



PROCEEDINGS

REFORMING GOVERNMENT POLICIES AND THE FIGHT AGAINST FOREST CRIME

Rome, 14-16 January 2002



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Expert Meeting

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Rome, 2002

ACRONYMS

AF&PA

American Forest and Paper Association

ATFS

American Tree Farm System

ATO

African Timber Organisation

CBD

Convention on Biological Diversity

CIFOR

Center for International Forestry Research

CITES

Convention on International Trade in Endangered Species of Wild Fauna and Flora

COFO

Committee on Forestry

CSA

Canadian Standards Association

EU

European Union

FATF

Financial Task Force (OECD)

FAO

Food and Agriculture Organization of the United Nations

FON

Forestry Policy and Planning Division (FAO)

FONP

Forestry Policy and Institutions Branch (FAO)

FONS

Forestry Planning and Statistics Branch (FAO)

FOP

Forest Products Division (FAO)

FOPAC
Fonds Provenant d'Activites Criminelles (Interpol)

FOPH
Forest Harvesting, Trade and Marketing Branch (FAO)

FSC
Forest Stewardship Council

GIS
Geographical Information System

GLOBE
Global Legislators Organization for a Balanced Environment

GPS
Global Positioning System

ILO
International Labour Organization

ISO
International Organization for Standardization

ITTA
International Tropical Timber Agreement

ITTO
International Tropical Timber Organization

LEGN
Development Law Service (FAO)

NGO
Non-governmental Organization

OAS
Organization of American States

OAU
Organization of African Unity

ODA
Official Development Assistance

OECD
Organisation for Economic Co-operation and Development

PEFC
Pan-European Forest Certification Framework

SFI
Sustainable Forestry Initiative

SFM
Sustainable Forest Management

TCI
Investment Centre Division (FAO)

UKWAS
United Kingdom Woodland Assurance Scheme

USDA
United States Development Agency

WCMC
World Conservation Monitoring Center

WTO
World Trade Organization

WWF
World Wide Fund for Nature

FOREWORD

The informal meeting of experts was part of the FAO Forestry Department's programme of activities. In March 2001, the FAO Committee on Forestry (COFO) emphasized the need to organize activities to combat forest crime, and this meeting was organized in the context of such mandate.

After the Earth Summit in 1992, it became apparent that solutions to forest degradation in developing regions were likely to be more political than technical and that, while technical solutions were generally available for many of the forestry development and conservation problems, the lack of effective action during the last few years was mainly due to the failure of political systems to mobilize consensus for reform. Accordingly, the meeting aimed at analysing ways to increase awareness of the policy options available for enhancing law compliance in key aspects that affected forest resources management and conservation and at identifying avenues for international action that could be supported by FAO.

Lennart Ljungman
Director
Forestry Policy and Planning Division
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CONTENTS

ACRONYMS.....	III
FOREWORD.....	VII
BACKGROUND.....	1
Objectives of the meeting.....	1
Participation.....	1
Opening session.....	2
The framework of the expert meeting.....	2
Examples of illegal practices in the forestry and forest industries sector.....	3
Main issues discussed during the meeting.....	5
<i>Policy options dealing with the causes of illegal actions.....</i>	5
<i>Implementation mechanisms.....</i>	12
<i>Main recommendations for international action and to FAO.....</i>	17
Closing session.....	18
ANNEX I.....	19
Expert Meeting Agenda.....	21
ANNEX II.....	23
List of Participants.....	25
ANNEX III.....	31
Action for National, Regional and Local Governments.....	33
Action for Forest Product Retailers.....	35
Action for Financing Agencies.....	37
REFERENCE DOCUMENTS.....	41
<i>Policy and Legal Options to Improve Law Compliance in the Forest Sector</i> <i>(Arnoldo Contreras-Hermosilla)</i>	43
Introduction.....	45
The nature and magnitude of illegal acts.....	46
What are the economic, environmental and social consequences of forest crime?.....	50
What are the causes of illegal acts in the forest sector?.....	54
The main elements of a strategy to improve law compliance in the forest sector.....	59
Cross-cutting implementation issues.....	80
References.....	87
<i>Illegal Actions and the Forest Sector: A Legal Perspective</i> <i>(Kenneth L. Rosenbaum)</i>	91
Overview.....	93
Putting legal issues in perspective.....	93
Kinds of failures of the legal system.....	95
Strategies to combat illegal activity by improving the law.....	105
Setting priorities for action: a systems framework.....	112
References.....	115

Forest Certification and Forest Law Compliance: Some Background
(I.J. Bourke).....117

- Certification: a high-profile subject.....119
- What is certification?.....119
- The reason for certification.....120
- Certification: current situation.....121
- Issues of significance to forest law compliance.....124
- Conclusions.....125

BACKGROUND

The informal expert meeting took place at FAO headquarters in Rome between 14 and 16 January 2002. This report summarizes the main debates and results of the meeting. Although every effort has been made to record the main ideas emerging during the meeting, these proceedings are based on notes taken during the discussions and, thus, they do not necessarily reflect the exact words said by the different participants.

Illegal activities are a major impediment to reducing deforestation and forest degradation and to the adoption of sustainable management. In many countries, most of the forest harvesting is illegal and a substantial proportion of the industrial production and trade also takes place outside the law. Forest crime has a number of negative environmental, economic and social consequences. In particular, it hurts the poor and deprives governments of much needed revenues that could be employed to support the adoption and dissemination of sustainable forest management methods. It also reduces the value of forest resources, thus making their conservation and appropriate management commercially non-attractive.

The severity of this problem throughout the globe was prominently exposed in the Food and Agriculture Organization of the United Nations (FAO) analysis of the State of the World's Forests 2001 report.

The FAO Forestry Department organized the meeting to exchange ideas on key subjects related to improved compliance with laws that affect the management and conservation of forest resources.

Objectives of the meeting

The objectives of the informal meeting were:

1. To examine policy options that decisions-makers in government agencies and other interested parties could adopt to reduce forest crime.
2. To identify themes for international action aimed at improving law compliance that FAO could consider as part of its programme of work.

The meeting agenda is in Annex 1.

Participation

Some 50 international experts from the FAO, the World Bank, the International Tropical Timber Organization (ITTO), and leading non-governmental organizations (NGOs) involved in promoting governance, sustainable forestry, industrial operations and trade, and combating corruption worldwide, as well as from the forest industry and government organizations, attended the meeting. The list of participants is included as Annex 2.

Opening session

The opening session was chaired by Mr Lennart Ljungman, Director Forestry Policy and Planning Division, FAO, and was addressed by Mr M. Hosny El-Lakany, Assistant Director-General, Forestry Department, FAO.

Mr El-Lakany welcomed participants. In his opening address, he stressed the nature of illegal forest activities and their negative impacts on forests, people, the economy and the environment. Forest crime reduced the value of forest resources and weakened honest operators. This subject previously was not discussed in detail in international fora. Reformers in search of solutions to reduce the problem of forest illegal acts had to consider the political environment of the countries concerned. He stressed that the goal of achieving sustainable forest management will remain elusive unless illegal acts can be brought under control and that solutions that rely entirely on government action are not likely to be effective; there was a need to involve the public and ensure broad participation in efforts to control forest crime, through appropriate negative and positive incentives. He emphasized that FAO was committed to supporting countries in their struggle to improve governance and that the Organization was ready to join forces with other institutions to fight against forest illegal activities.

