

# CUT AND RUN

ILLEGAL LOGGING AND TIMBER TRADE IN THE TROPICS

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**ILLEGAL LOGGING AND TIMBER TRADE IN THE TROPICS**

*Edited by Rob Glastra*

INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

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## ***Foreword***

*Forests are arguably the worst managed ecosystems on the planet. Where they are not regarded as barriers to economic growth, and therefore cleared to make way for agricultural or urban expansion, they are exploited by governments and by corporations in the name of economic growth, and just as effectively destroyed or degraded. Even when people live at a considerable distance from any wilderness, as they typically do in developed countries, the assault on forests continues as they receive the effluents of our affluent lifestyles in the form of acid rain and heavy metals. Even in less developed countries, where people live closer to the forests, both timber and nontimber resources have been extracted to the point where survival of the forest itself is in question. Living in conditions of poverty, men (but not women) have been quite prepared to sell their forest birthright for a mess of potage in the form of wages.*

*It was not always so. Not so long ago, forests received a great deal of protection. This was not because human beings were any more ethical in the past or because, living closer to nature, they possessed any innate sense of conservation. Rather, it was because forests were widely regarded as dangerous places — untracked areas where one could lose one's way forever, be torn apart by vicious beasts, or perhaps stumble inadvertently into the home of a demon, never again to emerge, at least not as a human being. Only the very brave, the very foolish, or those living outside the law went into the forest. Under these*

conditions, the forest was exploited, but minimally and only around its edges.

Today, forests have been largely tamed. One no longer has to be brave at all to go into the forest, as is evident by the enormous number of people who use the forest for day picnics or longer trips into remote areas. Modern equipment and modern communications have reduced the dangers enormously. Though some of those who enter the forest may still be foolish, they are more likely to suffer from mosquitoes or sore legs than to get lost or eaten, much less possessed by a demon.

In the tropics, the forests of today resemble those of the past in one respect: they remain a target for outlaws. But even here, differences are greater than similarities. The outlaws of old lived as small bands and exploited the forest mainly as a hideout and for subsistence rather than as a source of wealth. It is just the reverse with today's forest outlaws; few of them live in the forest and fewer still use it for subsistence. Rather, for them, the forest is exclusively a source of wealth—in some cases, enormous wealth. And, coming as they do with huge chain saws, heavy equipment, large trucks, these outlaws are hardly hiding.

If forests are among the worst managed ecosystems on our planet, they are also among the most studied. The traditional knowledge of forest dwellers and of naturalists around the world is of course profound. Equally profound is the industrial and academic knowledge about forests, and we have trade journals and professional journals in a score of languages. Every year, hundreds of students graduate from courses in forest management at all scales from wood lot to commercial timber, and at all levels from informal classes to advanced university degrees. In recent years, new disciplines, such as forest ecology and recreation studies, have added to our store of knowledge about forests. As a result, we know a great deal about how forests grow and how they react to stress, including both natural stress and the stress imposed by human action. We also know a great deal about forest management and how much wood and other products are taken from the forests, the firms active in forestry, and the uses of forest products.

However, within this huge body of forest knowledge, one factor is conspicuously absent: illegal cutting and trading. In many countries of the world, mainly but not exclusively countries located at the low latitudes lying between the Tropic of Capricorn in the south and the Tropic of Cancer in the north, a good part of the forest is harvested by operations that are, to one degree or another, illegal—harvested by the new forest outlaws. In some cases, the new outlaws operate under the guise

of the law; but, more commonly, they do not have or need even that. It almost goes without saying that the harvesting goes on under conditions that are as unsustainable as they are inequitable. Then, just as money is laundered by passing through several hands, so too are the logs passed from one operation to another until they enter the world of commerce as if they had been harvested legally and sustainably. Most of the wood ends up serving the needs of those who live well to the north or to the south of the countries where the original, illegal harvesting took place.

For obvious reasons, it is extraordinarily hard to get accurate information about illegal forest activities. Not a few forest rangers have been killed in their attempts to protect the forest. The murder of Chico Mendez in Brazil – perhaps the most famous death in environmental history – stemmed from his attempts to protect long-established and sustainable communities of rubber tappers from destruction, as big cattle farmers burned down hundreds of thousands of hectares of forests to turn them into unproductive grasslands.

Given this history, one is tempted to say that the very brave or the very foolish attempt to study illegal forestry. The authors of this study fall into the former category. Recognizing that a good part of the timber in their countries – Ghana and Cameroon in Africa, Brazil and Paraguay in South America – was being cut by operations that were illegal and that much of this illegality stemmed from either misguided economic policies or outright corruption, a group of nongovernmental organizations (NGOs) working under the umbrella of Friends of the Earth (an international coalition of environment-and-development groups) decided to tackle the issue head on. They came armed not only with courage but also with two other critical qualifications:

- The researchers had the academic skills necessary not merely for describing the extent of the problem but also for analyzing the economic and political forces that permit, and in some cases encourage, illegal cutting and trading.
- Being based in NGOs in the very countries under study, the analysts were extraordinarily careful to avoid blaming the victims. In the presence of rural poverty, local people become easy prey for logging companies, who offer them scant wages in return for their cooperation in cutting and hauling logs. Typically, forest dwellers are only too aware of the long-term consequences of such cutting. But, in the absence of any other way to support their families, they concede and, eventually, become the first victims of the harvest.

Perhaps in the end, it was the uncommon combination of skill, analysis, and empathy that was most persuasive when, on behalf of the four NGOs, Friends of the Earth International presented the *Cut and Run* proposal to Canada's International Development Research Centre (IDRC). As one of the officers involved with the funding decision, I was initially most concerned about their research skills. (Of the four groups, only Friends of the Earth Ghana had previously been funded by IDRC.) Once convinced that the skills did exist and that a common methodology could be pursued (and at very low cost besides), I became even more worried about the safety of the researchers. Within the project, a number of measures were devised that gave greater protection, but far from full security, to the researchers. Never having had any doubts about their empathy, IDRC then moved to fund the research, which is now summarized in this book.

For many years, everyone working on tropical forests has known and talked about illegal logging. Now, thanks to the individual authors, to the four member groups, and to Friends of the Earth International, we have some solid field observations together with recommendations for doing something about the problem. With the publication of this book, the people of in the developed world on whose behalf most of the timber is harvested and who both set the rules for international commerce and control most of the marketing firms will no longer be able to argue that they did not know about illegal logging and timber trade in the tropics or that they did not know what to do about it.

David B. Brooks  
*Research Manager*  
*International Development Research Centre*

November 1998



## **Preface**

This new study by Friends of the Earth International (FoEI) highlights a problem that has hitherto received little attention in the forest-management literature – the widespread problem of illegal logging and timber trade. This report presents a summary and synthesis of the problem in four tropical countries: Brazil, Cameroon, Ghana, and Paraguay. The case studies, jointly known as the Chase for Quick Profits project, were carried out in 1995/96 by member organizations of FoEI – FoEI Ghana, Sobrevivencia (FoEI Paraguay), and the FoEI Amazonia Programme (Brazil) and by a partner nongovernmental organization (NGO), Enviro-Protect, in Cameroon. The FoEI Secretariat was in charge of coordination and synthesis.

This Chase for Quick Profits project focused primarily on the local and national contexts of illegality in the timber industry. Legal instruments and their implementation, as well as the socioeconomic and political mechanisms behind illegality and malpractice, were analyzed; specific cases and the actors involved were uncovered; and solutions have been proposed. Reinforcing the role and capacity of local NGOs in this type of research and campaign work was an essential goal of the project.

FoE has been recognized as the first international NGO to campaign against the destruction of tropical forests. FoE member organizations in several tropical countries (Brazil, Ghana, Indonesia, and Malaysia) have been conducting investigations on rainforest issues and

campaigning for years. Meanwhile, the campaigns of some European member groups have been focusing on tropical timber consumption in the North and on international trade, debt, and aid programs. Forest experts from FoE England, Wales and Northern Ireland have produced several well-documented reports on tropical timber trade and associated development topics.

Investigations by FoEI, the Environmental Investigation Agency, Greenpeace, the World Rainforest Movement, the World Wide Fund for Nature (WWF), and other NGOs and individual researchers have produced ample evidence of illegality in logging activities and timber trade in many countries, a testimony to the ineffectiveness of most regulatory mechanisms in the timber sector.

The case studies in this book clearly document the shocking and widespread nature of illegal activities. Key findings include the following:

- In Brazil, the timber sector as a whole is operating outside or against the law;
- In Brazil and in Cameroon, fines and fees are seldom imposed; enforcement is grossly inadequate; and collecting fines costs more than not collecting them. In Ghana, loggers consider the fines an incentive to break the law.
- Illegal logging leads to forest degradation; this in itself leads to a serious loss of biodiversity and to more forest fires. It also contributes to illegal trade in endangered species, bushmeat, and skins.
- Rules and regulations are often too complicated; they contradict each other; and knowledge about them is scant.
- In Ghana, the model structural adjustment program has led to logging at unsustainable rates. Unless urgent action is taken immediately, a productive sector of the economy will disappear a victim of predatory exploitation fueled by World Bank recipes.
- In Paraguay, investigations revealed complicity in illegal activities at the highest levels of society.

The findings of these studies were immediately used in national and international campaigns and advocacy work. Thus, they helped push the issue of illegal logging higher up on the agenda of the 1996 meetings of the Intergovernmental Panel on Forests of the United Nations Commission on Sustainable Development. In all four countries, the

studies led to widespread publicity. In Paraguay, two officials saw reason to flee because of arrest warrants issued against them. And, during the preparation of this combined report, improvements have been made, most notably in Ghana, where new and progressive forestry laws have been installed.

As a snapshot in time, these studies point to the need to raise awareness, not just in consumer countries but notably also in producer countries, and to reinforce the independent monitoring and campaigning abilities of NGOs. They also point to the need for legal instruments to enforce current laws.

FoE will continue to do work in this important area. It sees the need for national and international campaigns to make the trade in illegally harvested wood more difficult and thus more costly for the perpetrators. Now that international discussions on global forest conventions and the like seem to be stymied, a campaign aimed at improving and enforcing current legislation may be the key to progress. Of course, it is necessary to further develop the concept of sustainable forest management (SFM). However, as this work amply demonstrates, it is no longer possible to ignore the need to combat illegal logging and timber trade.

We wish to stress that the project dealt primarily with illegality in forest exploitation and timber trade; sustainability is another issue – an essential one, but beyond the primary scope of this project. However, the findings do demonstrate, yet again, the clear relationship between the two concepts: the effective implementation of legal and other regulatory mechanisms is a necessary precondition for SFM, but it is certainly not the only one. In some ways, illegality is an easier issue to deal with in research projects – and also in political debates – than sustainability. First, illegality is easy to define and measure, as opposed to sustainability, which is interpreted in many different ways. Second, the concept itself is less controversial. This makes it easier to rally broad political support for a campaign against illegality than for one against unsustainability. Everyone committed to saving their country's forests is thus left with a big challenge: integrating the principles of ecological, social, and economic sustainability into national forest policy and legislation.

FoEI fully recognizes that illegal practices occur in many other countries, on all continents. The selection of countries for this project is the result of discussions and consultations among FoEI member and partner organizations and simply reflects the priorities of the participating organizations. What makes this project special is that it was

carried out by local NGOs with impressive records of investigative and campaign work on environmental, development, and human-rights issues. The problems that this project focuses were not solved with the publication of the final reports. However, the dedication of the participants in the project, the experience they gained, and the allies that they made of key actors all place these NGOs in an appropriate position to continue playing their watchdog role. We hope that the donor community will also be convinced that their efforts deserve further support.

The report starts with a background chapter introducing some key issues and presenting a global overview of illegal logging and timber trade. Chapters 2-5 are dedicated to the case studies; each contains an introduction, followed by a summary taken from the report of the participating organization. The final chapter discusses some common elements and differences among the country case studies and presents the overall conclusions and recommendations that emerged from the project.

Bert van Pinxteren  
FoEI Coordinator

Rob Glastra  
Project Coordinator



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The project coordinators were Roberto Smeraldi, FoEI – Amazonia Programme, Brazil; Roger Ngoufo, Enviro-Protect, Cameroon; Theo Anderson, FoE Ghana; Elias Diaz Peña, Sobrevivencia (FoE Paraguay); and Rob Glastra, FoEI.

As project leader, I wish to thank the following for their contributions to the realization of this project and preparation of all the reports: Micha Kuiper, Gabriella Fredriksson, Ann Doherty, Linda Cook, Ronald Hollander, Sophie Querido, Bert van Pinxteren, Arthur van Norden, Malini Mehra, Roberta Cowan, Jenni Richardson, Felix Hoogveld, and Sjoerd Hoekstra, all from the FoEI Secretariat; and Willem Ferwerda and Rietje Grit, both from NC – IUCN.

Rob Glastra  
Project Coordinator

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## **CHAPTER 1**

### ***The World***

#### ***Understanding the Illegal Logging and Timber Trade***

This chapter discusses some aspects of the illegal logging and timber trade within the national and international contexts of logging, deforestation, and timber-trade policy. The concept of illegality used in this Friends of the Earth International (FoEI) project and in this report has a somewhat broader focus than the mere violation of laws; it also includes fraudulent behaviour and the evasion of government restrictions – practices that often lead to bribery, corruption, and the abuse of power. Two broad forms of illegal activity are discussed: illegal harvesting and the illegal shifting of funds.

#### **DEFORESTATION, FOREST DEGRADATION, AND THE TIMBER INDUSTRY**

The fact that forest clearance for farming is now considered the direct cause of more than half of the deforestation in the tropics (Dudley et al. 1995) does not imply that other factors are of minor importance, as causal links can be quite complex. Advocates of the timber industry emphasize selective harvesting techniques, which are supposed to leave most of the forest intact. However, logging (along with mining) makes forests accessible to farmers and land-hungry colonists, who

often settle illegally or are encouraged to settle these newly opened lands by unsustainable colonization laws or transmigration schemes (such as in Indonesia and the Brazilian Amazon). Logging personnel and colonists are also often implicated in illegal wildlife trade, resulting in the rapid depletion of wildlife populations. Logged-over forests are then cleared for crop production. Causal links between forest loss and logging are obscured if deforestation researchers rely too much on satellite images. The initial selective logging can hardly be detected on these images, giving the misleading impression that the subsequent clearing for farming or for secondary logging, which is clearly visible, is the real primary cause of deforestation (Dudley et al. 1995).

Regardless of its actual relative importance of the timber trade as a causal factor, ample evidence shows that its role is substantial and is increasing in scale and intensity. In the forest debate, opponents of environmentalists tend to downplay the direct and indirect links between timber harvesting and deforestation (loss of forest quantity) and in particular to neglect the significance of forest degradation (loss of quality).

The WWF report *Bad Harvest?* (Dudley et al. 1995) convincingly showed that the timber trade is the most important cause of forest degradation around the world. This has now become the biggest threat to biodiversity-rich, old-growth forests both in the South and in the North and to the traditional communities that depend on them. Even though temperate and boreal old-growth forests in rich countries have been reduced to fragments, most of these fragments are not legally protected against logging. Another alarming development is that large-scale conversion of natural forests into monoculture plantations, until recently practiced mainly in the North, is rapidly becoming popular in the South (for example, in Chile, Indonesia, and Malaysia). This trend represents a substantial threat to forest quality, although some of the advocates of this practice cynically claim that the overall forest cover is maintained.

The role of the international tropical timber trade, its ecological, social, and economic impacts, and the international and national policy contexts have been thoroughly analyzed in some excellent reports by Friends of the Earth England, Wales and Northern Ireland (FoE EWNI) (Counsell et al. 1992; Rice and Counsell 1993). A fact-filled, powerful report issued recently by the Environmental Investigation Agency (EIA) discussed the excessive powers of transnational corporations (TNCs), evidence of widespread malpractice and illegality, and the threat that all of this poses to the world's forests (EIA 1996).

Any reasonably informed person should therefore agree that the production and trade of timber must be regulated if sustainable forest management (SFM) is to become more than a hollow phrase – that is, if the entire spectrum of nonmarketable biological and sociocultural values of natural forests is to be maintained. This cannot be left to the industry as long as the rules of the market dictate a narrow focus on marketable goods, conventional cost-benefit analyses, and a hands-off approach from governments. Some examples of primary regulatory mechanisms are sustainable traditional or innovative forms of community forest management; legal instruments; sound and democratically controlled government policies; and independent certification of forest products. Such mechanisms can only work with the help of other actors in society (besides industry and government), including the people who depend on forests for their survival and those who defend the multifunctionality of forest ecosystems. Political will among governments, effective democratic control over economic and political elites, transparency, and public access to information are also necessary conditions for the regulation of timber production and trade.

Unfortunately, liberalization and deregulation of global trade and export-oriented aid schemes that push developing countries into selling their natural resources – dominant trends in international trade and aid policy – undermine the effectiveness of such regulatory mechanisms. However, this international dimension does not absolve national governments from their responsibility to provide good governance as stewards of the forests that form part of a global heritage and should sustain future generations.

Providing aid is the main way rich nations address environmental issues in developing countries. Yet, aid agencies still fund projects that not only ignore the root causes of deforestation and forest degradation but actually make them worse. Some forms of aid are in fact a smoke-screen to obscure the impacts of trade that principally benefits the donor countries. In 1992, for instance, the United Kingdom's forest aid to developing countries was about one-fifth of the amount earned from the value-added tax levied on imported tropical timber alone (Counsell et al. 1992).

As long as illegal practices prevail, it will be impossible to achieve SFM, as these undermine the credibility and effectiveness of any regulatory mechanisms.

## CHANGING GLOBAL TRADE PATTERNS<sup>1</sup>

In recent years, exploitation and management of forests have been profoundly affected by a number of changes in global trade patterns:

- *Timber consumption* Timber consumption has increased immensely in the past few decades (for instance, hardwood production rose by 54% between 1966 and 1988). This has occurred in industrialized countries in particular, which consume a disproportionate three-quarters of the world's traded timber (mainly in Europe, Japan, North America, which collectively comprise 17% of the world's population).
- *Concentration of economic power* Throughout the world, economic power is becoming concentrated in the hands of private interests, outside and within the timber industry. This is due to company mergers and the survival of the fittest enterprises, as well as to privatization in the forestry sector, which shifts control over forest resources from the state to private interests. This trend is obviously promoted at the expense of independent control over the use (or exploitation) of natural resources and creates ample opportunity for totally unsustainable, quick-profit exploitation.
- *Vertical integration of the production chain* The entire production chain is becoming vertically integrated, that is, the same company will be involved in all aspects of production, from timber growing, through harvesting, processing, and manufacturing, to the marketing of end products. This is another dimension of the concentration of economic power.
- *Domination by TNCs* The globalization of the economy is also reflected in the timber trade; a decade ago, TNCs already controlled 80–90% of the global trade in forestry products (UNCTC 1985). They collectively control nearly 1.3% of the world's forest cover, around 45 million ha, and their total trade is worth 80–90 billion United States dollars (USD) per year (EIA 1996). Although international trade represents a relatively small proportion of the global timber trade, trade at the national level is also increasingly dominated by big TNCs. They have therefore become key economic and political actors, determining the fate

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<sup>1</sup> Most of this section is based on chapter 3 from *Bad Harvest?* (Dudley et al. 1995).

of the world's forests and setting the agenda with their investment strategies and their influence on aid programs. Governments of many smaller developing countries are no match for the economic power of the largest TNCs, especially when these TNCs establish joint ventures with local state bodies.

- *Shareholder influence* Ownership patterns of TNCs are changing as well. Nowadays such companies may be owned by a large number and variety of shareholders, many of whom are interested in nothing else than quick returns on their investments. This, in turn, reduces the mandate of executive management to that of maximizing profits. Some investors, such as organizations investing their pension funds, are usually more concerned about their public image, so they can be lobbied to influence the company's business practice in a positive way.
- *Diversification* Another recent phenomenon is that large companies with core activities in other sectors are entering forestry as part of their diversification policies. Examples are Shell, Unilever, Mitsubishi, and Hyundai. They seem to be mainly interested in monofunctional industrial forestry, which produces biomass for energy production or raw materials for the production of pulp or chemicals.
- *Expansion of Southern timber companies* Timber companies from the South, particularly from Southeast Asia, are playing a larger role on the world stage. They are substantially involved in the exploitation of natural forests. Because valuable timber has become depleted in parts of Southeast Asia and because many countries in that region have imposed log-export bans, companies from China, Indonesia, Malaysia, South Korea, Thailand, and Taiwan have begun exploring other continents and now operate in 20 countries in the South. Many of these companies have appalling environmental and human-rights records, and they are regularly implicated in illegal grab-and-run practices (such as in Cambodia, Guiana, Laos, Papua New Guinea, and Siberia).
- *Liberalization of global trade* The liberalization of global trade as embodied in the General Agreement on Tariffs and trade (GATT) (which is administered by the World Trade Organization [WTO]) gives absolute priority to open markets and free trade and makes it increasingly difficult to impose trade restrictions on environmental and social grounds, either as national policy or as

trade provisions in international agreements. Many in the timber industry have become concerned about the threats of boycotts, bans, and restrictions that may result from certification schemes. Environmental controls can be applied to some extent on the grounds of species protection, but the protection of threatened ecosystems through trade restrictions is far more difficult, although the survival of many more species could be at stake.

- *Export orientation* Multilateral and bilateral structural adjustment programs (SAPs) and debt-repayment and debt-relief schemes for developing countries emphasize the short-term generation of foreign revenues. Besides having to clear their forests to grow cash crops for export, these countries are forced to adopt a far more export-oriented exploitation of timber resources and other natural resources (Reed 1992).
- *Technological developments* Technological developments have had far-reaching consequences for logging operations. The introduction of chain saws accelerated the penetration and exploitation of forests. Because chain saws are inexpensive, can be transported easily, and can be used in small-scale operations, they play a prominent role in illegal exploitation (this was a finding of all four country studies in the FoEI project). The mechanization of forest exploitation has gone much further, and nowadays larger integrated harvesting machines are used to fell, saw, and transport logs. With the new processing methods that have been developed, species, age, and timber quality are no longer such limiting factors. In other words, much less selective logging techniques can become commercially attractive, with a much larger impact on the forest ecosystem. Such developments on the supply side correspond well to the booming demand for pulp; more than 35% of world timber production (for Europe, more than 50%) is now used for pulp, and this is expected to increase to 50% by 2000.
- *Decreasing employment* As a result of increased mechanization, employment in forestry is decreasing, as statistics in Canada, Scandinavia, and the United States clearly show; one harvesting machine can replace up to 10 forest workers. In the United States, it has even been shown that mechanization has actually cost more jobs than conservation legislation has. Although labour in developing countries is generally cheap, it

will only be a matter of time before this trend affects the labour market in the tropics as well.

