultural expansion. Currently, the largest commercial force behind land conversion and the fastest growing crop in Indonesia is oil palm (Barber and Schweithelm, 2000; Lee and Potter, 1999). The conversion of forestlands to oil palm plantations, coupled with the associated practice of setting fires for land clearing, makes palm oil a key element in the rapid deforestation equation. At the root of this threat to Indonesia's forest are the government's land-use allocation processes that have been assessed by both Indonesian and foreign observers as inappropriate, corrupt, and conflict-ridden.

The 1997 Asian Financial Crisis and IMF Intervention

The Asian financial crisis began in mid-1997 in Thailand and by year's end it had spread to Indonesia, South Korea, and other countries. The details of how the crisis affected each of the countries vary. Typically, there was a collapse in currency values after a period of turmoil in foreign exchange markets. Asset values declined sharply and economic activity turned negative. The turmoil occurred to the detriment of these countries, whether it is measured in terms of economic output, investment, jobs, environment, or human life.

THE GOVERNANCE ROOTS

Indonesia's financial crisis shares many characteristics of the other countries beset by crises in the late 1990s. The main factors that left Indonesia particularly vulnerable to financial crisis included weak government regulation of the financial sector coupled with the cronyism and corruption that permeated the banking system. These factors led to poor and reckless investment decisions, over-lending by banks, excessive production capacity in key industries, and an economy overly reliant on debt rather than equity. The forest sector provides many examples of these more general weaknesses.

With the economy's ruin and ensuing political meltdown came the opportunity to rectify other failures, including management and control of natural forest resources. Wielding the considerable leverage of a US$46 billion bailout package, the IMF in particular had a unique opportunity to work with the GOI to effectively address the failed policies and management regime in the forestry sector.

IMF INTERVENTION: THE FOREST POLICY REFORM

When preparing the 1997 Indonesian bailout prescription, the IMF recognized that it could not ignore the problems besetting the forestry sector and turned to World Bank staff for advice on forest policy.[6] In January 1998, in an unprecedented measure, the IMF required the GOI to consent to a number of forest policy reforms (as described in Box 1); the most remarkable of which was a moratorium on conversion of natural forestland.

Unfortunately, the forestry sector reforms prescribed by the IMF did not address the underlying issues that drive deforestation and, therefore, in spite of the declared forest conversion moratorium, its interventions have not slowed the rate of deforestation in the slightest. This failure is attributable to basing the forest policy reforms only on generic prescriptions for forest management. These elements include removal of export taxes, enforcement of selective cutting guidelines, increased government capture of timber rents, and market-based efficiency in the wood processing sector. These cookie-cutter prescriptions are not particularly relevant to Indonesia. The effectiveness of the forest reforms is constrained by the fact that they focus almost exclusively on reforming the logging concession system or HPH (Hak Pengusahaan or right of forest exploitation) contracts (Barr, 2000b). In doing so, they fail to provide a credible plan for controlling illegal logging, ensuring that sustainable practices are used in managing conversion forests[11], and reducing demand for logs by the excessive production capacity of Indonesia's wood industries.

Moreover, as suggested by Barr (2000b), these policy reforms threaten to increase logging in Indonesia since:

■ The removal of log export taxes is likely to bring domestic roundwood prices up to international parity levels, thereby providing Indonesian producers with an incentive to increase log supply.

■ Recent increases in processing efficiency have placed added pressure on forests by making it possible for plywood producers to process a wider number of species and logs of a smaller diameter than were commercially viable in the past.

In addition to the shortcomings of its forest sector policies, the IMF failed to recognize the substantial pressures put on the Indonesian forest by the crisis in the financial sector and the policies regulating palm oil production.

IMF INTERVENTION:

THE FINANCIAL SECTOR REFORM[12]

In January 1998, in order to carry out the reform of the banking sector, the Indonesian government created the Indonesian Bank Restructuring Agency (IBRA),[13] following directions from the IMF and with technical assistance from the World Bank. The core responsibilities of IBRA include closing problem banks, recapitalizing banks deemed capable of regaining solvency, and recovering assets and bad debts transferred to IBRA (hereafter referred to as corporate debt resolution). As illuminated in the section below, the last two activities, bank recapitalization and corporate debt resolution, have significant implications for the forestry sector.

Box 1: IMF Conditionalities Related to Forest Policy Reforms

In the Indonesian government's January 1998 Letter of Intent to the IMF, the following points referred to the forest sector:

■ **Point 10:** Increase the currently implemented land and building tax up to 40 percent, including an increase in the taxation of plantations and forestry property.

■ **Point 12:** Incorporate the Reforestation Fund into the national government budget. This measure takes control of the Reforestation Fund away from the Minster of Forestry[7] and redirects the capital inflows[8] to the official government budget.

■ **Point 37:** Reduce export taxes on logs, sawn timber, and rattan up to 10 percent ad valorem. Replace these taxes with appropriate resource rent taxes.

