



Illegal Logging, Conflict and the Business Sector in Indonesia

Esther Schroeder-Wildberg Alexander Carius



Capacity Building International, Germany



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Responsible:	Demetrio Polo-Cheva	
Authors:	Esther Schroeder-Wildberg	
	Alexander Carius	
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	Charlie Pye-Smith, CIFOR (page: 12, 65)	
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Preface

The economic dimension of crisis and violent conflict has received increased attention during the past decade by governments, non-governmental organizations and the private sector. Ian Bannon and Paul Collier stress in their recent book on "Natural Resources and Violent Conflict", published by the World Bank, how civil war and conflict over natural resources can contribute to a 'development in reverse', setting back the national economy and societal structures of developing countries for many years. Conflict prevention, peace building, conflict transformation and post conflict rehabilitation are difficult objectives and require the intervention and cooperation of various stakeholders, involving governments and non-governmental actors, in particular the private sector.

As in many other countries, foreign, development and security policy in Germany is following a broader definition of security, which includes political, economic, environmental and social considerations, linking sustainable development and durable peace. We have acknowledged the importance of private sector engagement in development cooperation and support economic progress in developing countries through the promotion of the rule of law, economic reform, market economy and good governance. However, trade and foreign direct investment are also crucial to economic well-being and the improvement of livelihood conditions. Favourable societal and economic conditions require conflict-sensitive approaches by the private sector in their activities in developing countries to avoid harm and improve equitable wealth.

Violent conflict is caused on the one hand by structural deficits through economic and social in-

equity, environmental degradation and lack of resources, coupled with rapid population growth, disintegration and fragmentation, and state failure. On the other hand, conflicts emerges from a lack of democratic institutions and mechanisms for peaceful conflict transformation, the lack of rule of law, the destruction of social and cultural identity, and the violation of human rights. Even though economic activities can trigger and fuel existing conflicts they can also contribute to conflict transformation and peace building. Private companies also have a great interest in reducing the costs of conflict both as part of their corporate social responsibility and for the benefit of their business activities since they rely on stable investment conditions.

Against the background of the complex web of causalities for violent conflict the role of the private sector is ambiguous. Economic activities may become part of the solution but they often have been part of the problem. Illegal logging and illegal trade in timber products contributed to finance acute conflict such as in Liberia and the Democratic Republic of Congo. Privatization of water markets without social safeguarding can result in social upheaval, such as in the case of Bechtel's engagement in Cuchabamba, Bolivia. The destruction of forests affects natural habitats and can contribute to conflicts with communities depending on the forest, urging them to apply violence for their defence. Lootable diamonds have significantly contributed to the finance of warlords in Angola and Sierra Leone. In a less direct effect, the over-exploitation of natural resources and unequal distribution of wealth is often associated with the lack of governance, corruption, bribery, money laundering, and the suppression of ethnic minorities.

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In many cases the private sector can also be part of the solution. The German development assistance intends to make conflict impact assessments a cross-cutting effort through all of our activities. Such a conflict-sensitive approach may be a useful pathway also for the private sector with regard to foreign direct investment and the establishment of trade relations. Conflict impact assessments, in addition to traditional risk impact assessments, can assist to avoid negative effects when taking investment decisions. In the case of Baku-Tiblissi-Ceyhan Pipeline which poses a great challenge for governance minority rights and the environment, British Petroleum tries to involve the affected population, NGOs, governments and business partners to mitigate negative consequences and to contribute with sizeable own funds to the development of the affected areas.

The German government supports and welcomes the many regulatory mechanisms which already exist to provide useful frameworks for corporate social responsibility, sustainable development and conflict prevention, such as the Kimberley Process to control trade in 'blood diamonds', certification schemes for timber products and forest resources, the Wolfsberg Principles, a voluntary code of conduct to reduce money laundering, and the Equator Principles for project financing with a strong focus on human rights considerations.

The import of products and use of raw materials also require mechanisms to assess their conflict sensitivity. For example, the German Federal Ministry for Economic Development and Cooperation is financially supporting the US NGO Collaborative for Development Action (CDA), which intends to assess direct and indirect social impacts of business activities, to identify business alternatives that promote social and economic stability and develop management instruments to reduce negative costs for insurance, security and reputation. Regrettably, no German company took part in this initiative, which is disappointing since these are voluntary guidelines and principles that rely on adoption by the industry in order to be effective.

As part of our activities and programmes in developing countries, we promote the rule of law, good governance, strengthening of human rights, and the further development of democratic patterns in society. In this context, the private sector is playing an important role in contributing to durable peace. I wish participants in this conference, organized by Inwent - Capacity Building International and the Loccum Protestant Academy to explore in more detail the role of the private sector in conflict prevention and conflict transformation related to natural resources. I am convinced that the case studies on financial institutions and regulatory mechanisms in the timber sector as well as the cases to be presented by BASF, Shell and British Petroleum will provide new insights in the potential but also the constraints for private sector engagement to foster peace and stability. The discussion might also help to better understand the interplay between public and private entities in this context and ultimately help identify questions and best practices to follow.

Dr. Wolfgang Armbruster Head of Division, Southern Caucasus and Central Asia, Federal Ministry for Economic Development and Cooperation

Workshop Summary

"Environment for Peace: The Role of the Business Sector"

Expert Workshop, October 3-5, 2004. Loccum, Germany Organized by the Loccum Protestant Academy and Inwent - Capacity Building International

The outbreak of violent conflict is often a symptom of the failure to achieve development that is both sustainable and equitable. Many of today's violent conflicts are civil wars, fought by groups competing over rights and access to, or control over, valuable natural resources. Some are the consequence of development failures, where projects or policies exacerbate existing divisions in society, often by undermining natural resource-based livelihoods.

The economic dimension of acute conflict received increased attention during the past decade by governments, non-governmental organizations and the private sector. Ian Bannon and Paul Collier in their recent book on "Natural Resources and Violent Conflict" have shown that the greater a country relies on natural resource commodity exports, the higher the likelihood of violent internal conflict.

The vast majority of companies suffer from substantial losses when acute conflict breaks out. Destruction of investment and infrastructure, collapse of markets and trade partnerships, displacement and flight of workers are all phenomena of both conflict and environmental crisis that directly effect the functioning of businesses in unstable or high-risk areas. Nearly all branches of the economy therefore have a vested interest in a peaceful and stable environment for their economic activities. On the other hand, peace and sustainable development is fostered by economic growth, social development and a healthy environment, which often depends upon proper investment and responsible corporate activity. Foreign direct investment is a lucrative source of income for many countries that are resource rich and have large labor forces. At the same time, many resource rich and highly populated regions have experienced social turmoil and violence.

Traditionally, firms have managed risk in conflictprone areas through end-of-pipe measures such as danger pay, insurance and private security forces none of which address the underlying causes of conflict and insecurity. Moreover, companies can create or augment environment-related conflict either directly through the exploitation and degradation of natural resources, or indirectly through the support of governments that sustain inequitable resource allocations. In turn, there seems to be a vital role for the private sector at least in the protection of the environmental basis for peace.

Oil and gas, mining and forestry operations each have substantial impacts on access to and control over 'resource spaces', and often operate in remote areas that are home to traditional subsistence communities, where government control may be weak or contested. Many such communities are fundamentally dependent on natural resources for their livelihoods. When those livelihoods are put at risk, the result can be violent confrontation. Illicit trade in valuable natural resources can be used to finance the purchase of weapons and thus contribute to the collapse of government authority. The risk of conflict can be a prominent factor in business decision-making, a threat to capital stock, to reputation, to share price and to personnel.

However, just as 'pollution prevention' has often been a more cost-effective means for meeting environmental targets than the end-of-the-pipe alternatives, systematic investment in ecological stability might do the same for political risk management maintaining a company's 'license to operate' before it gets called into question.

The Loccum Workshop

Against this background, the Loccum Protestant Academy in cooperation with Inwent Capacity Building International hosted an expert workshop from October 3rd to 5th 2004 in Loccum on "Environment for Peace: The Role of the Business Sector". 60 experts from private sector entities, public authorities, academia and non-governmental organizations from 25 countries participated in this three-day conference to explore the role of the private sector at the crossroads of conflict prevention and sustainable development. This event has been the first of its kind in Germany to explicitly address opportunities and constraints of the private sector engagement in this area and intended to serve as a kick-off for a series of follow-up activities on business, conflict prevention, and

sustainable development. Yet, conflict prevention on the one hand and investing in sustainable development remain rather separated areas for the business community.

The following questions served to structure the debate in the plenary sessions and parallel working groups:

- How can corporate environmental investment be harnessed to enhance social stability and protect a company's 'license-to-operate'?
- Is there measurable value to be gained by the private sector in investing in environmental security?
- If so, what types of activities could managers engage in to understand and implement environmental security thinking into their investment decisions and risk management strategies?
- What kind of activities should governments and civil society actors undertake to contribute to targeted corporate investment in environmental security?

Opportunities and Boundaries for Business Involvement

Two papers on illegal logging and conflict in Indonesia and the role of financial institutions in conflict prevention and three presentations on business strategies of multinational companies on sustainable development and conflict have been prepared to fuel the discussion and explore the private sector's opportunities and limitations on environment and conflict. Presentations by senior officials of British Petroleum, BASF and Shell highlighted how these multinationals dealt with investments in regions at risk around the globe, lessons they have learned and how they improved their performance to contribute to sustainable development and conflict prevention in these regions.

The business community developed a wide range of voluntary mechanisms, guidelines and codes of conduct to improve the corporate performance of individual companies, corporate social responsibility, sustainable development and conflict prevention, such as the Kimberley Process to control trade in 'blood diamonds', certification schemes for timber products and forest resources, the Wolfsberg Principles, a voluntary code of conduct to reduce money laundering, the Equator Principles for project finance of the Global Compacts with a strong focus on human rights. Most of these principles have been established for the extractive industry, which is heavily relying on natural resource stocks. However, conflict prevention and sustainable development principles are still rather separate topics for the business community and even government authorities only recently started to reflect on the natural resource dimension of conflict.

Corporate social responsibility is a growth industry, though it is striking that many of the companies involved in recent business scandals in the United States have a code of conduct. Where translation of commitments and guidelines into day-by-day business operations fail, risks of corporate failure will increase. Business representatives pointed to three major areas of concern for corporate business with regard to investment in high-risk regions: corporate engagement and social investment, the actual corporate behavior in terms of accountability and transparency and corporate governance. However, there are also boundaries to corporate engagement when it comes to environment-related conflict and addressing the root causes of conflicts. Most important is the question of legitimacy. A company has no public mandate, is not elected and can not and should not substitute government's responsibility. But companies may serve as a partner, partnering with government institutions and civil society groups to jointly work out approaches that are suitable to address these problems appropriately. Where companies contribute to economic growth and social development, it widely remains the responsibility of government and civil society to assure equitable distribution of wealth and access to services.

The following sections provide a brief overview on the presentations of the two background studies on timber and the financial sector and subsequent discussions.

Forest and Conflict

Covering 36 million km² or roughly 30 percent of the globe, the world's forests are among its most important natural resources. According to the World Bank, forest resources directly contribute to the livelihoods of 90% of the 1.2 billion people living in extreme poverty and indirectly support the natural environment that nourishes agriculture and the food supplies of nearly half the population of the developing world. However, forests are disappearing at an alarming rate. 46% of the world's old growth forests have been destroyed. Competition for these resources triggers, exacerbates, or finances numerous crises and conflicts in tropical developing countries.

Forested areas of poor countries are likely to become areas of conflict because they tend to be remote and inaccessible, located on disputed land, home to multiple ethnic groups and minority populations, and lacking government presence or support. . In addition, the majority of forest-dwelling and forest-dependent households suffers from poverty, lack public services, have been poorly integrated into national democratic institutions, and often resent that outsiders capture most of the benefits derived from forest resources.

Indonesia had the third most extensive area of tropical forest in the world. The forestry and woodprocessing sector is vital to the Indonesian economy. However, Indonesia's forests are vanishing rapidly and may disappear completely within the next fifteen years if current rates of logging and forest destruction continue. It is estimated that 73% of the total of timber production is considered illegal. Financial losses of illegal logging and illegal trade are estimated up to US\$ 3.7 billion annually. Extensive negative impacts on both the environment and indigenous local communities include biodiversity loss, floods, soil erosion, landslides, drought, and watershed destruction, extinction of larger mammals and a significant contribution to climate change.

In their background study on "Illegal Logging, conflict and the business sector in Indonesia" Adelphi Research addressed four major questions:

- 1. What is the nature of illegal logging in Indonesia?
- 2. What are the social, environmental, and conflict impacts of current logging patterns?
- 3. What role do forestry businesses play in forestrelated conflicts?
- 4. What types of policy measures and instruments are available for addressing illegal logging, related conflicts, and business sector involvement?

Factors driving deforestation include: (1) logging for national pulp and paper, and plywood industries; (2) logging for illegal wood exports; (3) the conversion of forest to industrial timber and estate crop plantations; and (4) forest clearing by small farmers for shifting cultivation and the national transmigration program as well as settlements by pioneer farmers.

The types of conflicts that involve the forestry business sector in Indonesia are diverse, ranging from low-intensity disagreements on logging camps or land rights to violent action against local communities. Lower-level conflicts may affect a large number of people over a wide area and thus may prove larger, longer and, in the end, more serious than the effects of 'conflict timber'. Lowerlevel conflicts may also trigger large-scale violence and adversely affect local living conditions and livelihood security. Companies use violence to intimidate individuals and prevent opposition to their actions. Also, local governments, the police, and military sometimes support logging companies in their conflicts with local communities and the military violently suppressed protests against logg-ing operations.

Even though illegal logging often provides shortterm gains and immediate income, it is particularly the local community that fall victim of illegal logging since companies circumvent restrictive labor laws, encourage dependence on food brought in from outside the community vis-à-vis self-subsistence and limit the opportunities to use the forest in a traditional way. This has led to communityrelated conflicts over forest resources as communities have defended their traditional rights and livelihoods and claimed compensation from companies for environmental degradation or land disputed. Conflicts are exacerbated by weak law enforcement, corruption, unpaid compensation and the negative effects of political decentralization. International financing institutions played a significant role in encouraging the continuation of illegal operations as they provided capital for improving wood-processing capacity.

Conflicts where businesses are involved may stem from: (1) the decentralized issuing of logging concessions; (2) poor law enforcement and corruption; (3) discrepancies between official and traditional land rights; and (4) environmental degradation and health risks caused by unsustainable logging and wood processing operations.

The set of measures to address illegal logging and related timber conflicts is broad, ranging from regulatory regimes to strengthen law enforcement such as the World Bank supported Forest Law Enforcement and Governance process (FLEG) or the European Commission's European Action Plan on Forest Law Enforcement, Governance and Trade (FLEGT) to several programs to improve conditions of forest-depending local livelihoods, enhancing cooperation among producer and consumer countries, timber tracking and verification systems and various certification scheme, reform of public procurement, financing and investment, modification of existing legislation (e.g. against money laundering); and actions against conflict timber. The UK Timber Trade Federation (TTF), which represents the majority of major UK importers, is an example of a positive initiative among western buyers of Indonesian wood products.

Combating corruption is a crucial element when tackling illegal logging since it increases accountability and transparency in the forest sector and represents an important element of good governance. Since processing operations such as the pulp and paper or plywood industries require considerable external capital in an unstable financial environment, companies used their own banks to finance most of their expansions, avoiding interest and the collection of outstanding loans. In this context, efforts to include illegal logging and other environmental crimes in new amendments of existing money laundering legislation in Indonesia are a positive development.

The case of illegal logging and conflict clearly demonstrated the complexity of the issue and limited potential of private sector engagement in conflict transformation and conflict prevention in Indonesia's timber sector, as private companies themselves are often part or even the most important sources of conflicts where timber companies are associated with corruption, bribery, conflicting land rights, and over-exploitation of natural resources. The current structure of the domestic timber market which is dominated by a few but very powerful timber companies, weak governance structure, low level of law enforcement, and very limited opportunities for western consumers to enforce sustainable forest management practices are significant constraints for innovation towards sustainable resource use, equitable share of benefits and conflict prevention.

Against this background, approaches to conflict prevention in Indonesia have to address larger structural conditions such as regulation of timber industry, law enforcement and land rights. Combating illegal logging and its associated conflicts needs the combined effort of exporting and importing countries. Although international pressure may play a role in leading Indonesian businesses and the government, a regional approach may be more likely to succeed than a global one considering the predominantly regional integration of trade.