- *Seminatural forests and plantations* The logging industry is clearly shifting its operations from natural forests to intensively managed, seminatural forests and plantations. One of the reasons for this is the decreasing number of natural forests left to be logged. Another is the decreased demand for timber and the increased demand for fibres for the pulp and woodchip industry. The use of trees as a biomass resource for energy production is likely to become another trend with potentially dramatic implications for forests.

The hands-off policy of most governments has not been accompanied by stricter international and national frameworks limiting the ways logging companies operate. The vertical integration and globalization of large companies enable them to easily shift operations from one country to another, wherever profits are highest and the costs are lowest. This has also made it easier for TNCs to use tricks, such as declaring profits in third countries that have the lowest tax rates to evade higher taxes in the producing country (transfer pricing), taking advantage of favourable exchange rates in third countries, and reducing the share of profits for subsidiaries in joint ventures. When trade practices become so unclear, the temptation to engage in illegal exploitation and trade quick profits at low costs can be difficult to resist.

The changes in global trade patterns have created fierce competition between producing countries and have reduced the economic benefits to their governments and local economies. They create a competitive disadvantage for countries willing to invest in more effective control of the use of their forest resources, in adequate forestry administration, and in prevention of illegal practices, not to mention those countries where a serious commitment to SFM is developing.

## **CONCLUSIONS**

The overall picture emerging from these trends in global trade is that it will become increasingly difficult to place the forestry sector under the sort of control that is so badly needed as a response to the global forest crisis. Without that control, more opportunities will be created for illegal practices, especially when ecosystems and species become rare and illegal exploitation and trade in their products become more

lucrative. The fact that exploiters foresee trade restrictions and stricter conservation legislation also stimulates a timber-rush climate that puts the enforcement of regulations under pressure. Particularly at risk are threatened natural-forest ecosystems in developing countries, in countries with economies in transition, and in those industrialized countries where the political process is completely dominated by trade deregulation and free-market forces. In all dominant economic models, the consistent undervaluation of natural-forest values is one of the fundamental problems.

## **ILLEGALITY AND UNSUSTAINABILITY: GENERAL OBSERVATIONS AND REGIONAL SUMMARIES**

This section has a wider scope than illegality in the timber sector; it also looks at elements of totally unsustainable forest exploitation that, strictly speaking, may be legal but are nevertheless quite remote from any form of sound forest management or that are sanctioned by official bodies but are in conflict with national forest law. After all, the ultimate goal of anyone concerned about the future of the world's forests is to see forest loss and degradation come to a halt, and legislation is just a means to that end.

### **GENERAL OBSERVATIONS**

Illegal activities in resource exploitation usually consist of two phases: breaking the law and covering up to avoid detection. The success of these activities depends on the effectiveness of enforcement and on the penalties. Bribery and documentary fraud often accompany the illicit practices.

A powerful tool used by logging companies that want to harvest illegally is poverty. Rural poverty is widespread throughout the world, and in many places people are truly desperate to maintain even a subsistence living. Under these conditions, local people become easy prey for logging companies that offer them scant wages in return for their cooperation in cutting and hauling logs. Typically, forest dwellers are only too aware of the long-term consequences of such cutting, but having no other way to support their families, they concede—and in the longer run, they become the first victims of the degradation. Even where economic conditions are somewhat better, the value of individual tropical hardwood trees is so high (compared with what a worker

can earn by typical agricultural pursuits) that logging is bound to be attractive. Only when rural families have alternatives that allow them to live in dignity can the temptation to cut and sell (for those who cannot run) be at least partially overcome.

Many assessments of the volumes of timber trade rely heavily on government statistics. In countries with severe forest loss, official figures represent only a small proportion of actual fellings or exports (Dudley et al. 1995). Detailed statistics on the extent of illegal logging and timber trade are difficult to compile for a number of obvious reasons: clandestine practices are not registered in official records; the people involved try to conceal their activities; and the investigative work is difficult and sometimes dangerous. Nevertheless, evidence collected and published in the past decade gives an indication of the seriousness of the problem, particularly in the tropics and in countries with economies in transition. According to World Bank estimates, 5 000 km<sup>2</sup> of tropical forests was logged illegally each year in the early 1990s (EIA 1996).

An excellent 1992 international report from TRAFFIC (Trade Record Analysis of Flora and Fauna in Commerce) on illegal logging in the Asia Pacific region contains, in addition to abundant facts and figures, analyses of illegal activities with a much wider application than the Asia Pacific region (Callister 1992). The report categorizes illegal activities (listed here in Table 1) and discusses factors that facilitate illegal trade (Box 1).

The relative proportion of domestic and international markets for illegal timber varies considerably between countries. In a country like China, domestic trade dominates, whereas in Papua New Guinea, illegal activities are focused on exports. In international trade, timber may flow directly to the end consumer or eventually be reexported as processed products to third countries (Callister 1992).

## **REGIONAL SUMMARIES**

This section presents brief regional summaries. The most extensive of these covers the Asia Pacific region, as this region has the best-documented forest-related illegalities and malpractice in the developing world.

Although certain regions or countries are not mentioned in this review, this by no means implies that their forests are exploited in sustainable ways. Unsustainable logging and clear-cutting in the few

**Table 1.** Examples of types of illegal activities associated with the tropical timber trade.

A. Illegal logging
A1. Logging protected species
A2. Logging outside concession boundaries
A3. Logging in protected areas
A4. Logging in other prohibited areas not covered by A3, such as on steep slopes, on river banks, or in catchment areas
A5. Removing under- and oversized trees
A6. Extrading more than the allowable harvest
A7. Logging without authorization
A8. Logging when in breach of contractual obligations
B. Timber smuggling
B1. Export or import of timber of protected or restricted species
B2. Log export or import in defiance of trade bans
B3. Illegal export or import of restricted timber not covered by B1 or B2
B4. Other unauthorized movement of timber across state, national, or international boundaries
B5. Unauthorized domestic movement of timber (usually illegally harvested timber)
C. Transfer pricing
C1. On exports
C2. On imports
C3. On provision of services
D. Undergrading, underdeclaring, undervaluing
D1. Undergrading timber
D2. Underdeclaring volume or quantity
D3. Undervaluing export or domestic price of timber
E. Misclassifying species
E1. Misclassifying species to avoid higher taxes, royalties, or duties
E2. Misclassifying species to circumvent species-specific harvest or trade restrictions
E3. Classifying lesser used species as an accepted market species to gain market access
F. Illegal processing of timber

Source: Callister (1992).

remaining old-growth forest fragments in Australia, Canada, Scandinavia, and the United States continue (see, for instance, Greenpeace Canada [1996] on logging in North American temperate rainforests). Law enforcement is much more effective in these countries than in most developing countries, but regulations are also violated there.

## **ASIA PACIFIC**

The 1992 TRAFFIC report on the Asia Pacific region (Callister 1992) gave a detailed regional review of the context, nature, and scale of illegal practices in this region. The report also presented data on illegally logged areas and estimates of values of illegally traded timber for Cambodia, China, Indonesia (the world's top tropical plywood exporter), Laos, Malaysia (the number-one exporter of tropical logs, sawn wood,

### Box 1. Factors facilitating illegalities in the timber sector

Certain government policies and regulations can make illegal activities more lucrative or attractive, thereby encouraging them. Or they could place such constraints on concession holders and timber traders that the urge to circumvent regulations becomes almost overwhelming. Another extremely important factor is enforcement, or, more often, the lack or inadequacy of it. Enforcement is a function of physical capability to monitor the forestry sector coupled with a will to enforce government controls. Sometimes this will can be undermined either through individual or institutional apathy. However, it is also possible to facilitate the turning of a blind eye with the use of a well-placed inducement to do so. Unfortunately, corruption seems to be prevalent wherever profits are to be made and tropical forestry is no exception. In some countries at least, corruption seems to be a fundamental element of the system. Finally, the nature of the trade itself, set within the economic structure of the country, is such that companies gravitate towards illegal activities in order to get rapid returns for their large up-front expenditure.

The main factors mentioned are

- *undue political influence*; high-ranking (ex-) politicians and (ex-) military officers are awarded logging concessions because of their political connections, and then use their political influence to avoid unwanted enforcement attention (for instance, 60% of logging concessions in the Malaysian state of Sarawak were owned or run by relatives or other individuals connected with the Chief Minister).
- *poor government policies*;
  - ◆ insufficient revenue returned back into the forestry sector, for forest management and control of forestry operations and trade.
  - ◆ short concession lengths mean pressure to exploit the forest as fast as possible.
  - ◆ the more links in the chain from operating concessions to exporting timber, the more difficult to enforce legal requirements.
  - ◆ processing licences are granted with no guarantee of sufficient legal supplies of timber.
  - ◆ cutting and export bans are not met by necessary increases of resources for enforcement.
  - ◆ importing countries fail to impose reciprocal import restrictions to the export restrictions in producing countries.
  - ◆ complicated taxation systems, with many charges, collected at different stages of the chain (charges based on timber volume are more open to abuse than those based on surface area).
  - ◆ the band of government agencies responsible for the forest sector is too narrow, facilitating corruption of vested interests.
  - ◆ agencies in charge of controlling the sector have too little political clout and can be overruled by other, more powerful government agencies.
- *poor enforcement systems*, making illegalities impossible to control once they begin and creating a climate conducive to corruption;
  - ◆ understaffed forestry departments, lacking in the necessary equipment and infrastructure in the field, poorly trained and paid staff, insufficient back-up from central offices.
  - ◆ penalties are too low (disincentive to controllers to pursue a conviction, and to a logger or trader to comply with the law).
  - ◆ field forest staff of a much lower rank than logging company staff, making it difficult to exert authority.

The basis of all enforcement activities is legislation, which in turn is a reflection of government policy. Sometimes legislation is adequate, but enforcement is poor. Other times, enforcement effectiveness is restricted by weak or outdated legislation.

Source: From Callister (1992, pp. 26–32)

and veneer), Myanmar (Burma), Papua New Guinea, the Philippines, the Solomon Islands, Thailand, and Viet Nam. Illegality is certainly a big issue in Southeast Asia, where the frontier areas are typically under the control of the military – lots of soldiers with not much to do and lots of officers without much income and surrounded by lots of forests very close to an international border.

Illegal logging affects protected areas in all countries in the region, especially in those countries where valuable timber from unprotected forests has almost disappeared, such as the Philippines and Thailand. In the 1980s, several dozen national park guards were killed each year by illegal loggers in Thailand. Hundreds of thousands of hectares of forest in the Asia Pacific region have been logged either illegally or have supplied the illegal timber trade. Estimates of losses for the last decade in taxes, forestry charges, and forestry resources run into billions of USD (Callister 1992). The 1989 logging ban in Thailand has led to heavy illegal timber trafficking from neighbouring Cambodia, Laos, and Myanmar.

Restrictive legislation (for example, export bans on certain species or products), enforcement capacity, and the scale of illegality vary per country, but the situation in Cambodia, Papua New Guinea, and small, vulnerable island states, such as the Solomon Islands and Vanuatu, is disastrous. Malaysian and South Korean companies dominate logging in the latter three countries. The Central Bank of the Solomon Islands reported that the rate of logging in that country in 1994 was three times the sustainable level, and since 1993 the World Bank has recommended a moratorium on new logging concessions. What makes the situation in these Melanesian states unique is that more than 90% of the land is owned by indigenous communities under customary tenure upheld in their national constitutions. This makes the communities key players in negotiations with logging companies; too often, loggers, supported by local or national leaders, lure these communities into signing concessions by making seductive promises, which are seldom fulfilled and which in no way compensate for the havoc and dependency that the logging operations create (Greenpeace International 1996).

Almost all logging for export in Cambodia, India, Laos, the Philippines, and Thailand is illegal (Dudley et al. 1995). The major official reasons for the ban on all logging in Laos in 1991 were rampant corruption among officials and unacceptable levels of illegal logging, especially by Thai citizens. In Myanmar, rebel groups and Thai loggers established at least 200 illegal sawmills around 1990 to process logs taken from outside concession areas (Callister 1992).

One of the most in-depth investigations of the role of foreign – mostly Japanese and later, Malaysian – logging companies at the country level was conducted by an official commission of inquiry led by Judge Barnett in Papua New Guinea. The report revealed widespread abuse of power, corruption of cabinet ministers, transfer pricing as a standard practice, offences against local community rights, and blatant violations of regulations on the forest floor. One of the officials accused of corruption later became the deputy prime minister. The report was not made available to the public, and there was an assassination attempt on Judge Barnett. The commission's findings led to some minor policy reforms, but large-scale forest plunder and illegal practices continue.

In Papua New Guinea, fraudulent activities have led to estimated losses in national income equivalent to the annual aid the country receives from Australia (more than 300 million Australian dollars [AUD]) (in 1998, 1.675 AUD = 1 USD). Concentration of power, along with the consequent abuse of power, has continued, and one Malaysian company (Rimbunan Hijau) is now thought to control 86% of the country's logging, dwarfing the government's influence to control the sector. Logging operations by this company have been described by a forestry advisor as – amongst the worst that I have observed anywhere in the tropics. – Making things worse, the 1996 National Forest Plan set aside more than half the country's forests for logging, with complete disregard for biodiversity priorities, community needs, and conservation areas. Concessions are allocated or planned on proposed and existing conservation areas. The new plan almost triples existing logging concessions, despite the fact that earlier allocations were already found to be three times above economically sustainable levels and that little has been done to improve control of management practices (WWF 1996). Additional information on the situation in Papua New Guinea can be found in Marshall (1990), Callister (1992), Dudley et al. (1995), EIA (1996), and Greenpeace International (1996).

Cambodia represents one of the most depressing cases of nation-wide forest plunder, predatory behaviour of foreign loggers and timber merchants, and complicity of irresponsible national interest groups. After field investigations carried out in 1995, Global Witness (1995, 1996) brought to light the plight of the country's forests. The long civil war, funded by timber revenues, made any central control or outside monitoring completely impossible, especially in border regions held by armed forces. Despite official logging and timber-export bans, the government continued to issue concessions in secrecy. All of Cambodia's

forests have now been allocated as concessions to foreign companies. At least six protected areas in the region bordering Thailand had been extensively logged. The central government, its armed forces, and the Khmer Rouge were all found to be heavily implicated in corruption, illegal logging, and cross-border timber trade. The Thai military and the Thai government collaborated with the Khmer Rouge in log smuggling, and cross-border timber trade was estimated to earn the Khmer Rouge 10–20 million USD each month. Only one of the Thai-based timber companies active in the country was on an official concession list; the other concessions themselves were illegal. Logging regulations were extensively violated. The government proved to be somewhat sensitive to international pressure and closed the border with Thailand on the last day of 1996. Loggers were nevertheless able to smuggle about 45% of the timber they had cut into Thailand.

In Indonesia, according to the Indonesian government, more than 85% of concessionaires were breaking logging rules in 1992/93. Only 30% of the log production on Kalimantan was reported to the government. In 1989/90, sales of confiscated illegally harvested logs were expected to earn the government around 2.3 million USD (Callister 1992). Indonesia became by far the world's largest tropical plywood exporter, but the industry's overcapacity and the rapid depletion of its timber reserves resulted in a steady drop in exports (in 1994, 11.9% less; in the first 7 months of 1995, 14.5% less). The forestry minister announced last year that Indonesia might soon have to import logs to supply its processing industry (RIC 1996). Because the country's total processing capacity far exceeds its capacity to supply timber from legal sources, the industry is increasingly dependent on illegal supplies. Corruption by politically well-connected concessionaires is rampant. According to the forestry minister, unpaid forestry royalties and reforestation fees caused losses of 4.4 million USD during the second half of 1994 alone (RIC 1996). However, massive logging schemes in central Kalimantan and Irian Jaya (containing Indonesia's largest forest area) may relieve the supply problems of the plywood industry.

On Yamdena, a small island in eastern Indonesia where all lands are under customary rule, an indigenous organization is fighting a legal battle against the national government. In violation of a 1971 decision that gave the island conservation status, several companies were allowed to start logging activities in 1991, until protests by local people and international publicity made the government withdraw its earlier permits and commission an impact assessment. The study predicted disastrous consequences to both the environment and the local

economy, and the loggers left the island. Nevertheless, in 1995 to the dismay of the islanders the government granted permission to the country's timber tycoon to log more than half of the island's forest, in cooperation with the state company Inhutani. Initially, the case was taken to a provincial court, but it was lost, and it is now before the national Court of Justice. If the case is lost again, it will be taken to the International Court of Justice in The Hague (based on information from the Netherlands Centre for Indigenous Peoples).

## **AFRICA**

Illegal exploitation and timber trade and corruption in forestry administrations and customs services have been reported in many African countries in the (former) forest belt from Kenya to Senegal. International trade in African timber is dominated by European companies, in particular those from Belgium, France, Germany, Italy, the Netherlands, and the United Kingdom. French companies dominate the former French colonies, enjoying privileges resulting from connections between local elites and the French political establishment; in 1994, the French government cancelled half of Cameroon's debt in return for generous access to Cameroon's forests for French logging interests (EIA 1996). Local expectations regarding the arrival of logging companies are often high but are soon followed by disillusionment; the large logging companies mostly rely on imported goods and labour and disrupt local social structures, and local communities hardly see any benefits. Logging operations leave painful ecological scars and undermine the resource base of forest-dependent local populations.

Civil war and the collapse of the state in Liberia and, to a lesser extent, Sierra Leone, have allowed warring factions to plunder forests and smuggle timber with total impunity. Systematic corruption plagues the forestry sector in many countries, although economic crises and short-sighted foreign economic-aid programs are important underlying factors. These programs call for a reduction in state budgets, including forest services, and promote the accelerated export of natural commodities, including timber, with little concern for sustainability.

A case study published by FoE EWNI (1992) presented a detailed account of corruption, fraud, and malpractice in Ghana (see also Chapter 4). This study revealed links between foreign financial aid, European trade interests, and illegal practices. Reports of illegal practices in Cameroon, which is rising rapidly on the list of top 10 tropical-timber exporters in the world, can be found in Chapter 3. Neighbouring Gabon

is sparsely inhabited, and 85% of the country is covered by tropical rainforests. It is also one of Africa's biggest oil producers. Yet, it seeks to expand timber exports, and the government has even allowed logging in the few protected forests that the country has. Wildlife populations, including internationally red-listed species, are being decimated by communities of logging employees who have to subsist on bushmeat (EIA 1996). Hunting controls are extremely lax. The few remaining closed forests in Nigeria and Tanzania also suffer from illegal exploitation, and fraudulent practices abound.

An FoEI member organization recently reported (KENGO 1996) intense commercial logging of indigenous hardwood species (especially, Elgon teak and olive) in the Mount Elgon Forest Reserve in western Kenya, despite a presidential ban on the logging of indigenous hardwoods since 1996. This reserve extends into Uganda and contains some of the last remnants of montane rainforest in the area. The operations have extensively damaged the forest, and access roads created by the logging company have led to illegal logging and the installation of charcoal kilns. Local people are frequently harassed by loggers and local police, who have been involved in illegal felling themselves; villagers are not even allowed to use the timber waste. Wildlife has become scarce, and the local people are concerned about their water supplies and other subsistence needs and want the forest to be conserved. So far, the protests have met with deaf ears among the authorities, as the logging company is owned by politically well-connected people. Nongovernmental organizations (NGOs) and the national press have responded to calls from the local community for support, and the case has been widely publicized.

## **LATIN AMERICA**

Logging for the timber trade has long been a minor threat to Latin America's forests. This situation is changing rapidly, an effect of both the depletion of timber resources in Southeast Asia and Africa and the timber- and log-export bans in some Asian countries (Philippines, Thailand). Reports on the illegal logging and timber trade in Latin America have focused on Brazil and, in particular, on the mahogany trade, which rose by 370% in the 1980s, with an estimated 80% coming from illegal sources (Dudley et al. 1995). The Amazonia Programme of Friends of the Earth International (FoEI AP) has played a very active role in exposing illicit practices and in lobbying the Brazilian authorities and multilateral donors. As a complement to this work, FoE EWNI

mounted a strong campaign in the United Kingdom, the second largest mahogany-importing country. Greenpeace has been campaigning as well, both in Brazil and in the United States, the largest mahogany consumer. More information on this can be found in Chapter 2.

Illegality and malpractice in the timber sector have also been reported in Bolivia, Costa Rica, Chile, Ecuador, Guyana, Paraguay (see Chapter 5), Peru (see Chapter 2), and Suriname. Guyana and Suriname are tragic examples of how large logging companies from Malaysia, Indonesia, China, and Korea are taking advantage of the dire state of local economies, the weak administrations, and the liberalization programs inspired by the World Bank and the International Monetary Fund (IMF) to entice foreign investment. These companies have been able to obtain huge concessions in some of the last extensive primary tropical rainforests. Their sole interest is quick cash, without concern for the ecology or local social- and economic-development needs. In the brief period since their arrival in Latin America, fraud, bribery, and violations of forestry regulations have been frequently reported (Colchester 1994, 1995; Dudley et al. 1995; EIA 1996). Guyana's forest fees and taxes are less than 10% of those paid in most African and Asian countries, and foreign companies enjoy even more generous tax breaks. By 1993, more than 50% of Guyana's forests had been leased out as timber concessions. A 1995 World Bank study warned that this kind of forest mining entails a boom-and-bust pattern of development that can be highly disruptive to employment levels and macroeconomic stability (RAN 1996).

## **RUSSIAN FEDERATION**

Russian Federation, particularly Siberia, has the most extensive blocks of temperate and boreal forests. Collectively, Russian Federation's forests represent 20% of the total global forest cover and include the largest remaining old-growth forest on Earth (Dudley et al. 1995). The region's inaccessibility has long protected its vast forests from industrial exploitation, and indigenous peoples have been using the forests in sustainable ways for centuries. The breakdown of the Soviet system, the precipitous privatization, and the cutbacks in funding to the forestry administration have led to corruption, increased organized crime, and minimal government control, with ominous implications for the country's forest and wildlife resources. On a much smaller scale, some other former communist countries, such as Romania and Slovakia, face similar threats.