■ **Point 40:** Dissolve all existing formal and informal restrictive marketing arrangements, including those for paper and plywood.[9]

■ **Point 50:** Reform logging concession regulations[10], including:

By June 1998

- allow for periodic review of stumpage charges
- increase the rate of stumpage fees
- lengthen forest concession terms beyond the current 20-year limit
- authorize trading of concession rights
- conduct competitive auctioning of concession rights

By the end of 1998

- implement performance bonds
- reduce land-conversion targets to environmentally sustainable levels (**including a moratorium on natural forest conversion**)

SHORTCOMINGS AND IMPLICATIONS

Subsidies to Mismanaged Forest-Linked Companies. A recent study found that 20 percent of the debts under the supervision of IBRA's Assets Management Credit Unit (AMC) are owed by forest-linked companies, e.g. plywood, pulp and paper, and oil palm (Barr, et al., 2000) (See Table B.). Preliminary estimates suggest that IBRA currently holds approximately US$4.0 billion in loans related to forest and estate crop activities, of which US$2.6 billion are non-performing (Barr, et al., 2000). IBRA must either collect these loans, or sell the right to collect them, usually at a discount. IBRA is allowed by the IMF to sell them at discounts up to 50 percent. Many banking analysts believe, however, that a 70 percent discount is more likely. The end result may be that the original debtors will only have to pay back 30 to 50 percent of the debts they owe (Barr, et al., 2000).

These debt markdowns amount to a huge subsidy for poorly managed and, in some cases, illegally operating forest-linked companies. It is estimated that through this procedure IBRA will write-off as much as US$3.6 billion in non-performing loans associated with Indonesia's forest and agricultural plantation conglomerates (Barr, 2000b). The IMF-backed policy not only has the government (and, hence, public tax dollars) taking over a substantial part of the forest sector's bad debts, but it also proposes to make more capital available to the sector allowing for the completion of previously suspended expansion projects. The end result will be to expand the installed wood processing capacity of the sector, increase demand for timber, and thereby accelerate deforestation (Barr, et al., 2000).

Furthermore, the IMF-supported bank recapitalization process retains unsound interactions between the banking and

Table B: Bad Debts Owed by Indonesia's Top Ten Forest-Linked Conglomerates, January 1999[14]
(Million $ US)

Conglomerate Group Name	Plywood Subsidiary Debt	Pulp and Paper Subsidiary Debt	Oil Palm Subsidiary Debt	Other Subsidiary Debt	Total Debt
Andatu	27.5				27.5
Astra				36	36
Bakrie				206	206
Barito Pacific	12.8			548	560.8
Bob Hasan	173	217.5		2.1	392.6
Djajanti	212			8.6	220.6
Gemala	1.3			35	36.3
RGM	35.4	42.5	2.5		80.4
Salim			1.6	73	74.6
Sinar Mas	7			30	37
Total	469	260	4.1	938.7	1,672

Source: IBRA, June 1999 as cited in Barr, et al., 2000. Note: Converted original data from Rupiah to US$ using US$=11,400 Rp.

corporate finance sectors. Since 1988, when the GOI liberalized the country's commercial banking sector, most of Indonesia's largest conglomerates have owned their own banks. This has been particularly problematic because conglomerate-owned banks have frequently loaned far greater sums of capital to affiliated companies than Indonesia's banking laws allow (Barr, 2000a). Table C. summarizes the banks owned by forest-linked conglomerates and underscores the potential for the bank recapitalization process.

The corporate debt and banking sector restructuring has amounted to subsidies and enhanced financing to mismanaged and corrupt forest-linked companies. This outcome is partly due to the IMF's failure to adequately address the pre-crisis institutional weaknesses that promoted reckless investments in the forest-linked industries. The IMF reforms do not assure a system of checks and balances among the state, the private sector, and civil society. For example, in most cases, IBRA is allowing the companies' pre-crisis management teams to continue running their operations (Barr, 2000b). For many holdovers from the old Suharto regime, the IMF process simply means removing the most blatant corruption from the current system (e.g., Bob Hasan[15]) while leaving the mechanisms and relatives of collusion in place. As a result, the same system, patterns, and structural pressures on the economy and forests that existed under the Suharto regime continue and are reinforced by the IMF reform process.

Table C: IBRA Recapitalization for Forest-Linked Conglomerate-Owned Banks

Conglomerate	Bank	IBRA Status	Major Forest-Linked Assets
Astra	Bank Universal	Recapitalized	Surya Hutani Jaya, Astra Agro Lestari
Bakrie	Bank Nusa Nasional (BNN)	Inserted into Recapitalized Bank Danamon	Bakrie Sumatra Plantation
Bob Hasan	Bank Duta	Inserted into Recapitalized Bank Danamon	
	Bank Bukopin	Recapitalized	APKINDO (Pulp, Paper and Plywood)
Sinar Mas	Bank Interasional Indonesia (BII)	Recapitalized	Asia Pulp & Paper, Golden Agri Resources
Salim	Bank Risjad Salim Internasional	Inserted into Recapitalized Bank Danamon	Salim Plantations