With regard to the access to Western markets, certification might become a mandatory requirement in the future which might promote certification among Indonesian logging and wood processing companies and force the government to take action regarding the revision of tenure rights. A firm commitment by the Indonesian government to promote good governance and address the root causes of conflict such as corruption and the oversized industry capacity is needed before businesses in the forest sector will address conflicts. Participants recognized the complexity of the problem and stressed the interplay between domestic and international regulatory mechanisms and private sector engagement to promote sustainable forestry management, to fight illegal logging and contribute to the improvement of local livelihoods. The importance of financial institutions supporting unsustainable forest practices has been stressed and it was recommended to study their influence in more detail.

Participants from Indonesian NGOs mentioned several promising approaches to overcome the shortcoming described in the study, which deserve more attention. Special attention should be given small industries and local initiatives.

Investing in Stability - the Role of Financial Institutions

The financial sector can be broken down in terms of banks, insurance and reinsurance companies, and asset managers. Each group of financial institution has different products, and as a consequence, different conflict linkages, risks and opportunities for positive action. The discussion on this topic focused on opportunities for voluntary action by these institutions in the pursuit of peace.

The finance sector can become entangled in conflict scenarios as a consequence of long-standing investments or operations in formerly-peaceful countries, or through investment in projects that undermine social stability. Armed groups can misuse financial services, and firms can contribute to, or fail to prevent macroeconomic shocks. On the other hand, the financial sector can help to secure peace and prevent conflict through its core business - including investment in key infrastructure, energy and water services; through its social investments in communities and sustainability; and through its engagement in policy dialogue to promote protection of the environment, human rights and other public goods.

The key drivers moving violent conflict onto the agenda of managers in the finance sector are concerns about reputation, opportunity costs, threats to staff and investments, emerging regulatory and litigation threats, and opportunities for competitive advantage. Firms that start now to identify the opportunities and risks posed by conflict/business interlinkages will be better positioned to respond to emerging risks and to contribute to the global effort for peace and human security.

For international efforts to reduce conflict to succeed, the control of financial flows into and out of conflict zones, and the integration of the financial sector in conflict prevention and post-conflict reconstruction, is essential. There is a need to better understand for which linkages a clear business case for action exists, and which ones result from a market failure, where government intervention may be called for instead. The international community has sought in many instances to engage the finance sector in conflict prevention and postconflict reconstruction, yet may lack the appropriate framework for doing so. One approach would be to build upon 'win-win' opportunities, including improved risk assessment; introduction of new products and services that mobilize finance for post conflict reconstruction; while at the same time furthering the development of guidelines for FIs for responsible business in conflict zones and the management of finance flows into and out of conflict zones. The feasibility of launching a multistakeholder platform for dialogue and learning towards these ends should be assessed.

During the lively discussion on the potential and constraints of financial institutions in conflict prevention it has been recommended to specify the various actors involved, analyzing their specific role in with regard to different conflict types (genocide, ethnic conflicts, riots, political protect, etc.) and in different phases of conflict. Rating agencies, private insurers, banks, reinsurers, asset managers, credit risk insurers, industrial insurers and investment banks play rather different roles and have different interests and means available to make a change when deciding upon investment in projects.

Both background papers demonstrated two sides of the same coin. As the study on the timber industry provided a rather pessimistic picture with regard to the potential of the private sector, the study on financial institutions provided very good and illustrative examples on the various - mostly voluntary - approaches by financial institutions. A more balanced approach in both cases has been recommended. Examples on negative linkages between finance and conflict have been discussed and the audience specifically highlighted the involvement of financial institutions investing the big pulp and paper conglomerates in Indonesia. Participants recommended to explore the full potential of approaches in more detail and analyze their effectiveness against the background of specific cases. Recommendations for action both with regard to the private sector as well as public entities need to be prioritized. The role and potential of corporate social responsibility has been underestimated during the discussion and identified as a major track for follow-up discussion. The financial sector has access to more information than any other societal actor, and is therefore a vital force to create more transparency. The spread of sustainable investment practices is providing further energy to this momentum. Concrete follow-up activities have been suggested to focus on a specific analysis for different sectors of the financial world and their linkages to conflict. Further work should focus on a specific sector of finance, and provide a more detailed analysis and definition of different aspects of conflict. Efforts should be aimed at the development of sector-specific, practical tools or guidelines to assist financial institutions in assuming a positive role in conflict prevention and mitigation.

Follow-up Activities

The conference already resulted in two concrete follow up activities. UNEP Financial Initiatives in Cooperation with the International Institute for Sustainable Development conducted additional expert workshops and hearings on the corporate opportunities for financial institutions in environment and conflict. Adelphi Research recently embarked on a larger research project and dialogue process with industry to explore the specific role of German companies in conflict prevention and transformation related to natural resource consumption. Both initiatives are sponsored by the German Federal Ministry for Environment, Nature Conservation and Nuclear Safety. With this publication, Inwent and Adelphi Research would like to initiate a broader dialogue on this topic among all stakeholders involved.





Acronyms

APHI	Indonesian Association of Forest Concession Holders
APKI	Indonesian Pulp and Paper Manufacturers Association
Apkindo	Indonesian Wood Panel Association
APP	Asia Pulp and Paper
APRIL	Asia Pacific Resources International Holdings Ltd.
CGI	Consultative Group on Indonesia
CIFOR	Centre for International Forestry Research
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CSR	Corporate Social Responsibility
DFID	United Kingdom's Department for International Development
ECA	Export Credit Agency
EIA	Environmental Investigation Agency
EU	European Union
FIN	Forest Integrity Network
FLEG	Forest Law Enforcement and Governance
FSC	Forest Stewardship Council
HPH	Concessions for selective logging from natural forest
HTI	Industrial pulp wood plantations
InWEnt	Capacity Building International
IPK	Concession for conversion forest
ISA	Indonesian Saw Millers and Wood Product Manufacturers Association
MDF	Medium-density fibreboard
MoU	Memorandum of Understanding
NGOs	Non-governmental organizations
OECD	Organisation for Economic Cooperation and Development
PPATK	Indonesian Financial Supporting and Analysis Center
PWBLF	Prince of Wales Business Leaders Forum
TFT	Tropical Forest Trust
TI	Transparency International
TNC	The Nature Conservancy
TPTI	Indonesian Selective Cutting System
TTF	UK Timber Trade Federation
WTO	World Trade Organisation

14 | 1 Introduction

Valuable natural resources, including wood from tropical forests, play an important role in violent conflicts around the world (Collier and Hoeffler 2002; Peluso and Watts 2001). An estimated 40% of tropical forests in the world and over half of all tropical forests outside Brazil are in countries that experienced recent conflict (CIFOR 2003a).



The use of illegal timber, or 'conflict timber,' to finance national and regional disputes in Indonesia has yet to be proven. However, disputes between local communities, the state, and private companies over forest resources and revenues have resulted in lower-level violent conflicts in the country. Such lower level conflicts may affect a large number of people over a wide area and "may prove larger, longer and, in the end, more serious" than the effects of 'conflict timber' (Jarvie et al. 2003: 14). Lower-level conflicts may also trigger large-scale violence and adversely affect local living conditions and livelihood security. Conflict is also triggered by legal logging, which in most cases is as unsustainable as illegal logging. The existing infrastructure is additionally used by illegal loggers to reach formerly undisturbed areas.

Existing research on forestry in Indonesia has so far not adequately addressed legal or illegal logging as a source of conflict. Current research has also not closely examined the role that forest and timber industry businesses play in these conflicts. The types of conflicts which involve the forestry business sector in Indonesia are diverse, ranging from low-intensity disagreements to homicide. Companies use violence to intimidate individuals and prevent opposition to their actions (Harwell et al. 2003: 11; Peluso and Harwell 2001). Also, local governments, the police, and military sometimes support logging companies in their conflicts with local communities. In the past, the military violently suppressed protests against logging operations while the country's former President Suharto was in power. Since the end of the Suharto era, companies continue to pay the police or military to suppress resistance. Human rights violations by government troops are more likely to occur in remote locations where troops are less educated, less supervised, and not subject to the attention of media and non-governmental organizations (NGOs). Government officials often tolerate or support these violations (Kaimowitz 2003a).

In response, communities have defended their traditional rights and livelihoods by seizing equipment, blocking timber barges, and burning down logging camps. Communities also see environmenand illegal logging activity in Indonesia's tropical

(1) How extensive is illegal logging in Indonesia?

forest areas. It considers four main questions:

- (2) What are the social, environmental, and conflict impacts of current logging patterns?
- (3) What role do forestry businesses play in forest-related conflicts?
- (4) What types of policy measures and instruments are available for addressing illegal logging, related conflicts, and business sector involvement?

Section 2 describes the state of forests in Indonesia and introduces the forestry sector. Section 3 outlines the problem of illegal logging, including the various negative ecological and social impacts. Section 4 describes different types of forest related conflicts in Indonesia according to their main drivers. Finally, section 5 discusses the wide range of instruments and measure, at the national and international level, that can be applied to combat illegal logging and associated conflicts.





tal degradation or land disputes as justification for compensation from companies. Unpaid compensation, week law enforcement, corruption, and the negative effects of political decentralisation may further add to community-related conflict over forest resources. Recourse to illegal logging as a means of sustaining livelihoods or disagreements over compensation from companies may create additional tensions within communities.

Investigating the links between the forestry business sector and conflict is difficult. Press reports on forest-related conflicts may occur only when incidents are unusually violent or in areas of interest to NGOs (Jarvie et al. 2003). Journalists rarely cover smaller incidents since they may not have access to remote forest areas and since incidents related to logging activities are too common to report on continually. Such events are rarely large enough to attract national or international media coverage and interest groups may persuade the local press not to report through bribes or intimidation.

This paper addresses some of the existing gaps in information on violent conflict, the business sector

16 | 2 Forest Resources, Deforestation, and the Forestry Sector

2.1 Forest Resources and Deforestation Trends



Figure 1. Map of Indonesia

Indonesia's forests are vanishing rapidly. Forest degradation can trigger conflict since forest resources are becoming increasingly scarce while competition over their use is increasing. This section gives an overview of forest cover and current deforestation trends in Indonesia. It also describes the structure of the Indonesian forestry sector and the distribution of logging concessions.

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Table 1 provides general background information on Indonesia. The multi-island state stretches 5000 km from West to East, and its 217 million population is quickly growing (1.6% per year). Islam dominates religious life and Bahasa Indonesia was introduced as a common language so as to find a common denominator for 583 traditional languages and dialects. Figure 1 shows Indonesia. The majority of the remaining forest resources are in Irian Java, Kalimantan, and Sumatra.

In 2000, Indonesia had the third most extensive area of tropical forest (95 million ha) in the world

after Brazil (538 million ha) and the Democratic Republic of Congo (135 million ha) (WRI 2003: 270-271). Commercial logging contributed to the destruction of nearly half of Indonesia's natural tropical rainforest. Indonesia currently has an annual deforestation rate of at least 1.5% and is losing an average of 2 million ha of forest annually (ibid; FWI/GFW 2002) (an amount the size of Belgium) (see Table 2, page 18). Human activity has degraded about half of the remaining forest area in the country to date (ibid.; FoEI 2002: 37).¹ According to several Indonesian NGOs, Indonesia's accessible natural forest may disappear completely within

1) A good figureon process of forest degradation and deforestation can be found in FWI/GFW 2002: 25.

Table 1. General Background Information on Indonesia		
Geographic Composition	17,500 islands with 6,000 inhabited	
Geographic Area	1,904,000 km ²	
2002 Population	217 million (60% on Java)	
Ethnic Composition	365 different ethnic and tribal groups	
Population by Religion	87% Muslim	
	9% Christian	
	2% Hindu	
	1% Buddhist	

Table 2. Characteristics of Forest and Logging Activities in Indonesia	
Area under natural forest cover in 2000	95 million ha
Average annual deforestation since 1996	2 million ha
Average deforestation rate in the late 1990's (natural forest)	1.5 %
Timber processed in Indonesia	73-80 million m ³
Illegal logging as percentage of total logging in 1999	73%
Projected Depletion of Valuable Forest (at current deforestation rate)	2015-2020

the next fifteen years if current rates continue. Natural lowland forests will be completely gone from Sumatra by 2005 and from Kalimantan by 2010 if current patterns persist (Holmes 2000; FoEl 2002: 37). Table 2 summarises some recent trends in relation to forest use and deforestation in the country.

A number of factors drive current patterns of deforestation in Indonesia. These include: (1) logging for national pulp and paper, and plywood industries; (2) logging for illegal wood exports; (3) the conversion of forest to industrial timber and estate crop plantations; and (4) forest clearing by small farmers for shifting cultivation. The national transmigration program² and settlement by pioneer farmers in freshly opened forests (along roads or logging concessions) also contribute to deforestation although their impact is difficult to estimate (FWI/GFW 2002: xi, xii).

The transmigration program sought to reduce the considerable overpopulation of the main islands, Java and Bali. Between 1969 and 1993, some eight million people were relocated to other islands (FWI/GFW 2002: 48).

2.2 The Forestry Sector, Logging Activity, and Trade

2.2.1 The Indonesian Forestry Sector

Private business and industry are important actors within the forestry sector in Indonesia. These private sector actors include: (1) concession holders; (2) saw mill operators; (3) pulp and paper producers; and (4) wood product manufacturers (especially of plywood). Three national associations represent these four groups: the Association of Indonesian Forest Concession Holders (APHI); the Indonesian Saw Millers and Wood Product Manufacturers Association (ISA); and the Indonesian Pulp and Paper Manufacturers Association (APKI).

The important role played by the private sector in logging activity derives from government policies during the Suharto era. Suharto saw the timber trade as a major engine for economic growth. For this reason, he prohibited the export of logs and rough sawn timber during the 1980s in order to encourage growth in domestic pulp, paper and plywood production industries (FWI/GFW 2002: 4).

Table. 5 Estimated capacity of timber withs by type of with in indonesia in 2000		
Type of Mil	2000 Production Capacity Estimate in m ³	Percentage of (%) Total Consumption
Sawmills	20,647,674	28.0%
Plywood mills	22,173,626	30.0%
Pulp mills	22,545,000	30.5%
Chip mills (chips intended for consumption of pulp mills)	5,665,869	7.5%
Medium density fibreboard (MDF) mills: cabinetry,		
furniture, shelving etc)	2,812,500	4,0%
Total	73,844,669	100.0%

 Table. 3
 Estimated Capacity of Timber Mills by Type of Mill in Indonesia in 2000

Driven by China's and Japan's demand for wood products, Indonesia's domestic timber processing capacity subsequently increased seven-fold after the 1980's (ibid. 32) and plywood became the most important export good (Brown 1999: I). Woodbased industry units reached a record number of 1,597 in 2002 (comprised of 1472 sawmills, 107 ply mills, 7 pulp mills, 5 medium density fibreboard or MDF mills, and 6 chip mills) (Ministry of Forestry cited in Komarudin 2002). The total raw material demand of these mills is approximately 73.8 million m³/year (Wardojo 2003). Table 3 reflects the most current data for timber used by these wood-processing units.

The rapid growth in wood processing capacity in Indonesia has outstripped the availability of wood supplies from plantations. This has resulted in increased illegal logging of natural forests, which is now estimated to account for 73% of all Indonesian logging activity (FWI/GFW 2002: 4) (see section 3.1). It has also been accompanied by increased forest-related conflict and violence.

Government policies have also stimulated the concentration of concessions and activity within the forestry and timber sector. The Suharto administration stipulated that concession holders needed to either own or have a corporate relationship with a processing facility. As a result, pulp and paper mills as well as plywood factories are today mainly held by large companies, which also dominate concession holdings (Brown 1999: i; FWI/GFW 2002: 26). Box 1 presents some examples of concentration within the pulp and paper industry. Under the

Box 1.

Indonesia's pulp and paper industry: An Example of Concentration in the Forestry Sector.

Four large conglomerates dominate the pulp and paper industry in Indonesia. The Sinar Mas/APP and Raja Garuda Mas/APRIL groups represent integrated producers while Kiani Kertas and PT Tanjung Enim Lestari are the most important producers of market pulp. The integrated producers have their headquarters in Singapore but have established large-scale pulp processing plants as well as affiliated paper production facilities in Indonesia. APP and APRIL produce in East and North Sumatra. The market pulp producer Kiani Kertas, a fully owned subsidiary of the Bob Hasan Group, brought its first pulp mill online in East Kalimantan in the late 1990's. PT Tanjung Enim Lestari is a joint venture between Indonesia's Barito Pacific Group, a consortium of Japanese investors, and a holding company owned by former President Suharto's eldest daughter. They completed construction of a pulp processing facility in South Sumatra in 2000 (Barr 2001: 3-4). Under the terms of the partnership, Tanjung Enim Lestari's mill is operated by Nippon Paper Industries, while Japan's Marubeni Corporation and Cellmark of Sweden have agreed to purchase the pulp produced for the first 10 years of the mill's operation (Barr 2001: 4).