This unstable situation has attracted a number of small foreign logging companies that take advantage of the lack of controls; for instance, South Korean firms have been involved in illegal logging in nature reserves. Large TNCs have also shown an interest in obtaining concessions in Siberia. Hyundai (South Korea) and Mitsubishi (Japan) have already established operations there, and illegal activities have been reported (Dudley et al. 1995). Siberia's number-one export market is Japan, to which it exports 5 million m<sup>3</sup> of timber annually from primary forests. The economic benefits are divided among corrupt local officials, criminal groups, and logging companies; local people are generally left empty handed. Most forests are clear-cut, and wastage is quite high, ranging from 40–60% (Newell and Wilson 1996). Accelerated forest exploitation is encouraged by the World Bank and aid agencies, as part of economic adjustment programs (TRN, n.d.).

Recently established Russian NGOs, concerned scientists, and individual government officials are trying to counter the attacks on the country's forests. Greenpeace, in particular, has initiated and supported investigations, campaigns, and lobbying (see, for example, Anderson and Barclay [1993]). Implementation of the 1993 *Forestry Act* and of newly established protected areas has been a campaign priority, but this has met formidable adversaries. The shortcomings of the new Act include the failure to specify criminal penalties or personal liability for government officials or to outline the federal parks and reserves designated for protection from logging (Newell and Wilson 1996).

## **NORTH AMERICA**

In Canada and the United States, enforcement of forestry legislation is not the main problem. Conservation laws have become stricter, but this has to be balanced against growing antistatist sentiments and privatization and deregulation trends. The timber industry maintains effective lobbying circuits; it buys political influence through campaign contributions to election candidates; and it actively opposes stronger environmental and safety legislation. Large North American corporations increasingly turn to other continents, especially Latin America and Russian Federation, where operating costs are much lower (and, consequently, profits are higher) and environmental and labour restrictions are lax, nonexistent, or barely enforced.

More than half of the land area of Canada, the second largest country on Earth, is covered by forests, and the timber industry plays a prominent role in the national and provincial economies. Vast tracts of

natural forests have been clear-cut (90% of all logging in British Columbia is clear-cut), mostly by large timber companies. Resistance has grown in the past decade, such as happened with Clayoquot Sound, a widely publicized, controversial case. Because most of the lands allocated to logging companies have already been claimed by Aboriginal peoples, disputes are frequent. Canada's two largest logging companies (MacMillan Bloedel and Interfor) have repeatedly been convicted for violations of environmental laws and forestry regulations. Recent agents in the degradation and pulping of native, old-growth Canadian forests are Japanese TNCs (Mitsubishi, Daishowa). These TNCs have been involved in land conflicts with Aboriginal communities and have faced fierce opposition from local critics objecting to the environmental consequences of their operations and their favourable tax deals with local governments. The companies have responded with misleading public-relations campaigns and lawsuits against critics (EIA 1996).

In the United States, large logging companies have been regularly convicted for violating environmental laws (air- and water-pollution laws in particular), forestry regulations, and safety and health standards. Conflicts with local citizens groups and environmental NGOs have been a constant feature of the logging companies' operations, especially where they continue to clear-cut the last local remnants of unprotected old-growth forests. On the other hand, the employment argument assures them of considerable local support.

## **NATIONAL AND INTERNATIONAL REGULATORY MECHANISMS**

Before examining the case studies, which constitute the core of the FoEI project and of this report, we will take a brief look at national and international efforts to address the problems of unsustainability and illegality (in harvesting and in financial transactions) in forest exploitation and timber trade, especially in developing countries.

### **THE NATIONAL LEVEL**

National forestry policies and regulations vary considerably from country to country in complexity, quantitative and qualitative features, and specific goals (Poore 1989; Rice and Counsell 1993). Some of the objectives are as follows:

- To keep exploitation within certain limits to protect the resource base;

- To prevent or control negative impacts of exploitation;
- To protect land or use rights;
- To attract investors and commercial forest exploiters; and
- To raise revenues for the state, for lower-level authorities, or for other stakeholders.

Regulations may relate to exploitation techniques, forest-management systems, economic-benefit arrangements, control of trade volumes (for instance, bans and quota), reporting procedures for exploiters, etc.

Among the national initiatives to control the industry and the timber trade are bans and boycotts. Bans are legally enforced and refer to species or to wood products and the degree of processing that the original timber has undergone. Bans can be implemented by exporting or importing countries; for instance, Brazil, Indonesia, the Philippines, and Thailand have all introduced export bans on logs, either because of a need to support the domestic processing industry or because almost all their forest has disappeared. Boycotts are voluntary and not legally enforceable and therefore more difficult to challenge through international free-trade legislation. The difficulty with national regulations is that exporting countries have to compete with each other in a free global market, which gives countries with less strict rules, lower taxes, or ineffective implementation of regulations a competitive advantage. This acts as a disincentive to governments to apply stricter national regulations and consequently discourages a shift to SFM. If national regulatory mechanisms are to be effective, they should be supported by international regulatory frameworks. The International Tropical Timber Organization (ITTO) would have been the appropriate organization to deal with this issue, but it has largely failed to do so (Rice and Counsell 1993).

Most developing countries set very low fees and tax rates for forestry operations, which is an important reason for the lack of resources to adequately control the forestry sector. In addition, fee collection is insufficient in many countries. Raising forest-fee rates to more realistic levels and improving collection would easily pay for the extra costs involved in achieving SFM (Rice and Counsell 1993), provided that those revenues are earmarked for investment in the forestry sector. However, the governments' lack of interest in this simple strategy to raise state revenues is related to the vested interests of local political and economic elites, who profit from timber concessions. As Repetto and Gillis (1988, quoted in Rice and Counsell 1993) stated,

*Governments have typically sold off their timber too cheaply, sacrificing public revenues and the undervalued non-timber benefits of the standing forest while encouraging rapid logging exploitation. The terms of many timber concession agreements and revenue systems have encouraged wasteful, resource depleting logging.*

Violations of forestry regulations can be found in many countries, as demonstrated in the previous section. Any attempt to address such problems should include an analysis of the practicability of the regulations; the mandate, capacity, and resources of the institutions in charge of implementation and enforcement; and the economic and political interests and sociocultural profiles of the main stakeholders. Identification of specific reasons why regulations are not enforced is sometimes not that difficult, nor are the consequent solutions. But the fact that reasons and motivations are often linked in complex causal webs does complicate the analysis. Underlying factors such as poverty, lack of political will, and inequities in the wealth and political power of social classes or ethnic groups can be relevant as well and are obviously much harder to tackle.

Box 2 summarizes actions that have been taken or could be taken at the national level to address the problems, based on the TRAFFIC report on the illegal timber trade in the Asia Pacific region (Callister 1992).

## **THE INTERNATIONAL LEVEL**

Many international initiatives have been taken in the past few decades in response to the growing concern of the public, NGOs, the scientific community, local communities, and governments about the decline of the world's forests. These initiatives include new organizations, reforms in old organizations, official forums, conventions, and action plans. Comprehensive introductions to these initiatives and critical analyses of their effectiveness can be found in McNeely et al. (1990), Counsell et al. (1992), Rice and Counsell (1993), Dudley et al. (1995), Tarasofsky (1995), and Dudley et al. (1996).

The proliferation of overlapping international talks, special commissions, working groups, official statements, and policy papers since the 1992 Rio de Janeiro Earth Summit (sponsored by the United Nations Conference on Environment and Development) which was on how forests should be managed, used, and conserved could be a deliberate attempt to create confusion and provide excuses for inaction. In general, international conventions seem to serve as an excuse

## **Box 2.** Action taken or suggested at the country level

### **Exporting countries**

More and more countries impose logging or export bans, often as economic measures to promote domestic processing industries but sometimes out of concern about excessive levels of forest destruction and in some cases because of concerns about illegal practices.

Some countries have contracted inspection firms to inspect concessions, monitor tax payments, or oversee customs services (examples in Indonesia and Cameroon).

Many other forms of action logically follow from the preceding identification of factors that facilitate illegalities.

### **Importing countries**

Importing countries have a moral and political obligation to assist source countries in controlling the international timber trade. The two main options are

- to impose reciprocal restrictions to those imposed by exporting countries.
- to provide aid and other forms of assistance aimed at improving controls over the forestry sector (assistance is now too much focused on forest management alone).

Source: From Callister (1992)

for many governments to refrain from taking action at home, as indicated by the low priority that countries give to implementation and enforcement.

The lack of political will by governments to reduce the precedence they give to trade freedom over environmental and social concerns has been repeatedly demonstrated in international forums. It shows whenever trade-related texts are negotiated concrete proposals for restrictions on the trade of forest products are consistently rejected or weakened. This happened at the 1992 Earth Summit at the sessions of WTO and the Intergovernmental Panel on Forests (IPF) and more recently at the International Union for the Conservation of Nature's 1996 World Conservation Congress, when a draft resolution on illegal trade in forest products, cosponsored by FoEI, was discussed (see Appendix 1). Another illustration was the disbanding of UNCTC in 1992, after successful lobbying by the business sector. The UNCTC was one of the rare international initiatives to develop guidelines to reduce

the environmental impacts of TNC operations, including a timetable for implementation.

A number of international organizations and agreements with potential relevance to the legal aspects of logging and timber trade are briefly discussed below.

### **The United Nations Convention on International Trade in Endangered Species of Wild Fauna and Flora**

The United Nations Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) entered into force in 1975 and now has 135 signatories. This is one of the few legal instruments dealing specifically with trade controls and is intended to prevent overexploitation and to combat illegal trade. According to a species conservation status, it may be listed in one of three appendixes, each of which has a different degree of trade restrictions. Appendix III species are protected by domestic legislation only; other countries cooperate in the control of export trade permits. Appendix II lists species that may become threatened with extinction if trade is not regulated; these species are monitored in exporting and importing countries by a system of export permits. Appendix I includes most endangered species; international commercial trade in these species is banned, with a few specific exceptions. CITES now regulates trade in some 34 000 species of plants and animals. With its focus on species, this convention does not protect threatened areas or ecosystems per se, but it may be indirectly beneficial by reducing overall exploitation and by maintaining the inaccessibility of some areas.

Fifteen tree species are listed under CITES, including several timbers, but the World Conservation Monitoring Centre has identified no fewer than 304 traded species of Asian and African tropical timbers threatened with extinction (WCMC 1991; Rice and Counsell 1993). Discussions on the listing of timber species have created considerable political tension; the economic stakes are high, and countries are afraid that CITES listings may lead to unfair trade discrimination.

As in the case of so many international agreements, the implementation of CITES and sanctions against violations remains the largest bottleneck. Member countries give insufficient political priority to implementing and enforcing the convention through corresponding national legislation, and they fail to provide the CITES Secretariat with the necessary resources. Yet, there are some encouraging signs. A comprehensive review is under way to record the progress made by

member countries in drafting corresponding national legislation and in enforcing the legislation. The need for national management plans for traded species is now on the agenda, indicating that the convention is becoming less limited to strictly international aspects.

About the only hard sanction that can be applied is a recommendation to all CITES member countries to ban the import and export of all CITES-related products from a country that violates the convention. Also, negative publicity and public embarrassment often have some effect. To make CITES more effective, more room should be given for trade sanctions and other forms of sanctions against member countries that violate the convention or fail to implement it (such as the sanctions the United States imposed against Taiwan in 1994 for failing to act against the rhino-horn trade). A threat to the effectiveness of CITES sanctions is that they could be overruled by WTO decisions (see below). Because of the short history of the WTO, there is still little jurisprudence. The WTO only takes action if a state challenges an international trade restriction and presents an official complaint.

Of particular interest is Article IV, on the regulation of trade in appendix II species. Paragraph 2(b) states that an export permit can only be granted by the administrative authorities of the exporting state if it can be shown that the specimen has not been obtained in contravention of national laws for the conservation of that particular species.

A potentially strong legal instrument is the European Union (EU) regulation that implements CITES at the EU level and applies stricter criteria and procedures for the trade in endangered species (Rice and Counsell 1993). To date, the EU has applied about 800 international trade restrictions, based on this regulation (Schürmann, personal communication 1997<sup>2</sup>).

### **International Tropical Timber Organization**

ITTO was established in 1986 to research, coordinate, and regulate the trade in tropical timber. ITTO unites the main producing and consuming countries. From the beginning, predictable tension has occurred between ITTO's first goal, to promote trade, and its second goal, to regulate trade on the basis of sustainable use and conservation of tropical forests. It has become obvious from, for example, its voting structure and the political nature of other organizational decisions that ITTO's primary mission largely outweighs its secondary, conservation role (Colchester 1990; Rice and Counsell 1993).

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<sup>2</sup> C.L. Schürmann, CITES, Netherlands, personal communication, 1997.

ITTO has strongly resisted any moves to restrict imports of unsustainably produced timber by consumer countries. A major step forward would be for ITTO to support or at least accept import bans on illegally exported timber or timber originating from illegal sources. By not addressing the problems of illegality, ITTO directly undermines its official target of ensuring that all tropical timber in international trade originates from sustainably managed forests by 2000. So far, illegal trade has not received any substantive consideration by ITTO.

The following are possible actions that ITTO could take (Callister 1992):

- Compile and distribute information on tropical timber import and export restrictions, as such information is difficult to obtain;
- Ensure more critical review of statistical data already provided by member countries to the ITTO Secretariat, to identify possible illegal trade – as stated in a recent issue of the ITTO newsletter, transparency in trade is one of the essential elements of sustainability (ITTO 1996);
- Assess the implication of its policy and project decisions for illegal trade and timber extraction, avoid facilitating such practices, and promote the elimination of them instead; and
- Seek a waiver from WTO regulations banning trade restrictions, using the exemptions allowed if they meet the objectives of intergovernmental commodity agreements.

However, given ITTO's poor record of policy initiatives, which are limited to guidelines without mechanisms to ensure or even monitor their compliance, little can be expected from the organization. Many NGOs now consider any kind of involvement with the ITTO a waste of time. As stated by Rice and Counsell (1993), ITTO has become an alibi for inaction at the international level and a diversion from effective change at the national level. The ITTO has neither achieved an effective reform of the timber trade nor provided any mechanism to achieve such reform. A 1991 WWF report (Elliott and Sullivan 1991) draws the following conclusion: Many ongoing ITTO projects must be regarded as subsidized logging, and the organization should ask itself whether it provides an incentive or disincentive for radically new approaches to forest management.

## Convention on Biological Diversity

The Convention on Biological Diversity (CBD), also known as the Biodiversity Convention, is one of the few legally binding agreements signed at the 1992 Earth Summit in Rio de Janeiro. Key elements are conservation, sustainable use, and equitable distribution of benefits resulting from the exploitation of biodiversity. The potential that this comprehensive convention has to protect forests has so far not been used, and pressure to weaken the CBD provisions pertaining to forests has been strong. Many countries, in particular timber-producing countries, consider the CBD primarily a conservation convention.

Article 8 (UNEP 1992) is one of the most relevant to this FoEI project and can be used to combat illegal logging. It obliges signatories to

- promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings (Article 8, para. c);
- develop or maintain necessary legislation and/or other regulatory provisions for the protection of threatened species or populations (Article 8, para. k); and
- regulate or manage the relevant processes and categories of activities that have been determined pursuant to Article 7 (Article 8, para. l) to be those that have or are likely to have significant adverse impacts on the conservation and sustainable use of biological diversity (Article 7, para. c).

As an estimated 50–90% of all terrestrial species can be found in forests, effective implementation of the CBD would address many forest-related issues. But CBD fails to deal with some elements specific to forests. For this reason, several experts and NGOs support the idea of adding a specific forest protocol to the CBD.

So far, little progress has been made in setting national policy or legislation to implement this convention. The potential is there, but the implications of serious implementation and enforcement of the CBD articles can be far-reaching and can deter many governments. On the other hand, the CBD is more process oriented and less focused on specific end products than other international agreements and seems to be less polarizing. An interesting momentum has been building up in several countries where national or ecosystem-specific biodiversity strategies are being developed. These strategies help to sensitize policymakers from various economic sectors to the need to integrate

biodiversity components into their policies. Improving the implementation and enforcement of environmental legislation should be specifically addressed in this process.

## **World Trade Organization and the General Agreement on Tariffs and Trade**

The WTO was established in 1993 and entered into force in 1995 to administer and enforce the specific rules of GATT. Today, of all international bodies involved in trade and environment issues, the WTO has the highest profile, especially when those issues concern restrictions on trade. Policy measures adopted by either exporting or importing countries to restrict the trade in unsustainably produced products are easily judged as being in contravention of the WTO rules of free, nondiscriminatory trade. Exceptions can only be made if necessary to protect human, animal or plant life or health, applied in conjunction with restrictions on domestic production or consumption, or undertaken in pursuance of obligations under any intergovernmental commodity agreement (such as the International Tropical Timber Agreement). Rice and Counsell (1993) meticulously analyzed the impacts of GATT rules within this context, providing many examples from the tropical timber trade.

Within the WTO, the discussion on environment and trade issues has been delegated to the Committee on Trade and Environment. So far, this committee has been unable to contribute substantially to environmental concerns related to trade. In fact, this committee can be a threat to environmental agreements such as CITES and CBD if it fails to protect trade provisions in these conventions from challenges within the WTO.

The issue of products that have been harvested, produced, processed, or traded in violation of the laws of a producing country has not been explicitly on the agenda of GATT or the WTO. Illegality should be a less contentious issue than sustainability. In the light of widespread illegality and malpractice in many tropical timber-producing countries, as documented and referenced in this report, a case could be made for the WTO to address this issue. This could mean allowing for reciprocal trade restrictions by importing countries on illegally produced or traded timber or wood products or taking measures against countries that knowingly import them. It would be embarrassing for a producing country to argue against such measures and unlikely that such a measure would be challenged in the WTO. Without a formal complaint, the WTO will not take steps against the importing country.

The sovereignty argument would have little validity here, as such restrictions merely aim at assisting a producing country in the implementation of its own laws. This would also make local laws a stronger weapon for local NGOs; in the event of a legal victory in court, this information could then be passed on to NGOs and authorities in importing countries and result in restrictive trade measures. Campaigns by NGOs to improve legislation in importing and exporting countries would become more effective.

### **International Labour Organization's Indigenous and Tribal Peoples Convention**

The Indigenous and Tribal Peoples Convention, established by the International Labour Organization (ILO) in 1989, is particularly relevant to indigenous and tribal forest peoples. It requires countries to preserve and protect the environment in their territories, ensure the realization of their peoples' socioeconomic and cultural rights, and guarantee their participation in decision-making bodies on issues that concern them. It also requires that land-ownership rights and the right to use and manage the natural resources be recognized. Probably because of the convention's progressive character, only six countries have become party to it so far (including Paraguay, one of the case-study countries in this book). This convention could be used to combat illegal logging in indigenous territories, for example.

### **International certification initiatives**

A fairly recent development that may reform forest management and timber trade has come from the market itself. After years of campaigning by NGOs and consequent consumer pressure, the timber industry has responded with a flurry of green labels and more serious certification initiatives. Most labels have been little more than public-relations tools, with inconsistent, unverifiable, unproven, or simply untrue claims of environmental soundness. Around 1990, a number of systems of independent timber certification were proposed. Such systems would provide a framework for proving claims made by producers and traders that timber comes from well-managed sources and for showing consumers that such claims are justified and that the logging meets publicly agreed sustainability standards. Auditing of forest management by independent inspectors and tracing timber from certified forests all the way to the end consumer were to be the main functions of such systems. In countries where illegalities in logging and trade are

common, it will obviously not be an easy matter to provide such proof. The fact that logging companies in many countries are intensifying their operations could be connected with their perception of certification as a potentially effective instrument and their desire to turn as much timber as possible into cash before their operations become subject to restrictions. This underlines the urgency to make substantial progress in the implementation of sound certification systems.

The most significant and comprehensive certification initiative to date from the social, ecological, and economic standpoints has been the Forest Stewardship Council (FSC). The FSC is a voluntary-membership body, established in 1993 by representatives from trade and industry, environmental and other NGOs, indigenous peoples, consumer groups, and certification bodies. Several FoE organizations have become FSC members. The FSC works through accredited agencies, which evaluate forest management according to a series of principles and criteria that have been developed after a long process of consultations. Since 1995 the FSC has gathered considerable momentum among consumers, NGOs, and industry and has attracted interest from government departments in an increasing number of countries. One of the threats to the FSC's possible success comes from competing certification systems heavily influenced by industry interests, with strong backing from certain governments (such as proposed by the International Organization for Standardization and the Canadian Standards Association). Some critics among NGOs object that FSC principles and criteria do not go far enough, that the process is too voluntary, and that it provides for insufficient control of the certifiers, who are contracted and paid by the applicants requiring certification.

The first FSC principle is of special relevance to illegal logging and trade practices. This is the principle of compliance with all applicable laws of the country of origin and with international treaties and agreements to which that country is a signatory. FSC certification can therefore serve as a form of market pressure on countries to implement and enforce their own laws.

Certification is primarily a voluntary instrument, developed by market parties, with no role for governments. On the other hand, governments do have a political responsibility for the way a country's forests are managed. This means that governments should create some sort of policy framework with respect to certification systems, which might include various incentives or disincentives. Such a framework could, however, be easily challenged in the WTO. In 1996, a more general discussion on ecolabeling schemes started in the WTO. The

outcome is uncertain, as so far the deadlock between free traders and more environmentally sensitive countries has not been broken (Hall 1996).

### **Intergovernmental Panel on Forests**

The IPF is an ad hoc, open-ended panel that, following the 1992 Earth Summit, has been the most comprehensive international policy forum on forests among a myriad of more specific initiatives in the past few years. The IPF was established at the third session of the United Nations Commission on Sustainable Development (UNCSD) in 1995 to depolarize the highly charged forest debate and to work toward global consensus on a wide range of forest-related issues. Following its four planned sessions, the IPF presented its final conclusions and proposals to the fifth UNCSD session, in April 1997, and to the Earth Summit II, in June 1997.