Box 2: Forestry Sector Trends

Production Trends in Indonesia

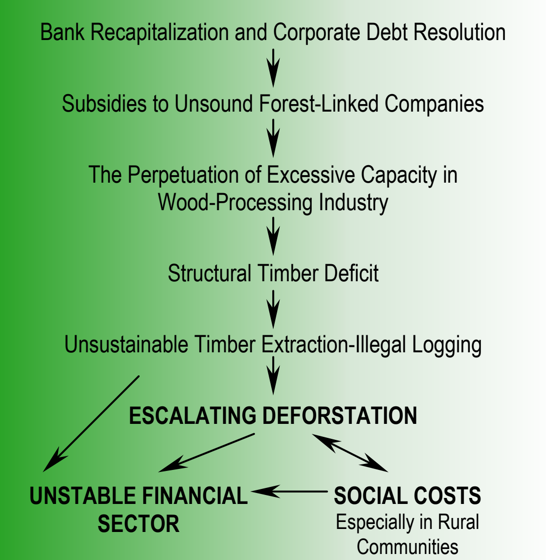
- Over-capacity in wood processing sector (more sawmill capacity than trees)
- Illegal logging supplies over half of demand
- Declining supply from natural forests (degraded land and lower quality species remaining)
- Lagging planting and production from plantations, relative to competing countries[16]
- Stiff plantation timber supply competition abroad after 2005

Global Trends

- Natural forest area and its productivity are declining.
- Plantation timber production volumes will increase rapidly, in waves of tens of millions of cubic meters through 2005 and beyond, driving prices down.
- Timber production for commodity and industrial uses will become increasingly competitive.
- Uses of natural timber will decline.
- Costs of producing (extracting) natural timber will increase, thereby:
  - Increasing environmental controls and
  - Increasing market demands for sustainable forest management, or certification[17]

Source: Leslie, 2000; NRM, 1999

Potential Outcomes of IMF Financial Reforms



Continued Reckless Investments Threaten Health of Corporate Finance. A significant, unsound practice retained by the IMF reform process is the pattern of risky investments in Indonesia's forest-linked sectors. Forest-linked investments should be considered risky because of the potential for production slowdowns due to: prosecution for illegal logging activities; breakdowns in raw material supply associated with excessive processing capacity; social conflict over land rights; and competition from an increasing world supply of plantation timber. Such investments threaten the health of the corporate finance sector because production slowdowns often result in disruptions of financial flows for loan repayments. The underestimation of this financial risk encourages the flow of investment capital to projects that would otherwise not be funded on such a scale, or with such favorable terms (Barr, 2000b).

To avoid future financial difficulties in the forest sector, the IMF should have supported closing down some of the debt ridden forest-linked companies instead of providing debt markdowns and more capital to complete suspended expansions. Box 2 lists near- to long-term global and domestic trends in the forestry sector that highlight the need in Indonesia to downsize the wood-based industry. Furthermore, the trends underscore the importance of strictly enforcing the planting of tree plantations.

IMF INTERVENTION:

LIBERALIZED OIL PALM TRADE AND INVESTMENT

The oil palm industry is an important source of foreign exchange and employment for Indonesia, but oil palm expansion is also a significant source of concern for many Indonesians. Much of the expansion of oil palm has come at the expense of Indonesia's tropical forest resources, often in the form of land conversion and associated forest fires. In fact, oil palm expansion is considered by many to be the largest commercial force behind deforestation in Indonesia (Barber and Schweithelm, 2000; Lee and Potter, 1999). Furthermore, local communities have been displaced and exploited by the large-scale oil palm plantations resulting in social conflict.

Oil palm plantations rapidly expanded in Indonesia beginning in the mid-1980's onward. Starting with 600,000 hectares (ha) of planted area in 1985 (Wakker, 2000) and reaching approximately 2.5 million ha by 1997 (Casson, 1999). In 1996, the GOI set aside 9.13 million ha of forestland for oil palm plantation development (Wakker, 2000). By early 1997, the Investment Co-ordination Board (BKPM) had approved 8.7 million ha of this land for 612 oil palm investment projects representing a total value of US$23.55 billion (See Table D.) (*Jakarta Post*, 1997a).

Table D: Land Held by Major Oil Palm Conglomerates, 1997

Holding Company	Group	Total Land Allocated (ha)	Total Planted Area (ha)
PT Golden Agri Resources	Sinar Mas	582,208	211,713
PT Astra Agro Lestari	Astra International	260,000	177,976
PT Salim Plantations	Salim	275,000	125,000
PT Asian Agri	Raja Garuda Mas	200,000	110,000
PT Pan London Sumatra	Napan	245,629	78,944
PT Socfindo	Socfin	47,777	37,180
PT Tolan Tiga	SIPEF	52,869	36,312
PT Bakrie Sumatra Plantations	Bakrie	376,041	34,392
Total		2,059,524	811,517

Source: Casson, 1999.

Table D. Note: In 1997, eight conglomerates dominated the Indonesian private sector for oil palm plantation estates, as shown in Table D. These conglomerates currently manage a total of approximately 812,000 ha of oil palm plantations and intend to expand their oil palm estates to at least 2 million ha. They represent approximately 69 percent of the total planted area owned by private companies (Casson, 1999). Government officials linked to the private palm oil sector are mostly Suharto hold-overs. Janji Akbar Zahiruddin Tanjung, the speaker of parliament, for instance, is a member of the Tanjung family whose family company, PT Marison Nusantara, has overlapping shares with several member companies of the Salim and Raja Garuda Mas Groups (Inside Indonesia, 1999).

However, before 5.8 million ha of approved projects could be developed, in 1998 the booming oil palm expansion rate declined by one-third (Casson, 1999).