Suharto regime, marketing of plywood was also centralised. The Indonesian Wood Panel Association (Apkindo) received the right to control plywood export permits, regulate prices, set production and export quotas and, if companies ignored guidelines, impose high fees (Pura 1995). From 1983 to 1998, a close ally of president Suharto, Bob Hasan, controlled the association. In the mid 1990's, Apkindo controlled about two-thirds of world trade in tropical plywood (Dauvergne 2001: 114-115).

Another feature of the Indonesian timber industry is that it lacks the presence of international companies, apart from some large businesses operating in Indonesia which are part of Singaporean business conglomerates that also have wood mills in China. This lack is due to the log export ban and former President Suharto's practice of rewarding large concessions to friends, family members and potential allies (FWI/GFW 2002: 23). Since international companies are not engaged in timber extraction and processing in Indonesia, they can play a special role in combating illegal logging. International wood importing companies, for example, have the possibility of pressuring their Indonesian suppliers to abide by the law and apply environmental and social standards. The implications of this point are discussed in Section 5.

2.2.2 Logging Concessions and the Timber Trade

The government regulates legal wood harvesting by granting two types of 15 to 20-year concessions: (1) natural forest concessions and (2) timber plantation concessions. These two types of concessions are summarised in Table 4. Natural forest concessions consist of: (a) concessions for selective

Concession Type	Subdivision
Natural Forest	(a) Selective Logging From Natural Forest (HPH)(b) Conversion Forest for Plantations (IPK)(c) Community Forest
Timber Plantation	(a) State-controlled Timber Plantations (Perhutani)(b) Industrial Timber Plantations (HTI)

Table 4. Types of Government-Regulated Forest Concessions in Indonesia

logging from natural forest (HPH)³; (b) concessions for conversion forest (IPK), which allow clear felling from degraded natural forests for the purpose of establishing plantations; and (c) community forest concessions. Timber plantation concessions consist of: (a) state-controlled timber plantations (Perhutani); and (b) industrial timber plantations (HTI)⁴.

Natural forest concessions are intended to maintain forest land in permanent production (Brown 2002a: 7-8). To achieve this, 20-year concessions require logging companies to follow the provisions of the Indonesian Selective Cutting System (TPTI). This requires replanting and prohibits logging of trees with diameters under a certain limit, the removal of trees from river banks, logging on steep slopes, and the cutting of protected species (FWI/ GFW 2002: 29). However, probably less than half of the concessionaries comply with this system (World Bank 2001). Natural forest concessions also require concession-holders to carry out community development, for example, the building of hospitals or schools, a practice that shows the lack of development funds at the national level. However, this

system is not very effective since it requires companies to provide services and food but not to empower local communities to meet their needs themselves (Fathoni 2003).

Timber concessions are held mainly by private companies, five state-owned *Perhutani* firms (mainly plantations), and representatives of the armed forces. The largest five private timber groups control 30% of the HPH timber concession area (Brown 1999: 12,39 and 2003).⁵ These businesses came to prominence during the Suharto era. Close ties between these companies and the government also enable them to promote policies aimed at increasing the level of the legal timber harvest and the number of processing plants (Dudley 2001: 8).

Table 5.

Destination of Indonesian Wood Product Exports By Country or Region 2000

Region	Percentage (%)
China	27
Japan	22
Other Asian Countries	26
North America	11
Europe	9
Other Regions	5
Total	100

³⁾ According to a 1999 study by the Indonesia-UK Tropical Forest Management Programme, only 17 million ha (out of the 95 million remaining in 2000) are good production forest. The rest is either of poor quality or unsuitable for logging because it is on steep slopes or otherwise inaccessible.

⁴⁾ In addition to natural forest, conversion forest and planta-tion forest, Indonesia's forests also contain areas designa-ted as conservation or protected forest (Sijabat & Tandjung 2003).

Authorities over forests and the concessionary process are fragmented in Indonesia. At least five different ministries are currently involved in this activity. The Ministry of Forestry has authority over forest management and its Directorate General of Production Forests has the authority to grant large-scale logging concessions. The Department of Trade and Industry is in charge of issuing permits for timber and forestry enterprises such as saw mills and plywood factories. The Department of Agriculture deals with the conversion of forest to agricultural land. The Department of Transmigration and Forest Settlement procures forestland for transmigration or forest-dependant communities. The Department of Mines and Energy also grants mining rights in forest areas (CSD 2002: 23).

Table 5 shows the major destinations for Indonesian wood products. Only a quarter of Indonesian wood exports leave Asia. Three quarters go to either China and Japan or other Asian countries like Taiwan and South Korea. Malaysia and Singapore play a special role since they serve largely as trader countries, which send Indonesian products on to other destinations.

The forestry and wood-processing sector is vital to the Indonesian economy. In 1997, the sector

accounted for nearly 10% of GDP (World Bank 2001: 6). Plywood, pulp and paper exports were nearly half the value of oil and gas exports, contributing between 10-20% to total export earnings (FWI/GFW 2002: 4). Revenues from forest product exports are the second largest contributor to the national economy (5.3 billion US\$ in 2001) exceeded only by oil and gas exports (12 billion US\$ in 2001) (Bank of Indonesia cited in Harwell et al. 2003: 9). In the future, the Chinese market will continue to grow. A strictly enforced domestic logging ban in China creates a large demand for all types of wood imports for construction purposes, including those related to the 2006 Olympic Games (cf. Jarvie et al. 2003).



⁵⁾ With 585 concessions in 1995 covering 62 million ha and a high price for Indonesian forest products, the industry (comprised both of state and private companies) was robust. In 1996, the area of concessions began to shrink covering only 38.9 million ha under 360 licenses in 2001 (Komarudin 2002).

Illegal logging currently represents the most pressing environmental problem in Indonesia and has severe environmental and social impacts. Reasons for this are manifold, including developments in the international timber trade and the Indonesian logging industry. Government responses to the problem of illegal logging have so far proven unsuccessful.

3.1 The Scope of Illegal Logging in Indonesia

'Illegal logging' is "all forestry practises or activities connected with wood harvesting, processing, and trade that do not conform to Indonesian law" (FWI/GFW 2002: 31). Illegal forestry activity in Indonesia encompasses a range of actions and actors. Legitimate operators may violate the terms of their licenses and also harvest protected species, take more than their allowable cut, ignore selective cutting guidelines, and log outside their concession boundaries or in protected forest areas. Plantation concession owners sometimes clear-cut natural forests, replant at a low density, with low-quality species, or not at all. These plantation operators may also 'bridge' missing wood supplies with timber from natural forests (ibid.). In addition, people who have no legal right to fell trees may do so.⁶

Illegal forestry practices also comprise the use of corrupt means of obtaining access to forests or the violation of tax regulations. Illegal logging and timber trade, in fact, account for a financial loss of up to US\$ 3.7 billion annually, according to the Ministry of Forestry (Asia Pulse 2003). The Ministry has stated also that this does not include the ecological destruction and "moral degradation" caused by illegal logging (Asia Times Online 2003).

The majority of logging activity in Indonesia is currently illegal (FWI/GFW 2002: 4). A comparison of official log production (calculated from concessions) with industry output (calculated from machinery) allows some assessment of the extent of illegal logging in a given year. In 1998, the United Kingdom's Department for International Development (DFID) Tropical Forest Management Programme concluded that out of a total 78 mill m³ of timber production, 73% or 57 mill m³ was illegal and 27% or 21 mill m³ legal (DFID 1999). Data from the Indonesian Ministry of Forestry confirms the magnitude of these estimates. Although the government set a legal allowable cut from natural forests at 6.8 mill m³ for 2003, the Ministry estimates that industry capacity is 73 mill m³ but legal supply only 22 mill m³ (7 mill m³ from natural forest, 15 mill m³ from plantations) (Wardojo 2003). Greenpeace has estimated that 88% (79 mill m³ out of a total timber demand of 90 mill m³

⁶⁾ For a detailed overview of illegal forest practic see Tacconi et al. 2003: 3.es

that includes 10 mill m³ smuggled round logs) may be illegally logged in Indonesia (Greenpeace 2003: 9). The rate of illegal logging in Indonesia thus, probably lies somewhere between 73% and 88% of the total logging output.

Distinguishing between legal and illegal wood products is difficult. Some argue that there is no legal wood in Indonesia at all since the production of every timber product includes the breaking or manipulation of some regulation (Brown 2002a: 4).

The actors involved in illegal logging are numerous. The Ministry of Forestry (2000) divides them into three groups:

- villagers from communities in the forest areas or from other areas;
- (2) investors, traders, concession holders and the processing industries that buy illegal timber; and
- civilian, military, and government officials, law enforcement personnel, and legislators.

Large pulp and paper mills and the plywood manufacturing industry may be the main agents of illegal logging in natural forest and national parks where valuable timber is still available (Jarvie et al. 2003: 4).

The reasons for the participation of these groups in illegal logging vary. Demand of Indonesia's rapidly growing domestic wood-processing capacity in recent decades has outstripped the supply of legally logged wood. In response, illegal logging of natural forests has increased. Profit seeking is also a main driver (cf. Dauvergne 2001: 109). Other reasons for illegal logging are national and international demand for cheap timber, land clearance for cash crop plantations (such as oil palm), poor law enforcement, corruption, poverty of farmers, and environmental degradation that leads to the loss of traditional livelihoods. The dynamics driving illegal logging among different actors are considered in more detail in Section 3.4 and 4.0.

Beyond being against the law, illegal logging in Indonesia is sometimes characterised as resembling organised crime, which makes it difficult to tackle.⁷ The Ministry of Forestry officially stated in 2000:

"Illegal logging has come to constitute a well-organized criminal enterprise with strong backing and a network that is so extensive, well established and strong that it is bold enough to resist, threaten, and in fact physically tyrannize forestry law enforcement authorities ... Illegal cutting occurs in concession areas, unallocated forest areas, expired concessions, state forestry concessions, areas of forest slated for conversion, and in conservation areas and protected forests"

(Ministry of Forestry 2000).

⁷⁾ In 1998, there were 23 illegal sawmills around a national park in Sumatra. Twelve of these had military backing, one police backing, and five forestry department backing (unpublished DFID Tropical Forest Management Programme report quoted in Harwell et al. 2003).

It is important to note that the notion of 'legal' forest use and thus, the distinction between 'legal' and 'illegal' as defined by the central government or other political entities in Indonesia is complex and controversial. Historically, the central government as well as lower-level authorities have not always recognised traditional forest land and customary access rights of local communities. This situation is considered in greater detail in section 4.3.

3.2 Government Responses to Illegal Logging

Although coordination between the various ministries in Indonesia involved in forestry activities is slowly improving, tackling illegal and unsustainable logging practices is a challenge. In general, the Indonesian government seems willing to apply domestic measures to combat illegal logging. They work closely with the Consultative Group on Indonesia (CGI), conduct operations to confiscate illegal logs, aim to restructure the forestry industry, and foster plantation development and reforestation. The Ministry of Forestry also plans a forest resource assessment and a moratorium on forest conversion, and is willing to address land tenure conflicts (Ministry of Forestry 2003). However, all of these measures have not been very effective so far due mainly to corruption at multiple levels.

A main problem is that companies engage in illegal logging or buy illegally cut timber in order to run their oversized processing plants profitably. The Ministry of Forestry is currently trying to deal with that problem by constantly reducing the yearly allowable cut from natural forests and trying to downsize domestic industry to reduce demand. Neither measure has been very successful so far. Although the Ministry of Forestry aims to reduce logging, the industry pressured them to increase the allowable cut in 2003, because the year's 6.8 million m³ quota was already exhausted by August (Fathoni 2003). While the number of concessions fell by almost 40% from 1995 to 2002 (585 in 1995, 464 in 1998, and 350 in 2002), increased illegal supplies compensated for this decline (cf. Brown 1999: 12, 39). The Ministry's efforts at re-



ducing illegal logging may also fail due to strong opposition from companies, locale communities, and local government at district level were illegal logging is considered a major source of income and revenues. There is also a low capacity and will by the state to regulate companies and prosecute violations. The state's lack of adequately trained forestry staff, infrastructure, and equipment limit their effectiveness at regulation. In many cases, staff is also in-sufficient. Since forestry staff often rely on logging companies for transportation and accommodation during their inspection visits, they are indebted to companies and have limited access, in practice, to many sites where illegal activities may take place (Dauvergne 2001: 160; Wardojo et al. 2001: 3).

3.3 Illegal Logging and International Trade

As discussed above, the Suharto administration banned the export of logs and rough sawn timber in order to boost domestic processing industry and capacity (cf. Harwell et al. 2003: 12). Although these bans have been largely successful, smugglers still transport an estimated 10 million m³ of logs and rough sawn timber out of the country since higher prices occur on the international market (Greenpeace 2003). Wood products manufactured from illegally felled timber often appear legal when they arrive in consumer countries because it is easy to obtain false documentation for illegal wood or wood products in Indonesia. It is also easy to smuggle illegal timber products across to agents in Malaysia or Singapore, who 'launder' and export them onward to other destinations. In this regard, some 70% of all Indonesian timber products, which the European Union (EU) imports, may come from illegal sources (Matthew 2001: 4). This number is greater than the average of 50% for all tropical timber products imported by the EU (ibid.).

The new Free Trade Agreement between Singapore and the United States (US) may make the trade of illegal wood from Indonesia even more difficult to control. As noted above, groups in Singapore launder a significant proportion of illegal timber from Indonesia for further export. More relaxed trade rules under the new Free Trade Agreement may make this easier. Although the two countries signed a Memorandum of Intent on Environmental Concerns as part of the Agreement, it does not yet include any concrete actions addressing the illegal timber trade in Singapore. The availability of illegal timber in the US may also further increase when Singapore signs free trade agreements with China and Japan, the world's second and third largest timber importers, respectively (EIA 2003; Thornton et al. 2003: 1-2).

3.4 Illegal Logging and the Business Sector

As noted above, private logging industries and businesses are one of the main actors involved in illegal logging activities. They are extensively engaged in the cutting, buying, and smuggling and play a role in the violent conflict associated with these activities. Larger wood processors may be most involved since they have the capacity to fell and process wood on a large scale. In contrast, small companies may be less involved since they lack the heavy machinery needed to operate at this scale (cf. Jarvie et al. 2003:3).



Businesses have numerous incentives for engaging in illegal logging. In general, businesses undertake illegal logging when "the benefits derived from violating the law (e.g. illegal logging, tax evasion, harvesting protected species in unauthorized areas) exceed the costs of non-compliance" (Tacconi et al. 2003: iii). Companies are involved in illegal logging in order to maximise profits. Weak enforcement of the law also provides little incentive for companies to abide by the law in their pursuit of profit. Indonesian pulp, paper and plywood industries, in fact, earn above-normal profits because of a lack of competition (Brown 1999: 1-4). The 1997/98 financial crises also increased profits of plywood exporters by 600% (from US\$ 25 per m³ of plywood in 1996 to US\$ 172 in March 1999). The reasons for this development were that the profits they made in US\$ on the world market rose threefold against the weaker Indonesian currency and they no longer had to pay high fees to the Indonesian Wood Panel Association (ibid: 65).

In order to make up for large investments in new processing facilities, companies aim to run them at full capacity to maximise profits, using a supply of mainly illegally cut logs that are available at low cost (cf. FWI/GFW 2002: 31). Illegal logging also generates personal wealth for those involved in forest industries, which continually draws individuals to the sector. Since government officials and security forces often comply with company activities, they can expect that there illegal activities will be overlooked at the highest levels (Hutter 2000: 85).

The uncertainty under which logging companies operate also contributes to their involvement in illegal logging. There is a high uncertainty about political stability and reliability in Indonesia, as well as unclear or contradicting laws. This makes companies uncertain about future rules. Their reliance on political patrons, disputed property rights, the risk of prosecution for corruption, and unclear jurisdictions among different levels of government also add to their uncertainty. For example, it is unclear if the 100 ha concessions previously issued by local governments were still legal in 2002 because a government regulation in that year took this concession granting right away from local governments (see section 4.1). The regulation has also made logging companies uncertain as to which political level they are responsible for. In addition, forest data is often unreliable leaving companies unclear as to timber values. It can also simply be difficult or even dangerous to get to remote logging sites. All these factors generate uncertainty and provide incentives for making the highest profit as guickly as possible and ignoring long-term concerns (cf. Dauvergne 2001: 135,147,167).