The IPF has been a cross-sectoral forum receiving institutional support from many international agencies. Positive signs appeared in IPF's early debates on certain issues. However, by the time concrete conclusions were ready to be drawn and proposals for action were ready to be made, the international community once more demonstrated a lack of political will and an incapacity to agree on how to balance commodity values and economic values of forests with ecological and sociocultural values, so no action plans, quantifiable targets, or timetables were made. In the end, discussions concentrated on the future of the global forest debate, at the expense of other substantive issues now receiving inadequate attention, as some delegates to the IPF sessions also expressed. A number of delegates (including those from Canada, the EU, Indonesia, and Malaysia) proposed a new global forest convention, but others opposed such an initiative (for example, delegates from the United States, Brazil). No consensus was reached among delegates, and the proposal to the UNCSD on a future forest forum consisted of three options.

Almost all NGOs working on forests were united in their opposition to such a convention, fearing that the negotiation process would take too much time and serve as an excuse for inaction. NGOs believed that the outcome would be weak, lowest-common-denominator standards, with a free-trade bias. They argued that priority should be given to strengthening and implementing existing instruments. The IPF has therefore become little more than another talkshop, with its delegates unable to agree on any substantive proposal for action. It would seem

that those governments and sectors of the timber industry that have no interest in true sustainability in managing the world's forests have won yet again.

No progress has been made toward effective action to address illegality in timber trade and forest exploitation. On the other hand, the issue has received more attention than earlier, when most governments preferred to use the sovereignty argument to keep the subject off the agenda. Lobbying, interventions, and campaign material presented by NGOs at the IPF sessions have made it difficult for governments to continue ignoring these issues. In fact, the debate in IPF4 on illegal trade was one of the most striking examples of the tension between those favouring national control over natural resources and those favouring international regulation. Delegates from Brazil, India, and the G77 China (on behalf of the block of developing countries) stated that the problem was primarily one of domestic legislation and enforcement. Delegates did agree that a global assessment of the illegal trade in forest products should be provided; the United States proposed an independent group of experts to carry out such an assessment, with access to all relevant sources; and the G77 China recommended that countries themselves provide an assessment. Quite significantly, Brazil, one of the case-study countries in this FoEI project, noted that existing studies seemed to target specific countries as illegal traders. Brazil argued that the focus should be more on illegal harvesting, a national issue, than on illegal trade and proposed that countries share information describing their own enforcement.

It appears that some momentum has been created to push for action by international forums or agencies to address illegal logging and trade, apart from the obvious work to be done at the national level. However, there is still a long way to go – the Proposal for Action in the IPF's draft final report suggests no more than inviting countries to provide an assessment and share relevant information on the nature and extent of illegal trade in forest products and consider measures to counter such illegal trade (IPF 1997).

### **Development programs, multilateral development banks, and aid agencies**

Development programs, multilateral development banks (MDBs), and bilateral and multilateral aid agencies, such as the Tropical Forests Action Programme (once called the Tropical Forestry Programme) have been heavily criticized since the 1980s for their influential role in the

forestry sector. Unsustainable macroeconomic growth has been the dominant model guiding the programs of those agencies. Many projects and programs have had severe detrimental impacts on tropical forests and local human communities (Counsell et al. 1992; Dudley et al. 1995). In recent years, some reforms have taken place, but in the eyes of many critics, they have not been sufficiently radical.

SAPs, which are economic programs imposed or conditioned by lending institutions or development agencies, have met with strong criticism from many sides (see, for example, Counsell et al. 1992). Classic macroeconomic goals are set at a high environmental and social price. For example, as a condition for a large forestry-sector loan to Ghana in the 1980s, the World Bank requested that the country's ban on the export of logs of certain tree species be lifted (Counsell et al. 1992). In relation to illegal forest exploitation, one of the impacts of the SAPs (besides intensified forest exploitation and export promotion of forest products) is that enforcement agencies and programs suffer from drastic budget cuts.

Illegals in forest exploitation and timber trade have hardly received any attention from these agencies. The issues are apparently too politically sensitive, and many governments, banks, and aid agencies prefer to ignore the existence of illegal practices and hide behind the sovereignty argument. Two simple reasons can be given for breaking this silence:

- Illegal practices undermine the very goals and objectives of these development and aid programs and have extremely negative environmental, social, and economic impacts that, in the long run, the agencies cannot ignore; and
- Dwindling support from taxpayers in donor countries (the agencies' ultimate constituency), if malpractice becomes widely known, could have negative repercussions for the agencies.

Another specific aspect must be mentioned here. International financial institutions, such as the World Bank and the IMF, are usually against the earmarking of state revenues from a specific sector (such as forestry) for reinvestment in that same sector. They are more concerned with macroeconomic goals and prefer that revenues enter the general state treasury. This represents a clear disincentive for governments and forestry administrations to raise forest royalties and tax rates and improve collection performance. This is a missed opportunity to help solve the resource scarcity of enforcement agencies.

## CONCLUSIONS

1. The fact that exporting countries have to compete with each other in a free global market serves as a disincentive to governments to apply stricter national regulations, to implement restrictive legislation, and to apply higher royalties and taxes in the forestry sector; therefore, this situation discourages a shift to SFM. National regulatory mechanisms, to be far more effective, need to be supported by an international regulatory framework. In addition to trade liberalization, vested interests of local elites often constitute a large obstacle to stronger control of the forestry sector.
2. The fact that reasons and motivations for not enforcing regulations are often linked to complex causal webs complicates their analysis and the identification of solutions. Underlying factors such as poverty, lack of political will, and inequity in wealth and political power between social classes or ethnic groups can be relevant as well and are obviously much harder to tackle.
3. With respect to international initiatives, the potential offered by the CBD and CITES to address the issues needs to be strengthened and used more effectively. National governments must be continuously lobbied and pressured to implement these conventions through concrete action plans.
4. Both certification schemes and trade-related provisions in environmental treaties should be protected from the efforts of the WTO and other free-trade initiatives to undermine them. Instead, illegal trade, including trade in illegally harvested forest products, should become an issue on the agenda of trade forums. An unambiguous concept like illegality will be more difficult for governments to ignore or create smokescreens around than unsustainability will be.
5. The fact that illegalities in forest exploitation and timber trade have been openly discussed at the IPF but proposals for action were not forthcoming calls for further persistent campaigning by NGOs. The NGOs should build effective alliances with other stakeholders, in other forums (such as aid agencies), and especially at other levels than the multilateral talk circus. Given that many governments invoke the sovereignty argument when this

issue comes up, most efforts must be concentrated at national and local levels.

- Illegalities in forest exploitation and timber trade have hardly received any attention from development banks and aid agencies because this is a politically sensitive issue. It is in the interest of the forests, their inhabitants, and the political position of banks and agencies themselves that these problems be seriously addressed when economic-assistance and development programs (including SAPs) are planned.
- Institutions such as the World Bank and IMF should allow state revenues from the forestry sector to be earmarked for reinvestment in the forestry sector. This would represent a disincentive for governments to increase forest tax rates, and it would improve collection performance.



## **CHAPTER 2**

### ***Brazil***

#### ***Forest Management at Loggerheads***

Brazil, being the world's fifth largest country, still has the greatest extent of forest in the tropics. However, this is not due to cautious government planning of forest exploitation. Until recently, most of Brazil's economy was firmly rooted along the coastal belt and in the southern part of the country. The Legal Amazonia (an administrative area of 5 million km<sup>2</sup> encompassing all or part of nine states) covers 60% of Brazil's land area, but only 10% of the population lives there (Harcourt and Sayer 1996). Migration, on the other hand, has made Amazonia the fastest growing region of the country.

The growth of large-scale timber industry in the Amazon Basin has been relatively recent. Timber production in Brazilian Amazonia increased massively in the 1980s, mainly as a result of the construction of roads, but declined somewhat in the early 1990s. This decrease in timber production was not based on government planning for long-term sustainability but was connected to a recession throughout the whole of the Brazilian economy. The economic situation did not allow the government to continue building highways and establishing settlement projects, and ranchers lacked finances to expand their clearings at the previous pace. Since 1992, with the stabilization of the economy, the annual rate of deforestation has increased by 34% (Dudley et al. 1996), although the extent and pace of deforestation in Brazil have been the subject of considerable controversy. According to the Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais e Renováveis

(IBAMA, Brazilian institute for the environment and renewable natural resources), the federal environmental protection agency, 11% of Brazil's Amazonian forest has been cleared (RIC 1996). Until now, a large proportion of wood obtained from Amazonia has been used to meet domestic demand, and foreign consumption has been low. However, this is likely to change in the future as Asian tropical hardwood stocks decline (Uhl et al. 1997). Other factors that have put pressure on the forests in Amazonia are the depletion of hardwood stocks in the southern part of Brazil and a rapidly growing economy, which create a large domestic demand for Amazonian wood. Furthermore, much of the land on which logging has occurred has been unclaimed, which has made timber both abundant and available at low cost (Uhl et al. 1997). An unobstructed influx of migrants and logging companies has resulted in land conflicts with indigenous people and the violation of land rights.

To date, most deforestation in Amazonia has primarily been for unsustainable uses, such as large-scale cattle ranches, stimulated by government subsidies. Other factors negatively affecting sustainable forest use in Brazil at present are illegal logging practices and grants of vast concessions in the Amazon Basin to Chinese and Malaysian logging companies. These logging companies have a long history of highly destructive-forest exploitation practices in Asia. A WWF report (Dudley et al. 1996) stated that as much as 90% of timber logged in Brazil is illegally exported.

Much of the mahogany (*Swietenia macrophylla*) for sale in the United Kingdom and the United States comes illegally from Amerindian reserves (Dudley et al. 1996), and concession licences have been used to legalize timber obtained from indigenous lands and conservation areas (FoEI AP 1996). Within this context of illegality, land rights of indigenous peoples have been violated, despite clear legal protection of their lands (Dudley et al. 1996). Because of the high value of mahogany, logging companies have opened up forest roads that extend as far as 500 km from their mills to obtain this low-density species. These logging roads are usually the first step to colonization by landless peasants and to the conversion of forests to farm fields and pastures (Uhl et al. 1997).

At present, clearing forests for cattle pasture is still seen by state and federal government land agencies as an improvement of the land (Harcourt and Sayer 1996). Mining affects the forests less directly, as relatively little forest needs to be cleared, but indirectly the impact is considerable because the roads have to be built into previously

inaccessible areas and the ores have to be processed, for which large amounts of charcoal are required (Fearnside 1989). The effect of mining on aquatic ecosystems is much more severe: watercourses are changed, and high levels of mercury in the sediment reduce fish life and alter pH levels (Harcourt and Sayer 1996). Hydroelectric schemes are also a threat to the forests. A large proportion of the energy generated by Amazonian dams is used for aluminium production. Plans for a series of dams, which were postponed because of Brazil's financial difficulties, would involve the flooding of 100 000 km<sup>2</sup>, or 3% of the forests in Amazonia (Brazil, ELETROBRAS 1987, cited in Harcourt and Sayer 1996). Compared with the effects of ranching, relatively little deforestation in Amazonia has been caused by subsistence agriculture.

As a result of the construction of the roads traversing most areas in the Amazon Basin, deforestation is now becoming a widespread issue. Road access encourages colonization by landless migrants for agricultural practices, which leads to total clearance of the forest, usually by fire (Rice and Counsell 1993).

Large sections of forest in Brazil have already been hit hard by deforestation, such as the Atlantic forests, where deforestation started as early as the arrival of European colonists. In the cerrado scrublands, the vegetation has been partially buffering the Amazonian forests from economic pressures and human settlement but is being destroyed more rapidly than these forests because of the proximity of these scrublands to densely populated areas in the central-south region. The cerrado's protective effect is rapidly declining as transport into Amazonia improves (Harcourt and Sayer 1996).

In 1992, only 2.7% of Brazil's Amazonian Basin was protected within parks and equivalent reserves. The country does not have specific legislation for a protected-area system, but one is being established (Harcourt and Sayer 1996). The Brazilian government announced an Ecological Package in July 1996, which indicated a greater concern for the Amazonian region. This package introduced initiatives to increase the size of legally reserved areas (that is, where the clearance of forest for agriculture is prohibited) on rural properties in certain regions and to suspend new concessions for the exploitation of mahogany and *Virola* spp. Although the new Ecological Package was a step in the right direction, it has several weaknesses. It includes no consultation with relevant NGOs or members of the National Congress. In addition, the government, instead of focusing on improving environmental control, monitoring, and law enforcement in Amazonia, gave priority to the Brazilian space program and gave budgetary

guarantees for the development of new satellites. This should have been given lower priority in the current context of combatting deforestation (FoEI AP 1996). Establishing an effective system to certify timber and listing mahogany in CITES appendix II would complement the Ecological Package and increase control of illegal logging practices.

## **ILLEGAL LOGGING ON THE GOVERNMENT AGENDA<sup>3</sup>**

FoEI AP, following the preparation of its reports in 1994 and 1995, had detected the reluctance of relevant government agencies to take action against illegal logging. Today, however, especially after the national press broadly covered this issue in 1996, this problem has become a priority on the governmental agenda. In addition, relevant institutions (in particular IBAMA) are cautiously becoming more open and transparent.

## **ILLEGALITY AND UNSUSTAINABILITY**

In less than three decades, the region will become the principal world centre for the production of tropical timber. Nevertheless, as shown in the *Forest Management at Loggerheads* report, not only is timber extraction not managed on the basis of sustained yield, therefore causing excessive damage to forests, but the timber sector as a whole (logging and commercialization) is operating outside or against the law. It can be concluded that those logging and management activities that are conducted legally are either demonstration projects or exceptions to the rule. Serious measures are needed to improve monitoring and enforcement.

Current practices for exploitation of forests in the southern Amazon Basin could be characterized as prospecting for trees. Virtually all the extraction systems are predatory, repeating the well-known path of destruction that occurred in the Atlantic forests. According to preliminary findings from recent research, forest degradation, mostly due to selective logging, is also among the principal causes of fires destroying the Amazonian forest cover in Brazil. In 19% of forest-management

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<sup>3</sup> The balance of the chapter presents an executive summary of the report *Forest Management at Loggerheads. 1996 Update Report on Illegal Logging in the Brazilian Amazon*, the Brazil case study in the Chase for Quick Profits project. The original report was written by Roberto Smeraldi, coordinator of FoEI AP. The preceding introduction was prepared by FoEI.

units inspected by the Brazilian Agricultural Research Corporation (Empresa Brasileira de Pesquisa Agropecuária), a national research body, the forest had been severely damaged by inadequate extraction techniques, despite a lower intensity of timber extraction. This finding corroborates those of previous studies, which reported that up to 60% of the canopy in the region had been damaged by extraction practices.

## **HOW CONCESSION-MANAGEMENT PLANS HAVE FAILED**

Concession-management plans are in most cases a mere formality, as companies are still trading timber regardless of its origin or the practices used for its extraction.

IBAMA, in an unprecedented audit of concession-management plans, found that at least 70.2% of these plans do not comply with existing legislation. Of this 70.2%, more than two-thirds (that is, 50.6% of the total) were suspended, and the rest (19.6% of the total) were canceled. FoEI AP findings indicated that these estimates are probably conservative; sampling showed that even the plans that did comply did not pass the test of a field visit and that auditing is done without the necessary preparation, independence, and professional skills.

Most of the official reasons for canceling concession-management plans point to the embarrassing question of how it was possible that over the years, the authorities granted management concessions without even the most basic information about the area to be managed. In municipalities with an established timber industry, such as Marabá, 95% of the concession-management plans were illegal. Only one out of five concession-management plans for mahogany could continue to be used. As a result, 81% of the mahogany trade is now in the hands of only five firms. A similar situation applies to *Virola*, the preferred Amazon tree for manufactured plywood.

Recognizing that mahogany might soon become subject to stricter international regulations through CITES, the Association of Timber-Exporting Industries of Pará state asked the government to spare *Virola*. Therefore, the fact that this is the only major commercial tree for which not a single concession-management plan was canceled should be considered one of the weakest aspects in the government audit.

One of the weak aspects in the audited plans was the general absence of descriptions of what silvicultural treatments would be applied to support regeneration and growth.

## **THE COST STRUCTURE OF LOGGING**

The cheap and abundant supply of illegally harvested raw materials keeps logging companies from adopting sound management practices and from controlling the costs of their operations, which represent an almost insignificant component in the cost structure of traded timber. Any successful strategy to combat illegal logging should aim to increase the costs of round timber obtained through predatory practices so that they become comparable to the costs of management.

The Ministry for Land Tenure Policy recently adopted a new regulation for the rural land tax (Imposto sobre a Propriedade Territorial Rural), which progressively taxes land use according to its productivity. This will help to reverse the disincentive that this tax currently represents for SFM and to address the role that this tax plays in stimulating forest destruction. However, the proposed text must be complemented by coherent changes in the criteria for productivity: currently, cattle ranching is considered more productive (low tax rate) than managing natural forest (high tax rate).

The Forest Use Charge has failed to alter patterns of forest use (small-scale exploiters can pay this legal fee as an alternative to the reforestation obligation). To be effective, stumpage values must reflect the real costs of recuperating lands subject to deforestation, and collected charges must actually be used to support a long-term program of investment in forest rehabilitation.

## **MAKING LAWS AND REGULATIONS MORE FEASIBLE**

An excessive number of rules affect the forestry sector. They cover, for example, cutting, planting, transporting, processing, and marketing. This collection of laws, norms, and regulations is mostly not respected. Noncompliance with the norms in force has usually led the government to establish new norms, instead of pursuing enforcement of the old ones. This creates the prospect that the rules will never be taken seriously and undermines the government's credibility. The plethora of rules encourages logging companies to seek alternatives to bypass

legislation (to avoid having their activities paralyzed) and favours corruption among public officers.

Municipal authorities, rural workers, and timber-industry workers are almost totally ignorant of the requirements of forestry laws. The industry workers are concerned about the future of their industry, but they consider the depletion of raw materials as simply natural and irreparable. Timber-company owners themselves feel that the management prescribed by law is a joke or just an additional cost.

Given the weakness and incapacity of the enforcement agencies, the regulatory apparatus should be simplified to make the laws more widely respected. One simple normative principle, in three parts, would reduce mismanagement of natural resources in the Amazonian forest. This rule could be called 5 30 5. The initial 5 refers to the average number of trees that could be extracted per hectare, the 30 refers to the minimum number of years in a cutting cycle, and the last 5 refers to the width, in metres, of the protective strip that should be kept around management areas to avoid fires in the exploited forest. Implementation of this principle would protect forest areas from the three main causes of degradation: excessive extraction, repeated extraction, and fires.

## **PLANNING FOREST LAND USE**

The adoption of forest management depends on favourable prices for raw materials. The easiest means to increasing timber prices would be to make the timber resource artificially scarce through forest zoning. Zoning criteria should include the value of timber resources (vegetation maps), topography, land tenure, biological diversity, and infrastructure. In Brazil no criteria currently exist to determine where timber exploitation should be permitted or prohibited. As a result, timber exploitation has grown in an unplanned and illegal fashion, especially within indigenous areas.

An article in decree 1963/96 (August 1996), part of the government's Amazon Package, required technical proposals for new florestas nacionais (FLONAs national forests,) within 30 days. FLONAs may represent an important alternative to the current system of tree prospecting, but it is also important that the creation of new FLONAs include the broad involvement of locally affected communities and relevant actors so that the social and environmental aspects are taken into account. The Pilot Program for the Conservation of Brazilian Rainforests has set an example in this respect.

## **MAHOGANY AND CITES**

As shown by decree 1963/96, the government finally recognized the serious impacts of illegal mahogany exploitation, but it should also have accepted the proposal for listing this species in CITES appendix II at the next CITES meeting in 1997. This measure has been proposed for years by FoEI and is now also supported by other Amazonian countries, such as Bolivia, Ecuador, and Venezuela. Recent measures, such as the ban on the export of sawn mahogany and cedro that Peru imposed in August 1996, show that CITES listings have an important influence on the creation of effective controls on international trade.

## **INFORMATION TOOLS**

FoEI AP research showed the need for an improved and updated information base to stimulate SFM and to enable more effective enforcement to curtail the widespread illegality. Georeferenced information on the state of all logging concessions, the land-tenure situation, etc., should be collected. For this purpose, FoEI AP signed a specific agreement to develop technical cooperation with IBAMA.

## **FINES AND ENFORCEMENT COSTS: A VICIOUS CIRCLE**

It should be noted that in almost all states in Legal Amazonia, fines related to timber extraction and transportation represent the largest share and sometimes virtually all of the fines imposed for environmental infractions, reaching 98% in Amazonas and 99% in Rondônia. The exception is Mato Grosso, which shows a higher number of fines related to pollution, fauna, and fishing.

An extremely important fact to be considered by decision-makers and policymakers is that few of those convicted of illegal logging in the region actually pay their fines. In the case of Acre and Roraima, paid fines vary from less than 1% (Amazonas and Rondônia) to a mere 17% of the total due.

When revenues from fines were compared with the expenses incurred by IBAMA in issuing fines, it was found that enforcement activities represented a substantial net loss for the federal government. Even in the two states with the highest revenue (Mato Grosso and

Pará), the amount was barely sufficient to cover half of the costs of enforcement.

A vicious circle exists: lack of resources and capacity in local IBAMA legal departments, in conjunction with legal loopholes, allows transgressors to neglect the payment of fines, which makes enforcement very expensive; this financial loss prevents IBAMA from strengthening its capacity and improving its enforcement record, including its legal capacity to exact payment.

## **EAST ASIAN LOGGERS: A NEW THREAT**

The initial moves of Asian timber firms in Amazonia were mainly to test whether the commercial, political, and administrative climate would make it feasible to develop larger operations over the next decade. The weak institutional and enforcement system in Brazil explains the easy and virtually anonymous establishment of these companies, many of which have extremely negative environmental and social records in their own countries, as well as in third countries. East Asian businesses seem more interested in areas where no developed timber industry already exists and prefer areas that have few valuable species but offer larger quantities of raw material for plywood and veneers.

## **PERU AND THE LOGGING FRONTIER**

Illegal logging has grown considerably along the Javari River and its tributaries, west of Amazonas state. Because the Peruvian government recently suspended any export of cedro and mahogany, cross-border smuggling will likely increase. Lack of adequate controls and lack of the mere presence of the Brazilian state in the area could provide ideal conditions for the growth of illegal activities.