The slowdown was partly due to severe drought and fires[18] and partly due to the economic crisis, i.e., financial resources had dried up for national companies. As a result, world crude palm oil (CPO) stocks declined and the price of CPO on the world market increased. In turn, Indonesian producers raised their CPO exports, further reducing domestic supplies and causing a jump in the domestic price of cooking oil.[19]

In an attempt to control domestic CPO prices and curb the flow of CPO exports, the GOI imposed higher export taxes.[20] Subsequently, this measure prevented oil palm firms from taking advantage of high international prices and the devaluation of the rupiah (Rp). If given time, the high export taxes and lack of funding may have provided some relief in oil palm related deforestation and social violations. However, the IMF intervened with liberalization measures requesting a large reduction in the export tax and providing incentives for foreign investors to make up for the shortfall in domestic capital.[21]

Given the IMF bailout and liberalization measures coupled with strong global demand, many companies began boosting their planting targets and attracting new foreign investments. For example, PT Astra Agro Lestari increased their planting target from 6,000 ha in 1998 to 10,000 ha in 1999; and PT SMART increased from 20,000 ha in 1998/99 to 50,000 ha in 2000 (Casson, 1999). Thus, rapid deforestation and related social conflicts persist.

Shortcomings and Implications

The most significant shortcoming of the IMF's intervention in the palm oil sector is its disregard for the government of Indonesia's dysfunctional and corrupt forestland allocation scheme, specifically as it relates to land conversion for plantations. The existing system allows many oil palm developers to carry on illegal land clearings through the manipulation of government agencies and traditional landowners.

In Indonesia, the Ministry of Forests and Estate Crops (MoFEC) is the government body responsible for classifying and allocating parcels of land to different uses. When forestland is classified for conversion, it usually entails the permanent transformation to a mono-crop plantation. The problem is that the land classification of MoFEC does not accurately reflect the actual vegetation or local community rights. A study commissioned by the Japanese International Cooperation Agency (JICA) found that only 15 percent of 3.2 million ha of land earmarked for oil palm development in West Kalimantan were actually suited for this purpose considering the region's current vegetation cover and local community land rights (Potter and Lee, 1999). Not surprisingly, such deals are being extracted by an oil palm industry that is dominated by some of the same domestic conglomerates that control the logging and wood processing industries (Barr, 2000b).[22]

In addition to leaving in place this flawed land allocation system, the IMF support for oil palm expansion fosters three other problematic trends: simplified licensing procedures; land conversion as timber supply; and expansion in Irain Jaya's forests.

Simplified Licensing Procedures. As a direct result of the IMF liberalization measure, the GOI has expedited the licensing procedures for both domestic and foreign investment ventures, and has empowered the provincial administrations to issue all kinds of investment permits. It now takes at most 10 days to obtain all necessary permits for an oil palm investment project. In North Sumatra, it takes only 3 days (Jakarta Post, 2000b). It seems reasonable to surmise that in the Indonesia framework a simplified licensing procedure will give even less consideration to local communities and the environment[23].

Land Conversion as Timber Supply. Under the MoFEC's forest conversion policy, a private timber operator is able to obtain a wood utilization permit or IPK (*Izin Pemanfaatan Kayu*) to harvest the timber from areas that have been slated for conversion. In contrast to a logging concession contract (or HPH[24]), the IPK agreement allows the logging company to employ nonselective harvesting techniques and to pay minimal royalties (and no reforestation fee) on the logs that are cut (Barr, 2000b). As Table E shows, the aggregate volume of timber produced through IPK forest conversion rose from 4.2 million m^3 in 1992/93 to 10 million m^3 in 1997/98 and from 15.5 percent to 34.4 percent of the country's log production respectively. Even though large tracts of degraded land exist in Indonesia, many plantation companies develop their estates in forested areas because the companies are also interested in the timber that can be logged there (Barr, 2000b).[25]

Table E: Log Production by Source

Year	Sources						Total
	Natural Forest (RKT)		Conversion Forest (IPK)		Forest Plantation (HTI)		
	m^3	%	m^3	%	m^3	%	m^3
1992/1993	21,798,810	79.3%	4,250,689	15.5%	1,437,359	5.2%	27,486,858
1993/1994	20,473,641	76.3%	4,712,812	17.6%	1,661,557	6.2%	26,848,010
1994/1995	17,308,737	72.5%	4,708,696	19.7%	1,871,737	7.8%	23,889,170
1995/1996	16,943,933	68.5%	5,398,196	21.8%	2,383,048	9.6%	24,725,177
1996/1997	15,268,134	60.1%	8,021,328	31.6%	2,097,813	8.3%	25,387,275
1997/1998	15,597,546	53.5%	10,038,228	34.4%	3,513,643	12.1%	29,149,417

Source: 1997/1998 Forest Utilisation Statistical Yearbook (1998).
Indonesian Ministry of Forest and Estate Crops as cited on the Forest Liaison Bureau website at http://www.eu-flb.or.id/statistik

Table F: Oil Palm Expansion in Irian Jaya (hectares)

Plantation Company	1997 Original Request	1997 GOI Approval	Current Operation '00
Sinar Mas Group	111,000	19,100	40,000
Djajanti Group	150,000	17,000	17,000
Texmaco Group	300,000	35,000	35,000
Korindo Group	70,000	34,900	34,900
Perkebunan Nusantara II	113,000	55,344	125,000
Total	744,000	121,344	247,900

Sources: Produced with data obtained from Wakker, 2000; Antara, 1999; Jakarta Post, 2000b; and Jakarta Post, 1997.