Insecure property rights also undermine long-term environmental management since companies do not know if they will be able to access the same land in the future. Because of this insecurity, when conflicts with local communities occur, which may threaten company operations, HPH companies may simply increase illegal activities in order to maximise profits before they are forced to stop their activities (ibid: 141,145). In other cases, when legal or illegal logging operations face local opposition, especially large and powerful companies have little incentive to change their practices. Companies instead may pay timber militias, the military, or the police to intimidate local communities or to violently suppress opposition. A corrupt judiciary hinders any hope of their meeting prosecution. The current fifteen to twenty-year logging standard also pro-motes maximum resource exploitation. In a well-managed tropical forest harvesting cycles should be around 35 years (Klassen 2003). Since a company cannot be sure if its concession will be prolonged, long-term sustainable forest management is not attractive. Also, Indonesian companies have no brand name to lose, which makes them resistant to international appeals and external consumer pressure. They will be influenced only if international buyers stop purchasing their illegal wood products.

The Indonesian logging industry has debts of US\$ 20 billion alone in Sumatra, which they accumulated during the 1990s when companies expanded processing capacity with borrowed money. Companies may use this indebtedness as a justification for engaging in rampant deforestation activities in order to pay off their loans (Harwell et al. 2003). International financing institutions played a significant role in encouraging continuing illegal operation by providing capital for improving wood-processing capacity. For example, much of the money Asia Pulp and Paper (APP) received for the expansion of its processing capacity in the 1990s came from international financial institutions such as Barclays Bank, Bank of America and Deutsche Bank (Barr 2001; Matthew & van Gelder 2001: 4,6) (see section 5.4.1).

In any case, running a legally compliant business in the Indonesian forestry sector is difficult because even the operation of legal concessions is affected by corruption (Tacconi 2003). Many company managers and workers are aware of sustainable forest management practices, which are required by national concession holders. Yet, preserving the forest and the basis of their business operations is not high on their agenda. As a financial officer of one of Indonesia's pulp companies has stated:

"Of course we are bringing our plantations online. But we're in no rush to switch our mill to acacia if there are still cheap supplies of mixed tropical hardwoods (kayu campuran)

3.5 The Impacts of Illegal Logging

3.5.1 Ecological Impacts

Unregulated logging and rapid deforestation in Indonesia have numerous negative ecological effects including biodiversity loss, floods, soil erosion, landslides, drought, and watershed destruction. The fragmentation of forests also contributes to the extinction of large mammals, which need large areas for their survival.

Logging and associated forest fires in Indonesia also contribute considerably to climate change. On the one hand, clear-cutting results in local changes in temperature and rainfall. On the other hand, fires in peat forests contributed from 13% to 40% to global CO_2 emissions from oil, coal and gas burning between 1997 and 1998 (Siegert 2004). The reasons for these fires, which burned approximately ten million ha of forest in ten months, were available. Why should we? As it stands, we have access to a very low-cost supply of raw materials. Developing good plantations not only involves higher costs, but also a good deal of risk - the trees have to be there for harvest seven years from now. Right now, our HTIs *(industrial pulp wood plantations)* are essentially an insurance policy, and we will cash it in when the HTI is no longer available"

(cited in Barr 2001).



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mainly logging and man-made canals. These factors caused the naturally constantly moist soils of the peat forests to dry up (ibid.). In addition, increased forest fires caused air pollution, toxic fumes, and ash (Harwell et al. 2003: 11).

The environmental consequences of illegal logging are devastating, especially for indigenous people who depend on the forest and its interconnected soil and river systems (FWI/GFW 2002: 3). In some cases, forest loss has lowered the water table and caused saltwater penetration of rivers (Budiarto et al. 2003; Kurniawan & Suherdjoko 2003).

While illegal logging is responsible for the majority of these impacts (73% of all logging operations are illegal), 'legal' logging is, in most cases, neither more regulated, monitored, or sustainable and does not take into account any kind of long-term or ecologically sensitive measures. Under the Suharto administration, the Ministry of Forestry estimated that less than 15% of logging operations followed forest management rules (Dauvergne 2001: 161). This number most likely decreased after Suharto because law enforcement weakened.

According to the Indonesian Deputy Coordinating Minister for People's Welfare, Farid Husain, these negative environmental impacts have become apparent in recent years (Kurniawan 2003). Rampant deforestation, associated with illegal logging activities, was linked to 229 natural disasters from January 2002 to March 2003. These disasters have claimed more than 505 lives and forced approximately a million people to flee their homes. The economic losses due to natural disasters between 1991 and 2000 reached US\$ 17.6 billion. The most Box 2. Ecological Impacts of Illegal Logging in Gunung Leuser National Park

In early November 2003, a flash flood that occurred downstream of Gunung Leuser National Park (Leuser NP) in Sumatra left 200 people either dead or missing. Although the reasons for this event are not quite clear, it is likely that illegal logging in the mountains of Leuser NP triggered flooding and landslides, which disrupted the natural absorption and flow of rainwater. It is also probable that illegally felled logs have blocked a river in Leuser NP, causing the flash flood. The Indonesian government has described the illegal loggers as terrorists and aims to stop illegal logging in the national park. But, it also recognises that rampant corruption will make this task extremely difficult (cf. Associated Press 2003).

recent flood on Sumatra illustrates the scale of the problem (see Box 2). The government has responded to this situation with a 5-year reforestation program in 21 degraded catchment areas in the country (Kurniawan 2003).

In addition to clear-cutting, other logging operations also have ecological impacts. Heavy vehicles, which remove harvested logs from the forest, damage smaller trees and ground vegetation. The bulldozing of trees into waterways to construct bridges causes inundation and, subsequently, the rotting of tree roots. Erosion from clear-cut hill slopes is another negative impact. The effects of these logging activities create unnecessary ecological pressures for local communities.

According to Indonesian NGOs, such as LATIN, environmental impacts related to water quality and quantity and flooding have become evident to local communities in recent years (Muhtaman 2003). Since logging companies log in the direct vicinity of villages, forest dependent communities not only face environmental degradation but also reduced access to non-timber forest products. This combined situation may trigger continuing conflict in the future (ibid; Heydir 2003).



3.5.2 Social Impacts

As mentioned above, concession holders, the processing industry, and civilian and military government officials are important players in illegal logging. Villagers also willingly engage in illegal logging to obtain cash and improve their standard of living. But, unlike the other actors, local communities occupy a special position. Although they benefit from illegal logging in the short-term, they may also suffer more from its adverse consequences in the long-term. In most cases, villagers log inside or outside of concession areas and sell wood to the company holding that concession. The main driver for villagers to engage in illegal logging is the need for money. They are also influenced by the fact that non-villagers are already carrying out illegal logging in their area and that they, themselves, have lost control over their traditionally-owned forests (Dudley 2002: 1). In this situation, many villagers want to exploit the forest themselves rather than leave others to do it (Jarvie et al. 2003: 17).

In the short-term, illegal logging provides immediate income for local communities, may aid day-today survival, and reduce poverty. But the community's role as a victim of illegal logging activities is far more significant. Illegal logging allows companies to essentially 'employ' additional people while circumventing restrictive labour laws aimed at protecting workers (Heydir 2003). Increased cash and work away from home associated with illegal logging may contribute to decreasing religious values, changes in family life, and the growth of prostitution and alcoholism (Budiarto et al. 2003). Conflicts may occur between members of the community who want to protect the forest and those who engage in illegal logging. When villagers shift from subsistence farming to work in illegal logging they also become dependent on brought-in food. This may decrease local food security while increasing the logging company's profits through food sales.

Illegal logging also limits the opportunities of indigenous communities to use the forest in a traditional way. Apart from providing food (fruit, vegetables, meat and spices), they use forest products for medicinal purposes. The spiritual value of the forest manifests itself in the use of forest products for ceremonies (Safitri & Bosko 2002: 10). Newly planted plantation monocultures of exotic species do not deliver any of these traditional services for indigenous people (Harwell et al. 2003: 12-13). Illegal logging also considerably impacts on local communities by disrupting traditional systems of customary rights over forests since local leaders who enforce such systems may side with illegal logging operators. Villagers may also abandon traditional sustainable resource management practices such as agro forestry (for example, multiple species orchards mixed with natural re-growth) in favour of unsustainable logging (ibid: 10; Budiarto et al. 2003). These kinds of traditional resource management systems are still important for indigenous farmers who do not use any fertilizers, herbicides or pesticides. They also harvest other forest products such as rubber, fruits and tree crops (cinnamon and coffee), which are either sold on the market or directly consumed (Harwell et al. 2003: 9-10).

Illegal logging combined with the export ban on logs also negatively effects communities by affecting the price of timber. Since the export of raw logs is prohibited in Indonesia, timber demand is generated mainly domestically. As a result, illegal logs flood the Indonesian market and the domestic price of wood is only roughly half that of the international market. Plywood companies can then buy timber cheaply and sell it for large profits on the international market. This system provides little benefit for the majority of the Indonesian people (Brown 1999: iii).



In the long-term, forest depletion through illegal logging likely increases poverty among villagers. Traditionally, forests offer valuable sources of income to the poor through the provision of nontimber forest products, environmental services, and sustainable timber harvesting. Forest-dwelling communities have less access to labour markets and forests serve as 'safety nets' if other sources of income fail (Angelsen & Wunder 2003: 19,21). The destruction of social structures as well as the loss of traditional sustainable resource management practices among villagers may also make it more difficult to find alternative income sources. As a result, their livelihood security will decrease (cf. Harwell et al. 2003: 11).

34 | 4 Forest-Related Conflicts in Indonesia

Logging and wood processing activities contribute to numerous violent and low-level conflicts in Indonesia. These conflicts may occur in natural forests, plantations, national parks, and around pulp and paper mills or plywood factories. Depending on the location and situation, they may involve government agencies, businesses, communities, illegal loggers, or security forces. The business sector plays a particularly important role because of its key position in the forestry sector.

Many conflicts in Indonesia's forests are of an economic nature. Suharto era policies were an important contributor to this situation since they channelled profits away from communities in logging areas. After the fall of Suharto, local communities demanded their share of benefits from logging operations. Unclear or contradicting policies and laws are also a cause of conflict. These include: decentralising the issuance of logging concessions; inconsistencies in formal law and overlapping authority between entities; unclear tenure rights; weak enforcement; and corruption.

One can classify the kinds of conflicts in which businesses are involved into four categories according to their main driver. Conflicts may stem from: (1) the decentralisation of the issuance of logging concessions; (2) poor law enforcement and corruption; (3) differences between official and traditional land rights; and (4) environmental degradation and health risks caused by unsustainable logging and wood processing operations. Each of these categories will be considered in more detail below.







4.1 Decentralisation of Power

The fall of Suharto in 1998 ended an era of centralised power and revenues as well as of policies aimed at economic development at all costs. Subsequent policies aimed at encouraging democracy, in contrast, favoured local autonomy. The goal was to move political and economic power away from the central government and enhance local provision of public goods and services (Ehtisham & Hofman 2000).

Decentralisation began in January 2000 and aimed at transforming Indonesia into one of the most decentralised countries in the world. Most government functions moved to districts and municipalities, overstepping the province level because of the fear of strengthening separatist movements. The defence, security, and justice systems remained centralised and the central government also retained a specific role in national planning and natural resource utilisation (ICG 2003: 2). At the same time, responsibilities for agriculture, land, industry and trade, capital, and labour shifted to some 360 local governments (districts). This step positively influenced the general political climate in Indonesia. However, the new law did not define the local governments' functions in these policy areas, leaving, for example, the responsibility for mining or natural resource management unclear (ibid: 2-3).

When decentralising the forestry sector, good intentions did not result in good laws. Also, local governments did not receive adequate financial resources to enable them to fulfil their new tasks. The most significant decision in the forestry sector was that districts gained the authority to grant 100 ha logging concessions in order to provide poor people with land for subsistence farming and to compensate them for the loss of their indigenous land rights. Clear-cut concessions of this type did not require reforestation and were only valid for one year (CGI 2003). In the end, ambiguous, overlapping, or conflicting decentralisation laws, as well as the need for revenues, have led local governments to issue larger concessions, which often overlap with centrally-issued logging concessions. All in all, some 500 pieces of legislation within the forestry sector are overlapping or conflicting (Jakarta Post 2002).



Local governments still do not have sufficient capacities or funds in order to govern effectively, resulting in intensified exploitation of forest resources as a means to generate short-term revenues (cf. FWI/GFW 2002: xii). Decentralisation, in reality, has resulted in a shift of the imbalance of power from the national to local level. Local patterns of cronyism today resemble the structures found under the former centralised Suharto government, putting into question the whole decentralisation process. Representatives of many aid agencies are concerned because decentralisation has produced 'many Suhartos' instead of reducing corruption.

In the summer 2002, the national government issued Government Regulation No. 34/2002 in order to reduce deforestation and stop the issuance of overlapping logging concessions by local governments. This regulation declares that the granting of logging concessions by district governments is illegal and is retroactive for all licences issued after 1 January 2002. This law has so far been unsuccessful because local authorities do not recognise its legitimacy and have not stopped issuing concessions (CGI 2003). The central government does not see any possibility of enforcing the new law since the police and military accept bribes from local players or play an active part in illegal logging activities themselves (Wardojo 2003).

The practise of local governments granting logging concessions to areas already allocated to companies under national concessions often causes conflict. For this reason businesses ally with decision makers at different government levels since the issuance of licences often depends on bribes. For local authorities this is a lucrative business because, with every concession granted, bribes between from US\$ 5,000 to 50,000 may be paid (Jarvie et al. 2003: 89; FWI/GFW 2002: 62). Box 3 discusses an example of conflict resulting from overlapping concessions. The situation is particularly difficult because both government levels claim to have sole authority to issue legal licences. Since an independent jurisdiction, which could solve these problems, does not exist, conflicts are 'resolved' in the field.

Box 3.

Conflict and Overlapping Concessions

In East Kalimantan, Malaysian timber contractors often carry out large-scale, heavy equipment, logging with locally issued concessions. This results in conflicts between these contractors and national concession holders whose concessions may overlap, and communities whose traditional land has been allocated for logging. Villagers often obtain better terms from the locally licensed, Malaysian companies. These companies may thus mobilize villagers to attack national concession holders and seize or destroy their equipment (Jarvie et al. 2003: 19,63-64). Driving these actions is the fact that each partner tries to cut trees before their competitors. In these cases, the costs involved for companies, which are the object of local attacks, may be high. They must continue to pay their employees even though their work has stopped. They must also replace or retrieve equipment as well as cover conflict-settlement costs.

4.2 Weak Law Enforcement and Corruption in Government and the Military

There is no effective law enforcement on the ground in Indonesia's forests (FWI/GFW 2002: 34,48). Factors contributing to this are the selective or non-enforcement of law, widespread corruption (including judicial corruption), and bribery. Corruption has played a role in Indonesia's bureaucratic system since the Suharto era and continues to be a driving force behind a majority of illegal activities and political decisions. Today, corruption is the main reason behind the lack of enforcement of forestry law and of binding rules and regulations governing access to and harvesting of forest resources.

The more recent decentralisation process has triggered flourishing corruption also at the local level. This has occurred since increased local responsibilities have taken place in the context of an ineffective legal system and weak mechanisms of democratic accountability (cf. Contreras-Hermosilla 2002). Fighting corruption is essential to re-establish the rule of law. Yet, since it benefits many actors, corruption will be difficult to combat.

Corruption weakens the state by eroding citizens' confidence and reinforcing the perception of state failure. Widespread corruption also encourages open access to forest resources by enabling wealthier and better-connected individuals and groups to move outside the law with no fear of prosecution. Individuals in this group include companies, civilian government officials, law enforcement personnel, and legislators (Ministry of Forestry 2000: 13-14). Local government officials may also widely abuse newly obtained power by receiving bribes for their election campaigns, votes, or personal wealth. In turn, they reward supporters with logging concessions (Jarvie et al. 2003: 5,39). Another source of financial rewards for local government representatives is shareholding in logging companies. Logging companies also undertake infrastructure development, such as roads and bridges, which may positively reflect back on local leaders who support those companies (Dauvergne 2001: 122).