## **THE BRAZIL NUT TREE: THE NEXT LOGGING VICTIM?**

Over the last few years, mainly because of the reduction in available timber in overexploited areas along the colonization frontier, the logging industry has been cutting increasing numbers of brazil nut trees.

However, the brazil nut has been a totally protected species under Brazilian legislation since the 1970s. This violation is one of the first significant cases in the Amazon Basin in which the timber industry is facing the risk of having to close down business in the short term, at least locally, for harvesting a protected species.



## **CHAPTER 3**

### ***Cameroon***

#### ***Blind Ambition and the Domino Effect***

Cameroon still has extensive forest cover, but this country may become the next domino to fall in the chain of West African countries that have seen their formerly abundant forests lost or degraded. Cameroon's position and ambitions among the world's tropical-timber producers speak for themselves. By around 1990, Cameroon had become the seventh-largest tropical-timber exporter in the world; the third-largest, in Africa (Dudley et al. 1995). The government's ambition was to become the continent's number-one exporter by 2000. To that end, the country has been following a production trajectory that has been described as unsustainable and completely unrealistic by Poore (1989), in his study for ITTO.

Foreign logging companies have been rushing to Cameroon since the 1980s to exploit the country's timber resources before importing countries from the North become serious about restricting imports of unsustainably produced timber (Horta 1991; Van Dorp 1995). By 1995, the rapid expansion of this sector had led to a 100% rise in timber extraction over a few years and a 400% increase in the deforestation rate (Dudley et al. 1995). Encouraged by international development agencies, the Cameroonian government has seen this turbulent and highly intransparent industry as the cure for the country's dramatic economic crisis as the prices of other export commodities go downhill.

This crisis followed a period of strong economic growth between 1970 and 1985. The vast timber reserves may also be expected to provide short-term foreign exchange needed to service the country's foreign debts.

European companies (mainly Dutch, French, German, and Italian) dominate the industry and have done so since colonial times. However, East Asian and Lebanese firms, many with suspect reputations, are expanding rapidly. As a result of economic concentration, six leading expatriate companies (one Dutch, three French, and two Italian) controlled more than half of all logging and wood processing and about three-quarters of all timber exports in 1991/92. Ninety percent of timber exports are directed to the EU; about 70%, to France, Italy, Portugal, and Spain (Van Dorp 1995). Most timber comes from the southeast region of the country, which is covered by some of Africa's most ancient and biodiverse forests.

According to specialists (Dudley et al. 1995; Van Dorp 1995), timber extraction in Cameroon is unsustainable. Wastage is high; cutting cycles are unfeasibly short; forestry regulations are more often ignored than respected; and many of the taxes are unpaid. The combination of lack of effective controls, economic instability, and fear of northern timber boycotts has created a real timber rush: minimizing immediate costs and maximizing immediate profits have become the main goals. As a result, forests assigned to industrial exploitation make up more than 60% of Cameroon's forest area (Van Dorp 1995).

Small and large logging companies and small-scale Cameroonian exploiters maintain intransparent timber-supply connections, which makes it hard to determine the origin of logs and easy to evade regulations and taxes. Official statistics for 1991/92 classified 50% of the registered timber production as indeterminate, meaning that this volume was either wasted or entered the illegal circuit (Van Dorp 1995). To make things worse, the estimated real timber-production volume could be more than 50% higher than volumes registered by official statistics (Toornstra et al. 1994).

Although the limited number of marketable species and high transportation costs have led to selective logging practices (as opposed to clear-cutting), direct ecological damage is nevertheless considerable, affecting 10–15% of the standing forest (CIRAD 1993). Family members of immigrants working for the logging companies are responsible for most of the forest degradation around towns (Enviro-Protect 1993). A tremendous threat to Cameroon's unique wildlife is the access to hunters and poachers provided by logging roads and trucks, with

devastating consequences. On one occasion, it was found that 200 poachers had settled along a 100-km new logging road (Toornstra et al. 1994). Bushmeat is in high demand because it is cheaper than beef, even in cities. Protected species, such as gorillas and chimpanzees, are especially at risk because of their trophy value. The depletion of populations of other mammals that act as seed-dispersal agents (elephants, duikers<sup>4</sup>) will affect the regeneration capacity of tree species.

The human population is sparse in the timber-producing region, and social structures are loose, but probably all forest has been used in some way by the local Bantu and indigenous Baka populations. Central African forest dwellers in general are considered more dependent on forests for their survival than people anywhere else in the tropics (Horta 1991). The indigenous population in Cameroon is particularly vulnerable to the incursions of modern civilization and the acculturation efforts of the Cameroonian government efforts that fail to recognize existing socioeconomic structures and the values of traditional, sustainable use of the forest. On the other hand, long-term sustainability is not the main local concern, especially among nonindigenous communities (Toornstra et al. 1994). Conflicts involving the local population, the logging industry, and administrative authorities have become frequent (Verhagen and Enthoven 1993). The conflicts arise mainly because land and forest-resource tenure is insecure; controllers lack the minimum necessary resources; and forest exploitation benefits logging interests and corrupt officials, rather than addressing the local population's basic needs (for example, companies use immigrant workers instead of locals, are self-sufficient and do not support the local market, refuse to give timber waste to villagers, and fell traditional multipurpose trees).

The government and international development agencies showed little concern for local-community interests in the numerous, poorly coordinated forest-related development and conservation programs of the 1980s (Horta 1991). In recent years, though, more integrated programs have been initiated, but this could well be a case of too little, too late. A positive development was the 1994 forest law, which recognized community forests as a separate category for the first time.

The Tropical Forestry Action Plan drawn up for Cameroon in 1988 has been widely criticized by NGOs, independent experts, and members of the donor community (Colchester and Lohmann 1990; Jeanrenaud 1990; Horta 1991). The plan suggested that 2 million

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<sup>4</sup> The duiker is a small African antelope (genus *Cephalophus*) with short, straight horns.

forestry jobs would be created within 15 years, but recent estimates of jobs in the sector vary from only 20 000 to 40 000 (Van Dorp 1995). The plan also included an ambitious road-building proposal to open up millions of hectares of dense forest in the southeastern region. Although donors were reluctant to fund this scheme, it remained on the agenda; in June 1996, the World Bank's Board of Executive Directors approved a road-building project through some of the most sensitive, biologically rich forests, including the Dja Reserve (FoE EWNI 1996).

The 1994 forest law represented a shift from seeing forests merely as a timber resource to seeing them more as a multifunctional natural asset to be managed. The law was part of a World Bank-inspired reform package, which the government had to accept to remain eligible for multilateral forestry loans. However, parliamentary amendments in favour of vested interests undermined the potential sustainability in the exploitation of large concessions (a reduction in duration from 40 years to 15 years, that is, less than one cutting cycle for most species; and a reduction in maximum area from 500 000 ha to 200 000 ha). The new law increased from 60% to 70% the proportion of timber from large concessions that had to be processed locally and set a 100% target (log-export ban) for 1999. Nevertheless, because of reduced investment and the forestry administration's weak capacity to exert control, less than 30% is actually being processed locally. The wider range of regulations has not been accompanied by the necessary substantial increase in control resources (salaries of civil servants, including forestry agents, were cut by 60–70% in 1992/93), and implementation will become an even bigger bottleneck. It would seem that key players in the administration prefer to protect their private interests, rather than investing in stronger enforcement, which would easily pay for itself with increased tax revenues (Toornstra et al. 1994; Van Dorp 1995).

In this country case study, carried out by Enviro-Protect (one of Cameroon's active environmental NGOs), the overall focus was on the analysis of legislation and on the constraints to its implementation. In addition to the institutional and policy context, the study looked at the motivations of key actors. Enviro-Protect interviewed both primary actors (the loggers and local people whose decisions have a direct impact on the forest) and secondary actors (the civil servants who have an indirect impact on deforestation because they influence the primary actors) (Toornstra et al. 1994). The environmental and socioeconomic impacts of illegal logging were also assessed.

## BACKGROUND<sup>5</sup>

Logging and timber trade in Cameroun-Est (eastern province) have been marked by widespread illegality as a result of the province's isolation and inadequate controls. Illegal practices are a major obstacle to SFM because they have the following effects:

- Ecological – forest degradation and overexploitation of timber species;
- Economic – loss of up to two-thirds of the expected taxes because the state fails to collect them; and
- Social – growing inequity between the few people who benefit and the many who do not, as well as more frequent conflicts between stakeholders.

Laws seem to be developed to protect individual interests or to meet the requirements of funding organizations. Multiple decision-making centres and conflicts of authority in different ministries cause serious coordination problems in the forest sector.

## FORMER (PRE-1994) FOREST LEGISLATION IN THEORY AND PRACTICE

The former (pre-1994) forest legislation recognized three legal categories of forest-land tenure: communal and privately owned forests (about 2% of the country's area); state-owned forests, including protected areas (about 10%); and forests of the public domain (about 15%) (Obam 1992). In practice, however, state influence was enormous and discouraged other stakeholders from undertaking forest stewardship. The relevant minister could suspend almost any arrangement. The government officially opened the protected areas to logging, without putting into place any compensation measures.

The maximum surface area for a concession licence was 200 000 ha. Legislation required that 60% of the production be

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<sup>5</sup> The balance of this chapter presents an executive summary of the report *Illegal Logging and Timber Trade in Cameroon: Backgrounds and Consequences*, the Cameroon case study in the Chase for Quick Profits project. The original report was written by Enviro-Protect's coordinator, Roger Ngoufo, and primary editing was done by the FoEI Secretariat in Amsterdam. The preceding introduction was prepared by PoEI.

processed locally, but capital investments were too high in relation to the short working life of a concession (5 years, renewable). Therefore, old machinery was used, leading to very high levels of waste (65–75% of the felled trees): it took 3 m<sup>3</sup> or more of raw log to produce 1 m<sup>3</sup> of sawn wood.

In past years, loggers with entitlements under Sales of Standing Volume (SSV) contributed to the exploitation. SSV titles were reserved for nationals, and the exploited area had to be no larger than 2 500 ha. To overcome the limitation in supply, logging companies made deals with Cameroonians working in adjacent forests. National licencees were not obliged to have a wood-processing unit. As much as 50% of the production by logging companies were of such *de gré à gré* (by mutual consent) origin. Controls were less strict, so the risks of uncontrolled forest degradation were obviously higher.

Another type of authorization to fell trees was established to enable local people to meet their own basic needs for domestic fuelwood and construction material or to sell timber to small-scale exploiters. In practice, such authorizations were not sought by small-scale exploiters or chain-saw owners. The latter were responsible for most of the clandestine felling, a direct result of the economic crisis. The authorities tolerated the markets, often in the heart of major cities, where small-scale exploiters openly sold illegal wood products. For the Directorate of Forests, control was not easy, as the controllers had totally insufficient resources. Sanctions were rarely applied; files hardly ever reached the courts; and those that do were not followed up upon.

The interests of local and indigenous peoples were taken into account through user, or traditional, rights and through the legal protection of useful species. Other legal elements were the information meetings with logging companies and a special tax for exploiters that was supposed to help pay for basic local infrastructure. But the lack of transparency and the unreliability of government agencies made it impossible to determine where the collected taxes ended up. In the field, logging operations often conflicted with rural-village interests and traditional land-tenure systems. Trees of economic and social value to the village were felled or damaged. Logging companies, which had paid all the necessary taxes and fees to the government, generally had to pay additional money to local villagers.

## NEW (1994) FOREST LAW

As mentioned earlier, the new forest law of 1994 was part of an externally inspired reform package. The World Bank's shift toward a broader view of the forest as a multifunctional asset to be managed inspired the following changes to Cameroon's previous forest legislation:

- At least 30% of the national territory is to be maintained as permanent forest cover (the old goal was 20%);
- Forest-use and forest-tenure categories are more balanced;
- Timber exploitation in production forests (permanent domain) must be based on a 15-year management plan;
- Local and indigenous people are granted a share in the revenues generated by the sale of forestry products;
- The exploiters' contributions for local infrastructure are to go directly to the local community (instead of passing through tax channels); and
- User, or traditional, rights are better protected.

It is still too early to detect any changes in implementation or practice. However, some other requirements of the new law will likely be hard to meet:

- Detailed pre-logging forest inventories;
- Control of management plans; and
- Local processing of 70% of the timber.

In addition, several criticisms have been raised:

- Community forests can be misused and unsustainably exploited to supply loggers for commercial purposes;
- In the case of infractions, offenders can still make transactions to avoid penalties;
- User rights of local people have yet to be clearly secured, so conflicts with other stakeholders are inevitable; and
- Enforcement agencies still lack adequate resources.

## HOW NATIONAL NEWSPAPERS PERCEIVE THE PROBLEM

The government has allowed some freedom of the press in recent years, and independent newspapers are now read by about 75% of the total newspaper readership. An analysis of the perception of illegal practices in private and (pro-)government newspapers revealed the following:

- The official press emphasizes the importance of the forestry sector to the country's economy and the need to enable national actors to play a bigger role and compete more successfully with foreign interests.
- In the private press, the emphasis is on malpractice and illegalities, inadequate laws and policies, incompetence and corruption among authorities, Cameroon's selling of its natural heritage at bargain prices, and the negative ecological and economic impacts.

## TYPES AND OCCURRENCE OF ILLEGAL PRACTICES

In Cameroon, the two major types of illegal practices are the following:

- *Illegal felling* This practice encompasses felling without an exploitation permit, generally by unemployed persons; leasing of titles; felling of trees whose diameter is below the minimum set for exploitation; and felling outside the permitted area.
- *False declarations* This is one of the most rampant illegal practices, and it results in major losses for the state and the community. Based on data from Cameroun-Est, the undeclared timber volume in 1992/93 was close to one-third of production.

A review of the 1988-90 officially registered infractions showed that almost all large logging companies had a record of infractions. Apart from the general practices noted above, other infractions were the destruction of control barricades and the removal of confiscated logs without authorization. The Société forestière et industrielle de Bélabo (SOFIBEL, Bélabo lumber products corporation) was one of the worst offenders. SOFIBEL, a parastatal at the time, has since been privatized and is now in Lebanese hands. Cases against SOFIBEL have

been dropped, and no sanctions seem to have been applied. The main officially recorded infractions committed by locals, small-scale exploiters, and chain-saw owners were setting uncontrolled bush fires; felling without a permit or authorization; felling under-diameter trees; and stealing previously confiscated products.

The following conclusions can be drawn from an analysis of the judicial follow-up of selected cases:

- The administration is aware of malpractice, but there is still a lack of political will to address the problem;
- If a defaulter is arrested, a financial transaction is preferred, rather than criminal sanctions, and this encourages informal negotiations;
- For many logging companies, transactions are actually paid either once a year or not at all, despite repeated offences; and
- Individuals without administrative protection or money to pay bribes are more easily sent to court for environmental offences.

Some recent types of malpractice should be noted:

- There have been strong indications of frauds committed at borders and in export seaports, mainly Douala. When arrests were made by controllers, instructions were apparently issued from within the hierarchy to have the defendants released;
- Some loggers are said to be using provisional declarations to commit fraud (this refers to timber sales made before taxes are paid, resulting in arbitrary tax amounts and major losses to the state); and
- Recuperation of timber remains from forest clearings is increasing; under the cover of fictitious community farms (where recuperation is authorized), forests are being intensively logged.

A recent case involved SOCATHAI, a Thai company operating in southwest Cameroon. The company allegedly protects the interests of Cameroonian VIPs and specializes in cutting under-diameter trees. Its exports do not pass through Douala and are not monitored. SOCATHAI planned to triple its exports in 1997. The company claims to be rehabilitating two small, abandoned seaports. The Société forestière Pallisco (Pallisco timber corporation), a French company, is said to have

depleted all the legally protected moabi (*Baillonella toxisperma*) around the Dja Biosphere Reserve. Logging is now considered the most serious threat to the conservation of this reserve.

## **MOTIVATIONS AND PERSPECTIVES OF THE PRINCIPAL ACTORS**

The perceptions and motivations of different actors were recorded in interviews. Responses came from 193 small-scale exploiters, 15 logging companies, 44 civil servants, and 150 local villagers. These actors were generally aware that current forest exploitation is very damaging, but they blamed each other.

### **SMALL-SCALE EXPLOITERS**

Most small-scale exploiters did not agree that their operations could exhaust the forest resources; they claimed to have little knowledge of the laws; they were very critical of state controllers (bribes, harassment); and they complained of complicated procedures. Exploitation titles are for a limited volume of timber and valid for a very short period; by using these titles to send the maximum possible quantity of timber to the markets, small-scale exploiters can cut more than three to five times the authorized volume of timber. As far as the new forest law is concerned, small-scale exploiters doubted that administrative harassment by controllers will ever cease.

### **LOGGING COMPANIES**

Large logging companies claimed to be aware of the need for sustainable practices in timber exploitation. But loggers believed that to be able to implement long-term management plans, they should be given more secure exploitation titles and larger concession areas. They considered small-scale exploiters as being the real danger to the ecology of the forest and to state finances, as they do not pay taxes. Foreign loggers accused national loggers of being irresponsible. National loggers felt that they had a competitive disadvantage (compared with foreign loggers) in terms of financial resources. Logging companies felt that local people are particularly hard to please.

Loggers criticized the legislation because they believed it was inapplicable on a number of points; they considered the areas conceded to

be much smaller than the required industrial processing units. Administrative procedures are lengthy and complicated. Foreign loggers could not imagine a forest inventory as detailed as the new law requires. Local processing of 70% of the timber harvest was considered unrealistic, and the Directorate of Forests does not have the necessary means to implement the law.

## **CIVIL SERVANTS**

Civil servants from all key ministries and all hierarchical levels were interviewed. The reasons they gave for not enforcing the laws were pressure from higher up, widespread corruption, the wealth of (foreign) companies, lack of resources, and impracticable legal provisions. They all emphasized that an underlying factor was the dire economic situation for state employees, a result of drastic salary cuts and steep inflation.

## **LOCAL VILLAGERS**

Local villagers claimed to be scarcely aware of the formal laws. All the interviewees were in favour of exploiting the forest; the only restrictions they mentioned were not allowing foreigners (21% of sample) and not allowing industrial exploitation (7% of sample). The concept of sustainability was quite remote. They perceived the law as favouring outsiders and as an obstacle to claiming their own ancestral rights. Local people demand direct benefits from forest exploitation. Local people did not yet perceive any positive change with the new forest law, except in the case of some privileged villagers.

## **SOME IMPACTS OF ILLEGAL LOGGING**

For six important timber species the exhaustion times – the number of years to exhaustion extrapolated from current exploitation rates – range from 127 to 790 years. However, if we take illegal forest exploitation into account it is quite possible for a logger to harvest more than three times the officially authorized volume – we must also adjust the exploitation rate accordingly, and this accelerates the exhaustion rate. An exhaustion time of less than 200 years must be considered critical, given the slow regeneration rates.

Because of the enormous pressure exerted on a small number of species, a continuous loss of genetic tree biodiversity occurs. At the moment, public concern is focused on species such as moabi because they provide a range of benefits to local people. Markets in the capital are openly supplied with illegally harvested timber. Of 19 species surveyed in this area, 4 could be considered scarce and 3 could be considered threatened.

People involved in illegal logging are not inclined to respect other laws, either. Poaching is another illegal activity that can generate quick profits. Logging trucks illegally transporting bushmeat and skins facilitate contact between poachers and consumers.

Corruption and institutional inefficiency, combined with a lack of the resources needed to enforce the laws, make it practically impossible for the government to collect forest-related taxes. Figures from the second half of the 1980s show a downward trend in collected taxes but an upward trend in timber-production volume. In 1994/95, extra collection efforts by the revenue service led to a sudden increase in tax income.

## **RECOMMENDATIONS**

The main recommendations from the project are listed below:

1. Monitor the implementation of forest legislation on a long-term basis. Results should be passed on to the relevant authorities, international NGOs, institutions with influence in Cameroon, and the national independent press.
2. Strengthen the resources of enforcement agencies. Provide enforcement agencies and controllers with adequate training and the means for control. Apply a more transparent appointment policy.
3. Ease administrative procedures. Relevant administrative procedures are complicated and sometimes impracticable, and they take too much time. This discourages loggers from applying for permits, and it also discourages state controllers.
4. Initiate a dialogue involving the state, the loggers, and the local population. An open dialogue involving these stakeholders is seen as a precondition to reducing social tensions and solving the problems of illegal exploitation.

- Increase transparency in export records. SGS (Société générale de surveillance) is the agency that monitors exports in Cameroon at the seaport of Douala. This agency's figures should be made public to enhance the transparency.
- Develop public-education programs. Public education is urgently needed to develop a national environmental consciousness and to change the perception that forest resources are merely a source of quick profits.
- Strengthen the certification process in Cameroon. In export-oriented developing countries like Cameroon, certification could effectively curtail illegal practices.
- Intensify forest-regeneration programs. Illegal exploitation causes a great deal of damage to the forest, which makes the need for ecologically sound regeneration methods even more urgent.

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## **CHAPTER 4**

### ***Ghana***

#### ***A History of Mismanagement***

More than 90% of Ghana's forests have been logged since the 1940s (Asibey and Owusu 1982, cited in Sayer et al. 1992). Primary forest practically disappeared a decade ago (OFI TRADA 1991, cited in Rice and Counsell 1993), and the extent of remaining forest cover has been estimated at about 15 000 km<sup>2</sup> (Sayer et al. 1992), which is scattered as small isolated fragments throughout the southern part of the country. During 1981–85 the annual rate of deforestation in Ghana was estimated at 1.3%, but more recent estimates set it at close to 2% (Keeling 1991, cited in Rice and Counsell 1993). Forestry plays an important part in Ghana's economy. In the 1980s, timber was the third-largest export commodity after cocoa and gold, accounting for 5–7% of the total gross domestic product (GDP), and the forestry sector employed some 70 000 people (IIED 1988, cited in Rice and Counsell 1993). Forests also provide 75% of Ghana's energy requirements (Sayer et al. 1992).