Expansion in Irian Jaya's Forests. Due to a shortage of conversion land in western Indonesia, the GOI began to direct investors to Irian Jaya with special investment policy measures. In 1997, 14 proposals were approved for oil palm estates in Irian Jaya totaling 121,344 ha. To its credit, MoFEC did substantially reduce the areas initially requested by companies (744,000 ha) in order to lessen pressures on the forests (Wakker, 2000). Nevertheless, as Table F illustrates, some of these plantation companies have gone on to develop areas well beyond what the GOI originally approved.

With the IMF supported liberalization and a newly built port to support CPO exports[26], it is not unreasonable to assume that the oil palm expansion trend into Irian Jaya will increase in the future. Given that Irian Jaya is still mostly covered with pristine natural forest, oil palm development in the province poses a great threat to a unique ecosystem and the vast biodiversity within it. Irian Jaya has the richest concentration of plant life in all of Indonesia, and perhaps in the entire world. Scientists estimate that there are 16,000 plant species, 650 bird species, and 200 frog species with many of them being endemic (PCU, 2001).

Besides its environmental costs, social conflicts over land rights and land status surrounds the oil palm development in Indonesia. For instance, many have complained that some corporations have "arranged" government support for projects that conflict with existing land-rights (Bowen, 1999). Numerous case studies point out that indigenous communities have been forced or lured into surrendering their traditional land rights to plantation companies (Wakker, 2000; Bowen, 1999; Lee and Potter, 1999).

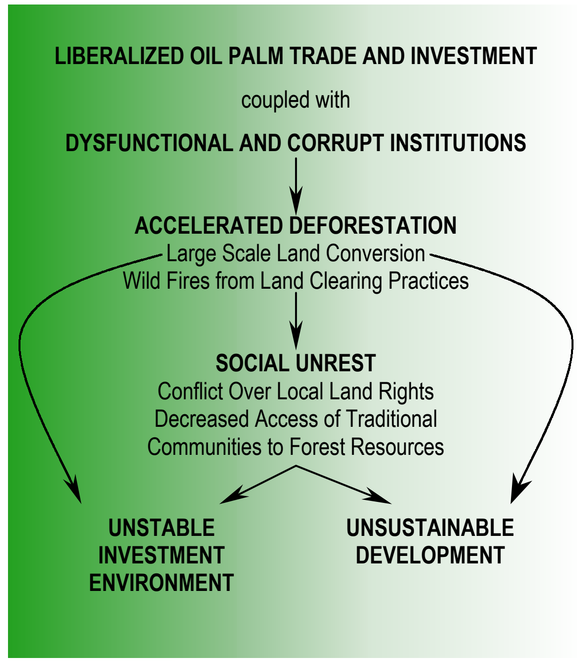
Since the resignation of President Suharto in May 1998, there has been a marked increase in social unrest in and around oil palm estates often involving fires, demonstrations, intimidation of local people, injury, and death (Casson, 1999; Lee and Potter, 1999; Telapak, 1999; Wakker, 2000; WRM, 1998). As evidence of the scope and severity of social conflicts associated with the palm oil industry, there are currently more than 40 NGOs active throughout Indonesia that focus on the environmental and social threats posed by irresponsible oil palm expansion.[27]

Nowhere in its policy proposals does the IMF address the social issues surrounding the liberalization and expansion of the oil palm sector. Yet these social conflicts jeopardize the stabilization and economic growth objectives that are at the core of the IMF intervention. Targets of economic growth largely depend on recovery of market confidence, which in turn depends on political and social stability. For example, Bowen (1999) reports that in recent years many oil palm companies, unable to rely on the Indonesian authorities for security assistance, have had to close down their operations, reduce their planting targets, or withdraw their investment plans.

Last but not least, the oil palm sector is a major source of forest fires in Indonesia. Between 46 and 80 percent of larger fires are associated with land clearing for plantations (Wakker, 2000). Oil palm companies use fire as an easy and cheap method to clear as much land as possible. Many of these fires run out of control, extending to larger areas. In some cases, forest fires are intentionally set as part of the intense struggles between local communities and the plantation companies.

The extensive 1997/98 fires in Indonesia came at great cost to human health, the environment, and the Indonesian economy. The 1997 haze burned over 2 million ha of forest in Indonesia (FAO, 2001), and caused extensive health and transportation damage with an estimated US$9.3 billion in economic losses (Jakarta Post, 2001). In 1998, Indonesia pledged to the Association of Southeast Asian Nations (ASEAN) to implement a "zero burning policy" that would prevent forestry and plantation companies from making use of fire to clear land from mid-1999 onward. However, fostered by a lack of institutional capacity and political

Potential Outcomes of Oil Palm Reforms



incentives, hundreds of hot spots continue to appear on satellite images and the haze continues to blanket the region (Jakarta Post, 2001).

In short, the IMF-supported liberalization of the palm oil sector runs headlong into its own request for a moratorium in the conversion of natural forests. First, Indonesia has failed to meet the moratorium requirement and the IMF has said nothing to oblige compliance. Second, the moratorium did not apply to conversion permits already issued but not yet used, which include a staggering 5.8 million ha. Third, given the many problems associated with the GOI land-use classification scheme, natural forests remain vulnerable to bogus land use permits. Finally, the IMF has backed rapid expansion of the oil palm sector creating conditions for increased deforestation.