Corruption enables companies to pursue their interests independent from any laws. They bribe local government officials to obtain concessions or to build a new processing plant. Companies may also hire military or police forces to suppress local conflict or discourage local leaders by arresting them (cf. Harwell et al. 2003; 6; Jarvie et al. 2003; 82). The military's involvement in legal and illegal logging has a long history. Since the Suharto era, the military has played a central role in the consolidation and maintenance of power by the state as well as in the business sector. By granting logging concessions to generals, the Suharto regime secured their support and made up for low salaries. Military officials often entered into partnerships with investors in exchange for their influence. For investors, the military's involvement secured access to forests and was advantageous for pressuring government officials to make laws and investments in the company's favour (Harwell et al. 2003: 13-14; McCulloch 2000: 28).

In addition, the military and police must raise twothirds of their operating budget from businesses or service. This predisposes them to engage in business overall. The forest sector offers the military two sources for income: as concession-holders and as supporters of the activities of private companies. While the military is the country's sixth largest legal concession holder, it is also extensively involved in illegal activities, such as protecting saw mills and legal and illegal logging sites on behalf of companies (Jarvie et al. 2003: 5,16).

Weak enforcement of forest laws also involves either not charging companies with crimes or not convicting representatives. Cases in which local government or company representatives are first arrested for corruption and then released without explanation are common. The judiciary, police, and politicians are involved in and use this situation to find opportunities for increasing their personal wealth (cf. ibid: 37). The interests of local communities do not play a role in the decision-making of these groups since they do not have the necessary financial resources. This direct involvement of the police and military and indirect support of illegal logging by government officials and judges creates a situation, in which companies largely control local politics and jurisdiction. This results in the selective or non-enforcement of law and prosecution of forest crimes. According to the Ministry of Forestry, only 10% of forest crimes that have been followed-up by the judicial system ever reach the courts (Wardojo et al. 2001: 3).

Violent conflict and illegal logging are part of this situation. The military acts as private enforcer for companies by breaking-up protests against 'land acquisitions' and company representatives, or burning down villages (Harwell et al. 2003: 13-15). The military or permanent, company-funded civilian security forces are also engaged in numerous civil rights violations in the name of companies and use repression and life-threatening violence to frighten villagers or the media. Box 4 describes such violations within the Tanjung Putting National Park in Kalimantan. The system of poor law enforcement and corruption also promotes rampant illegal logging, agricultural encroachment, and poaching in national parks (FWI/GFW 2002: 20,34).

Box 4. Human Rights Violations in Tanjung Putting National Park

In Taniung Putting National Park, the local timber baron Abdul Rasyid is involved in large-scale illegal logging. Rasyid is a member of the Indonesian parliament and supported by local military, police, and forestry officials. In order to protect his interests, employees of Rasvid's timber company, Taniung Lingga, badly injured two observers from the Environmental Investigation Agency (EIA) and Telapak (who had conducted extensive investigations in the area in 1999) and held them hostage for three days in January 2000. A journalist, following up on these events a year later, was almost killed by agents associated with the company (FWI/GFW 2002: 35; EIA & Telapak 2002: 26). This situation also illustrates the level of corruption within and outside the control of local governments. Although EIA and Telapak passed on evidence to the authorities, Abdul Rasyid has increased his influence and power and has pressured the Governor of Central Kalimantan to award additional forest concessions to him. Rasvid further increased his control over the park in November 1999 when the Governor established a commission to oversee its management. Its first chairman was Ruslan, Abdul Rasyid's brother. Although national park management is under central government control, "the commission was given absolute authority to run the park and was given primacy over the national Forest Police and Conservation Department..." (Currey & Ruwindrijarto 2000). By July 2002, mounting evidence had still not resulted in charging A. Rasyid or his company with their crimes (EIA 2002).

4.3 Conflicting Land Rights

Land disputes are at the root of many conflicts over natural resources in Indonesia because Indonesian law does not recognise traditional or indigenous land rights (FWI/GFW 2002: xii). This has not always been the case. In 1960, agrarian and land reform measures recognised the land rights of indigenous people (Colfer and Resosudarmo 2002; Sembiring 2003). The reason for current land disputes stems from the land reforms and forestry acts in 1967, by which the Suharto regime seized total control over locally managed forests in order to use them as a means of driving economic development.

These 1967 measures assumed that since no one lived in the forests, all forests were 'state forests'. This change in status did not result in any or only marginal compensation to communities. It also occurred despite the fact that declaring customary land as state forest was actually against the country's constitution (Article 18), which specifically recognizes customary (adat) property rights (Harwell et al. 2003: 10). Effectively, local communities were left without any control over the land they lived on and 75% of the total land area of Indonesia became state forest (90% of the outer islands or all islands apart from Java and Bali) (Sembiring 2003). In fact, most forest dwelling communities today do not use the Indonesian word for 'forest' since it is closely linked with the non-acknowledgement of their indigenous land rights and the exploitation of their forests by the central government without any compensation (Fay 2003).

The same land reform measures provided the legal basis for awarding logging concessions. Under it, a central state administration in Jakarta now directed and controlled forest management and resource exploitation (Harwell et al. 2003: 12-13). The Forestry Act clearly favoured forest exploitation and encouraged illegal logging through the noninclusion of sanctions for criminal acts. Based on this law, newly issued logging concessions often included the traditional land of indigenous communities.



In 1999, the post-Suharto government issued a new forestry law, which offered the opportunity for land tenure reform and sanctions for violations. The law has proved disappointing in practice. The 1999 Forestry Law establishes a category of customary forest and requires the government to respect community rights. However, it also states that this holds only as long as those rights do not conflict with national interests. Thus, the government first unilaterally decides which communities are 'customary' and then chooses which community rights to respect (FWI/GFW 2002: 64-65). As far as sanctions are concerned, the 1999 Forestry Law contains provisions for a maximum but not a minimum sentence. As a result, recent sentences have been very low (Wardojo et al. 2001: 3).

Unclear land tenure rights have recently caused numerous conflicts. This is related to the fact that recent decentralisation and democratisation have encouraged numerous forest-dependent communities to stand up more for their traditional rights (FWI/GFW 2002: xii). Traditional forest users generally do not recognize the government's right to exploit the forests. Local communities may confront logging companies, local government, the police, and the military (Kaimowitz 2002). Conflicts between national forest or plantation concession holders and communities also occur. While companies hold concessions issued by the Ministry of Forestry or the local government, local communities often consider these licences illegal and overlapping with their traditional rights. Companies seldom acknowledge these community claims and may accuse local people of being uncooperative and unwilling to settle conflicts peacefully (Jarvie et al. 2003: 60). However, as Box 5 describes, it is often the companies who determine the terms that settle these conflicts. A corrupt judicial system also plays a role in the perpetuation of these kinds of conflicts because it does not provide the opportunity to objectively settle land conflicts in court.

Box 5.

Conflict and Conflict Resolution AroundTraditional Forest Lands in East Kalimantan: The Example of PT Sumalindo

Between 1998 and 2003 the PT Sumalindo industrial timber company in East Kalimantan threatened villagers and bought police officers to force the community to accept their development plans and compensation offers. The company wanted to expand its industrial timber plantation into traditional community land, including fruit orchards and graveyards. Villagers asked for compensation requests rising from US\$ 170.000 to 1.6 million over four years, after the involvement of an Indonesian NGO. The company started clearing the land. Ultimately, the community accepted a lower company's offer of US\$ 10.000 after the police arrested twelve demonstrators for disturbing stability and security for the population and the company. The police only released these individuals after the company's offer was accepted (Jarvie et al. 2003: 26-37).

Recent events, however, also indicate that company policies may dramatically change and positive conflict resolution and agreement with communities is possible. The Nature Conservancy (TNC) is developing a collaborative management model with PT Sumalindo and communities that are in their Unit 4 concession in Berau district, East Kalimantan. The idea is to provide increased say and benefits to the communities from forest management. TNC has facilitated the formation of a multi-stakeholder management council that has representatives from all five involved communities the concession, TNC, and local government. This council will soon be managing the funds from a fee paid by Sumalindo for each cubic meter, that will go toward community devel-opment and health activities (Stanley 2003).

4.3.1 Natural Forest Concessions (HPH)

Conflicts over centrally issued natural forest concessions occur because they may encompass the traditional forestland of communities. In the forests of Sumatra and Kalimantan, in particular, low-level conflicts between logging companies and local communities are common. These conflicts often begin with communities trying to reclaim their land or obtain compensation from companies. Although concession owners often promise compensation in the form of building a school or supplying food or money, they frequently do not live-up to these offers. The frustration of villagers due to these unfulfilled promises triggers violent actions against concession owners by the community. Villagers may demonstrate, burn logging camps, block transport ways, directly threaten company employees, or seize heavy logging equipment to halt company operations (Muhtaman 2003). However, conflicts in natural forest concessions are often less intense than in other settings (for example, those involving large processing activity or conglomerates) because the companies operating in them are generally smaller ones with more limited resources. These kinds of companies may not be able to pay high bribes or hire significant numbers of security forces. They are also more likely to stop operations if on-going conflicts keep them from generating profits. Such companies may choose to stop operations within a problematic concession, especially if they have access to concessions in other areas (Jarvie et al. 2003: 45). According to the chairman of APHI, at least fifty concession holders in Irian Jaya, Kalimantan, and Sulawesi had stopped logging activities in 2000 because locals had threatened their workers (Jakarta Post 2000).

Land disputes may also lead indirectly to conflicts within or between communities. Communities may disagree over the distribution of compensation, how leaders negotiate compensations, and the degree to which communities are involved in these negotiations (Jarvie et al. 2003: 19). Some community members oppose accepting compensation at all. Ethnic differences can exacerbate these disagreements.

The successful resolution of conflicts may occur in cases where companies choose not to stop activity or want to re-start operation. Many of these natural forest concession holders are willing to deal fairly with local communities. Some concession holders seek certification of their timber. Others financially compensate communities. Others offer benefits to the community, which may include: (1) developing village infrastructure (e.g. irrigation infrastructure); (2) developing and strengthening community organisations; (3) creating job opportunities in concession or in other areas; and (4) involving the community in managing the forest (cf. Jakarta Post 2000). Box 5 also illustrates the kind of conflict resolution that is possible even with companies like PT Sumalindo, which have been involved historically in intense conflicts with communities.



4.3.2 Plantations (HTI)

Plantations are a common source of violent conflict between entrepreneurs and adjacent communities since the former regularly establish pulp wood plantations (HTI) on land traditionally held by communities. They may respond by burning or 'illegally' logging plantations and plantation owners may then retaliate with attacks or coercion (FWI/GFW 2002: 64). Local government and the military, which often have a vested interest in the plantation, may support or comply with the violent actions of plantation owners. Local communities more adamantly oppose pulp wood plantation concessions than logging ones on their traditional land because HTI's "provide the plantation company with exclusive control over the land within the concession area for an extended period of time" (Barr 2001: 13). Another reason for more intense conflict around plantation concessions, is that pulp and paper plantations are often part of large pulp conglomerates. Centrally located mills are part of a larger connected network of plantations and third-party timber suppliers. Mills and plantations are normally in close proximity to each other, so that companies do not have to transport wood over long distances. In contrast to HPH's, these conglomerates control a large infrastructure, can mobilise significant numbers of people, and have considerable financial resources. This allows them to hire security forces to suppress conflict and ensure their political influence (Jarvie et al. 2003: 45). Pulp and paper producers are also not willing to give up plantations when local communities claim the land because of the large investments that wood processing plants represent (each new facility costs between US\$ 600 million and 1.3 billion). Because of this investment, they need to run continuously at full capacity. Box 6 describes in more detail the Asia Pulp and Paper (APP) conglomerate, which along with Asia Pacific Resources International Holdings Ltd. (APRIL), is one of the largest pulp and paper producers in Indonesia.

Box 6. Asia Pulp and Paper (APP) Conglomerate

The APP conglomerate is Asia's largest pulp and paper producer outside Japan and ranked tenth in the world in 2000. APP's current pulp capacity is 2.3 million tonnes and its paper and packaging capacity 5.6 million tonnes. Its headquarters are in Singapore and APP currently has sixteen manufacturing facilities in Indonesia and China (www.asiapulppaper.com). As with several other Indonesian business conglomerates, APP spent large amounts of borrowed money during the 1990s to raise its pulp and paper capacity. When the Asian economic crisis hit, companies like APP had problems paying off their debts. They used this debt repayment as an argument to defend illegal logging. When APP stopped all debt repayments in March 2001, the company had debts of US\$ 13.4 billion with hundreds of foreign and domestic banks, making it one of the world's largest corporate debtors (Matthew and van Gelder 2001: 4; FWI/GFW 2002: 38). Since 1990, APP has cleared over 280,000 hectares of rainforest and plans to cut another 300,000 over the next five years (FoEI 2002: 37).

Although APP and APRIL claim to receive most of their wood from plantations, the majority of their supply comes from illegal logging in natural and protected forests (Sijabat & Tandjung 2003). In 1999, only 8% of APP's timber supply came from plantations. This means that these companies are not only involved in conflicts occurring around their plantations, but they also create conflicts in natural forests since they buy large quantities of illegally cut timber. They were also actively involved in clear-cutting of natural forests, which triggered several social conflicts in their area of operation (FWI/GFW 2002: 38).

Conflicts in connection with plantations often occur when the government gives a company land to expand their operations. Locals may then burn plantations in order to reclaim their land. The pattern is always the same: the company sees the claimants as criminals and hires security forces to either protect existing plantations or to seize new land, often dismissing any indigenous land claims. These kinds of conflicts may lead to murder, abduction, torture, and other violence.

Although most land disputes between locals and plantation owners are not resolved, some of the state-owned Perhutani companies, which control plantations in Java, have gone a different way. Confronted with rampant illegal logging on their plantations and fears that buyers in Europe and the US pressure them to get their wood certified (Astraatmaja et al. 2002: 74), some companies are introducing schemes that include benefit sharing with local communities. Box 7 describes the contrasting positive and negative ways, in which plantation owners and communities may resolve their differences.

Box 7.

Two Different Ways of Addressing Conflict

When villagers in Riau refused to give up their land to one of APP's suppliers, pulpwood plantation PT Rimba Rokan Lestari, "they were subsequently attacked by thugs and had their houses destroyed by uniformed Brimob police and members of an ethnic Malay militia called 'Laskar Melayu'. On June 27, 2002, Sihombing and Miswan, two men from Muda village ... in the sub-district of Manau Duri, were returning from the Mandau subdistrict head's office following an unsuccessful negotiation with the company, when they were seized by six unknown men in a car. Sihombing managed to escape, but Miswan was abducted, bound and blind-folded. He was badly beaten, stabbed, and had both his ears cut off before he was left bleeding in a ditch on the plantation. Miswan reported that during his attack his assailants had threatened, 'you're from Muda, huh. You think you're really something. We'll finish you off. You all just keep acting up, and one by one, we'll kill you all'" (Harwell et al. 2003: 35).

In contrast, the company Perum Perhutani in Madiun, East Java, reflects a more positive model of resolving disputes with the community by introducing the following scheme: Communities that are willing to cooperate with the company by, looking after the trees in the plantation so that illegal logging can be reduced, receive a 25% share of the profit made from selling the trees to the mill. Communities can also use the plantation to plant food crops (Slamet 2003).

4.4 Conflicts over Environmental Damage and Health Impacts

Protests and conflicts also arise from concerns over the environmental damage and health impacts of logging and processing activities. The actors involved in these conflicts are the companies who cause pollution, villagers who suffer from it, and government representatives, judges, or security forces that may have vested interests in company activity.

A well-known example of conflict due to environmental impacts in Indonesia is the case of the PT Inti Indorayon Utama mill (of the larger group Raja Garuda Mas/APRIL) in North Sumatra. Confrontations between the company and local community over the seizure of community land in 1987 gathered new momentum when environmental degradation and health impacts emerged from the mill activity. Air and water pollution from the mill were associated with adverse effects on local human and livestock health, reduced agricultural output, and chlorine gas emissions. Subsequently, the Indonesian House of Representatives pressed for the relocation of the mill due to local protests. The mill closed its doors in 1999 (National News Jakarta 1998; Happe 2001: 23). Protests began again when the mill reopened in 2003 with the backing of local government. The mill continues to operate, suppressing protests with the aid of military and police (Jarvie et al. 2003: 43). Box 8 and 9 describe in more detail the aspects of this and other conflicts occurring around the environmental impacts of pulp mills.

Box 8.