The timber industry in Ghana had practically collapsed by the early 1980s, mainly because of the global recession in the late 1970s and early 1980s. A new administration came into power in 1981, but despite the government's efforts to halt the economic crisis, the IMF had to intervene through an SAP. The IMF promoted the expansion of Ghana's exports to enable the country to acquire additional foreign exchange. The timber sector was given special attention through the World Bank's Export Rehabilitation Project of 1983–86. Sawmills were

renewed; logging operations, modernized; harbours, rebuilt; and timber exports, increased. The economy improved, but at the expense of Ghana's forests. Additionally, the aid money provided a new source of illegal profits for many companies, and millions of dollars disappeared out of Ghana as a result of corruption and fraud (FoE EWNI 1992).

Overexploitation of a limited number of species led to a ban on the export of 14 primary species in 1979 and of an additional four species in 1987. This ban resulted in the increased use of secondary species (Friar 1987, cited in Sayer et al. 1992). Exact figures on Ghana's timber exports are difficult to obtain, but the country remains one of the most important African suppliers to the EU (Eurostat 1991, cited in Rice and Counsell 1993). The United Kingdom, from which Ghana obtained independence in March 1957, imports about 11% of the country's timber (FoE EWNI 1992). Initiatives to develop long-term sustained yield management include the Ghana forest simulation model, GHAFOSIM, which reviewed current and alternative exploitation practices and recommended a 40-year felling cycle (Ghartey 1990, cited in Sayer et al. 1992).

At the end of the 1980s, the tropical moist forest zone contained 252 forest reserves covering a total area of about 17 000 km<sup>2</sup>. Of this, 12 000 km<sup>2</sup> was designated for timber production, whereas only 5 000 km<sup>2</sup> was allocated as protective (sic) forest (FoE EWNI 1992).

## **PROBLEMS**

The timber industry comprises some 500 logging companies (including Danish and Dutch firms), which operate through long-term concessions and short-term licences. The International Institute for Environment and Development (1988, cited in Rice and Counsell 1993) reported several problems in the forestry sector: repeated logging of commercially exploited areas without allowing the forest to recover; the very small size of some concessions (in one case, only 2 km<sup>2</sup>), which makes proper management difficult; and a disregard for felling cycles (15 years, instead of the recommended 40 years). In addition, very high levels of waste in timber processing and inefficient extraction methods result in a final lumber volume that is only 25–40% of the total log volume extracted (Chachu 1989, cited in Rice and Counsell 1993).

As an alternative for meeting domestic and industrial demands for wood, plantations have been developed in Ghana as far back as the

first decade of this century. Between 1968 and 1977, planting was used to convert some 400 km<sup>2</sup> of natural forest into logged-over forest reserves. As a result of poor management, though, planting has declined to a mere 10–20 km<sup>2</sup> a year, and this is mainly for rehabilitating failed plantations (Owusu et al. 1989, cited in Sayer et al. 1992). In view of their history, industrial plantations do not appear to offer a solution to Ghana's deforestation problem, either for the near future or for the medium term (Rice and Counsell 1993).

The major causes of deforestation have been fires, overlogging, shifting cultivation, and an ever-increasing demand for fuelwood. Fire following the drought in 1982/83 altered the structure and composition of 30% of the forest left in the semideciduous forest zone and led to the loss of 4 million m<sup>3</sup> of high-quality timber. In recent years, fire damage has spread southward, and heavily logged areas are at high risk. Other major causes of deforestation are the following:

- Overlogging is a serious threat: the annual cut is 1.6–2.5 times higher than the optimistically calculated sustainable cut (World Bank 1988, cited in Sayer et al. 1992).
- Shifting cultivation traditionally accounts for up to 70% of deforestation. Fuelwood and charcoal consumption accounts for 75% of all energy consumed in Ghana. The World Bank (1988, cited in Sayer et al. 1992) estimated that in the period 1986–2000, fuelwood consumption would rise about 2.8% per annum, compared with a decline in wood availability of 0.7% per annum. As fuelwood mainly comes from natural ecosystems, wood resources will become scarcer outside protected areas, and pressure for wood within reserves will continue to intensify (Owusu et al. 1989, cited in Sayer et al. 1992).

## IMPACTS

The impacts of deforestation are widespread. Not only are biodiversity, ecological processes, and environmental functions affected, but also the livelihoods of local people. Nontimber forest products are used by a large part of the Ghanaian population. It has been estimated that 75% of the population relies on bushmeat for protein. Apart from subsistence use and local trade, another drain on wildlife species is a lucrative export market. In addition, forest loss results in serious land degradation (soil erosion, nutrient depletion, and desertification),

which is an increasing problem in northern parts of Ghana (Falconer 1990, cited in Sayer et al. 1992).

Because of current unsustainable forest use, Ghana is also losing impressive fauna, ranging from rare and endangered species such as the forest elephant, the bongo, Ogilby's duiker, the chimpanzee, and the pygmy hippopotamus to several of West Africa's rarest forest birds, which are important for seed dispersal and forest regeneration. Most of the existing conservation areas in Ghana are too small to maintain populations of animal and plant species in the long term (IUCN 1988b, cited in Sayer et al. 1992), although in the last decade several conservation initiatives have been taken by the Environmental Protection Council, the Department of Game and Wildlife, and the Forestry Department.

In 1989, the 64.6 million USD Forest Resources Management Project was launched by the World Bank, the Food and Agriculture Organization of the United Nations, the Canadian International Development Agency, and the British Overseas Development Administration. The project was designed to review forestry and wildlife sectors, strengthen the present network of conservation areas, and improve game management outside protected areas. Additionally, the Forestry Commission was to revise the national forestry policy, which had been in place since before Ghana's independence (Sayer et al. 1992).

FoE Ghana has initiated a number of tree-planting, environmental-education, and research programs, and a number of villages have expressed interest in establishing agroforestry projects with the help of FoE Ghana.

## **MANAGING ILLEGAL LOGGING IN GHANA<sup>6</sup>**

Ghana's forest zone, which at the beginning of this century covered 8.2 million ha, has been reduced drastically to about 1.7 million ha. Pressure on the remaining forests has increased because of the large number of wood-processing plants and illegal logging operations. At the current rate of wood consumption in Ghana be it for the timber

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<sup>6</sup> The balance of this chapter presents an executive summary of the report *Managing and Mismanaging the Forest. A Study of Illegal Logging in Ghana*, the Ghana case study in the Chase for Quick Profits project. The original report was written by Friends of the Earth (FoE) Ghana staff, under supervision of Theo Anderson, director of FoE Ghana. The preceding introduction was prepared by FoEI.

industry, illegal timber trade, or fuelwood use the remaining fragmented forest patches will likely disappear soon unless serious changes are made immediately to combat these threats.

Forestry has traditionally played an important role in Ghana's economy, with timber being the third-largest export commodity after cocoa and gold. During the 1980s, revenues from timber exports contributed 5–7% to GDP, and the timber sector employed about 70 000 people (IIED 1988, cited in Rice and Counsell 1993). Additionally, about 2 million people (14% of the population) gain direct livelihoods from the forest.

The colonial authorities in Ghana did try to control exploitation of the forest resource. In 1907, they established the Timber Protection Ordinance, which banned felling of trees of commercial species before they had grown to a certain diameter. In 1908, they set up a government department to be responsible for forestry activities. Commercial forestry in Ghana, as it was first practiced, was controlled almost entirely by large companies from the United Kingdom. However, under the Nkrumah administration (1946–66), the government successfully promoted small to medium-sized Ghanaian timber enterprises and reduced the number and size of concessions allocated to foreign firms. Of 102 concessions granted through the Ministry of Lands and Natural Resources between 1961 and 1971, only 2 went to foreign companies.

From 1956 to 1970, the Modified Selection System was the main method of controlling exploitation. This involved stock-mapping of all economic trees; the selective exploitation of mature species, governed by minimum-girth limits; and a 25-year felling cycle. In the early 1980s, the timber sector was dominated by a large number of small to medium-sized companies. By the end of the 1980s, the number of companies claiming to be log exporters had grown from 90 to 300. Most of these companies had no real experience with international trade, which increased their dependence on business deals with foreign and European resident agents and buyers.

The scale of illegal exports of timber became clear to the Ghanaian authorities in 1987, when several shiploads of illegally harvested wood were halted, and fraud involving export documents was revealed.

In July 1990, the authorities introduced forest-improvement levies, aimed at promoting sustainability in the timber industry and forest conservation. By 1994, the export of logs and air-dried timber had ceased.

## LOCAL COMMUNITIES AND ILLEGAL LOGGING

Forest- and land-tenure systems established by decree of the Ghanaian government and executed by concessionaires have led to conflicts with local communities, despite the fact that national legislation relating to land and tree use was mainly intended to reflect the public interest in natural resources.

The customs controlling native land tenure vary to some extent with the practices of the different clans, but all land, including waste and unoccupied land, has an owner under native or customary law. A study of the legal framework for forest reserves in Ghana indicated that most of the reserves are owned by corporate customary stools or clans. In a few of these areas, the communities' interests were not taken into account before the establishment of a protected area, and difficulties have arisen because of this. The government forcefully obtained land from local tribes for three state-owned reserves.

Customary law provides no restriction on destruction or use of trees, and national legislation seeks only to prohibit the destruction or sale of commercial timber trees. Individuals have no right to sell timber trees from their land. Local people do not receive a part of the royalties, and they have no legal right to be informed of or to refuse to allow felling on their land by timber-concession holders.

The Forest Decree of 1974 sets many restrictions on communities' use of forest reserves. This decree imposes criminal sanctions for any violation of the forest laws. Furthermore, people need a permit or written note issued by the Forestry Department to enter a forest reserve. The collection or extraction of nontimber forest products for domestic use, which most communities rely on for their existence, is permitted, but commercial exploitation of these products is not permitted.

An analysis of the procedures related to forest reserves showed that the laws governing them have stifled the local land-tenure systems and given local communities a disincentive to protect reserves. These procedures fail to properly take into account community rights and benefits for villages near the reserves and have alienated local communities. With few or no rights in the reserves, nearby farmers and communities have had no incentives to protect, manage, or invest in the resource.

Outside the reserves, the lack of tree tenure and payments to farmers, together with inadequate compensation by concessionaires for damage to farms, have created not only a disincentive to plant or protect timber trees but also a strong incentive to destroy them before the concessionaire can harvest them. Many landowners and farmers

would rather negotiate secretly with chain-saw operators to have the trees on their land illegally harvested than allow the legitimate concessionaires to harvest the trees and pay token compensation. Until the laws are modified, farmers will continue to collaborate with illegal operators to plunder the forest.

## **TIMBER HARVESTING**

Timber harvesting is the main cause of deforestation in Ghana. Logging has been increasing outside the forest reserves, mainly because of the lack of effective control. In recent times, logging activities have intensified in the semideciduous zones because of the greater densities of desirable timber species, especially in the Brong Ahafo region. These drier zones are now in critical condition.

The traditional bush-fallow system of cultivation involves the slashing and burning of forests and grasslands. With the increasing population over the last two decades, pressure on forested land has been considerable. Demand for subsistence farming has been compounded by demand for cash crops such as cocoa, coffee, oil palm, and tobacco and for urbanization and infrastructural development.

Additionally, fire has been the immediate cause of a large part of forest degradation in the semideciduous zones. About 30% of the forest in these areas has been degraded or destroyed. Bush fires occur annually in the dry season, usually from November to May, and are caused either by natural events or by intentional burning.

Open-cast mining (gold and diamonds), especially by small-scale operators, and large-scale mining (bauxite, manganese, and gold) pose a serious threat to the remaining forests. Gold mining, especially in the wet evergreen zone, threatens some botanically very rich areas; this is particularly so with the large-scale surface mining at the northern edge of Neung North Forest Reserves.

## **GOVERNMENT POLICIES**

In most cases, government policies have adverse environmental and economic effects. The policies offer a direct incentive for wasteful environmental management, which has led to increased forest degradation. In general, very low fines are imposed on offenders, and in most

cases it is more profitable to break the law and pay a fine than to abide by the law.

With the introduction of the SAP, the contribution of Ghana's forest products to the GDP increased significantly, rising from 3.4% of GDP in the 1980s to current levels of 6.8% of GDP and 13% of merchandise export. However, this growth has been achieved by logging the forest at unsustainable rates. At the same time, production is inefficient and its wastage is high; wood is priced below its real market value; and communities that depend on the forest suffer the social and economic costs of overexploitation.

The fines are too low to deter illegal timber harvesting. Until the national task force came into existence, the maximum fine for harvesting logs illegally was 20 000 cedis, far below the price of 1 m<sup>3</sup> of log (in 1988, 2 292 Ghanaian cedis [GHC] = 1 USD). The total loss to the nation from illegal logging operations is about 36.22 billion GHC (28.97 million USD), equivalent to about 2% of the GDP.

A large number of reserves have been threatened by the encroachment of illegally established farms. Again, the penalties are an insufficient deterrent. This continuous illegal encroachment is considered the greatest source of deforestation within the forest reserves. If this situation remains uncontrolled, it will lead to irreversible ecological damage.

In 1994, the Forestry Department estimated that about 34% of logs harvested from forests were illegally harvested. Statistics from the Forestry Department indicate that the level of harvesting has been increasing over the last 5 years.

## **CORRUPTION**

The main collaborators with illegal chain-saw operators are district forestry officials, district chief executives and assembly people, law enforcement agents, chiefs and village elders, concessionaires, and wood sellers.

In general, the police service has been either lukewarm about environmental issues or uncooperative. They often fail to make arrests or to investigate or prosecute offenders. This attitude of the police, which demoralizes informants and forestry officers, has worked to the advantage of illegal operators, who ignore the forestry laws with impunity.

Confusion surrounds the authority to issue felling permits to chain-saw operators. The Ministry of Lands and Forestry has authorized only the Chief Conservator of Forests to issue permits for felling or

processing of trees outside the forest reserves. However, most district chief executives also issue permits, justifying this by invoking provisions of the legislative Act that regulates chain-saw operations. Because the Act has not been revoked, it is unclear who has the authority to allow felling.

In 1993, Ghana's log exports rose by 123% over those of the previous year. The annual allowable cut of timber was exceeded by 30%, and the number of log exporters increased to more than 200 (almost double the 105 of the previous year). The sudden increase in the number of log exporters was mainly due to the speculation in timber felling that characterized the national economy. Of the exporters, the top 10 were timber-processing and -milling companies, and they accounted for more than 32% of total log exports.

The Ministry of Lands and Forestry submitted a memorandum to government to introduce a suspension of log exports for a period of not less than 12 months. This would enable the Forestry Department to introduce measures to bring order and discipline into the forestry sector and reduce the excessive pressure on forest resources.

An analysis of the timber statistics collected by the Forest Products Inspection Bureau and of the Forestry Department's forest inventory revealed that of the 40 main marketable species, 16 are being heavily overcut at unsustainable rates, particularly in forests outside reserves, and 14 are hardly touched. Some have been listed by CITES as critically endangered.

## **PRODUCTIVITY LOSS**

Forest resources have played a significant role in the provision of food, clothing, shelter, furniture, water-supply sources, bushmeat, and traditional medicine for the local community. The rapid destruction of the forest through excessive logging is therefore of much concern to development planners and policymakers. The degradation of the forest has resulted in field-productivity losses of 0.5–1.5% of gross national product, loss of sustainable logging potential and erosion prevention, loss of watershed stability and carbon sequestration, and loss of potential new drugs as a result of the loss of genetic resources. The people most affected live below the poverty level in environmentally fragile rural areas. These people rely on the forests for their livelihood but have very little legal hold on the resources. The economic activities of these people often intensify the deforestation process and lead to pollution

and soil degradation, exposing them to even greater environmental risks.

Factors that make tackling of the problem difficult are the following:

- The lack of an updated and clearly defined forest-policy document spelling out goals, objectives, strategies, and future direction of the timber industry;
- The lack of a clear land-use policy to guide the use of land in the country, without which encroachment on forest reserves occurs;
- Domination of the timber-export trade by round logs that generate low foreign earnings from large volumes of log exports;
- The Forest Department's deficient protection of forests outside reserves under any form of sustainable management, a deficiency that promotes illegal harvesting of logs; and
- The low fines for offences, which stimulates even more malpractice both within and outside reserves.

A new Forest and Wildlife Policy has been formulated and published to replace the Forest Policy of 1948. This new policy was informed by current national-development policies as embodied in the 1992 Constitution, the Environmental Action Plan (1991), and the Forest Resource Management Project (1989-95). It was also informed by accepted international principles of resource management and sustainable development as stated by the *ITTO Guidelines for the Sustainable Management of Natural Tropical Forests* (ITTO 1990); The Rio Declaration and The Statement of Forest Principles, both prepared at the 1992 Earth Summit (UNCED 1992); the 1968 African Convention on the Conservation of Nature and Natural Resources (also known as the African Convention) (OAU 1977); and other conventions to which Ghana is a signatory. Before 1992, timber royalties in Ghana were said to be the lowest among the tropical African countries. As a result of this, the Forestry Department has been unable to meet the cost of sustainably managing Ghana's timber resources.

With the Fourth Republic coming into office, the Ministry of Lands and Forestry revised most of the old legislation and proposed new legislation, including new regulations to help mobilize revenue for forest management. The *Trees and Timber (Amendment) Act* (1994) increased the fees for property and provided higher penalties for contravention of forestry laws. The Act also introduced export levies to limit the export of certain timber species, thereby regulating the harvest of

endangered and environmentally sensitive timber species. A Collaborative Forest Management Unit has been set up under the Forestry Department to promote community monitoring of timber harvesting in reserves. Furthermore, the Ministry of Lands and Forestry is drafting a 20-year Forestry Development Master Plan for forest resources, forest industries, and wildlife management. The 1994 Forest and Wildlife Policy identified the need to strengthen public participation in forest management.

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## **CHAPTER 5**

### ***Paraguay***

#### ***The Many Faces of Deforestation***

Forests in Paraguay, and in particular the Atlantic rainforests, have been under increasing pressure from development since the beginning of the colonial period. More than half of the original area of the Atlantic rainforests had been degraded by the turn of the last century, and more recently only 1% was found to be still in a virgin state (Wilson 1988). Even the most conservative estimates have placed the remaining forest cover in Paraguay, including secondary growth, at some 6% of the original cover (IUCN 1988a). Threats to this remaining forest cover include fragmentation and acceleration of economic development (large-scale agriculture and ranching projects, commercial logging, and the construction of hydroelectric dams).

Most of Paraguay's tropical moist forests can be found in the eastern region of the country, near the Paraná River. Around 98% of the population lives in this region, giving a population density is 18.6 per km<sup>2</sup>, compared with 0.2 per km<sup>2</sup> in the western, or Chaco, region. Raising cattle is the main activity in the Chaco region. In the eastern region, the soil is more suitable for cultivating crops. Cattle, forestry products, and crops constitute the economic mainstay for the eastern region. Paraguay's main exports are soybeans and cotton (Harcourt and Sayer 1996).

Land-tenure organization in Paraguay has left 95% of the land under private ownership (WWF 1991, cited in Brooks et al. 1992), which constrains the livelihoods of indigenous people and peasant

farmers (Brooks et al. 1992). It also makes state-sponsored forest management very difficult (Harcourt and Sayer 1996). The most valuable timber species, *Amburana cearensis*, is at present threatened and can only be found in a small area in the north.

Estimates suggest that only 15% of the eastern region was still forested in 1991 (Harcourt and Sayer 1996). Logging is generally done indiscriminately, and marketing of wood is uncontrolled. Most of the forest is in private hands, and Paraguay has no policy to promote private forest management.

Agricultural land has a much higher economic value than forested land (that is, in some regions 1 000 USD/ha, compared with 400 USD/ha for forested land), which represents an obvious economic incentive for deforestation. The export of logs was prohibited in 1972, but illegal export still occurs, especially from the northeastern part of the country (IIED and USAID 1985, cited in Harcourt and Sayer 1996). Fuelwood consumption per capita in Paraguay is much more extensive than in other South American countries; more than half of the fuelwood is used by the industrial sector (Harcourt and Sayer 1996).

Despite this unsustainable forest use, Paraguay does provide a legal framework for the forestry sector – the Forest Law of 1973. This law establishes, on paper, fiscal incentives for reforestation; defines forest land as reserves, production forest, or semiprotected forest; and sets up regulations and fines to protect the forest resources. To date, Paraguay has had little political will to uphold this law, and few of the restrictions are applied. Additionally, the law allows people to colonize forest reserves. The mainstream view is that forest lands are unproductive, and therefore little attempt is made to prevent deforestation. Indeed, Paraguay's annual deforestation rate, at 4.7% (WWF 1991, cited in Brooks et al. 1992), is higher than that of any other South American country. Large-scale landowner cut down their own forests to prevent the government from settling landless peasants in the unused forest areas, and this is another cause of deforestation (Harcourt and Sayer 1996).

The alarming rate of deforestation is threatening Paraguay's unique biodiversity. Botanically, Paraguay is one of the least-known countries in South America, although it has an estimated 7 000–8 000 species (Davis et al. 1986, cited in Harcourt and Sayer 1996). Probably, most of its fauna is greatly endangered. Although relatively few mammals, birds, or reptiles are wholly endemic to Paraguay, deforestation threatens a substantial number of rare species, such as the bush dog (*Speothos venaticus*), the margay (*Leopardus wiedii*), and the helmeted

woodpecker (*Dryocopus galeatus*) (Brooks et al. 1992; Groombridge 1993, cited in Harcourt and Sayer 1996). Hunting, primarily of larger species, could also have a serious impact on biodiversity, given the widespread deforestation. Additionally, the illegal trade in wildlife and wildlife products is considerable (Harcourt and Sayer 1996).

At present, the conservation areas in Paraguay are poorly connected, and the objectives are weakly pursued because of the absence of a national environmental or conservation policy (Acevedo and Pinazzo 1991). Conservation efforts in Paraguay fall into three categories. First, the National Parks and Wildlife Directorate (Dirección de Parques Nacionales y Vida Silvestre) administers eight national parks, two protected forests, a national reserve, and a scientific reserve (Acevedo and Pinazzo 1991). Second, within the Paraguayan land-tenure system, various organizations have taken up private conservation initiatives. The Moisés Bertoni Foundation has developed a system of Private Nature Reserves to encourage large-scale landowners to protect the forest adjacent to their *estancias* (farms or ranches). Such forest areas act as a vital refuge for animals driven out of deforested areas. Third, in the last few years, more conservation NGOs have become active in Paraguay, and their importance to environmental education, legislation, and enforcement is increasing.