The framework of the expert meeting

Illegal forest acts have substantial negative economic, social and environmental impacts, are common in developing and industrialized nations and occur in all major forest types, boreal, temperate and tropical. Although illegal logging is the type of forest crime that attracts the most attention, other illegalities normally occur in the extraction, production and marketing chain. Illegal acts include a great variety of deeds, such as unauthorized occupation of public and private forest lands, logging in protected or environmentally sensitive areas, harvesting protected species of trees, woodland arson, wildlife poaching, unlawful transport of wood and other forest products, smuggling, transfer pricing and other fraudulent accounting practices, unauthorized processing of forest products, violation of environmental regulations, and bribing government officials (See Box next page). Some studies estimate that illegal logging alone costs countries between US\$10 billion and \$15 billion per year.

Many of these illegal acts are accompanied by instances of corruption, when government officers use their power and influence to make decisions that go against social objectives and provide instead advantages to those officers, their family, friends or partners in crime. Corruption is a particularly harmful practice because, when government officials are involved in illegal acts, there is little chance that other actors in society will abide by the law.

Examples of illegal practices in the forestry and forest industries sector

Illegal occupation of forest lands

- Invasion of public forested lands by rural families, communities or private corporations in order to convert them to agriculture or cattle ranching
- Practice of slash and burn agriculture in invaded lands
- Inducing landless peasants to occupy forested areas illegally to force governments to grant land ownership rights to them and then buying these lands from peasants

Illegal logging

- Logging protected species
- Duplication of felling licenses
- Girdling or ring-barking, to kill trees so that they can be legally logged
- Contracting with local entrepreneurs to buy logs from protected areas
- Logging in protected areas
- Logging outside concession boundaries
- Logging in prohibited areas, such as steep slopes, riverbanks and water catchments
- Removing under/oversized trees from public forests
- Extracting more timber than authorized
- Reporting high volumes extracted in forest concessions to mask the fact that part of the volume declared is extracted from non-authorized areas outside the concession boundaries
- Logging without authorization
- Obtaining logging concessions through bribes

Woodlands arson

- Setting woodlands on fire in order to convert them to commercial uses

Illegal timber transport and trade and timber smuggling

- Transporting logs without authorization
- Transporting illegally harvested timber
- Smuggling timber
- Falsifying and/or reusing timber transportation documents
- Exporting and importing tree species banned under international law, such as CITES.
- Exporting and importing timber in contravention of national bans

Transfer pricing and other illegal accounting practices

- Declaring lower values and volumes exported
- Declaring higher purchase prices above the prevailing market prices for inputs such as equipment or services from related companies
- Manipulating debt cash flows to transfer money to subsidiary or parent company, for example by inflating debt repayment to avoid taxes on profits
- Undergrading, undervaluing, undermeasuring and misclassification of species exported or for the local market

Corrupt procurement

- Restricting information about procurement contracts
- Establishing unnecessary prequalification requirements to exclude unwanted companies from procurement contracts
- Tailoring contract specifications to fit a specific supplier
- Leaking confidential bidding information to preferred contractor
- Manipulating bid evaluations to suppress competition

Illegal forest processing

- Operating without a processing license
- Ignoring environmental, social and labour laws and regulation
- Using illegally obtained wood in industrial processing

Source: *Policy options for improving law compliance in the forest sector*. Meeting background document.

The economic effects of forest illegal acts are very negative. Forest crime usually leads to wrong decisions concerning the allocation of scarce economic resources with public officers allocating excessive financial resources to investments in those alternatives that provide opportunities for bribes, regardless of the economic soundness of these decisions, while other investments that may have a greater productivity are postponed or ignored altogether. Furthermore, when illegalities are rampant, investment risks tend to be higher, with the result that entrepreneurs will only start ventures that are capable of producing fast and high returns, thus discouraging investments in long-term sustainable forest management. For example, loggers tend to harvest the best species as fast as possible, with little thought given to the long-term sustainability of the resource base.

When illegal acts are common, economic forces create significant obstacles against the sustainability of forest resources. Illegal activities are regularly more profitable than legal sustainable management options, and this is a main reason why economic players, given the chance, take the illegal route rather than incur the financial sacrifices imposed by long-term legal forest management alternatives. Were long-term sustainable forest management financially more attractive, there would be no need to impose laws to force loggers and forest owners to follow sustainable forest management practices: profit-maximizing entrepreneurs would adopt them spontaneously. But, when illegal forest enterprises coexist side by side with legal entities, the former are able to displace the latter because of their superior ability to reduce costs. Eventually, unscrupulous enterprises dominate the market, creating a vicious circle of illegalities, corruption and resource destruction.

Profits from illegal forest operations tend to be sent abroad, robbing the country of scarce financial resources for further investment. And evading taxes, as well as underdeclaring the value of forest resources utilized in industrial processing and trade, leave cash-starved forest administrations with reduced income and with a restricted capacity to improve the management of the sector.

In addition to their negative economic impacts, illegal acts cause a number of undesirable consequences on the poor. Many of the world's poorest are dependent on forest resources for their livelihoods and, while some may initially benefit from illegal actions – for example by unauthorized harvesting of timber from public lands – these gains are generally short-lived. In environments where illegalities are systemic, soon more powerful groups acquire control of forest resources. The very poor are unable to undertake large forest operations and to pay substantial bribes to benefit from corrupt deals. Large operators are able to take over forest areas that may be of vital importance to the poor or that may have been under local community management and administered following traditional rights for generations. Illegal forest activities tend to result in deforestation and forest degradation, which deprive local poor populations of essential resources such as construction materials, medicines, fuelwood and wildlife. Over time, sources of local employment and income are likely to be lost. Benefits to the poor stemming from illegal acts tend to be minimal and, in any case, transitory.

Because of the absence of economic incentives, illegal forest acts work against the quality of forest management. Forests produce a number of non-timber goods and services, such as carbon sequestration, aesthetic and religious values, biodiversity, and soil and water protection, that have very weak or absent markets. Because these goods and services are desirable to society, most nations' laws establish prescriptions for their production and conservation, even if this does not generate commercial profits for forest entrepreneurs. Operating outside the law negates these socially desirable benefits.

As illegal activities are substantial – in most countries where forest crime has been assessed, more than half of the forest harvest is illegal – the opportunities for improving forest management through better law compliance are significant. Reducing forest crime by 25 percent would generate more government income than does all the official development financial assistance to the forest sector of developing countries.

Main issues discussed during the meeting

The meeting discussed the main possible causes of illegal acts and the policy options to handle them and selected mechanisms to implement remedial policies and the potential roles of international actors, particularly that of FAO.

Policy options dealing with the causes of illegal actions

Combating forest crime requires an understanding of its root causes. The following were identified:

- failures of the law;
- insufficient knowledge and inadequate management of existing knowledge;
- excessive discretionary power in the public sector and monopoly power in the private sector;
- poor implementation capacity of the public forest administration and enforcement agencies;
- lack of transparency in decisions by public agencies.