Conflict over Environmental Degradation and Health Issues: An Example from North Sumatra

"In 1990, ten elderly local women in the village of Sugapa, North Sumatra were arrested and sentenced to six months in prison for destroying plantation eucalyptus trees in order to plant food crops on what they considered to be their ancestral land. [The women were charged with destroying property and "obstructing national development"(EIA 1998).] Locals claimed that the company had illegally appropriated their land by colluding with local subdistrict and village heads, who illegally sold 62 families' land. Protests arose around further complaints about air and water pollution from the mill, and became increasingly exacerbated until local people began blockading roads to the plant in May 1998. In March 1999 ... the police were called in to quell the protests - seven people were shot ..., one died instantly; 90 were allegedly abducted and tortured or otherwise mistreated, one of whom later died in hospital from injuries, two 'disappeared' and are presumed dead, five remain blinded or crippled from injuries; 7 had their homes or shops vandalized. Four employees were subsequently kidnapped, 3 of whom were killed" (Harwell et al. 2003:31).

Box 9.

Conflict over Environmental Degradation and Health Issues: An Example from Riau

Another pulp and paper mill owned by the APRIL conglomerate in Sumatra, PT Riau Andalan Pulp and Paper (RAPP), is one of the largest pulp mills in Asia. It had strong links to the former dictator Suharto and enjoys the protection of security forces (Sijabat & Tandjung 2003). The operation of the mill affects the entire Kampar river ecosystem. This includes a daily withdrawal of 100 000 m³ of water from the Kampar River for timber processing operations as well as the emission of water pollution. These activities resulted in a decline in the fish population since mill operations began in 1994. Because fishing is the main livelihood of hundreds of thousands of villagers in the Riau district, these ecological changes have severely affected their incomes. The 1997 decision of the Environmental Impact Management Agency (Bappedal) to blacklist RAPP and 13 other companies due to water and air pollution and problems associated with their mills did not result in any action (EIA 1998). The company is also extensively involved in illegal logging in natural and protected forests (Sijabat & Tandjung 2003).

Conflicts between local villagers and RAPP relating to the recognition of land rights, compensation and environmental degradation escalated in 1997 when the company had announced that it would no longer honour an earlier compensation deal and also planned to build a 25 km road through ancestral land owned by the villagers. RAPP also had their IPK concession revoked for their HTI development, a decision that was taken back after an investigation. During the subsequent protests police violence was widespread, several villagers were hospitalised and the village's legal representative was arrested (EIA 1998).

In June 2003, the ministries of forestry and environment supported the intention of WALHI to file a lawsuit against 20 firms (including RAPP) and seven local governments in Riau for either failing to contain fires or starting themby slash-and-burnclearing. Besidesdeforestation, the fires alsocontributed to acute respiratory infections (Jakarta Post 2003a).

The above examples suggest that communities generally do not receive backing from local governments or judicial systems in their complaints against the environmental records of companies. In the case of RAPP, environmental degradation caused by their illegal logging was brought to court. This represents an important step forward in holding companies liable for environmental degradation.

Approaches to Combat Illegal Logging and Related Conflicts 5 | 47

Approaches for tackling illegal logging and resulting conflicts in Indonesia cannot rely exclusively on domestic initiatives or self-regulation. International assistance is needed to provide mechanisms and resources to support, initiate, foster and supplement domestic efforts. This section discusses numerous international approaches for tackling illegal logging through law enforcement, trade control, and certification. Various national instruments and initiatives, where international leverage might be brought to bear are assessed. Types of international measures, that are in place in other areas, which might be transferable to the forest sector, will also be looked at. Some initiatives apply one measure to directly or indirectly combat illegal logging, but a number of international initiatives combine different measures to address different aspects of the problem. A combination of these types of approaches may provide the best way to tackle illegal logging and its related conflicts.

5.1 Forest Law Enforcement and Governance (FLEG)

The most important multilateral approach focussing on law enforcement and the strengthening of governance structures is the World Bank supported Forest Law Enforcement and Governance (FLEG) process. This process created a framework for enhancing cooperation among producer and consumer countries and civil society. It employs a diversity of approaches. In September 2001, a regional FLEG Ministerial Conference in East Asia was held in Bali. Several countries from East Asia, the UK. and US attended the conference. Malaysia and Singapore, who are important recipients of illegal timber from Indonesia, did not attend (cf. Brack at al. 2002: 41). The Bali Ministerial Declaration emerging from the Conference emphasised the necessity to "take immediate action to intensify national efforts, and to strengthen bilateral, regional and multilateral collaboration to address violations of forest law and forest crime, in particular illegal logging, associated illegal trade and corruption, and their negative effects on the rule of law" (FLEG East Asia Ministerial Conference 2001).

The Declaration also included a commitment to explore ways to eliminate the export and import of illegally harvested timber, including the possibility of a prior notification system for commercially traded timber. It also emphasised the improvement of forest-related governance (accountability, transparency and law enforcement), awareness raising, the involvement of stakeholders in decision-making, and the mapping of forest areas. The declaration has an attached annex that formulates actions for different public stakeholders and addresses aspects such as concession management, transparency and participation.

The FLEG process focuses on law enforcement, governance and a commitment to address illegal logging, illegal trade and corruption. As such it can potentially contribute to the reduction of conflicts in Indonesian forests. The fact that most of Indonesia's timber trade is regional suggests that a regional approach of this nature might be beneficial. The Bali Ministerial Declaration established a regional East Asian Task Force to advance the objectives of the declaration and an Advisory Group of NGOs and industry to ensure a participatory approach. Both had initial meetings in May 2002. The process, however, seems to be currently slowing down and the second Ministerial Conference, which was scheduled for 2003, to review progress has not taken place. Indonesia also failed so far to set up the secretariat, which it had volunteered to host (FLEG Task Force 2002; Speechly 2003).

5.2 Trade Control

International trade control measures to stop the flow of illegal timber are an incentive for traders to make sure their timber comes from legal sources. The most common international trade control systems involve issuing permits, licenses, or certificates. To be effective, these kinds of measures must meet internationally agreed criteria. Exporting and importing countries must also rigorously apply them. Several relevant international initiatives for reducing illegal logging by controlling trade are reviewed below.

5.2.1 FLEGT

In May 2003, the European Commission proposed the European Union Action Plan on Forest Law Enforcement, Governance and Trade (FLEGT), which was adopted by the Council in October (EC 2003). By mid-2004, the Commission will report back to the Council on the implementation of the Action Plan and propose legislation for certifying legal timber imports (Smith 2003). The proposed Action Plan lays out a broad menu of possible ac-tivities which include: support to exporting countries; partnership agreements with exporting countries to establish timber tracking systems; reform of public procurement, financing and investment; modifying existing legislative instruments (e.g. against money laundering); and actions against conflict timber. When developing the central voluntary timber licensing scheme, it is essential that the approach complies with WTO rules so that customs can distinguish between legal and illegal timber and take appropriate action (Barrett 2003).

The plan presents several specific measures aimed at the private business sector. Box 10 lists these measures in detail. Although the amount of trade between Indonesia and the EU is small (9%), the Action Plan's trade components are important for Indonesia. A successful implementation of the Action Plan could cause other consumer countries to adopt similar schemes. However, since the suggested timber-tracking scheme will initially include

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only round wood and rough sawn timber, Indonesia would not participate in this first stage of the process.

In the medium-term, the positive impact of the Action Plan on forest-related conflicts may be substantial. Although the Plan focuses mainly on securing legal timber and not on sustainable production per se, the substantial reduction of the rate of illegal logging in Indonesia would inevitably have some affect on reducing associated conflicts. In addition, the voluntary timber tracking system may eventually play a role in the more sustainable management of forests.

5.2.2 Bilateral Agreements

Since the beginning of 2002, a set of bilateral agreements on illegal logging have been concluded between Indonesia and the United Kingdom (04/02), Norway (08/02)⁸, China, (12/02) and Japan (06/03). These Memoranda of Understanding (MoU) call for a mixture of measures to enhance cooperation for combating illegal logging and trade. These include: verification systems; financial and technical support for legal and institutional strengthening; involvement of civil society; and data collection. Such bilateral agreements have the potential to enhance cooperation in combating illegal logging and to change the accepted levels of

Box 10

European Union Action Plan on Forest Law Enforcement, Governance and Trade (FLEGT): Measures Aimed at Business and the Private Sector (§4)

- Commits support to exporting countries for developing licensing systems to confirm compliance of harvested timber with legal requirements; technical support in monitoring and tracking systems; capacity building and the institutional strengthening in government institutions, civil society and the private sector; and monitoring and gathering evidence of environmental crimes and the collection of revenues in the forestry sector
- Establishes Forest Law Enforcement, Governance and Trade Partnership Agreements, which stipulate that EU will only accept timber coming from that state if it is certified as being legal. A timber tracking system will form the base for partnership agreements.
- Promotes the development of a regional FLEGT partnership with the Association of South East Asian Nations (ASEAN) and, as a first step, a Trans-Regional EU-ASEAN Trade Initiative (TREATI) to encourage dialogue and joint activities that facilitate trade and investment flows.
- Promotes corporate social responsibility amongst companies in the EU and encourages their collaboration with private businesses in timber-producing countries.
- Provides support for capacity building in developing countries to initiate private sector initiatives, for example, in forest monitoring, and encouraging an active role of the private sector in exporting countries to develop a licensing scheme (EC 2003).

⁸⁾ This agreement was a 'Letter of Intent' between the Government of the Kingdom of Norway and the Government of the Republic of Indonesia regarding cooperation to improve forest law making and law enforcement to combat illegal logging.

illegal behaviour. They also offer opportunities for NGOs to expose any evasions of the agreement and the governments involved and present the chance to tackle trade of illegally felled timber (Brack et al. 2002: 49). But, these agreements also have a number of limitations. They are very general and, even if implemented, the provisions are easy to evade via trade through third countries and the inherent difficulties in tracking timber processed in different places.

The Memorandum of Understanding with the UK is the most comprehensive and promising approach. It sets out a broad program that includes: the joint clear definition of illegal logging; the improvement of forest legislation; forest data collection; and the goal to involve the Indonesian government, the private sector and civil society in effective monitoring of logging activities. Its aim is to exclude illegal wood products from the UK market. In August 2002, both governments agreed on a joint action plan to pursue the goals of the agreement and are currently working on its implementation. An important component in this early stage of implementation of the action plan is to work with several stakeholders to develop an enforceable definition of legality. This definition would be highly important for subsequent measures that require shared objectives and definitions. Reaching agreement on an enforceable definition of legality faces

significant problems in Indonesia because many laws govern different aspects of forests and forest industry (cf. Speechly 2003).

The UK-Indonesia MoU has also initiated a process of piloting verification and tracking schemes pilot work is currently under way in Kalimantan (ibid.). Since verification schemes are required in the proposal for the FLEGT Action Plan, this project might deliver some valuable lessons learned. Another important aspect of the UK programme in Indonesia is its support of efforts to restructure the forest industry so that mills relying on illegally sourced timber can be shut.

The MoU between the UK and Indonesia can provide a model for similar agreements between the EU and other producer countries to control the trade in illegally sourced timber and wood products. It can also provide valuable lessons learned from its implementation, as well as the will of the Indonesian government in this area. Finally, it provides a signal to the timber industry of likely future developments (Brack et al. 2002: 48,51). The last aspect is highly important since MoU's like this might send a clear signal to the industry about the future ramifications of illegal acts. Finally, "it paves the way towards - and irons out many of the practical difficulties involved in - a wider, regional or multilateral, agreement" (ibid: 49).







5.2.3 Public Procurement

Another type of trade measure is to reform public procurement programmes so that they limit purchases of forest products to those from legal and sustainably managed sources. Such programs either already exist or are currently being developed and implemented in several OECD countries. For example, the UK's public procurement policy to create incentives for sustainable forest management became effective in July 2000. It requires government departments to ensure that all their purchases of forest products come from legal and sustainable sources. As far as possible, suppliers are to provide independently verifiable documentary evidence (Defra 2003). In Germany, the Coalition Agreement between the Social Democrats and the Green Party calls for procurement of tropical timber that has been certified by the Forest Stewardship Council (FSC). Efforts are underway to implement this provision in a manner that is compatible with existing national, European, and international law (SPD / Bündnis 90/Die Grünen 2002: 40).

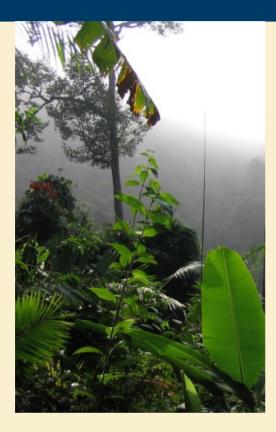
The European Commission's proposal for the FLEGT Action Plan also includes public procurement as an instrument to combat illegal logging and trade. While the Commission is currently revising its Public Procurement Directives, it has prepared a publication, which sets out the possibilities under the current legislation. The Handbook on Green Procurement presents "clear guidance and best practice examples on the use of environmental considerations in public procurement procedures as part of the drive towards sustainable development" (EC 2003, §4.3). The Commission wants the member states to use this Handbook to revise legislation to make sure that public authorities use only legally and sustainably produced wood products.

Recent initiatives under the Asia FLEG process involve pilot projects with key industrial players in Indonesia, mainly with APKINDO and the Association of Indonesian Forest Concession Holders, on codes of conduct and purchasing schemes.

The impact of sustainable public procurement policies on exporting countries will depend on the amount of timber involved and the success of independent certification and verification schemes. Currently in Indonesia, most exports are to the Asian region, where demand for certified products is low. Also, certification and verification schemes are not yet fully operational.

5.2.4 CITES

The 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) uses a system of import and export permits to protect endangered species from over-exploitation by controlling international trade. CITES Appendix III creates a framework that allows individual countries to obtain cooperation in their efforts to regulate trade in particular species from their country. Unlike the other Appendices, listings on Appendix III are unilateral. In August 2001, Indonesia has voluntarily listed the tree species Ramin on CITES Appendix III with a zero export quota. However, groups still smuggle it out of the



country (mainly to Singapore and Malaysia) in large amounts. The enforcement of the export ban needs the support of the intermediate destination countries of Singapore and Malaysia, who export illegal wood to other parts of the world (Thornton et al. 2003; Wardojo et al. 2001). In addition, implementation problems exist. Many CITES permits are forged and importing countries cannot always properly crosscheck the contents of the delivery (Tacconi et al. 2003: 38). Since Ramin is the only Indonesian tree species that is listed on any of the CITES Appendices and the Convention faces severe implementation problems, CITES may currently not be the most effective tool to combat illegal trade in logs from Indonesia.

5.2.5 Kimberley Process

The Kimberley Process, which came into operation in January of 2003, addresses the problem of illegal diamonds. It grew out of effective collaboration between the diamond industry (especially the World Diamond Council) and key governments. It provides a particularly interesting analogy in relation to illegal versus legal logging. Illegal and legal diamonds, like timber, have the same physical characteristics, but are distinguished by their place and manner of extraction and use.

The Kimberley Process is an international initiative aimed at breaking the link between legitimate trade in diamonds and "conflict diamonds," or diamond sales that fuel civil conflict or finance corrupt governments and terrorism. It relies on authorities that validate import and export certificates, which certify compliance with certain rules (Kimberley Process Certification Scheme - KPCS). The diamond industry additionally introduced a scheme of self-regulation by implementing a system of warranties supported by verification of companies by independent auditors and the use of internal penalties (Tacconi et al. 2003: 37).⁹

There are several obstacles to transferring the Kimberley Process to wood products. First, authorities and independent certification systems, which are in place for the Kimberly process, do not yet exist for timber products, particularly in Indonesia. Important structural differences also exist between

⁹⁾ For a general overview on the Kimberly Process see http://www.kimberleyprocess.com/

the two industrial sectors, which make such an approach more feasible for diamonds than forest products. Diamonds are traded internationally in much smaler quantities than forest products. Also, diamonds can be sealed in tamper-proof containers and are less diverse in type than forest products. In addition, the forest industry is more diffuse than the diamond industry and the types of revenuegenerating possibilities relating to timber are more numer-ous than for diamonds (cf. ibid.). Furthermore, there is no global forestry organisation, equivalent to the World Diamond Council, which can bring the problem of illegal logging to world attention. There is also not yet the same level of robust international concern to combat illegal logging that might lead to similar agreement on import and export rules. In the long term, there is scope to explore the applicability of the Kimberley process to the timber sector. In fact, within the FLEGT Action Plan, the European Commission will consider lessons from the Kimberley Process. The most significant ob-stacle is to convince the business sector to take part in a production and trade control scheme similar to the Kimberley Process.