An Alternative Approach

The foregoing analysis obliges us to pose the questions: What should the IMF have done? What should the IMF do in the future? The following section presents suggestions for both the Indonesia program and future IMF-supported operations in other countries.

THE INDONESIA PROGRAM

Because of governance shortcomings and corruption in Indonesia's natural resource development, it is almost useless to start with conventional forest management policy reforms. In other words, conventional forest policies are of little use when they are easily evaded by illegal activities (i.e., most the timber supply is dependent on illegal logging) and the institutional capacity to implement reform is lacking. With these points in mind, policy reform efforts in Indonesia should have focused (and still need to focus) in three main areas:

1. Balancing demand for timber with raw material supply (e.g., stop subsidizing and providing risky loans to the timber industry);
2. Improving governance (e.g., institutional capacity building); and
3. Controlling forestland conversion.

Balancing demand for timber with raw material supply. Current rates of deforestation will not be arrested if the wood-processing companies are not downsized and restructured to balance supply with demand. To this end, the IMF should have:

■ Prevented Indonesia from bailing out forest-linked companies that were operating illegally. The IMF should have made certain that such companies were not provided with further risky loans and debt write-offs that allowed them to continue and, in some cases, expand operations. Since many of these companies are unsustainable and debt-ridden to begin with, this measure also makes good economic sense.

■ Provided adequate management guidelines for IBRA. The IMF (through its role on the Independent Review Committee) should have provided specific guidelines for the management and sale of IBRA assets. Rather than providing generic asset valuing guidelines, it should have provided specific guidelines tailored to the political and economic situation in Indonesia[28] (See Box 3.).

Improving governance. A major problem with the IMF approach to advocating far-reaching economic reforms is that these reforms require a capable government. However, in most countries stricken by financial crises, a capable government is simply not present. The IMF should have acknowledged this and supported:

■ technical assistance for institutional capacity building in key critical areas (see Box 4.), and

■ transitional counterbalance measures, namely, measures that may not be optimal but can improve the situation while institutional capacity is being built.

Controlling forestland conversion. Given that the moratorium is seen as little more than a rhetorical promise, a more significant intervention would seek to address directly the causes of deforestation. Regarding the oil palm sector, it was critical to consider the sequencing, pace, and essential accompanying reforms that would have been most appropriate for decreasing government controls and liberalizing the market. Foremost in determining the pace of those reforms should have been safeguarding local communities (especially the poor) and avoiding the rapid depletion of the natural forest resource base. Until the preconditions necessary for beneficial oil palm expansion were in place, Indonesia should have been advised to open up to trade and capital flows gradually instead of permitting immediate full liberalization. To this end, the IMF conditionalities should have included:

- Halting land conversion in all disputed areas until fair and transparent land allocation mechanisms are in place[29];
- Upholding the 1998 Indonesian pledge to implement a "zero burning policy";
- Requiring third party verification that no natural forests are being cleared for plantation development; and
- Adhering to strict implementation of "best practices" (e.g., well-planned and ecologically appropriate) in land clearing techniques.

Box 3: Enhanced Management Guidelines for IBRA

- Incorporate meaningful environmental and social performance criteria into the IMF-sponsored bank recapitalization and corporate debt resolution processes.
- Expose and penalize the illegal activities (e.g., illegal material supplies and banks not paying the penalty for violating legal lending limits) and risky investments. Rather than encouraging IBRA and the GOI to make money from bad forestry investments, the IMF should oblige creditors to absorb their losses since they knowingly invested in high risk and unsustainable forest industries. The corporate debt negotiation process should secure full accountability.
- Enforce an expanded code of due diligence to ensure that domestic and international financial institutions do not continue to finance illegal and/or inordinately risky practices in Indonesia's forest and estate crops sector.
- Close heavily indebted wood industries under control of IBRA, as suggested by the Consultative Group on Indonesia (CGI) at its January 2000 meeting.
- Close firms found to be operating without a proven sustainable supply of raw materials. In some cases, this means operating illegally, and may include violation of concession licenses, violation of plantation requirements, and illegal logging activities.
- Link proposed debt write-off to capacity reduction, as suggested by the CGI at its January 2000 meeting and committed to by the GOI.
- Provide independently verified evidence that no natural forests have been converted for agricultural plantation development by any of the subsidiaries within a company group (Wakker, 2000).

FUTURE IMF OPERATIONS:
A STRATEGIC ENVIRONMENTAL FRAMEWORK

Finally, while the IMF's acknowledgement of the social and environmental dimensions of its operations represented an important step forward, the Indonesian experience highlights the difficulties the IMF has in translating policy into "high-quality" growth. This is because the IMF does not include environmental factors in its calculation of achieving macroeconomic stability and sustainable development.

In order to achieve its professed policy orientations while staying focused on the core mandates, the IMF must alter its traditional economic prescription to integrate both social and environmental dimensions of macro-stability. To this end, the IMF must establish a comprehensive strategic environmental framework to guide its operations.