Accordingly, policy measures to reduce the incidence of illegal acts should be aimed at these root causes. Because simple solutions are not realistic, actions should encompass a wide spectrum of coordinated reforms in all the areas listed above. There is a need to streamline the legal framework, manage more effectively knowledge about forest resources, their exploitation and subsequent industrialization and trade, increase the competitive conditions and effectiveness of markets, establish legal “bright lines” that would give unambiguous signals regarding the differentiation between legal and illegal acts, increase transparency in government decision-making processes and reform the civil service.

These reforms need to be aimed at strengthening three basic functions of the fight against forest crime: its prevention, swift detection and effective suppression. The meeting examined the opportunities for policy and legal reform in the areas described above, with a view to identifying what the various institutions of government, the civil society and the

private sector could do to improve the effectiveness of prevention, detection and suppression of forest crime.

Failures of the law

An initial observation is that the law is a means to implement policy priorities and not an end in itself. Unfortunately, in some cases the law is flawed and the correspondence between policy priorities and legislation is less than perfect. Therefore, simply achieving better law enforcement does not necessarily lead to better governance and better forest management or to the realization of other policy priorities.

The law should be in agreement with shared expectations of the public at large, consistent with the political alignment of forces and in consonance with the cultural values of the country. The legal system may, and frequently does, contain imperfections and some illegal acts are the unintended consequence of faulty laws. An imperfect legal system may induce, or even force, some actors of society to operate outside the law. This may happen in several ways.

First, sometimes laws pursue “wrong” *objectives*. The legal system should condition main actors to take steps to contribute to the achievement of national objectives. However, the legal system is not always in harmony with this obvious concept. For example, the law may seek sector economic expansion only, in the process sacrificing other national policy objectives, such as the conservation of forests or their utilization to improve the condition of the poor. Or the law may go against deeply held values, such as traditional rights of local communities. In this sense, not all legal acts are “legitimate”, because they may disproportionately and unfairly hurt disadvantaged groups such as forest-dependent or indigenous peoples. In these circumstances, the incentives to avoid the law are powerful. People will always find the way around laws that they do not support.

In other circumstances, the legal system may be *inconsistent*, with some laws promoting certain objectives and others aiming in the opposite direction. In many countries, forest laws sought to achieve sustainable use of forests, while agrarian laws granted landownership to those could prove land occupation and use through deforestation. Before these prescriptions were abolished, many peasants were acting illegally according to forest laws that prohibited the conversion of forest lands but in accordance with agrarian laws that promoted such change. Actions in the forest sector are also influenced or governed by laws that rule contracts, property, taxes, commercial operations and customs. The legal system affecting forest resources needs to achieve a level of overall harmony, or inconsistencies may materialize, giving opportunities and incentives to avoid regulations.

In many cases, laws contain objectives that are not *commensurate with the resources* needed to achieve these objectives. The law may demand actions that cannot be carried out because of limited resources. For example, in some cases the law requests formal forest management plans as a precondition for exploiting forests. However, some forest-dependent poor people may lack the knowledge or financial resources to hire a

professional to produce such plans. In these circumstances, forests will be exploited against the prescriptions of the law simply because the law is unrealistic.

Frequently laws are also *obscure* in the sense that they are ambiguous, with unclear prescriptions for behaviour. Obscure laws invite arbitrary interpretation and are more susceptible to abuse by those who have the power to interpret these rules.

Finally, laws may be faulty in the sense that they may not make use of the most efficient and effective *instruments* to promote the use of scarce resources in order to achieve national policy objectives. For example, costly and administratively complex command and control instruments may be favoured when market approaches would do a better job. If this is the case, the propensity to avoid the law may increase.

In consequence, forest illegal acts may take place because the system of laws in a country is inconsistent either with national objectives or with the objectives of related laws; is unrealistic because objectives are unfeasible given available resources; or depends on inefficient or ineffective policy instruments. If these problems arise, illegal acts may in a sense be “tolerable”, as main actors may be unable to follow the law, even if they wanted to do so.

In these circumstances, adherence to the law does not necessarily mean that resulting actions by individuals, communities or corporations will lead to the achievement of society’s objectives, to public support or to moral rectitude. Thus, the first step is to get the legal system right, pointing towards the objectives of society and making it internally consistent and clear.

Corrective measures should secure a better agreement of the legal system with policy priorities, including such aspects as the legal recognition of traditional rights. Law reform should also embrace efforts to make the legal system realistic in the sense of being feasible, clear and with as little ambiguity as possible, and of creating a transparent and accountable room for discretionary decisions, as well as being understandable to major stakeholders. Law reform should be in harmony with legislation in related sectors.

However, human inventiveness is boundless, and even a perfect law will not be respected in all cases when illegal activities provide opportunities for private gain in excess of those that legal ones can offer. Other corrective policies are needed.

Monopoly power in private sector decisions and excessive discretionary power in public decisions

Excessive discretionary power in decisions for public officials, such as the arbitrary award of timber concession and procurement contracts, the promotion of staff and so on, invite corruption. In these policy situations, decision-makers have an additional incentive to create more rules that would allow them to increase their discretionary power, thus generating a self-feeding mechanism that fosters illegal actions.

The counterpart in the private sector is the prevalence of monopoly power. Monopoly power here is understood as the overwhelming dominance of one or few companies in the markets for inputs and outputs related to forest production and marketing. Monopoly conditions have a propensity to foster illegal acts as the concentration of economic power in the sector usually goes hand-in-hand with the ability to wield great political influence. In countries where there is a significant concentration of economic and political power, there is a higher risk that dominant interests will gain control of the sector, sometimes acquiring the ability to manipulate key decisions made by the government. The potential problems associated with very large industrial operations that can wield substantial monopoly/monopsony power in the economy are acute when industrial capacity exceeds by a large margin the ability of forest resources to provide raw materials for processing.

Policy options for reducing the dangers of monopoly and discretionary power are, first, the more intensive and generalized use of open, transparent and competitive auctions in the allocation of timber concessions and in procurement contracts. Second, to increase the competitive conditions of auctions, governments should strive to establish clear rules of the game, with transparent contract conditions leaving little room for interpretation, and to reduce barriers to entry through, for example, widely publicizing calls to submit bids, they should open contracts to both national and international bidders and reduce the size of contracts in order to allow smaller enterprises to compete. Third, only independent firms that can handle the process of establishing conditions for auctions, determining clear and objective criteria for selection and ranking bidders according to those criteria should be used. Sealed bids should, in any case, be open in public in order to eliminate the possibility of deals made behind closed doors. Fourth, there is a need to regulate the expansion of forest industry in order to secure an acceptable balance with the capacity of resources to produce the required wood raw materials.

The capacity to track the chain of custody is essential in order to monitor financial transactions and trace variations in value added, thus providing information about potential leakages, product laundering and financial wrongdoing.

Furthermore, discretionary power in the hands of a few forest administration officials can be reduced by requiring that all forest lands in concession be under unambiguous forest management plans and by monitoring contractors' compliance. Present predominating slight penalties should be replaced by stricter ones and should be fully enforced. Thus, when contractors deviate from the terms of the agreement, punitive actions should be meaningful and calibrated according to the magnitude of the economic and other losses due to breach of contract. At the same time, positive incentives can be considered for those contractors that exceed the conditions of the agreement.