5.3 Combating Corruption

Corruption is one of the main drivers behind illegal logging and conflict in Indonesia, particularly among businesses in the private sector. Since it is also very difficult for companies to follow their legal interests without bribing officials, corruption is also part of government as well. Combating corruption is a crucial element when tackling illegal logging since it increases accountability and transparency in the forest sector and represents an important element of good governance.

Several instruments to increase transparency in private sector engagement in different fields exist which might be applied to the forestry sector. These include: transparency indices (raising awareness for corruption in the forest sector); vulnerability indices (documenting impacts of forest corruption on societal groups); business principles to combat bribery (codes of conduct and guiding principles to promote the private sector to take the lead in combating forest corruption); or integrity pacts (to reduce corruption in public procurement through binding "no-bribery" agreements between procurement agencies and bidders) (Gupta 2003). Addressing corruption effectively and sustainably involves a holistic approach, examining all parties involved and their interrelationships. "From the executive, legislature and judiciary, to the private sector, the media and civil society organisations, each pillar, and its relationships to the others, is crucial to the equilibrium of the system as a whole" (TI 2003).

The Forest Integrity Network (FIN),¹⁰ an NGO that is anchored by Transparency International (TI), as-

10) http://www.transparency.org/fin/

sumes that illegal logging and other forest crimes principally arise from a failure in governance. Thus, FIN wants to combine TI's corruption fighting experience with that of civil society groups concerned with the sustainable use of forests (FIN 2002: 1). This initiative, which is still in the initial stages, aims to better understand the nature of forest corruption and to develop common methodologies for analysis. To this end, FIN plans to: (1) establish and co-ordinate a coalition of stakeholders (international and national organisations, public and private) willing to engage in the fight against forestry corruption; (2) create a web-based document centre and database on initiatives to fight corruption; (3) work to expand awareness of the issues related to forest corruption and their adverse consequences; and (4) seek to promote appropriate case studies on forest corruption by the academic and research communities and help to co-ordinate these studies (FIN 2003).

In March 2003, FIN started a project entitled "Improving Governance to Ensure Sustainability of Forests and Livelihoods" with funding from the World Bank Programme on Forests (PROFOR). This project will review the corruption fighting tools of TI to determine their relevance to corruption in the forestry sector. The final outcome will be the first "Forest Corruption Fighters' Toolkit." This toolkit could comprise integrity pacts and codes of conduct affecting the private sector (Rosenbaum 2003).

FIN can play an important role in the future since successful anti-corruption measures will be crucial for combating illegal logging. The prospects for making this tool effective in Indonesia are good since the Indonesian government acknowledges corruption is a significant problem. However, the high-level political commitment to address corruption is still lacking. The discussion process for the establishment of a national anti-corruption commission is slow since many people are involved (Fathoni 2003).

5.4 Investment

While logging operations do not require substantial investment, processing operations such as the pulp and paper or plywood industries do necessitate considerable external capital (Van Gelder et al. 2003: 25). Since the establishment of new, large pulp and paper mills requires investments between US\$ 600 and US\$ 1.3 billion a piece, companies may need to borrow money at a large scale. In the past, Indo-

nesian and foreign banks and states provided most loans (through export credits) (Barr 2001: 20). Under the Suharto regime, state-owned Indonesian banks provided discounted loans and the government granted generous tax deductions.

Between 1988 and the financial crisis in 1997, each of the mayor pulp and paper producers also

owned their own banks. Although Indonesian laws had placed numerous controls on lending practices of these private banks, those belonging to groups with strong political connections were, in some cases, saved from insolvency by the government. In this environment, companies used their own banks to finance most of their expansions, avoiding interest and the collection of outstanding loans (ibid: 22,26). In this context, efforts to include illegal logging and other environmental crimes in new amendments of existing money laundering legislation in Indonesia is a positive development.

5.4.1 Foreign Investment

Foreign investment has broadly financed the Indonesian timber industry accounting for US\$ 12 to15 billion since the early 1990's (Barr 2001: 31). Private financial institutions such as banks or public and semi-public financial institutions provided this capital. While public financial institutions are owned by one or more states, semi-public financial institutions may be partly or completely privately owned but provide certain financial services on behalf of their state and with the state bearing the financial risks. Examples include multilateral development banks such as the World Bank and Export Credit Agencies (ECA) (Van Gelder et al. 2003: 20-22).

Export credit agencies (ECAs) either grant loans themselves or supply guaranties and insurance to companies that aim to either invest in or deliver machinery to countries too risky for conventional corporate investment.¹¹ ECAs are the largest group of public international financial institutions. (Together they exceed the World Bank Group in size.) The majority of ECAs have no binding social or environmental standards (Marijnissen 2002: 1).

In Indonesia, projects backed by European ECAs contribute to illegal forest exploitation. For example, ECAs from Finland, Germany, Spain, Denmark, Sweden, Belgium, and the US supported the construction of pulp and paper mills (Matthew & van Gelder 2001). Asia Pulp and Paper was the most successful pulp and paper producer to secure international finance to expand its processing capacity. APP's access to low-cost fibre convinced US investors and international investment banks to grant loans (Hill 1998). Between 1994 and 1998, APP borrowed nearly US\$ 7 billion (Ausnewz 1999). Considering the ease with which APP and other companies obtain international loans, the international investment community seems to have underestimated the risks associated with largescale pulp and paper production in Indonesia. These risks include a supply of unsustainably harvested wood (including clear-cuts) and the use of illegal means, which may result in the company getting its licence revoked or facing heavy fines. Banks also base decisions on information provided by the companies rather that investigating the resource situation themselves (Barr 2001: 32-33).

^{11) &}quot;Export credit agencies intend to stimulate exports from their host country, by issuing export credits to either exporting companies in their own country or to the foreign customers of these exporters in foreign countries. Even more commonly, the export credit is extended by a private bank and the export credit agency (ECA) only guarantees its repayment" (van Gelder et al. 2003: 22).

Export guarantees by ECAs guaranteed Western firms, delivering machinery to Indonesian wood processors, that insolvency of the processors would not result in financial losses (Happe 2001: 15).

These guarantees were in line with the agencies' mandate "to facilitate capital investment projects involving the export of goods by their own country's vendors" (Barr 2001: 34). Export guarantees also backed up banks that provided loans for the Indonesian logging industry, a policy that encourages banks to provide loans, which under normal circumstances would be too risky. Due to the reduced risks, banks did not require certain guarantees for long-term loans and did not exert influence on the company's strategies and policies to ensure that interests and repayments would be met (cf. ibid: 34-35; van Gelder et al. 2003: 23).

Since international financial institutions, in this way, have come to finance a considerable part of the Indonesian pulp and paper production capacity, they are also now in a position to press companies involved in illegal logging or conflicts to change their behaviour. In the case of Asia Pulp and Paper, which carries a debt of US\$ 14 billion, investors agree that the company is too large to be judged bankrupt. International creditors could instead require compliance with logging regulation when granting inevitable postponement of payments to highly indebted companies like APP (Happe 2001: 26).

What is needed is a changed policy by export credit agencies. Since they are already bound to comply with the legislation of the receiving countries, ECAs need to follow these guidelines, secure minimum environmental and social standards, and ban the support of illegal businesses, businesses using illegal timber, or the establishment of oil palm plantations on natural forestland. Important instruments in this process are environmental and social impact assessments for all projects (Tacconi et al. 2003: 19f; Happe 2001: 24).

Recent developments have partly been positive. While lending institutions have increasingly become targets of environmental activists stressing accountability and sustainable investment, private banks also realise that controversial projects are less likely to turn a profit. For example, the Dutch Bank ABN AMRO adopted a "forest policy" in 2001 that aims to ensure that any negative environmental, social, and reputational impacts of their financing activities are minimized. In this context, they do not finance logging in primary forests or companies that conduct illegal logging or buy illegal timber, among other measures (ABN AMRO 2001). According to Kaimowitz (2003b), the world's ten largest banks are now pledging the banking community not to lend money for projects that may damage the environment in developing countries (the 'Equator principles' code of conduct for private lending). Following these guidelines will mean that international lending for pulp and paper mills will become much less likely (ibid.). Along with this initiative goes the EU FLEGT proposal, which also encourages banks and financial institutions to take environmental and social factors into account before granting loans or export guarantees. This means taking into account important factors like existing conflict over land and a lack of

long-term supply of legal and sustainable timber. However, since the FLEGT Action Plan does not propose illegal logging as a "serious crime", revenues cannot be captured through money laundering legislation (Marijnissen 2003).

5.4.2 New Indonesian Money Laundering Laws

In September 2003, the Indonesian Government modified its money-laundering laws to include illegal logging and other environmental crimes as an offence. The law was amended after the OECD's "Financial Action Task Force" requested such a step from Indonesia in April 2003. The new money laundering laws were developed in close cooperation between the Indonesian Financial Supporting and Analysis Centre (PPATK), the Indonesian parliament, and CIFOR.

Under the new law, banks in Indonesia are required to report any transactions suspected of being con-

nected to illegal logging and other forest crimes to PPATK. Since about three-quarters of Indonesian wood are illegal, most of financial transactions of large logging companies may be suspicious. Banks also have to ensure that their customers are not engaged in illegal activities before loaning them money for investments in large-scale logging and timber processing facilities. This is particularly significant since these new facilities create the demand underpinning illegal forest activities (CI-FOR 2003b).

The new law represents an important element of Indonesia's efforts to combat illegal logging. For the first time, the government is aiming to reach the main actors engaged in illegal logging. If enforced, this new law will make it more difficult for large Indonesian and international companies, as well as businessmen, to launder money from illegal logging in Indonesia.





5.5 Forest Certification and Partnerships

5.5.1 The Forest Stewardship Council and Certification Processes



International forest certification schemes, which can bring benefits to businesses in a competitive environment, have so far not been successful in Indonesia. This is partly related to the high costs of participating in these schemes, especially for small and medium sized enterprises, the lack of financial and other incentives to use this tool, and because substantive standards of legality and clear land rights are difficult to meet. Despite a government call in 2001 for all concessions to be certification compliant by 2003,12 there is only one FCS-certified forest in Indonesia. Indeed, many NGOs have called for a moratorium on FSC certification, which is the only globally acknowledged timber certification label. They argue that the framework conditions do not exist for communities to effectively exercise their right of free and informed consent regarding their forest resources (Colchester et al. 2003). But there is no consensus over this assertion. Some see a positive role for certification, particularly in the context of decentralisation, which allows for workable and mutually acceptable solutions on the local level (GTZ 2003).

SmartWood, a Rainforest Alliance programme accredited by the Forest Stewardship Council (FSC), has refined the global FSC guidelines for Indonesia (see Table 6). They have done this taking into consideration the principles of the only Indonesian certification body, Lembaga Ekolabel Indonesia (LEI). An important aspect of the FSC guidelines is the establishment and monitoring of a chain of custody for every wood product. It covers every aspect within each processing stage (e.g. forest, sawmill, furniture factory) as well as chain of custody between processing stages or when products (logs, sawn timber, pulp) move from one stage to the next (Dykstra et al. 2002: 8). So far, SmartWood certified 2 forest managers in Indonesia, which were both suspended later. A teak plantation of Perum Perhutani, which was first certified in 1998, was suspended in August 2001 and terminated in December 2002. The certification for PT XvIo Indah Pratama in Sumatra, which was first certified in April 2000, was suspended in June 2003. Since the latter was due to a chain of custody issues, the concession holder should be able to address it. Smart-Wood has worked with close to 12 concessions at some stage of the certification assessment process. They are currently working with four concessions. It is possible that one or two of them may be certified within the next 12 to 36 months (Hayward 2003). In addition to the certification of forests, SmartWood also certifies different products, for example, household and outdoor furniture.

SGS International Certification Services is also working with the FSC system. In April 2001, SGS

¹²⁾ See http://www.forestandtradeasia.org/news_details.html?cnt=Indonesia&lang=English&nID=37

Table 6. SmartWood Guidelines for Indonesia

Principle 1: Compliance with Laws and FSC Principles	Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria
Principle 2: Tenure and Use Rights & Responsibilities	Long-term tenure and use rights to the land and forest resources shall be clearly defined documented and legally established.
Principle 3: Indigenous Peoples' Rights	The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognised and respected.
Principle 4: Community Relations and Workers' Rights	Forest management operations shall maintain or enhance the long-term social and economic well being of forest workers and local communities.
Principle 5: Benefits from the Forest	Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.
Principle 6: Environmental Impact	Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.
Principle 7: Management Plan	A management plan - appropriate to the scale and intensity of the operations - shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.
Principle 8: Monitoring and Assessment	Monitoring shall be conducted - appropriate to the scale and intensity of forest management - to assess the condition of the forest, yields of forest products, chain custody, management activities and their social and environmental impacts.
Principle 9: High Conservation Value Forests	Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conser- vation value forests shall always be considered in the context of a precautionary approach.
Principle 10: Plantations	Plantations shall be planned and managed in accordance with Principles and Criteria 1 - 9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world need for forest products, they should complement the management of, reduce pres- sures on, and promote the restoration and conservation of natural forests.

certified 90,000 ha natural forest of PT Diamond Raya Timber, part of a large conglomerate. This certification has been controversial since at the time of assessment Diamond Raya did not comply with many of the FSC Principles and Criteria. Also, SGS did not adequately consult locals, especially the village having most disputes with the company. Diamond Raya also faced large problems concerning tenure rights in their concession area. In addition, the company harvested timber on an unsustainable level, prepared an unsatisfactory management plan, and did not take any measures to protect the rare Sumatran tiger (Valentinus and Counsell 2002)



Many Indonesian NGOs oppose the certification of any logging concessions in Indonesia on the grounds that principles relating to land tenure, user rights and responsibilities and indigenous peoples' customary rights (Principles 2 and 3 in Table 6) are in conflict with existing formal laws. As a result, it is not possible to protect these rights under the current situation. NGOs fear that any certification of an ordinary concession will legitimize a system of unlawful industrial forestry and is counter-productive to fundamental reform of the forestry system and reform of indigenous land rights within the concession system (Valentinus & Counsell 2002: 137). Projects working towards expanding certification should be aware of the risks they are taking and the opposition of local NGOs to this approach. Putting pressure on the Indonesian government to reform the land right system, such that there is more domestic NGO support for certification, is an area where the international community can also play a role.

Although the certification process is controversial, there are two major initiatives that aim to promote certification in the Indonesian forestry industry in order to combat illegal logging: (1) the World Wide Fund for Nature / Nature Conservancy (WWF-TNC) Alliance and (2) the Tropical Forest Trust (TFT).¹³ The Tropical Forest Trust's goal is to increase the area of FSC certified natural tropical forests and get certified timber and timber products into TFT member supply chains. The initiatives assume that environmental and social performance has to improve a company's bottom line and that company owners try to meet certification standards only if they believe they will loose important markets or miss opportunities for expansion if they do not.

Therefore, the initiatives aim to make buyers in the US, EU, and Asian countries, such as China and Japan, sensitive to the problem of illegal logging

13) http://www.tropicalforesttrust.com/objectives/policy.asp

and convince them to purchase only certified wood from Indonesia. A second component aims to interest logging companies in Indonesia in obtaining certification. TFT also provides capacity building to meet certification standards.

The operational tools for bringing sustainable suppliers and consumers together are trade networks. For example, the WWF launched the Indonesian Producer Forest and Trade Network (Indonesia PFTN) on 16 October 2003. The Network will be a part of the Global Forest and Trade Network (GFTN) initiated by WWF International. It shall bring together tropical timber buyers and Indonesian suppliers to develop market links for sustainably produced tropical forest products. To complement this initiative, TNC will develop a tracking system in East Kalimantan that enables companies to verify the legality of wood (WWF/TNC 2002). The TFT has a similar trade network with producing, supplying and buying members, which differentiates between five different categories of timber, ranging from 'illegal' to 'FSC-certified'.

TFT also works with companies and carries out eight to ten day analyses to identify gaps in a company's environmental management. If, after this process, a company is still interested in participating and agrees to implement a management plan, it becomes part of the TFT network (Lewis 2003). TFT is currently working on several certification projects in this context, including ones with: (1) PT Daisy Forest Management Unit project (67,000 ha natural forest in East Kalimantan); (2) an 8,000 ha community based forest operation and two teak plantation areas within the PT Perhutani estate; and (3) the East Kalimantan Working Group on Certification, which is supporting forest concessionaires within the group to achieve certification and sustainable forest management.¹⁴ The EU FLEGT Action Plan explicitly mentions the network approach of the Tropical Forest Trust because it allows European businesses to purchase timber that is in line with certain social and environmental standards. The TFT has developed a guide for industry on how to exclude illegal wood from their supply chain for this purpose (TFT 2003). All these efforts may slow illegal logging in Indonesia since they directly work with the concession holders and mill operators.