AS A MINIMUM,
THIS FRAMEWORK SHOULD INCLUDE:

Country Surveillance -

- Environmental indicators for country surveillance
- Strategic environmental crisis management framework

IMF-Supported Country Programs -

- Environmental impact assessments
- Environmental impact monitoring systems
- Corrective mechanisms

By and large -

- Enhanced cooperation with other organizations

Box 4. Institutional Capacity Building in Indonesia

At the time of the IMF bailout, it would have made a difference to Indonesia's forest sector if:

- IMF conditionalities had required specific outputs from an Interdepartmental Committee on Forests (IDCF) and had secured the funding for the committee's operation. According to the CGI recommendation, the IDCF should be a multi-sectoral committee with a mandate to work out solutions for priority forest issues. The government of Indonesia made a commitment to the CGI to create the IDCF. However, the IDCF has failed to provide any outputs regarding potential solutions to Indonesian forest issues. This is mainly because there are no political or economic incentives to work seriously on the IDCF mechanism. Furthermore, the IMF should support the expansion of the IDCF to include full participation of relevant civil society groups, instead of the current limited participation. Once the IDCF has provided appropriate resolutions, the IMF should follow up with support for the committee's recommendations by ensuring inclusion in subsequent Letters of Intent.

- The IMF had requested a transparent and accountable system be in place to evaluate future investments in the forest/estate crops sector of Indonesia. Given the scale of investments and social unrest involved, effective transparency measures should be introduced to monitor use of state bank funds and export credits to finance investments and operations of wood-based industries (e.g., pulp/paper mills, etc.).

Environmental indicators for country surveillance (reform balance of payments accounting).

According to the IMF, as part of its continuous country-level economic surveillance operations, “Article IV consultations are not limited to macroeconomic policies but should touch on all policies that significantly affect the economic performance of a country, such as labor market, **social and environmental issues, and good governance**” (IMF, 1998). In reviewing recent Article IV consultation publications, there is no evidence that these issues are seriously being considered. The IMF should follow a more socially and environmentally comprehensive approach to surveillance. This would include, *inter alia*, explicit environmental indicators for country surveillance and making country-specific environmental issues a priority for surveillance mission chiefs.

Furthermore, in the current IMF method for balance of payments accounting, the export of depleted natural capital, such as timber cut beyond sustainable yield, is entered in the current account, and thus treated entirely as income. Some portion of those unsustainable exports should be treated as the sale of a capital asset, and thus entered on the capital account (see Heuting, 1989; Daly, 1991; and Sheng, 1995). If this were properly done, some countries would see their apparent balance of trade surplus converted into a true deficit, one that is being financed by drawdown and transfer abroad of their stock of natural capital. Reclassifying transactions in a way that converts a country's balance of trade from a surplus to a deficit would trigger a whole different set of IMF recommendations and actions. Specifically, the Fund might think more before recommending to pay debt service through increasing forestry revenues. This reform of balance of payments accounting should be the initial focus of the IMF's interest in sustainable development.

Strategic environmental crisis management framework.

Pressures on the environment most often increase during economic crises. In some cases, the IMF’s far-reaching economic reforms are accompanied by environmental and social impacts of comparable proportions. Those impacts arise from environmental externalities, social dislocations, and from the change in rate and composition of natural resource use. Moreover, as we have learned from Indonesia, these environmental stresses can have a significant bearing on economic recovery.

In times of crisis, it is difficult to address the full scope of those potential negative impacts. Due diligence requires that those potential negative outcomes be adequately addressed prior to disbursing public resources. As a consequence, responsible lending requires that a strategic environmental crisis management framework be in place before crisis conditions arise in any given country. The IMF (especially with participation from mission leaders), in collaboration with the World Bank, should immediately undertake to develop such strategic environmental frameworks with national governments so that, in times of crisis, probable outcomes and risks are an established part of policy making.

Environmental impact assessments.

Until such time that the IMF establishes strategic environmental crisis management frameworks for each country, mitigation measures must be put in place to address the negative impacts of IMF-supported programs. To this end, each policy intervention of the IMF that carries the potential for causing environmental disruption must be accompanied by an environmental impact assessment. Even if an environmental assessment cannot be implemented in tandem with the preparation of the policy loan, the IMF should implement an assessment immediately after disbursement with the minimal objective of identifying the major environmental risks and establishing the probable magnitude of those impacts (see Iannariello, et al., 2000).

Environmental impact monitoring systems.

Once the environmental impact assessment has been carried out, and with it identification of risks and their probable magnitude, a monitoring system should be put in place that will track the actual impacts and their intensity. This monitoring system should be an integral part of the IMF's lending agreement, the content of the monitoring programs should be made public so that effective tracking of the negative environmental outcomes can be reviewed by public and government alike (See Iannariello, et al., 2000).

Corrective mechanisms.

Given the potential for IMF program activities to have significant environmental impacts, a corrective policy response mechanism must be put in place to respond to the negative environmental outcomes identified by the monitoring systems referenced above. This policy response mechanism must be anchored in the government agency and must have direct links to the IMF and World Bank country operations desks so that policy corrections can be made as economic policies are being pursued.

Enhanced cooperation with relevant organizations (public, NGOs, and private).

In order for the IMF to deal with the various social and environmental challenges appropriately, it must collaborate with relevant organizations. Active cooperation between the IMF and NGOs would be beneficial to the IMF, not to mention to local governments. Local and international NGOs can frequently provide data, analysis, and policy recommendations that are often lacking in government agencies. Moreover, NGOs can play monitoring and verification roles that neither the IMF nor governments can take on.