The issue of the number of agencies involved in oversight is a matter that should probably be examined in the context of specific countries. In most cases, the police provide a complement to the action of forest law enforcers from the public forest administration. The role of other related agencies such as customs and the finance police would depend on the particular conditions of the country. While there are no definitive rules, there is a case for overlapping institutional responsibilities as a means to establish a

more effective system of double checks and balances and thus diminish the propensity to forest crime and increase the capacity to detect it. However, decision-makers should keep in mind that this may entail considerable institutional costs and that, therefore, a reasonable balance between cost and the capacity for crime monitoring and suppression must be obtained.

Knowledge deficiencies

Illegal acts are also caused by imperfect knowledge. The prescriptions of the law, especially if they are complex, may not be known or understood by the public. Also, knowledge about the main features of the forest resource itself is frequently imperfect, with only a vague notion of the volumes and species that the national forests contain. In these situations, there is no great awareness about the values of forests, their role in environmental quality or the benefits that they provide to the poor or to the economy as a whole.

In many cases, the vast majority of forest resources belongs to the government, but the property limits are seldom demarcated. Trespassers may not know that they are on public property. Technically, however, they are acting in illegal ways. The lack of clear and known property lines reduces deterrence and makes prosecution a very difficult task.

The chances of detecting international forest-related crime are also impaired by the different standards and definitions used in customs procedures in different countries. This lack of homogeneity makes the transfer of knowledge between customs officials difficult and weakens the capacity to trace the movement and changes in value of internationally traded forest products.

Even when information is available, it is common to find that this information flows slowly between government agencies and, therefore, it has reduced value in terms of providing a basis for decision-making and administration of forest resources. There have been cases of land reform agencies giving land titles in national parks as a result of imperfect communication with national forest services.

Information also needs to be translated into terms that can be easily understood by the public. A well-informed public is likely to demand a greater say in the way national forest resources are managed, particularly if the benefits of legal use or the costs of illegal operations are highlighted.

There is a strong linkage between knowledge management and transparency. The following programmes should be pursued to increase knowledge about the resource and the modalities of use.

First, it is advisable to promote the creation and development of producer groups. Groups operating under certification on the supply side would complement efforts to promote demand-side markets for certified products. Such support would further increase and disseminate knowledge about products originating in sustainable sources of production and would discriminate against those producers that do not follow sustainable

management practices. The creation of producer groups would indirectly expand knowledge in the markets for products originating from legal sources.

Second, the dissemination of knowledge about the features of forest resources and the consequences of different patterns of use is essential to generate political pressure and public participation in monitoring and suppressing acts against the law. For this it is necessary to promote the installation of remote sensing and other resource assessment technologies that would provide greater knowledge about the condition of forest resources and their evolution.

Third, there is a need to obtain deeper knowledge about the root causes of illegal acts and the most common procedures employed in forest crime. This knowledge is essential for the proper design of policies to ensure better law compliance.

Fourth, prevention, detection and suppression of forest crime would be facilitated by international standardization of customs classifications of forest products (for example, the nomenclature employed in classifying species, common standards to define quality and volumes).

Fifth, interested parties can do much to promote information sharing among themselves – including information on companies that utilize unscrupulous procedures, and about legal management practices – as well as the flow of information between producer and consumer countries.

Finally, governments should give priority in decisions concerning the allocation of forest harvesting and forest management rights in national public lands to those companies that are willing to support transparent procedures and independent verification of compliance with the law.

Institutional weaknesses

In many forest-rich developing countries, the government assumes enormous powers in the management of forest resources. Government is either the owner of the nation's forests or assumes unlimited control of their management. However, the government institutions entrusted with these great responsibilities are generally unable to discharge them. Forest public administrations are understaffed and affected by budgetary shortages: there is a large gap between what the government is supposed to accomplish and its actual performance. In this environment, the propensity to engage in forest crime is high. When public institutions are not strong, the probability of detection is low and prosecution may be impaired by weak evidence and inefficiencies of the police and the judiciary.

Forest land property and access rights are often not clear and, in certain circumstances, they are absent altogether. Forest lands that on paper belong to the government are invaded by shifting cultivators or other actors that acquire de facto land possession. This facilitates further illegal entry and poses great obstacles to the resolution of conflict over

land rights and to the prosecution of squatters, poachers and illegal loggers because evidence of criminal wrongdoing may be inconclusive.

In most developing countries, staff salaries are very low and, while evidence of a correlation between salary levels and corruption is not definitive, it is plausible that the temptation to engage in illegalities may be higher in situations of extreme need, particularly when the probability of being caught is low.

Given these conditions, what can be done to limit forest crimes? First, it seems clear that, while the government must bear the greatest responsibility for directing the development and management of the forest sector, government institutions do not need to, and should not, be directly responsible for everything that happens in that sector. Local communities and the private sector can be better equipped to monitor and enforce at least some of the legal principles. For example, there is some evidence that, under favourable conditions, local traditional societies can manage forest resources in sustainable ways. Devolving the responsibility for local forest management to local communities may reduce the propensity and opportunity for corrupt deals and enhance incentives to monitoring, reporting and even directly suppressing forest crime. Other government functions, particularly those that have to do with productive activities, may also be entrusted to the private sector. Governments should consider devolving some of the responsibilities for selected functions of forest management to local communities and to actors of the private sector.

Given the fact that the law is difficult to enforce when landownership and use rights are unclear, governments could strengthen mechanisms for the allocation of land use and property rights. In particular, the traditional rights of local communities could be recognized, which could provide an incentive for crime control by the communities themselves. While governments, in view of the discrepancies between social and private values, may wish to retain ownership of most forest lands, certain productive functions could be entrusted to the private sector, provided that the rules governing these interventions are clear and enforceable. The private sector can contribute to better law compliance by establishing “bright lines” between criminal acts and legal ones. For example, voluntary codes of conduct provide these bright lines and can effectively contribute to discriminating against illegal operators and creating a more even playing field for all private firms concerned with law compliance. Industry associations can increase their pressure on illegal operators by marginalizing those that do not comply with codes of conduct. The government can reinforce these actions with positive incentives such as performance bonds tied to the execution of transparent sustainable forest management plans on public forest lands by private sector firms. This may also imply the acceptance of third party standards for certification.

In some cases, the government may also consider establishing forest crime monitoring programmes to maintain and publish consolidated data on law compliance, to create an institutional memory that may help in the selection of future contractors (perhaps blacklisting those that have a criminal record) and to increase public knowledge about the operations of unscrupulous firms.

Experience shows that efforts to strengthen government institutions are expensive and that time and patience are required to change attitudes and to achieve the capacity to prevent, detect and suppress illegal acts effectively, as well as to create a body of data and knowledge about the sector that could serve as a basis for better sector management.

In this respect, international NGOs, private foundations, bilateral and multilateral technical assistance organizations and donors, as well multilateral development banks, have distinct roles to play to help nations with weaker institutions to improve compliance with the law.

International NGOs have a comparative advantage in fostering producers' and buyers' groups and promoting local ownership and control of forest resources traditionally held and used by communities. Some have a strong capability to map forest concession utilization and track performance by concessionaires and other groups, and many have the ability to train staff in developing countries in forest crime prevention, detection and suppression technologies. They are particularly effective in detecting and measuring large-scale forest crime and in publicizing results in the national and international media. They could collaborate with, for example, the G8, consultative groups and assistance agencies in fostering and rewarding government commitment to reducing illegal acts.