Although there are some positive developments, the benefits of certification (for example, good management standards, dialogue on key forestrelated issues, foreign donor financing) still seem distant in Indonesia. As long as efforts do not address the underlying conditions of conflicts, forest certification will likely remain controversial in Indonesia for the foreseeable future.

5.5.2 Bilateral Partnerships with the Indonesian Private Sector

Direct partnerships between NGO's or western buyers and Indonesian producers are another way to reduce illegal logging, protect forests, and reduce conflict. One of the initiatives of the WWF-TNC Alliance project presents an example of this

¹⁴⁾ http://www.tropicalforesttrust.com/projects/indonesia.asp

approach. In August 2003, Asia Pulp and Paper signed a cooperation agreement with WWF, promising to set aside almost 50% of its forest concessions in Riau as conservation areas. The company also promised to stop buying illegal timber for its pulp mill. Under WWF supervision, APP will prepare a multi-year action plan, which addresses the sustainability of its forest resources, nature conservation, the problem of illegal logging, and the resolution of land conflicts with local communities. This somewhat unexpected cooperation by APP is related to the combined pressure of nongovernmental organizations and the buyers of APP timber products in Japan (Jakarta Post 2003b). Yet, the company has yet to prove that it is really going to change its former practices. The WWF will need to undertake close monitoring of the implementation of the agreement to maintain its credibility.

The UK Timber Trade Federation (TTF), which represents the majority of major UK importers, is an example of a positive initiative among western buyers of Indonesian wood products. TTF's Code of Conduct, released in summer 2002, encourages members to: comply with all relevant legislation and trade fairly and responsibly, obtain their timber and timber products from legal and well-managed forests, condemn illegal logging practices, and commit to working with suppliers and stakeholders towards eliminating these practices (TTF 2002).

Although the UK imports only 4% of Indonesian timber products, TTF wants to exercise whatever influence it can on its Indonesian suppliers. In July 2003, they published a ten-point action plan to promote legal and sustainable timber from Indonesia. The immediate goal of the action plan "is to secure third party audited legal timber for the UK market with the ultimate objective of sourcing certified sustainable timber" (TTF 2003). The approach taken is to have chain-of-custody certification and a shortlist of mills supplying the UK. The first practical steps taken by TTF were

- to develop an acceptable working definition of legality through UK timber traders;
- to identify and target mills "that support a higher than average percentage of their product to UK and EU markets, and encourage them to undertake third-party legality audits..." (Roby 2003); and
- to contract the Tropical Forest Trust to survey selected Indonesian plywood mills for ability and willingness to use legal wood and support sustainable forest management.

The survey results will empower UK importers to use their purchasing policies to influence Indonesia's plywood sector (ibid.; TTF 2003).

Some individual companies in timber importing countries, like Lowe's, Home Depot and Ikea, among others, are also undertaking measures in response to the logging situation in Indonesia. Green procurement policies by such Western companies have a large potential for improving the performance of suppliers in Indonesia. The policies promote social and environmental responsibility; establish support from both internal and external stakeholders, such as employees, customers, constituents or community members; and also improve public image (Forest and Trade Asia 2003). The procurement policies by such companies aim to encourage sustainable forest management by guaranteeing that the timber products they use are legal and do not come from protected or ancient forests.

Home Depot, the world's largest home improvement retailer, has adopted a Wood Purchasing Policy giving preference to the purchase of FSC-certified timber and wood products wherever feasible. The company aimed to eliminate the purchase of wood from endangered regions around the world by the end of 2002 (Home Depot 1999). However, the Rainforest Action Network announced in May 2003 that Home Depot still sells Indonesian plywood (Home Channel News 2003). Lowes, the world's second largest home improvement retailer, adopted a timber and wood product procurement policy that commits the company to overhaul the sourcing of its timber and also to actively engage its wood suppliers in permanently protecting critical forest areas. Lowe's supports the identification and mapping of endangered forests (in collaboration with World Resources Institute) and will eliminate Indonesian Ramin dowels from its inventory. They also plan to phase out wood coming from endangered forests and to give preference to FCScertified timber and wood products in the future (Lowe's 2003).

The Swedish firm Ikea has a long history of responsible procurement for its furniture production. They purchase timber from temperate forests only when it fulfils the first-level requirements of a four-level 'staircase model'. In the longer term, suppliers must reach level four, which is a FSC certification. The purchase of tropical timber is currently not subject to the staircase model. Tropical timber is only used when the suppliers can assure that the wood is FSC certified. For that reason, lkea ended its contract for teak with its Indonesian supplier after the FSC withdrew its certification of Indonesian teak plantations. Although lkea is not using any tropical timber from Indonesia at the moment, the company has close contacts to some Indonesian suppliers promoting certification (Hartmann 2003; Ikea 2001).

The decision by some American and European timber merchants to stop purchasing Indonesian timber and wood products as long as they are not certified offers another opportunity to promote certification in Indonesia. The British timber merchant, Jewson, aims to stop trading in Indonesian timber. In 2003, they will purchase 80% of their plywood products from alternative, sustainable sources (Edie weekly summaries 2003). In the US, Lanoga Corporation, Centex Homes, and International Paper announced in May 2003 that they would stop buying Indonesian wood. The Rainforest Action Network brokered this action (Home Channel News 2003).

5.6 Corporate Social Responsibility

Efforts to promote corporate social responsibility (CSR) directly address conflict that may occur around timber extraction and processing in Indonesia. Large, regionally operating companies such as APRIL or APP seem to have an interest in changing their image and may be open to CSR. However, so far they have not resolved social conflicts resulting from tenure disputes with local communities in their concessions. Still, the main actors, in this regard, may be Western companies or buyers of Indonesian timber and wood products. Actions by European and American buyers may set important standards, which ultimately may have an impact on Indonesian companies and its forestry sector as well. The EU Commission recently defined the concept of corporate social responsibility as "when companies integrate social and environmental concerns in their business operations and in their interactions with stakeholders on a voluntary basis" (EC 2002).

Although CSR is becoming increasingly popular among businesses, there is no consensus on definitions of social and environmental responsibility. An example of one definition is the UN Global Compact, which aims to assist the business sector in mainstreaming sustainable corporate responsibility into their strategies.¹⁵ The Global Compact seeks to integrate human rights, labour standards and environment e.g. through the protection of internationally proclaimed human rights, the support of the precautionary approach, and the promotion of environmental responsibility. This is done by bringing together companies, UN agencies, labour organisations, and civil society. The Compact is not a regulatory instrument and does not 'police' or enforce the behaviour or actions of companies. Rather, it relies on public accountability, transparency, and the enlightened self-interest of companies, labour, and civil society. Hundreds of companies are involved in the Compact, including some Indonesian ones, although none are timber producers.

The Martha Tilaar Group's Nature-based Cosmetics and Corporate Responsibility Project, which is within the Compact network, represents a positive example of CSR engagement by Indonesian companies and the assistance of Western institutions (GC 2002). The Global Compact's principles can guide Western companies in their business relations with Indonesian partners. In 2002, the Global Compact also ran a policy dialogue on "The Role of the Private Sector in Zones of Conflict" which represented a forum for companies, NGOs, and trade unions to identify key issues and actions regarding the role of the private sector. Based on the recognition of the rule of law and the respect of human rights, the conference explored ways for the business sector to avoid conflicts (GC 2003).

15) The UN Global Compacts nine principles are available at www.unglobalcompact.org/Portal/?NavigationTarget=/roles/portal_user/aboutTheGC/nf/nf/theNinePrinciples Other promoters of CSR within the business community are business organisations such as the World Business Council for Sustainable Development (Wenger & Möckli 2003: 114-115) and the Prince of Wales International Business Leaders Forum (PWBLF). The PWBLF offers multinational companies assistance in developing their own standards and creating tools to implement them on the company level (PWBLF 2003). Its Business and Peace Programme (with International Alert) promotes the role that businesses can play in contributing to long-term peace in conflict-prone areas and assists companies in developing and implementing policies (IA 2003; Nelson 2000: 3).

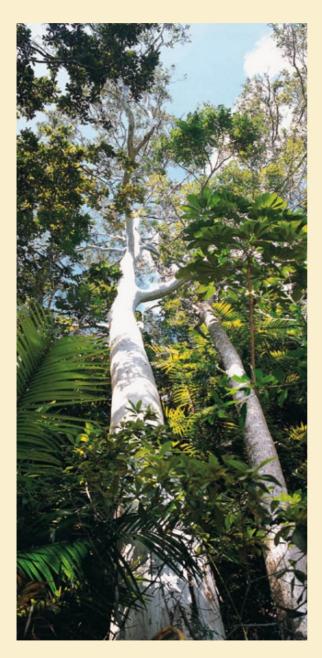
Corporate social responsibility also plays an important role in the EU Commissions FLEGT Action Plan. It supports voluntary codes of practice for timber harvesting and procurement and a rigorous voluntary independent audit of the supply chain. In the future, the European Commission will apply lessons learned from CSR initiatives in other sectors to the forest sector, promote private sector initiatives in the EU, and foster capacity building for building private initiative in developing countries.

Corporate social responsibility has led retailers in the EU and the US to exclude Indonesian timber from their supply chains. But, conflicts caused by illegal logging have, so far, not been a factor in



these decisions. CSR does not yet directly address conflict prevention (Wenger & Möckli 2003: 119-122) despite the fact that conflict may reduce timber availability and adversely affect the interests of Western corporations.

66 | 6 Conclusion



The purpose of this paper was to explore illegal logging, the role of the business sector, and conflict in Indonesia. The authors outlined the magnitude of illegal logging and illegal trade and its social and economic impacts. Since 73% of logging output may be illegal, these impacts are extensive and may significantly worsen the situation for already marginalized communities.

The root causes of conflict related to illegal logging are complex and intertwined. A common factor is the role that the private sector plays in promoting illegal logging and its associated conflicts. This negative role of the private sector is associated with other adverse historical trends in corruption, weak or selective law enforcement, conflicting land rights, and uncoordinated decentralisation. The forestry industry and its market structure also deepen the involvement of its business sector in conflict. Apart from Singapore-based APP and APRIL, no international companies are involved in timber extraction in Indonesia at present. Most of the country's wood exports remain in Asia although western countries are an important market for plywood and paper and often provide financing for timber processing facilities.

Given these conditions, conflict prevention in Indonesia has to go beyond measures that address only the business sector, such as the promotion of stakeholder meetings and awareness in companies, to deal with larger structural conditions, such as regulation of timber industry, law enforcement, land rights, and codes of conduct (accountability and transparency). International pressure may also play a role in leading Indonesian businesses and the Indonesian government to undertake measures in these areas.

Combating illegal logging and its associated conflicts needs the combined effort of those countries that produce timber and those that import. This may involve the simultaneous implementation of policies and measures, such as export and import controls. International and regional initiatives such as FLEG and FLEGT may support the country's national level efforts of defining and enforcing legislative and regulatory frameworks (cf. Defra 2003).

As discussed above, numerous relevant international initiatives exist. Since much of the timber trade involving Indonesia is regional, a regional international approach may be more likely to succeed than a global one. A regional or bilateral approach, such as the FLEG process and the bilateral agreements involving the UK, Japan and China, are particularly promising. However, their effect is dependent on the collaboration of the Indonesian government, which has, so far, not been extensive.

Partnerships between NGOs and pulp and paper producers have the potential to reduce illegal logging but run the risk of white-washing. The example of the WWF APP partnership shows that associated risks can be minimised by: (1) looking at the whole concession area of a company (Does it protect primary forest in one concession but log it in others?); (2) investigating the standards of processing facilities; (3) ensuring the cooperation of the national government as the only authority with the mandate to enforce the agreement; and (4) making NGOs willing to pull out when the industrial partner does not keep its promises in order to minimise the 'reputational risk' of these deals.

Initiatives of business associations such as the British TTF or individual buyers of Indonesian wood products, such as Lowe's, are important since they sidestep the Indonesian government and directly address logging and wood processing businesses. If Asian buyers required some proof of legality from their suppliers, these kinds of business-to-business approaches can develop a significant momentum.

Conflict prevention and mitigation also require capacity building on the community level in conflict negotiation and the development of laws and institutions that protect community interests. The capacity-building support of international agents may be important for doing this. In this context, the withdrawal of the German government from the forestry sector in Indonesia in the future would reduce an important source for capacity building. Also, local efforts need to engage all stakeholders in rule-making procedures to ensure their compliance. For example, local stakeholders could negotiate land rights or set up forest management and equitable benefit sharing from sustainable forest utilisation.

The forest certification process is also an important element for promoting sustainable forest management and reducing conflict. There is a need to address conditions, which, so far, have made FSC unsuccessful in Indonesia. There are few incentives for local industry to invest in certification or verification schemes to combat illegal logging. Also, the non-recognition of indigenous land rights by the Indonesian government results in a majority of NGOs and local communities rejecting forest certification, which, in turn, does not promote use by companies. The international market also does not contain meaningful incentives for certification and the domestic legal and institutional structures do not provide an effective framework of rules and penalties in relation to illegal logging. However, regarding access to Western markets, certification might become a core requirement in the future (for example, it is required under FLEGT). This might promote certification among Indonesian logging and wood processing companies and force the government to take action regarding the revision of tenure rights.

Addressing illegal logging and conflict will entail partnerships with other kinds of organisations (for example the Forest Integrity Network) and groups in civil society including NGOs, local leaders and women's groups. Recent multi-stakeholder success stories in conflict situations seem dependent on the leadership and commitment of all stakeholders (Haufler 2002). A firm commitment by the Indonesian government to promote good governance and attack the root causes of conflict, such as corruption and the oversized industry capacity is needed before businesses in the forest sector will address conflicts. This is especially important because it is only the government that has the mandate to enforce the law. Efforts in the international business community that try to push Indonesian producers towards sustainable forestry management and conflict prevention will be more successful once the appropriate legal and institutional frameworks and economic and regulatory incentives or disincentives exist.

The problems linking illegal logging, conflict, and the business sector in Indonesia are complex. At the same time, the policy options for addressing this challenge are numerous. Their success will depend strongly on the willingness and ability of the Indonesian government to work with all stakeholders who depend on the forestry sector, to reduce corruption, establish effective laws and regulations, undertake sustainable forest management, and promote equitable access.

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InWEnt - Capacity Building International, Germany Department 5 - Environment, Natural Resources and Food

Division for the Environment, Energy and Water Lützowufer 6-9, 10785 Berlin

 Phone
 +49-30-254 82-0

 Fax
 +49-30-254 82-103

 E-Mail
 umwelt-berlin@inwent.org

 www.inwent.org

Adelphi Research

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Adelphi Research gGmbH Caspar-Theyß-Straße 14a 14193 Berlin

 Phone
 +49-30-89 00 068-0

 Fax
 +49-30-89 00 068-10

 E-Mail
 office@adelphi-research.de

 www.adelphi-research.de
 0

InWent - Capacity Building International, Germany

Department for the Environment, Natural Resources and Food

Berlin - Saxony - Bavaria

The Environment, Natural Resources and Food Department is made up of three divisions in Berlin, Leipzig-Zschortau (Saxony) and Feldafing on Lake Starnberg (Bavaria) - three specialised centres of competence which are mutually complementary and supportive.

We target developing, transition and emerging countries and offer human resource and organisational development at three different levels:

- Individual Fostering competence of decision making and action taking for specialists and executives.
- Organisation Strengthening the performance of organisations in the public and private sector.
- System Playing a role in shaping frameworks for political institutions through political dialogue and the creation of learning networks.

Nine key areas form the centrepiece of our professional expertise:

- Development management
- Energy and climate protection
- Natural resources
- Environment
- Global water resources
- Rural development
- Global food security and consumer protection
- EU enlargement and rapprochement
- Disaster prevention and management

Quality control is a continuing concern of the Environment, Natural Resources and Food Department. Our quality management standards comply with DIN EN ISO 9001:2000.



Berlin	Saxony	Bavaria
InWEnt Division	InWEnt Division and Conference Centre	InWEnt Division and Conference Centre
Environment, Energy	Natural Resources and	Rural Development, Food
and Water	Biodiversity	and Consumer Protection
Lützowufer 6-9	Leipziger Strasse 15	Wielinger Strasse 52
D-10785 Berlin	D-04509 Zschortau	D-82340 Feldafing
umwelt-berlin@inwent.org	zschortau@inwent.org	feldafing@inwent.org



rnationale Weiterbildung Capacity Building und Entwicklung gGmbH International, Germany