## **WORKING WITH INSTITUTIONS<sup>7</sup>**

An important part of the work for this project took place through Sobrevivencia's involvement with the National Commission for the Defence of Natural Resources, the Attorney General's Office, and the Environmental Directorate of the General Monitoring Office. Working with these official bodies allowed Sobrevivencia to take part in drafting the pertinent legislation, to lobby for effective implementation, to press for the formation of new working groups, to make joint field trips, and to exchange information from investigations. Sobrevivencia also exposed illegal forest exploitation and other forms of malpractice, filed complaints, and stood up for affected local communities.

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<sup>7</sup> The balance of this chapter presents an executive summary of the report *The Many Faces of Deforestation in Paraguay*, the Paraguay case study in the Chase for Quick Profits project. The original report was written by Sobrevivencia's project coordinator, and the preliminary editing was carried out by the FoEI Secretariat in Amsterdam. The preceding introduction was prepared by FoEI.

## **INVOLVEMENT IN THE LEGISLATIVE PROCESS**

As a result of discussion sessions involving the working institutions and Sobrevivencia, several laws and bilateral agreements have been developed and approved by Parliament. In addition, attention has been focused on improving the implementation of previously approved legislation and agreements.

Particularly relevant to the present project are laws 422 (Forest Law), 515 (prohibiting export and trafficking of logs and beams), 716 (establishing penalties for offences against the environment), 751 (approving Paraguay's agreement with Brazil to cooperate to combat illegal timber traffic), and 816 (adopting measures for the defence of natural resources). Law 515 outlaws log-processing industries within 20 km of the northeastern border with Brazil. Law 816 declares all forests in a zone along the northeastern border with Brazil to be of social and environmental interest and bans deforestation and new agricultural colonization.

## **THE ALTO PARAGUAY CASE**

The Alto Paraguay forest, in the northernmost part of Paraguay, was once a safe refuge for a number of rare and endangered species of fauna and flora because of its isolation and difficult access. But when the Paraguayan government began to promote the Hidrovía project (a massive waterway scheme in the Paraguay-Paraná Basin), the Alto Paraguay forest fell victim to land speculation. Speculators bought land from the government through intermediaries who could legally purchase government land. The land was then resold to Brazilian entrepreneurs, which is illegal, as land purchased from the government cannot be sold for 10 years. The forests were cleared by illegal Brazilian immigrants, using heavy machinery illegally brought into the country.

The speculators arrived by President Wasmosy's private plane, accompanied by the president's bodyguards. According to one source, a person directly involved in the purchase of a large tract of land was one of the President's sons. This illegal colonization scheme, known as Colonización San Gabriel, covers around 1 million ha. The total area so far deforested has been estimated to be in excess of 30 000 ha.

However, a Chamacoco indigenous community near Puerto Caballo had secured legal rights on a 13 500-ha tract within the area chosen for development by the Brazilians. In 1994, as a result of

intimidation and suspected bribing of indigenous leaders, the leaders of this community signed a letter to the Instituto Paraguayo del Indígena (INDI, national institute of indigenous affairs). The letter declared that they had no desire to remain on their land and wanted to move to another site, downstream from Puerto Caballo. INDI then bought a 1 200-ha piece of land for them; however, the Paraguay River floods this land for long periods every year.

In July 1996, during a Floating Seminar organized by Sobrevivencia along the Paraguay River from Corumbá (Brazil) to Asunción, it became clear that all traces of the Chamacoco settlements at Puerto Caballo had been erased. It was confirmed that members of another Chamacoco community had been employed to extract *karanda* y palm trees (*Copernicia alba*) from the abandoned land at Puerto Caballo for a recently established plant for palm-heart processing.

In November 1995, the leaders of the Chamacoco community from Puerto Caballo asked Sobrevivencia for assistance in recovering their lands. This case was under way at the time of the research, despite continuing pressure from INDI and local branches of the ruling political party. The case of Puerto Caballo was also presented to a panel in the Brazilian Pantanal in July 1996.

The deforestation process in the area resulting from the illegal colonization in Alto Paraguay breaches law 422 (Forest Law), law 716 (establishing penalties for environmental offences), the law of the National System of Protected Areas, and land-sales regulations. At the time of writing, a legal suit was being prepared. This case may have serious implications for high government officials, including, according to information not yet fully confirmed, the President of Paraguay.

Activities planned for the future include attempts to secure indigenous territories in the area and to stop illegal deforestation. Sobrevivencia will also support the joint implementation of indigenous and protected areas by Paraguay and Bolivia.

## **ILLEGAL LOG TRAFFICKING INTO BRAZIL**

The last remaining tracts of the Paraná subtropical humid forest in northeastern Paraguay are severely affected by illegal log trafficking to Brazil. In May 1996, Sobrevivencia was able to help an Ache indigenous community in Canindeyu province defend itself against the threat of an invasion by a group of landless farmers. The invasion was instigated by Brazilian timber entrepreneurs operating in the border

region. The leaders of this community have since asked Sobrevivencia to help develop sustainable land-use plans for their forest.

An important event was the public debate on laws 515, 716, and 751, held in Canindeyu in May 1996. In addition to Sobrevivencia, participants included the Governor of Canindeyu, the Mayor, other local authorities, owners and employees of wood-processing firms in the area, officials from Asunción, and some 300 community members from both countries. The meeting concluded with an urgent appeal to the government to create development alternatives for the area. Participants recommended tax incentives for economic reconversion to replace the timber industry, and they also called for public education to make the local population aware of the importance of forests.

On 26 June 1996, the Minister of Agriculture and Livestock signed Resolution 403, to suspend the National Forest Service's control of log transports for 15 days. This decree, illegal because it contravened the Forest Law, resulted in a huge increase in illegal log trafficking. Implicated officials were from the National Forest Service and from the Vice-Ministry of the Environment, the Vice-Minister of the Environment, and the Minister of Agriculture and Livestock. Partially as a result of Sobrevivencia lobbying, this illegal action was made the subject of meetings of the National Commission and sessions with the presidents of the National Congress and the Supreme Court of Justice.

The Minister of Agriculture and Livestock, the Vice-Minister of the Environment, and the Director of the National Forest Service were all summoned to a hearing in Parliament, where they were strongly criticized. An ad hoc commission was appointed to follow up on deforestation and log-trafficking convictions; members of this committee include the presidents of both the National Congress and the Supreme Court of Justice and a Sobrevivencia representative. Lobbying by Sobrevivencia for a political trial against the Minister of Agriculture and Livestock was not successful. Prosecution of officials of the Ministry of Agriculture and Livestock for illegal log trafficking was still pending at the time of writing. Arrest orders had been issued for two officials, who were fugitives from justice.

## **RECOMMENDATIONS**

Based on the findings of this project, Sobrevivencia will campaign for the following actions to address illegal forest exploitation:

- Institutional reform and capacity-building;

- Development of the necessary legal instruments;
- Efforts to raise awareness among those responsible for implementing these instruments;
- The initiation of pilot court cases to establish jurisprudence; and
- Public education.

More specifically, Sobrevivencia recommends the following actions:

1. Create a new Ministry of Environment so as to raise the responsibility for environmental policies to higher levels in Paraguay's administrative hierarchy.
2. Reinforce and expand legislation related to forests. For example, designate a no-deforestation zone along the border with Argentina, similar to the exclusion zone along the border with Brazil.
3. Organize more workshops to inform officials in the legal system and in the enforcement agencies about the importance and potential of environmental legislation. (A high-level commission, with representatives from all three branches of the state, has already started to organize such workshops for judges and public prosecutors; Sobrevivencia is planning similar workshops for the special section of the National Police that is in charge of enforcing environmental laws.)
4. Initiate pilot court cases related to environmental crimes. These cases should involve only judges and prosecutors who have been identified as sensitive and honest. (Sobrevivencia is investigating the feasibility of filing such cases in one or both case-study areas described in the report.)
5. Rapidly establish the proposed protected areas, but expand them with biological corridors. Give these corridors, as well as the legal indigenous territories, protected status. This will provide legal protection to ecologically and culturally sensitive areas. In addition, give legal recognition to more Ayoreo and Chamacoco territories in the Alto Paraguay region.
6. Launch a long-term public education campaign on the environment, particularly on the values of forests.

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## **CHAPTER 6**

### ***The Tropics***

#### ***Comparing the Countries Studied***

This chapter mainly discusses the similarities and differences in the overall context of illegal logging and timber trade in the four countries studied.

Key data on the forest cover and timber trade of each country are presented in Table 2. Some of the most striking conclusions to be drawn from Table 2 are the following:

- Paraguay has the highest deforestation rate;
- In countries with lower deforestation rates (Brazil, Cameroon), most logging takes place in primary forests (about 90%, versus 19% in the other two countries); and
- The African countries export more logs than processed timber, whereas in the Latin American countries the reverse is the case.

Local – including indigenous – forest-dependent communities suffer a wide range of negative consequences from illegal practices but are sometimes involved in illegalities themselves. This is a delicate issue that merits specific attention and is therefore analyzed in more detail in the section entitled – Local and indigenous communities and illegal logging.

The chapter ends with brief sections on the specific impacts of illegal practices and the role of local NGOs.

**Table 2.** Key data concerning forests and timber from the four case studies.

	Brazil	Cameroon	Ghana	Paraguay
Natural forest cover, 1990 (1 000 ha)	56 1 107	20 350	9 555	12 859
Annual deforestation (1 000 ha)	3 671	122	138	403
Annual logged:				
Closed forest (1 000 ha)	1 982	333	11	49
Primary forest (%)	93	89	19	19
Industrial roundwood (1 000 m <sup>3</sup> )				
Production	77 714	2 708	1 101	3 106
Export	262	457	201	2
Processed products (1 000 m <sup>3</sup> )				
Production	21 180	733	590	425
Export	1 226	82	170	249
Ratified CITES	Yes	Yes	Yes	Yes
Ratifies CBD	Yes	Yes	Yes	Yes
ITTO member	Yes	Yes	Yes	No

Source: Forest cover, deforestation, and logged area: WRI (1995); timber volumes for Africa: Sayer et al. (1992); timber volumes for South America: Harcourt and Sayer (1996).

Note: This table uses a broad definition of forest and includes deciduous woodlands. CBD, Convention on Biological Diversity; CITES, Convention on International Trade in Endangered Species of Wild Fauna and Flora; ITTO, International Tropical Timber Organization.

## CONTEXTUAL FACTORS: SIMILARITIES AND DIFFERENCES AMONG THE FOUR COUNTRIES

The four countries studied in this FoEI project present an interesting array of contexts. Obviously, the cultural setting and specific characteristics of the actors make every case unique to some extent. The following discussion of similarities and differences serves as a brief introduction to the various factors that make up the social, economic, political, and environmental frameworks within which the problem should be analyzed and addressed. In other words, these contextual factors are essential points of attention for individuals, NGOs, and agencies in other countries that wish to address the issues of illegal logging and timber trade and, especially, contribute to solutions.

### SIMILARITIES

Brazil, Cameroon, Ghana, and Paraguay have several basic elements in common, although they do not have these to the same degree. Each of these elements is discussed below.

## **Rapidly increasing exploitation**

Each of the countries is experiencing heavy or at least rapidly increasing exploitation pressure on its natural-forest and timber resources. Macroeconomic disturbance, rural poverty, insecure land-tenure rights, and SAPs imposed by development banks and aid agencies all combine to produce this pressure.

## **Conflicts between local forest-dependent communities and logging interests**

Conflicts often arise between local forest-dependent communities and the loggers. The loggers, however, are often well protected by political connections. The most frequent reasons for the conflicts are the following:

- Loggers violate legal or customary rights and local cultural traditions (for example, cutting sacred groves);
- Logging directly threatens the resource base on which the local people depend for subsistence. Their multipurpose trees are cut down; their land is eroded and their streams silt up; they are exposed to an increased risk of forest fires; and they face shortages of fuelwood.
- Local communities are given no share, or a very little share, in the economic benefits from logging and timber exploitation. In other cases, loggers do not comply with earlier agreements, or they fail to honour commitments they made to communities.

## **Conflicts between local communities and enforcement agencies**

Conflicts also arise between the local communities and enforcement agencies. A variety of issues are behind these conflicts:

- Local people feel that forestry laws and regulations simply go against their own interests. This can apply to forest conservation laws or regulations for forest-management regimes.
- Enforcers fail or refuse to protect the local people's legal rights or even their physical health from the loggers' violations and threats. In some cases, enforcers are involved in such violations themselves.

- Enforcers do not act without bribes or other favours. Local residents see that enforcement favours logging interests and related commercial or political linkages.
- Local residents are themselves involved in illegal forest exploitation.

### **The daunting task of enforcement**

In all these countries, enforcement agencies face a daunting task, with totally inadequate resources. That situation, exacerbated by a lack of political will and of commitment to the legal system and to forest protection at the highest levels, can lead to frustration, corruption, or illegal practices among enforcers. Forest rangers are often under physical threat – the loggers typically are better armed. Local people are of course also abused or killed.

### **Threatened protection**

Protected areas (including indigenous reserves) are particularly threatened, and this is for two reasons:

- These areas contain the last or the most accessible stands of commercial-timber species whose populations are dwindling; and
- Logging, and illicit practices especially, simply clash with conservation objectives for these areas.

### **Recent legal and policy reforms**

The four countries have recently adopted legal and policy reforms that should improve control over the forestry and timber sector. In many cases, however, these reforms present critical implementation challenges: because of the involvement of opposing interests, the reforms tend to be based on ambiguous and sometimes impracticable compromises. In all four countries, some individuals and departments within governments and administrations have a sincere interest in addressing problems related to illegal forest exploitation, but they face formidable adversaries with opposing objectives.

It is also interesting to note that national-certification working groups have been set up in Brazil, Cameroon, and Ghana.

## **Established environmental and social NGOs**

In each of the four countries, environmental and social NGOs are at least tolerated by the government, and in most cases they are still exploring the limits of their political space. The NGOs participating in this project are in a position to do at least some investigative work on sensitive issues. They have access to a (relatively) free local press and are able to maintain links with sympathetic departments and individuals within administrations (in Brazil and Paraguay, even direct cooperation with certain institutions has been possible).

## **DIFFERENCES**

In a number of ways the socioeconomic and political contexts of deforestation and forest degradation and the role of logging differ among the four countries.

### **Extent of remaining natural forest cover**

Brazil and Cameroon still have extensive natural forest cover, whereas Ghana and Paraguay have lost most of theirs. In Ghana and Paraguay, then, this situation creates both a national conservation priority and more concentrated exploitation pressure on the remaining unlogged forests. Effective enforcement of forest-protection regulations becomes an even more critical issue.

### **Relative importance of the international trade-and-aid dimension**

In the two African countries, the links between the problems (overexploitation of forests and illegal practices) and the international trade-and-aid factor (trade control by TNCs and international aid policy, such as SAPs, multilateral development banks, bilateral investment schemes) are much stronger.

### **Logging as the primary causal factor in deforestation**

Logging for the timber trade is a more dominant primary cause of deforestation and forest degradation in the two African countries. In Brazil and Paraguay, timber extraction is more intertwined with other factors (colonization, large-scale agricultural expansion, land speculation), although the relative importance of logging is growing. During the 1980s, timber exports from Africa dropped slightly, but those from Latin America increased more than sixfold (WRI 1994).

## **Strength of traditional social and cultural structures**

Traditional social structures, land-tenure systems, arbitration rules for conflicts, and customary laws have a stronger general presence in Ghana than in the other three countries. In Ghana, fewer of these have been replaced by modern structures imposed by a central government. This should be an important consideration when strategies are developed to involve local communities in the struggle against illegal logging. At the local level, a process of establishing the legitimacy of modern structures—including the state itself—over existing customary structures is taking place in all four countries.

## **The indigenous dimension**

In Brazil and Paraguay, the role of indigenous peoples in the context of illegal logging is quite distinct (mostly as specific victims; occasionally as participants in illicit practices themselves), whereas in Cameroon and Ghana, their role is far less distinct than that of the nonindigenous forest-dependent communities.

## **Demographic pressure on forest resources**

Demographic pressure in areas affected by illegal logging is an important factor in all countries, although this can be very local. Resident people can be victims of a range of associated illegal activities or abuse by enforcement agents. An unregulated logging frontier also creates a turbulent social dynamic, with waves of colonists or logging workers who have to survive on small-scale farming by clearing the logged-over forest. The extent to which they have to share space and resources with the original residents varies considerably between countries: pressure is high in Ghana but varies in the other three countries.

## **Press freedom and judicial independence and professionalism**

Press freedom and judicial independence and standards are highest in Brazil (although sometimes the most flagrant forms of abuse and illegality may go unpunished) and less stable in the other three countries. Conditions in Cameroon are the most limited. This has obvious consequences for the investigative and research strategies of the participating NGOs. The potential for legal and openly political action against illegal logging, malpractice in trade, and abuse of power is greater in the two Latin American countries than in the two African countries.

## **Economic factors**

Domestic factors and market conditions play a larger role in Brazil than in the other three countries. Despite its export orientation, Brazil has a much stronger economy and a more developed, much larger internal market.

## **LOCAL AND INDIGENOUS COMMUNITIES AND ILLEGAL LOGGING**

In all four countries, forests are home to indigenous groups, tribal people, and other forest-dependent human communities. These people are the most direct victims of illegal logging and other associated illegal practices. The fact that traditional land rights are not legally recognized is a major factor, but many incidents of abuse and violent conflicts with loggers occur even with such recognition. The most tragic cases have been documented in Brazil: dozens of Amerindians have been killed by loggers, and the culprits have usually gone unpunished (Dudley et al. 1995). Conditions amounting to semislavery have been found in association with logging in Brazil. Expulsion from ancestral lands is more common in Brazil and Paraguay.

Local communities have also been found to play a role in unsustainable exploitation and illegal forest exploitation. The concept of illegal exploitation by indigenous peoples who have been sustainably using forests for countless generations may seem rather strange. The main reason for their involvement in illegal exploitation is that colonial and subsequent independent central governments imposed formal laws and regulations on these people, usually without taking any account of customary laws and land-tenure systems, without legal recognition of their rights, and without any consultation.

Ongoing cultural contacts with modern civilization alone undermine traditional values and lifestyles and associated sustainable practices. Governments in these countries even actively started to integrate indigenous people into modern society, for both cultural and economic reasons. Less euphemistically, this means dispensing with anything that may give their country a backward image. These governments wanted in particular to gain control of these communities and get them out of the way, as they form an obstacle to the commercial exploitation of the natural resources that indigenous peoples have been using for their survival for so long. The importance in this context of national elites and domestic and foreign companies varies from

country to country, but they are eager to turn these resources into cash, with the blessing of international development agencies and neoliberal-economic government advisers. Companies interested in commercial exploitation tend to ignore the interests of local communities, as they feel their own exploitation of the forests is legitimized by agreements with central governments that have shown so little interest in these communities.

To indigenous communities, the state has come to represent an alien force threatening their land and resource security and offering little in return – hardly any economic benefits or employment opportunities. Instead, the communities find themselves having to compete with new immigrants and cope with the environmental degradation that undermines their subsistence base. Small wonder that they see the formal laws as part of the same system that works against their interests. When enforcement is almost absent and successive waves of immigrants take advantage of that situation, little incentive is left for indigenous communities to maintain their traditional sustainable forms of land use or to worry about respecting formal laws.

This process has taken place in all four countries in this project, with forests and timber being the examples of the natural resources targeted for commercial exploitation. With respect to securing land and resource use rights for their indigenous peoples, Brazil and Cameroon have theoretically made some progress recently. The reforms are quite modest, however, and implementation faces many obstacles.

Land-tenure security alone will be insufficient to put an end to illegal practices (as the situation in, for instance, Papua New Guinea illustrates). But it is a necessary precondition, and in the case of indigenous peoples, it is a matter of justice. It must be accompanied by incentives and policy instruments that give local communities an interest in protecting their forests from illicit practices.

## **SPECIFIC IMPACTS OF ILLEGAL LOGGING AND TIMBER TRADE**

The negative impacts of illegal logging are not inherently different from, or worse than, the impacts of legal activities. It is also a matter of scale; illegal felling of a few individual trees is obviously much less damaging than a large-scale legal clear-cut. What is specific to illegal activities is that they aim at maximizing profits by eliminating or avoiding costs that would be incurred if regulations were respected.

This means that illegal practices are a threat to any traditional regulatory mechanism that has ensured sustainability in the use of forest resources. For the same reason, illegal practices undermine legislation that aims

- *To conserve species, habitats, or ecological processes* violations include the logging of legally protected moabi trees in Cameroon, brazil nut trees in Brazil, trees in protected areas in Paraguay, and sacred groves in Ghana;
- *To ensure sustainable forest management* violations include the failure to implement legally required forest-management plans in Brazil, Cameroon, and Ghana;
- *To defend land- and resource-use rights of local communities* violations include timber extraction from indigenous reserves in Brazil and Paraguay;
- *To protect labour rights, health, and safety* violations include the semislavery in Brazil; and
- *To require compensation for damage from logging operations* violations include the failure to pay compensation to small cocoa farms near logging sites in Ghana.

Illegal logging and timber trade can also create a climate of lawlessness and corruption in which other illegal practices not directly related to timber or even to forests can thrive. Examples are poaching and trade in protected wildlife species, smuggling (drugs, arms), money laundering, illegal mining, and a variety of human-rights abuses.

The case studies confirm once more that illegal forest exploitation and timber trade represent a great economic loss to the state, reduce the resource capacity of forest departments, stimulate corruption, prevent other stakeholders (usually local communities as a whole) from sharing in the benefits of forest exploitation, and mean the loss of the benefits that would have accrued from sustainable and more equitable exploitation.

## **THE IMPORTANCE OF LOCAL NGOS AS WATCHDOGS**

The current project has shown that it is essential to have watchdogs to guard forest exploitation in developing countries, to monitor both logging companies and the authorities. In many countries, international

NGOs (Greenpeace, EIA, WWF) play a central role, but strengthening the capacities of national NGOs should receive more priority. Such a move would facilitate continuity in monitoring activities, make it easier to create alliances among key national and local actors, and increase the acceptance of critical messages by the general public, the press, and progressive politicians.