Private foundations may adopt specific policies to finance and support initiatives specifically aimed at combating forest illegal acts. Bilateral and multilateral technical assistance agencies have a valuable opportunity to support initiatives for strengthening institutions for better forest law compliance in interested and committed countries in the context of the national forest programmes and capacity building strategies they support. In particular, they can consider, among their policies, explicit support to the creation of multistakeholder national forest auditing institutions or other institutional arrangements that may be needed to improve law compliance.

Multilateral development banks could explicitly employ policy-based lending to support the control of corrupt practices and to promote law enforcement, help in institutional improvement and capacity building for the establishment of multistakeholder national forest crime monitoring and employ mechanisms for ensuring clean government procurement (e.g. the World Bank Oversight Committee for Fraud and Corruption).

Implementation mechanisms

While the previous sections of this report have described discussions on the possible causes of illegal actions in the forest sector and a selected group of policy alternatives to deal with these causes, the next sections focus on a number of mechanisms to implement the policy options discussed during the meeting.

Forming coalitions

As emphasized, there is little possibility that governments alone will be able to control forest crime. In most cases, law enforcement by government agencies exclusively is not realistic or even desirable. Given the right incentives, many stakeholders can contribute

to preventing, detecting and suppressing illegal acts. They should act in a concerted fashion, organized in coalitions, to maximize the possibility for synergy.

Coalitions – alliances of people, governmental and non-governmental organizations, organizations of the civil society and the private sector, or nations – can reinforce the political determination for fighting illegal acts and give greater vitality to the civil society and the private sector by bringing together groups that are interested in creating a solid legal framework for their operations.

Virtually any of the policies to improve law compliance undertaken by government can also be the subject of action by coalitions. Many actors and institutions can contribute to fighting forest crime. These include:

- national, regional and local governments;
- local communities;
- forest industry;
- forest product retailers;
- consumers;
- certification bodies;
- NGOs;
- financing agencies;
- the media;
- policy research institutions;
- technical assistance agencies;
- institutions promoting and implementing regional and global conventions.

A catalogue of possible specific actions to combat illegal forest acts by each of the actors discussed during the meeting is displayed in Annex 3.

Coalitions may comprise participants from one or more of these groups above.

National, regional and local governments could undertake a number of actions to facilitate the formation of coalitions. They could give priority to the recognition of traditional rights of local communities, ensuring their genuine participation in forest decisions affecting their well-being; provide for public hearings of public decision-making processes in the forest sector affecting other stakeholders; foster the development of buyer groups; and promote public knowledge and independent reporting by protected and possibly anonymous “whistle-blowers”. In many cases, governments could consider the creation of “forest crime monitoring units”, particularly when the forest sector is important and when the losses through illegal acts are suspected to be considerable. Governments could also lend support to the formulation of codes of conduct by the private industry and engage various NGOs in the prevention, detection and suppression of forest crime.

Examples of actions that *local communities* could undertake in order to promote joint efforts to control illegal activities include the encouragement of networking arrangements

such as India's Jungles project and Indonesia's SKEPHI; the establishment of close contacts with the media and providing well-substantiated material for publication and dissemination; seeking government support to empower members of Forest Protection Committees, Joint Management or Community Forest Management Committees to act as agents for monitoring forest crime; and securing contacts with government's "forest crime monitoring units" by regular reporting of illegal acts. It is important to note that local communities – as other entities – are not likely to enter into partnerships with other actors, unless participation produces tangible benefits for them.

In response to calls for greater environmental, social and legal responsibility, *industry* has launched a number of initiatives, mainly with other industrial partners, to undertake joint action. The adoption of codes of good governance and ethics, including compliance with existing regulations and international standards, should be encouraged. The Interafrican Forest Industries Association proposed a "Code of Conduct for the Sustainable Management of Forest Concessions in Africa" which includes explicit provisions for compliance with the law and is an example of an initiative aimed at establishing a clear difference between companies that respect the legal environment of the country and those that do not. Industry could support agencies such as ITTO, FAO and the World Bank in marginalizing harvesting and marketing opportunities for companies that fail to abide by industry-agreed codes of conduct. It could also support activities for equitable benefit sharing with local communities in the areas in which industry operates, thus generating incentives for local people to cooperate in law enforcement. Furthermore, in coordination with governmental bodies, industry should avoid pressure from foreign investors and local business interests that want to install industrial capacity well in excess of sustainably allowable harvest volumes.

Forest products retailers should be encouraged to form coalitions to purchase and retail timber and forest products derived from sources that have been independently certified as sustainably managed and complying with the law. In addition, buyers' groups should aim to mobilize consumers and the power of the market by insisting that forest products originate in forests that are certified as under sustainable management and following legal procedures. Buyers' groups are already proliferating in many countries, and they should be encouraged.

As a parallel and complementary action, *consumers* could also form groups that are committed to purchasing timber and other forest products that originate in legal sources and comply with the requirements of sustainable forest management. Consumers can bring the power of the market to bear on those firms that are perceived as operating outside the law by refusing to buy their products.

Certification bodies could support those multistakeholder groups that are committed to developing national standards for sustainable forest management, including standards of law compliance, and collaborate with national multistakeholder bodies that review the status of national forests and identify weaknesses in forest governance as well as priority areas for remedial action. Certification bodies could intensify their support to national capacity building of national certification entities by including in their mandate the

monitoring of private company and government legal performance. In many cases, certification bodies could coordinate their action with government agencies so that government requirements regarding law compliance can be considered as satisfied when independent entities certify private sector firms.

NGOs, in collaboration with national, regional or local government and with local communities, can form powerful alliances to monitor concessionaire performance by cross-checking government records and by using remote sensing satellite imaging, Geographical Information System (GIS) technology and other technologies, complemented with information from the field supplied by local communities, to detect and monitor illegal forest operations. By supporting the development of forest products tracking systems, NGOs can collaborate with government in ensuring that industrial forest transportation and processing operations, as well as exports of forest products, take place according to the law. NGOs have a comparative advantage in exposing cases of bribery and other illegal acts, as well as in establishing coalitions with the media to publicize such cases and generate public support for combating forest crime. They also have a comparative capacity to form alliances with local communities, informing communities of their legal rights and getting them involved in monitoring actions of other stakeholders that may not be inclined to follow the law.

International financing agencies could build on the experience gained by the World Bank's Oversight Committee on Fraud and Corruption and consider the establishment of similar mechanisms in their operations. They could also foster consultative groups to address severe situations of illegal logging and corruption. The World Bank, in collaboration with PROFOR, could undertake policy-based and structural adjustment lending, incorporating clauses related to compliance with the law and, through its alliance with the World Wide Fund for Nature (WWF), support the dissemination of independent certification, including support to the creation of national independent multistakeholder forest resources monitoring and auditing bodies. Financing agencies could also consider greater support to institutions researching the underlying causes of forest illegal acts, to training in their prevention, detection and suppression and to projects that foster capacity building.

In free and democratic countries, *the media* has the important role of informing the public about illegal acts committed in the forest sector. The media has a comparative advantage in disseminating information concerning the way forests are being managed, the incidence of illegal acts and their effects in order to enable public monitoring of the evolution of forests and provide a basis for political action for increasing law compliance. The media could strive to get better information from research institutions, NGOs and monitoring bodies and could publicize this knowledge widely in order to mobilize public support and commitment to improving law compliance.