Furthermore, enhanced collaboration between the IMF and the World Bank is essential. The IMF and World Bank need to establish precise guidelines detailing responsibilities and mechanisms for cooperation between the two institutions to ensure proper handling of and accountability for environmental and social issues.

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End Notes

1See also Tanzi & Chu (1998).

2 Deforestation is defined as the permanent loss of forest cover in its natural state (Resosudarmo, 2000). This implies that the rate of deforestation is not reduced by reforestation efforts or the establishment of tree plantations.

3 Rent in this context is defined as above-normal profit, or "economic rent."

4 By comparison, Scotland *et al*. (1999) estimates for 1997 total consumption of roundwood in Indonesia are even higher at 82.3 million m^3.

5 Production capacity figures included in this table are based on statistics provided by the respective industries' producers associations. However, several assumptions are made to estimate real production levels and roundwood consumption (Barr, 2000b). In the aggregate, sawnwood and moulding producers are estimated to have operated at 70 percent of their installed production capacity, and to have had an average recovery rate of 55 percent for the roundwood they consume. Plywood producers are estimated to have operated at 80 percent of their installed capacity, and to have had an average recovery rate of 50 percent. Pulp producers are estimated to have operated at 87 percent of installed capacity, with 4.3 m^3 of roundwood needed to produce each metric ton of pulp and 25 percent of the industry's overall fiber requirements coming from recycled paper.

6 To its credit, the World Bank attempted to use the 1997 financial crisis to shine a spotlight on governance issues in the forest sector, and force the dismantling of forest product marketing monopolies.

7 In the past, Fund monies had been misallocated for numerous non-reforestation projects, including the state aircraft corporation, which former President Habibie previously headed (Barber and Schweithelm, 2000).

8 Collected as a production levy on logging operations.

9 Many of these restrictive forest products marketing arrangements were embodied in APKINDO, the plywood exporters' cartel run by one of Suharto's cronies, Mohamed "Bob" Hasan.

10 Many of the provisions were intended to give concessionaires a commercial incentive to practice better forest operations and management.

11 Conversion forest is forestland designated for permanent transformation usually to an agricultural plantation.

12 This section draws extensively from the research of Chris Barr (2000a, 2000b) and David Brown (1999, 2000).

13 IBRA is also known as BPPN, which in Bahasa Indonesian stands for Badan Penyehatan Perbankan Nasional.

14 Excluding the Suharto family companies.

15 President Suharto's long-time crony and business partner, Mohamad "Bob" Hasan, used his power as Chair of the plywood producers' association to assign monopoly contracts to firms under his own control. In March 2001, the corrupt timber tycoon was finally sentenced to six years in jail and his forest product marketing monopolies were for the most part eliminated.

16 Although the industry's largest producers are now taking steps to bring online industrial pulpwood plantations (*hutan tanaman industri*, or HTIs), it is projected that most of the country's pulp mills will face sizeable deficits of sustainably harvested fiber for at least the next 10 years (Barr, 2000a).

17 Certification of sustainable forest management will be a prerequisite for access to many of the export markets affluent enough to want and afford the genuine wood at prices that will carry the cost of sustainable forest management (Leslie, 2000).

18 The El Nino related drought and forest fires are held primarily responsible for the marked decline in CPO production in 1998 according to numerous *Oil World* reports. However, it should be kept in mind that, ironically, many of the wild fires taking place in Indonesia were linked back to the clearing practices of the oil palm plantations.

19 Fluctuations in the domestic price and supply of CPO have significant implications for the poor as palm oil is the primary cooking oil used by the poor people of Indonesia. In 1998, the rise in the price of cooking oil was the direct reason behind riots in Sumatra.

20 Still in July 2001, the GOI continues to struggle with balancing domestic need with exports.

21 The January 1998 Letter of Intent stipulated that Indonesia should remove all formal and informal barriers to foreign investment in oil palm plantations, lift all trade restrictions, and drastically reduce export taxes (from 60 percent to a maximum of 10 percent).

22 Some oil palm conglomerates that are also involved in pulp and paper and plywood sector include: Raja Garuda Mas, Sinar Mas, Korindo, Benua Indah, Astra International, Barito Pacific, and the Salim Group (Casson, 1999).

23 It is worth noting that some provincial governments have also flexed their muscles in the opposite direction by rejecting some permits given to investors by the central government to expand oil palm plantations (Jakarta Post, 2000a).

24 The logging concession contracts are called HPH (HPH stands for *Hak Pengusahaan Hutan* or right of forest exploitation).

25 Even though some of Indonesia's timber groups have made investments in oil palm plantations, it is not uncommon for IPK-holders to abandon these sites once they have removed all logs of commercial value (Barr, 2000b).

26 The Sinar Mas Group is developing a new CPO refinery plant in Irian Jaya and a port to support its CPO exports. The Sinar Mas Group plans to build more refineries in the area in the near future in line with the group's plan to expand its plantations (*Jakarta Post*, 2000b).

27 These NGOs established Sawit Watch in 1998. Sawit is the Indonesian term for palm oil.

28 An unconfirmed World Bank contact stated that the model used for IBRA was the entity set up in the US to handle the Savings and Loans Crisis, which does not seem very appropriate for Indonesia.

29 At a minimum, local government officials and NGOs should act as intermediaries to ensure that companies hold open, transparent discussions with local people and that they adopt plantation development models that provide benefits to locals.

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