The grass-roots orientation of the national NGOs in FoEI puts FoEI in an appropriate position to play such a watchdog role.



## **CHAPTER 7**

### ***Conclusions and Recommendations***

#### ***Arresting the Chase for Quick Profits***

This final chapter presents conclusions and recommendations deriving from the four country case studies. Some of these conclusions and recommendations also reflect the research from other publications and studies cited in the earlier chapters of this book.

#### **CONCLUSIONS**

1. Illegal logging and illegal timber trade seriously threaten the development of SFM. As long as illegal practices continue, SFM is not possible. This conclusion is based on the following considerations:
  - ◆ One of the prerequisites for effective SFM is the successful implementation of regulatory mechanisms. These mechanisms include traditional systems of regulated forest resource use by traditional communities; formal local and national legislation; certification schemes and codes of conduct; and appropriate international instruments (charters, conventions, treaties).

Illegal logging and illegal timber trade, by their very nature, undermine the credibility and feasibility of such regulatory mechanisms, and this may affect not only the use of natural resources in general but also the rights and cultural integrity of forest-dependent human communities.

- Illegality and poor enforcement create a competitive disadvantage (higher costs) for SFM practices or even for companies prepared to just respect all relevant laws and pay their taxes.
- Illegality and malpractice cause economic damage to the producing country in the form of uncollected forestry-related charges, lost foreign revenues, and foregone forest resources (a loss to potential legal exploiters). Uncollected taxes represent a lost financial resource that could have been used to maintain adequate forest management and control administrations.
- Strategies to combat illegal logging and timber trade will have little effect as long as governments are unwilling to address one of the underlying causes: the precedence of trade and economy over the environment in currently dominant economic systems. Key constraints are the following:
  - The uncontrolled power of political and business elites, who are only interested in short-term gains, particularly in developing countries;
  - Liberalization and deregulation of national and international trade taken as goals in themselves, weakening the political priority and resources given to enforcement of environmental legislation;
  - Undervaluation of forest values other than timber production, a position that allows the externalization of environmental and social costs to continue;
  - The absence of international legal liability for environmental damage caused by private businesses;
  - The shift of control over forest resources from governments and local communities to the private sector;
  - Concentration of economic power in international industry, which surpasses the powers of authorities in developing countries;

- Adjustment policies pressuring developing countries to generate foreign revenue by exporting their natural resources at the lowest possible price; and
- Unsustainable consumption patterns driven by producers' interests and by the principle of perpetual growth, rather than the imperative of satisfying human needs within limits set by the environment.
- There is an urgent need to
  - Strengthen forest-protection legislation and increase penalties for infractions;
  - Reinforce the mandates and resources of enforcement agencies, as well as the motivation and training of their personnel; and
  - Legally recognize customary land-tenure systems or provide assistance in cases where these are no longer sustainable.

Multilateral aid and investment programs should give higher priority to assisting developing countries in these respects.

Mandates of forest departments in the case-study countries frequently overlap or conflict with those of other institutions. Enforcement agencies are often severely understaffed and lack the required equipment (too often, inspectors depend on transport and accommodation facilities provided by logging companies). Their personnel, especially field inspectors, are underpaid, poorly trained, and of insufficient rank to exert effective authority.

- The battle against illegal logging and illegal timber trade calls for an effective international monitoring and reporting process. It also calls for continuous, independent monitoring by NGOs with suitable expertise and with local-community participation, and it calls for donor support to provide these NGOs with the necessary resources. However, NGO involvement should not become an excuse for governments to abdicate their responsibilities.

Because of the international dimension of the issue, international networking is necessary. The goal of such networking is to exchange information on illegal-trade flow patterns, effective countermeasures, success stories, and internationally active agents implicated in illegality and malpractice. Networking

between neighbouring countries is essential because of the higher incidence of illegalities in border regions, especially when laws and regulations differ considerably between countries.

The FoEI project shows that for NGOs to be successful in monitoring, it is essential that they identify and cooperate with allies within government, parliament, the judicial system, enforcement agencies, the industry, and the press. It is also essential that they form coalitions with other NGOs and affected communities opposed to such illegal practices. Regional networking would enable NGOs to campaign more effectively against internationally active agents involved in illegalities, who force countries in the same region to compete against each other by progressively lowering their environmental, social, and financial standards.

- Improvements are urgently needed in national-level implementation of existing international environmental agreements. Countries should give priority to defining concrete national targets, strategies, and timetables; strengthening sanction mechanisms; ensuring transparency in the national drafting and negotiation process; and providing adequate resources for enforcement.

CITES, CBD, and the ILO's Indigenous and Tribal Peoples Convention are of particular importance. For the Latin American countries, the 1940 Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (also known as the Western Hemisphere Convention) is relevant, as it includes an article on restrictions in international trade of protected fauna and flora (PAU 1943). For the African countries, the 1968 African Convention on the Conservation of Nature and Natural Resources (OAU 1977) must be mentioned.

- International terms of trade, national legislation, tax systems, and land-tenure arrangements in the project countries contain many technical disincentives and lack incentives for sustainable land use, and for SFM in particular.

An example of a tax incentive is land-use taxation that applies lower rates, or even negative rates (= subsidies), for land uses that maintain nonmarket values (for example, biodiversity conservation, watershed protection) or that restore ecosystems (for example, natural-forest regeneration). The

opposite is more often the case in the four case-study countries, and this represents a serious disincentive.

An example of a trade incentive is discriminatory taxation on imports or sales of wood products, according to harvesting or processing methods; for example, a zero tax on certified products would be an incentive. Channeling forest-related charges and taxes into the state treasury without earmarking them for effective forestry control on the ground or for investment in SFM acts as a disincentive.

Small-scale farmers' acquisition of de facto property rights by turning forest into productive farmland acts as a disincentive for logging companies to practice long-term forest management, because the concessionaire has no guarantee of second and further harvests.

- Independent certification of timber and wood products is an indispensable market mechanism to discriminate between sustainably and unsustainably produced goods, and as is inherent in the first principle of the Forest Stewardship Council (FSC 1996) to guarantee that the product has been legally harvested, processed, and traded.

Although certification is primarily a market mechanism, any government that is serious about SFM can play a role by creating a favourable legislative and tax framework for certified products (see previous conclusion).

The rationale for this approach is that it is unacceptable to have a buyer of a sustainable product pay for internalized costs while the buyer of an unsustainable product unloads these costs on society or on future generations. In other words, it is unfair to expect responsible producers to depend on green ethics alone to persuade consumers to buy their products.

An additional criterion to be incorporated into certification schemes is reference to an effective national forest policy with a balanced allocation of the entire forest estate to various land-use categories (biodiversity conservation, timber production, nontimber-product extraction, indigenous territories, etc.).

- Illegal logging and illegal timber trade are often interwoven with other illegal practices. This poses a threat to human rights, nature conservation, and the overall credibility of legislation and enforcement agencies.

Examples from the project are the violation of indigenous land rights, exploitation of workers in the forest and wood industries, illegal land ownership and speculation, cross-border smuggling of other goods, poaching, and wildlife trade.

## **RECOMMENDATIONS**

### **ON INTERNATIONAL LEGAL INSTRUMENTS**

1. Trade provisions in international environmental agreements should be given sufficient status to prevent them from being undermined by international trade agreements such as GATT and by regulations such as those of the WTO.
  - ◆ The WTO regulations should be reviewed and, where necessary, reformed to protect trade provisions in environmental agreements.
  - ◆ WTO regulations should be reformed to allow for trade restrictions in case of illegal-trade practices.
2. An interagency task force should be established to review existing environmental and trade instruments with provisions applying to the trade in forest products to determine their potential to eliminate illegal practices and the constraints on their effective implementation.

NGOs with suitable expertise should be allowed to participate on the task force to help prevent the review from being paralyzed by political sensitivities. This task force should be given access to all relevant sources of information so it can make a global assessment of the extent of the illegal international trade in forest products, and then it should present concrete recommendations for improving these instruments.

Among the mechanisms that should be reinforced or added to these existing instruments are the following:

- ◆ Internationally recognized forest-product chain-of-custody tracking systems;
- ◆ Reciprocal import bans (by importing countries) to support the export bans of individual exporting countries;

- Prohibition of the import or export of forest products harvested or shipped in violation of the laws of the product's country of origin or in violation of the recognized customary property rights of indigenous and other forest-dependent communities;
- A mechanism establishing international legal liability of private companies involved in violations; and
- Incentives for the active involvement of local communities in monitoring and curtailing illegal trade.
- The status of the ILO Indigenous and Tribal Peoples Convention should be raised, and more countries should be persuaded to become signatories.

The recommendations made to the ITTO in the 1992 TRAFFIC international document on illegal logging in the Asia Pacific region (Callister 1992) are supported. ITTO should

- Compile and distribute information on tropical timber import and export restrictions;
- Adopt critical review procedures of statistical data already provided by member states to the ITTO Secretariat, to identify possible illegal trade;
- Assess its policy and project decisions for their implications for illegal trade and timber extraction – avoid encouraging these illegal practices and instead promote an end to them; and
- Seek a waiver from WTO regulations that ban trade restrictions, using the exemptions allowed if they meet the objectives of intergovernmental commodity agreements.

### **ON TRADE REGULATION**

- A process of radical reform in the terms of international trade should be initiated that gives precedence to the environment over freedom of trade. This process must be gradual, but made credible with the implementation of targets and timetables.

Reforms in international terms of trade should include mechanisms to compensate developing countries that adopt sustainable models of development but have to compete with countries that follow unsustainable models.

The continuing expansion and concentration of power in the hands of transnational corporations (also evident in the forestry and timber-trade sector) calls for an international system of restrictions, controls, and legal accountability for their operations.

The question of whether policy reforms restrict the freedom of trade in forest products should be subordinate to the question of whether these reforms contribute to SFM. This could mean that the environmental costs of unsustainable forest exploitation are incorporated into the market prices for timber and other wood products. This calls for a drastic review of some of the forest principles adopted at the 1992 Earth Summit (Principle 13a, trade in forest products should be ruled by nondiscriminatory rules, and Principle 14, no unilateral restrictions or bans on international trade in forest products ) and of certain elements in Agenda 21 (3rd Programme Area, opposing unilateral restrictions or bans contrary to GATT and other trade agreements and calling for the application of market mechanisms to address global environmental concerns ).

- Market access of certified products should be facilitated by specific policy, legislative, and tax incentives, without unnecessary delay. Compliance with national forest-related laws and international treaties to which a country is a signatory should be one of the criteria for certification. This recommendation can be seen as a means of internalizing external environmental and social costs and should not be misunderstood as defending country certification (see conclusion 7 for further explanation).
- Timber-trade organizations should not allow individuals or companies convicted of illegal-trade activities to become or remain members.

Timber-trade organizations should develop a code of ethics that includes an imperative to desist from all illegal and fraudulent activities in the forestry sector. Membership should only be open to companies and individuals abiding by this code (based on Callister 1992).

These recommendations aim to use the potential for good companies to put pressure on bad ones. The reasons for applying such pressure are that destructive and illegal practices tarnish the reputation of the entire industry; create unfair competitive advantages; and undermine the resource base for the entire industry.

## ON INTERNATIONAL AID AND INVESTMENT PROGRAMS

- International aid and investment programs should be critically evaluated to reveal components that may increase the level of illegal activities; such components should be replaced by measures that counteract illegalities.

International programs should facilitate information exchange on successes and failures in national enforcement strategies.

To enhance transparency and accountability of decision-making within multilateral aid and assistance agencies, countries should be required by national law to have their representatives to these agencies make their positions public.

Before international forestry aid and investment programs are implemented in recipient countries, an assessment should be done of the current or potential extent of illegal logging and trade in forest products. The assessment should lead to

- The formulation of measures to prevent abuse of power and corruption; and
- The identification of specific development needs related to the struggle against illegal practices this should include support for community ecoforestry projects as an alternative to large-scale industrial logging; increased community control over forest resources would act as a buffer against illegal practices.

The assessment exercise should be transparent and involve local-community representatives, independent experts, and NGOs with a proven record of monitoring these or similar practices. The assessment should cover a number of elements that reflect both political will and monitoring and control ability:

- The state of implementation of government forest policy;
- Quality and practicability of legislation and consequent enforcement constraints (criteria are consistency with SFM, implementability, and absence of ambiguities);
- The status of customary law and traditional forest land tenure in relation to their modern equivalents;

- The identification of incentives and disincentives in policy and legislation;
- Corruption levels and the effectiveness of anticorruption strategies;
- Level of undue political influence in, for example, issuing forestry concessions and enforcing regulations;
- Mandates, relative power, and resources of enforcement agencies;
- Local practices and attitudes toward forest exploitation and related legislation; and
- Extent of other illegal activities (parallel to illegal forest exploitation) and the potential for coordinated counteraction (for example, against drug trafficking, money laundering, poaching, and illegal wildlife trade).
- International forestry-development programs should support forest departments and enforcement agencies implementation of policies and measures mentioned in recommendation 11. They should also
  - Facilitate cooperative arrangements between the authorities of neighbouring countries, given that illegal forest exploitation occurs more frequently in remote border regions (exploiters take advantage of differences in forestry regulations between neighbouring countries) and that these areas may also offer easy escape routes for the culprits and provide good opportunities for smuggling; and
  - Provide financial resources for the participation of other actors (NGOs, local population) in monitoring activities.
- International forestry-development programs should be part of an integrated package of forest-management assistance, with due consideration to the conservation of forest quality (biodiversity and ecological processes) and to the protection of the land and user rights of traditional communities. Effective protection of these rights requires full participation of these communities at all stages of program development, implementation, and monitoring.

## ON NATIONAL LEGISLATION AND ENFORCEMENT

- Governments should provide for a critical assessment of forestry and trade-related policies, laws, and other regulatory instruments and for ongoing monitoring of their enforcement. The assessment should pay special attention to the extent to which illegal logging and illegal timber trade are encouraged or facilitated. NGOs with suitable expertise, independent experts, and representatives of local communities committed to SFM should participate in this assessment. The findings of such assessments should be used to reform policies and regulatory instruments. Practicability is a vital criterion; it is sometimes possible to make existing laws simpler, rather than adding more legislation. This assessment should be transparent and respect the public's right to know and to participate in public hearings.

Examples of disincentives to comply with forest laws and regulations or factors facilitating illegality are

- Short concession periods, which stimulate maximization of profits and discourage investment in long-term returns;
- Too many links in the chain from operating concessions to exporting timber, which tends to create intransparency;
- Penalties so low that they fail to act as deterrents;
- Absence of government (forestry or customs) officials when logs are shipped for overseas transport;
- Timber processing licences issued to companies without requiring proof that they come from legal supplies; and
- Royalty systems based on volumes of cut timber (stimulating underdeclarations), instead of on standing volumes.

Reforms that can counteract illegalities logically follow from the opposite of these disincentives.

- Governments must equip forest authorities with adequate human, technical, and financial resources, commensurate to the expected enforcement loads, with special incentives for personnel and severe sanctions against corruption and abuse of power. This refers to adequate salary levels all the way down to the lowest ranks; performance incentives for field personnel; sufficient means of transportation, communication, and information processing; and other technical resources to enable

forestry staff to operate independently. Field staff must be of sufficient rank in relation to the staff of logging companies to be able to exert authority. They must also receive adequate backup support from central offices.

Governments should provide proper training for forest department staff, with emphasis on the lower ranks and field staff and the principles of SFM; multiple values of forests; traditional land tenure, local community rights, and community relations; and forest laws and regulations.

- Governments should ensure that revenues generated by levies and taxes on forest exploitation and timber trade are high enough to cover at least the costs of effective enforcement and collection and should earmark forest revenues for reinvestment in SFM and effective enforcement.

Penalties for illegal logging and illegal timber trade should be severe enough to deter potential offenders.

- Parties to CITES and CBD should implement these conventions in national policy and legislation without delay and improve the enforcement of the corresponding national laws. Article 8 from the CBD should receive high priority.

### **ON LOCAL-COMMUNITY PARTICIPATION**

- Governments should develop and implement innovative incentives to interest local communities in forest-stewardship arrangements; cooperation in preventing and monitoring illegal forest exploitation should be linked to concrete benefits. Legislation should provide the necessary land-tenure security and resource-use rights to local communities and recognize indigenous peoples' rights as necessary precondition.

Communities should participate in the development of such arrangements. Optimum use should be made of failures and successes elsewhere, which have usually been documented in a broad array of reports and publications by NGOs, development agencies, and scientists.



## **APPENDIX 1**

### ***Resolution on Illegal Timber Trade***

#### ***Adopted at the 1996 IUCN World Conservation Congress***

#### **CGR1.48-REV1: ILLEGAL INTERNATIONAL TRADE IN FOREST PRODUCTS**

NOTING that forest products including non-timber forest products are in many countries harvested and exported in violation of national and provincial laws and regulations, and of the recognised customary rights of indigenous peoples and other forest-dependent communities;

RECOGNISING that these activities are counterproductive to the attainment of sustainable forest management and result in a failure to capture critically-needed funds required for such management;

DEFINING the illegal international trade in forest products as the cross-border movement of forest products harvested, transported, bought or sold in violation of the laws of the products' country of origin (including laws recognising the customary rights of indigenous peoples and other forest-dependent communities), or in violation of international agreements signed by the country of origin;

RECOGNISING that resolving the illegal international trade problem is first and foremost in the hands of national governments, who are responsible for monitoring forest management, tracking forest products trade, and enforcing national laws, and in the hands of forest products corporations and professional trade organizations, who are responsible for internal trade monitoring mechanisms and codes-of-conduct;

FURTHER RECOGNISING that resolving the illegal international trade problem may also be facilitated through multi-lateral bodies and agreements such as CITES [United Nations Convention on International Trade in Endangered Species of Wild Fauna and Flora];

NOTING that additional mechanisms to help countries effectively monitor, track and curtail illegal trade are required in many countries as well as at regional and global levels,

The World Conservation Congress at its 1st Session in Montreal, Canada, 14-23 October 1996:

1. CALLS UPON ALL IUCN [International Union for the Conservation of Nature] members, States and government agencies, international organizations, corporate sector entities and trade associations co-operatively to support and promote:
  1. a global assessment of the extent of the illegal international forest products trade;
  2. the research and development of effective means of monitoring trade of forest products such as chain of custody tracking in order to curtail illegal activities;
  3. create incentives for the active involvement of local communities in monitoring illegal international trade;
2. URGES the UN [United Nations] Intergovernmental Panel on Forests to address the issue of illegal trade in forest products in its recommendations to the UN Commission on Sustainable Development.

Source: IUCN (1996)



## **APPENDIX 2**

### ***Friends of the Earth International***

*Friends of the Earth International (FoEI) is a unique, decentralized federation of NGOs from all over the world. FoEI members campaign on the most urgent environmental and social issues of our day, while simultaneously catalyzing a shift toward sustainable societies.*

Founded in 1971, FoEI has grown to include about 60 national member organizations in as many countries, thereby uniting nearly 5 000 local grassroots activist groups worldwide. The combined number of members and supporters of Friends of the Earth (FoE) groups is close to 1 million, and together the FoE offices around the world employ close to 700 full-time staff members.

FoEI's decentralized, democratic structure is unparalleled in the global environmental movement. Member groups share core values and visions, allowing them to work together in a spirit of mutual trust and respect. All members have an equal say in policymaking within the main decision-making body, the Annual General Meeting (AGM). The AGM elects an Executive Committee, which oversees the work of a small international secretariat in Amsterdam. European member groups are organized in a regional network, FoE Europe, which has an office in Brussels.

FoEI's strength is the synthesis of the local with the global. With members in every corner of the world, cooperation is possible between

groups in the East, West, North, and South on critical issues and campaigns. In addition to international collaboration by FoE groups in the areas of forestry, ozone depletion, wetlands, biosafety, and desertification, current FoEI campaigns are taking place on the following issues:

- *Climate and energy* focusing on the acceleration of the process toward binding international commitments on climate change and the simultaneous transition toward a green energy revolution;
- *Trade, environment, and sustainability* demanding more equity between nations and peoples, a reduction in resource use and consumption, increased trade within local communities and regions, and greater public participation in decision-making;
- *International financial institutions* influencing the policies and operations of the World Bank, the International Monetary Fund, and the regional development banks as well as private financing institutions;
- *Sustainable societies* generating feasible scenarios for the creation of a sustainable world based on the environmental space concept and the equity principle; and
- *Mining* exploring the social and environmental consequences of large-scale mining and the unsustainable consumption model that lies behind such activities.

For more information on FoEI or on the *Chase for Quick Profits* project outlined in this book, contact the FoEI Secretariat or one of the following national offices:

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## **APPENDIX 3**

### ***Acronyms and Abbreviations***

CBD	Convention on Biological Diversity (also known as the Biodiversity Convention)
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
EIA	Environmental Investigation Agency
EU	European Union
FLONA	floresta nacional (national forest) [Brazil]
FoE	Friends of the Earth
FoE EWNI	Friends of the Earth England, Wales and Northern Ireland
FoEI	Friends of the Earth International
FoEI AP	Friends of the Earth International Amazonia Programme
FSC	Forest Stewardship Council
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product

IBAMA	Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais e Renováveis (Brazilian institute for the environment and renewable natural resources)
ILO	International Labour Organization
IMF	International Monetary Fund
INDI	National Institute of Indigenous Affairs [Paraguay]
IPF	Intergovernmental Panel on Forests
ITTO	International Tropical Timber Organization
IUCN	World Conservation Union
MDB	multilateral development bank
NC IUCN	Netherlands Committee of the World Conservation Union
NGO	nongovernmental organization
SAP	structural adjustment program
SFM	sustainable forest management
SGS	Société générale de surveillance [Cameroon]
SOFIBEL	Société forestière et industrielle de Bélabo (Bélabo lumber products corporation) [Cameroon]
SSV	Sales of Standing Volume
TNC	transnational corporation
TRAFFIC	Trade Record Analysis of Flora and Fauna in Commerce
UNCSD	United Nations Commission on Sustainable Development
UNCTC	United Nations Commission on Transnational Corporations
WTO	World Trade Organization
WWF	World Wide Fund for Nature (in Canada and USA: World Wildlife Fund)



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