Since knowledge about illegal activities in the forest-based sector is relatively recent, there are a number of *issues that need to be researched* in some detail, and this could most conveniently be done on the basis of alliances with the private sector, the civil society institutions and international technical and financial assistance agencies. An

effective monitoring system relies on a proper observation of the movement of forest products from the raw materials obtained at the forest to their industrial processing and marketing. There is a great deal to be researched on systems and procedures for log tracking and how these systems could perhaps be extended to other forest products. This research should include financial and human resources needs (How much would they cost? How complex are they and how demanding are they in terms of organization and training needs?). There is also a need to investigate conditions at the local level and the economic and other incentives that could be put in place to engage local communities and other local actors in the control of forest crime and to form effective coalitions at the community level. Furthermore, researchers in close contact with regulatory entities of the government could investigate how the financial system can be used to improve law compliance, since most corporations depend heavily on bank lending to finance their operations.

Detection technologies

Effective detection depends on a high level of public awareness of the differences between legal and illegal forest activities and on the capacity to track forest products movements and check the origin of supplies. Awareness at the national and local levels is essential to determine how information is used in controlling forest illegal activities. The experience of an NGO tracking illegal activities in Indonesia indicates that the issue involves much more than just forest circumstances, with links to the general condition of the economy, the political system, the efficiency of the judiciary and the structures to combat crime in general. It also shows that detection of forest illegal activities needs to rely on information collected from local NGOs and communities directly affected by forest crime, more than on indirect sources that frequently prove to be unreliable.

There is limited experience of employing modern log tracking technologies, and the advantages and disadvantages of different technologies should be researched. These technologies can be complex and skill-intensive, and this may pose some problems in countries where human resources are scarce. Tracking technologies need to be applied as early as possible in the chain of custody and should include wood products or fibre in order to minimize the possibilities for laundering illegal timber. They may require double or even multiple checking to reduce corruption.

The application of detection technologies must be done with some caution. Thus, for example, there is a tendency to use these technologies to arrest the less powerful for petty crimes or sometimes for simply exercising their traditional rights to the use of forest resources, while shying away from indicting the powerful that may be committing illegal acts on a grand scale. It is also important to design strategies that will allow law enforcers to have early successes in order to generate public support for strategies aimed at detecting forest crime. In any case, to avoid unnecessarily damaging reputations and violating people's rights, law enforcers should use detection data responsibly.

The specific costs of applying log tracking technologies under different scenarios have yet to be estimated, but they may be in the order of US\$1 to US\$2 per cubic meter of wood.

Main recommendations for international action and to FAO

Various international agencies described their programmes and experiences in supporting actions to improve law compliance in various countries. There were presentations by the Forestry Integrity Network, Transparency International, the World Resources Institute, the World Bank, the Environmental Investigation Agency, Greenpeace, Global Witness, Société Générale de Surveillance, the United States Development Agency (USDA) Forest Service, the Royal Institute of International Affairs, ITTO, Association Technique Internationale des Bois Tropicaux, the International Institute for Environment and Development, FERN, the Malaysian Timber Council, WWF International, Forest Trends and the United States Department of State. In the context of this panoramic vision of the main international initiatives, the meeting discussed further work that could possibly involve FAO, either in partnership with other institutions or independently. It was apparent that the number of international initiatives on the subject was proliferating very quickly, that great care should be exercised to avoid duplication of efforts and that these efforts should emphasize the application of existing knowledge, perhaps in the form of pilot projects.

The meeting issued the following recommendations for further international technical assistance by FAO aimed at improving law enforcement in the forest-based sector:

- *Gather*, collate and analyse data on forest resources, enforcement of the law, industrial capacity, trade, environmentally significant financial flows and logging concessions. Since a great deal of information and data are already available, FAO could foster the consolidation of the various databases already in existence in different agencies.
- *Develop* norms for legitimate procurement policies, transparent timber allocation procedures and national standards for sustainable forest management. FAO could also develop codes of conduct, including producers and buyers' groups, and foster their adoption by leading industrial forest firms. FAO should help countries to develop schemes for the control of illegally sourced imports, and develop models to standardize customs procedures and documentation. FAO should attempt to apply these models in pilot projects in a few interested countries that are politically committed to improving governance in the sector.
- *Research* the relative advantages and disadvantages of wood tracking systems in different contexts, the impact of illegal logging on poor populations, inconsistencies in world trade data that may help identify major illegal international flows, and the effectiveness of certification and independent auditing systems. Research the best ways and incentives leading to a greater involvement of local populations in law enforcement.
- *Support* the development of coalitions, the formation of professional networks on enforcement, the identification, analysis and dissemination of best practices to main stakeholders; the harmonization of regional laws and the involvement of local communities in law enforcement. Support the establishment of multistakeholder national auditing and certification bodies and the cooperation between importing and exporting

countries. FAO should help countries to refine their policy and legislative framework to eliminate legal failures that can facilitate the proliferation of illegal acts. FAO should also research and help design an International Plan of Action for combating illegal activities in the forest sector. In this context, the experience obtained in the preparation of the FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing should be taken into account prominently, although due consideration should be given to the inherent differences between these two sectors. FAO should also support regional initiatives to launch forest law enforcement agreements, policy declarations and meetings such as the forthcoming ministerial meetings in Africa and Latin America being promoted by the governments of several donor and developing countries and following the model of the recent East Asia Ministerial Conference on Forest Law Enforcement and Governance that took place in Indonesia.

- *Train* officers and lawyers, prosecutors and judges, police and custom officers on the nature of forest crime and the best practices to prevent it, detect it and suppress it. Develop standards for systems of procurement that will reduce the propensity for illegal acts and bribery. Train lawyers on how to draft laws utilizing stakeholder participation and stakeholders on how to participate effectively. FAO should also contribute to strengthening national capacity for law enforcement.
- *Inform* the main players. FAO should help disseminate the requirements already contained in international conventions. International organizations, particularly FAO, could collect data on illegal acts and make results widely available to governments and the public in order to increase awareness about the nature of the problem and its consequences. FAO should strive to include the subject of forest illegal activities in the agenda of its main international forest meetings (Regional Forestry Commissions and the Committee on Forestry [COFO]) and raise the issue outside the purely forest context, with finance departments for example. FAO should expand its web-based information system to cover forest-related crimes. FAO should also disseminate this information to the general public, bearing in mind that translations in different languages and dissemination other than through the Internet may be required in many cases.

Closing session

Mr Lennart Ljungman closed the expert meeting thanking all participants for their valuable contributions to its main objectives: the analysis of policy options that could be employed for combating forest crime, and help in defining a field of action for future FAO activities on the subject, in partnership with other national and international agencies.

ANNEX I

EXPERT MEETING AGENDA

FAO Headquarters, Rome 14-16 January 2002

Monday 14	09:00	Registration of participants, issuing of building passes, etc.
	09:30	Opening address, ADG, FO.
	09:45	Working session starts: Introduction. Participants introduce themselves.
	10:00	Overview. Purpose of expert meeting. Organization of debates. Questions and answers.
	10:30	Break.
	10:45	Overview of background discussion paper.
	11:15	Programmes by agencies involved in combating illegal acts in the forest sector.
	12:45	Administrative matters.
	13:15	Lunch.
	14:30	Programmes by agencies involved in combating illegal acts, continued.
	15:30	Break.
	16:00	Working Group 1. Law reform. Working Group 2. Increasing competition. Working Group 3. Knowledge creation and management. Working Group 4. Strengthening institutions.
	17:30	End of session.
	18:00	Cocktail hosted by the ADG, Forestry Department FAO.
Tuesday 15	09:00	Programmes by agencies involved in combating illegal acts, continued.
	10:30	Break.
	11:00	Rapporteurs present results of work group discussions.
	12:30	Lunch.
	14:00	Working group 5: Forming coalitions. Working group 6: Detection technologies. Working Group 7: International actions.
	15:30	Break.
	16:00	Discussion of working groups' recommendations.
	17:30	End of session.
Wednesday 16	09:00	Recommendations for further action.
	10:30	Break.
	11:00	Recommendations for further action.
	12:30	End of meeting.

ANNEX II

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ANNEX III

ACTION FOR NATIONAL, REGIONAL AND LOCAL GOVERNMENTS

- Simplify laws and rules.
- Establish realistic penalties.
- Recognize traditional rights.
- Introduce safeguards in legislation in other sectors.
- Reduce discretionary powers.
- Establish clear property and use rights.
- Provide for independent audits, inspections and investigation.
- Provide for public hearings.
- Facilitate independent reporting (whistle-blowing).
- Promote public education and awareness.
- Carry out resource assessments and monitoring systems.
- Improve statistical systems and generate baseline data and information.
- Require forest management plans.
- Promote certification.
- Foster producers' and buyers' groups.
- Promote free markets and competition.
- Establish efficient product tracking systems.
- Employ survey diagnostic tools.
- Promote meritocracy.
- Obtain balance between industrial demands and capacity of forest resources.
- Support and promote codes of conduct.
- Make use of incentive contracts and performance bonds.

Action for Local Communities

- Pressurize governments for clarification and legalization of forest ownership and land use rights.
- Insist on community participation in negotiation of timber concessions and legal protection that will ensure equitable benefit sharing.
- Seek government support to empower some members of Forest Protection Committees, Joint Forest Management or Community Forest Management Committees to act as “forest officers”. Empower locally appointed village “forest guards” to arrest and/or compound offences up to a certain amount of money. (Link to restrictive conditions to ensure that these privileges are not abused.)
- Press for national government support for creation of sustainable livelihood opportunities within and adjacent to forest areas, including such incentives as abandonment of poaching in exchange for employment as wildlife/forest guards.
- Ensure that State legislators are made conversant with cases of forest corruption. Seek opportunity for meetings with environmentally sympathetic congress or senate representatives (e.g. members of the Global Legislators Organization for a Balanced Environment [GLOBE]).

- Focus on corrupt practices that have a negative impact on social needs at the village level and the misappropriation of funding needed for forest conservation and development (i.e. not just large-scale timber theft).
- Urge all village and local community members to report on situations of log theft wildlife poaching and forest-related corruption.
- Foster improved communication strategy. Encourage the establishment of corruption networking arrangements (e.g. India's Jungles project and Indonesia's SKEPHI) and ensure that the media are supplied with well-substantiated material.
- Support national government "Forest Crime Monitoring Units" by regular reporting of corrupt acts.
- Urge government to establish a system for rewarding excellent forest stewardship and for apprehension, penalization and public humiliation of those engaged in corrupt practices.
- Develop simple indicators for village-level monitoring of the health and quality of local forest resources.
- Foster and participate in the establishment of multistakeholder representative national bodies that are mandated annually to review and report on the status of national forest resources and their social environmental and economic impacts.

Action for Forest Industry and Forest Industry Associations

- Develop and implement codes of conduct for social environmental and economically sustainable and responsible forest harvesting and management.
- Use industry association pressure and support agencies such as ITTO, FAO the World Bank and other financing agencies to marginalize harvesting and marketing opportunities for companies that fail to abide by industry-agreed codes of conduct.
- Endorse public and internationally acceptable principles criteria and national standards for sustainable forest management (SFM).
- Collaborate with independent certification bodies.
- Accept chain of custody analysis and transparent logging tracking procedures.
- Accept legislated arrangements for ensuring governments receive a fair and regularly adjusted economic rental value for timber derived from State forest lands.
- Accept transparency in timber concession negotiation processes and willingness to engage local communities in the dialogue and implementation of harvesting and management.
- Abide by the conditions of performance bonds.
- Agree to legalize arrangements for equitable benefit sharing with local communities.
- Support poorer communities within concession areas in their efforts to secure sustainable livelihoods.
- Foster reforestation and, in appropriate situations, support compensatory plantation establishment by local communities, farmers and private woodland owners (and thereby reduce the risk of non-sustainable and illegal harvesting of natural forest resources).
- Commit to containment of wildlife poaching within concession areas and take action to ensure arrest of those involved.

- Commit to avoid harvesting and illegal logging within concession areas in clearly defined areas of high conservation value.
- Avoid pressure from foreign investors and local business interests to install industrial capacity in excess of sustainably allowable harvest volumes.
- Adopt a company financial structure that has an acceptable debt/equity ratio and that does not depend to a high degree on turn-key supplier credit.
- Engage in multistakeholder dialogue on experiences of forest law enforcement and possibilities for wider replication of more promising solutions.
- Collaborate with Transparency International and other agencies involved in the establishment of a Forest Integrity Network.

ACTION FOR FOREST PRODUCT RETAILERS

- Commit to purchasing and retailing of timber and forest products derived from forests that have been independently certified as being sustainably managed according to acceptable social, environmental and economic principles (i.e. use market-based instruments including civil society and consumer pressure to ensure that private sector corporations practise sound forest management and adhere to codes of conduct).
- Through retail industry association pressure, expose the activities of companies that are marketing illegally harvested timber and that fail to adopt responsible forest management practices.
- Through public awareness raising media campaigns, emphasize corporate commitment to preservation of the global environment.
- Use corporate advertising as a vehicle for highlighting the negative social environmental and economic aspect of irresponsible harvesting and forest degradation.
- Through public awareness raising, emphasize how acceptance by consumers of independent certification is creating opportunities for them to influence how forests are managed and for whose benefit.
- Convince corporate shareholders of the positive influence on corporate profitability and shareholder dividends of corporate commitment to the adoption of environmentally responsible practices.
- Provide grant aid funding to NGOs and local groups that are committed to the attainment of responsible forest conservation and management.

Action for Consumers

- Commit to purchasing timber and other forest products that have been independently certified as derived from forests that are being managed in a social, environmental and economically sustainable manner.
- In extreme cases, support import bans and boycotts of companies that are heavily engaged in corrupt practices.
- Promote environmental consciousness and awareness of forest values within the family.

- Through the activities of parent/teacher associations, take a special interest in environmental education that incorporates improved understanding of the environmental values of forests.
- Within local neighbourhoods, promote the use of environmentally friendly products, including certified timber.
- Support with financial contributions the work of leading NGOs that are supporting forest conservation and sustainable management.

Action for Certification Bodies

- Support multistakeholder working groups developing national standards for SFM.
- Support national capacity building of local multistakeholder representative certification bodies that have a mandate systematically to monitor private company and government performance.
- Promote independent certification according to internationally acceptable principles and criteria.
- Establish and monitor the effectiveness of different log tracking and chain of custody analysis systems.
- Raise public awareness of the merits of independent certification and the opportunity that it creates for civil society to influence how forests are managed and for whose benefit.
- Collaborate with national multistakeholder forest auditing bodies that are mandated annually to review the status of national forest resources and to identify weakness in forest governance and priority areas for immediate action.

Action for NGOs

- Map concessions and ownership (who is doing what, where).
- Monitor concessionaire performance by cross-checking government records and by using remote sensing satellite imaging and GIS technology to detect and monitor illegal logging roads and forest degradation.
- Support the development and introduction of log tracking systems.
- Monitor log and timber exports through collaboration with customs and excise agencies.
- Support the establishment of national standard-setting working groups and local multistakeholder representative certification bodies.
- Build local capacity for watchdog monitoring and reporting.
- Gather factual evidence research and document chain of custody from individual forest operators to end consumers and publicize illegal activities of irresponsible private sector companies (whistle-blowing).
- Supply the media with information on illegal activities and corruption.
- Undertake regional studies of the social, environmental and economic impacts of illegal logging and corruption.
- Lobby for transparency and generate political pressure for high-level government action to achieve rapid prosecution of offending companies and individuals.

- Mobilize support of the international financial and environmental communities in addressing issues of forest law enforcement. (Especially through involvement in global initiatives relating to illegal logging, such as those being pursued by G8, the Organisation for Economic Co-operation and Development (OECD), FLEG and various NGO coalitions.)
- Foster codes of conduct by private sector industry.
- Foster producer and buyer groups.
- Pressurize governments to clarify property rights and develop mechanisms for conflict resolution over forest land rights.
- Promote decentralization of forest resource ownership and management with adequate safeguards for mismanagement.
- Insist on local community participation in policy decisions on allocation of timber concessions and in law enforcement.
- Promote forest-based livelihood opportunities for local communities within concession areas.
- With the World Conservation Monitoring Center (WCMC), monitor the management of biodiversity “hot spots”. Report situations of illegal logging and corruption.
- Promote environmental education.
- Collaborate with and support the establishment of national multistakeholder forest auditing bodies that are mandated annually to review the status of national forest resources and to identify weakness in forest governance and priority areas for immediate action.

ACTION FOR FINANCING AGENCIES

World Bank

- Build on the experience gained by the Bank’s Oversight Committee on Fraud and Corruption (which to date has declared misprocurement on about 40 contracts with a total value of US\$40 million).
- Mobilize collective action by consultative groups to address severe situations of illegal logging and corruption.
- In collaboration with PROFOR, undertake policy-based and structural adjustment lending incorporating, where appropriate, conditionality clauses relating to containment of corrupt practices.
- Through its alliance with WWF, support the application of independent certification.
- Finance and undertake economic sector work aimed at analysis of the underlying causes of illegal logging and forest-related corruption, including analysis of possibilities for cross-sectoral interventions.
- Through capacity building projects, support the establishment of multistakeholder national forest auditing bodies that are mandated annually to review the status of national forest resources, to identify weakness in forest governance and priority areas for immediate action as they relate to the national permanent forest estate.

- Support the establishment and activities of accredited certification bodies that monitor private company and government performance within specific timber concession areas and forests of high conservation value.
- Support the development of an International Plan of Action and Agreement for containment of forest corruption.
- Through the World Bank Institute, research best practices and use the Institute as a training ground for national policy leaders.

Multi Lateral Development Banks

- Support policy-based lending for projects that incorporate provisions for strengthening national capacity for containment of corruption and improved forest law enforcement.
- Support other relevant activities suggested for the World Bank on the previous page.

Private Foundations

- Support the forest law enforcement activities of NGOs.

Export Credit Institutions

- Adopt environmentally responsible credit practices. Refrain from financing industrial enterprises that will create excessive pressure for illegal and ecologically damaging non-sustainable harvesting of forest resources. Collaborate with Transparency International and other anti-corruption bodies in decision-making about the disbursement of export credits.

Multilateral Investment Guarantee Agency (MIGA)

Use MIGA to influence private sector corporate behaviour through conditionality attached to export credit guarantee operations.

Action for the Media

- Produce special TV and radio features relating to forest corruption (e.g. the CNN piece on wildlife poaching and illegal logging in Cameroon).

Action for Research Institutions

- Support technological research into low-cost log tracking systems and options for effective chain of custody analysis.
- Research methodologies for low-cost monitoring of the health and quality of forest resources.
- Research the economics and politics of illegal logging at the local level, the role of district governments in “legalizing” and taxing previously illegal activities, the link between overall timber supply and demand and illegal logging, and the potential role of the financial sector in curbing illegal logging.
- Analyse links between regulatory systems and poverty and the extrasectoral aspects of some of these issues.

- Use the literature from law enforcement in other sectors to provide insights to the regulatory issues related to forestry.
- Carry out empirical analysis of existing government regulatory systems. What resources and incentives do they have? How do they use their resources? How do they measure their effectiveness? And what could be done to achieve a more results-driven process?
- Research the impact of forestry regulatory systems on the rural poor and ways that the existing regulatory systems are used to allow larger and more powerful actors to monopolize forest resources.
- Research how financial sector regulation, at both the national and the multilateral levels, can be used as a tool to curb illegal activities (since most companies depend heavily on bank lending).
- Research on forests and violent conflict. (This links directly with the illegal activities issue, since often the “illegal activities” occur in areas where the government has no effective control over the territory and where those engaged in illegal forestry activities are armed groups that are also engaged in other activities considered illegitimate by the national government.)

Action for Technical Assistance Agencies

FAO

- Through its National Forest Programme Implementation Facility, support strengthening of national capacity for improved forest law enforcement, including the establishment of multistakeholder national forest auditing bodies that are mandated annually to review the status of national forest resources and to identify weakness in forest governance and priority areas for immediate action as they relate to the national permanent forest estate.
- Support the establishment and activities of accredited certification bodies that are mandated to monitor private company and government performance within specific timber concession areas and forest of high conservation value.
- Finance areas of technical assistance to national governments (see Annex 1), local communities (see Annex 2), certification bodies (see Annex 6), watchdog NGOs (see Annex7) and policy research institutions (see Annex 10).
- Provide technical assistance for the development of improved log tracking systems (e.g. see the European Union (EU)-supported TRATEK network).
- Through FAO publications and workshops, raise local and international awareness of the social, environmental and economic costs of forest-related corruption and promote promising solutions such as log tracking.
- Through COFO and regional Forestry Commissions, interact with high-level national government ministers to encourage adoption of incentive policies and more stringent measures for containment of illegal logging and corruption.
- Collaborate with ITTO in its proposed law enforcement activities and with specialized anti-corruption agencies such as Transparency International and the emerging Forest Integrity Network.

- Promote and support an International Plan of Action for controlling illegal activities in the forest sector.

Bilateral Donors

- Fund policy research and in-country technical assistance programmes aimed at improved forest law enforcement, as suggested for FAO above.

Action under Regional and International Conventions and Agreements

- The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) to limit trade in forest endangered species (see Appendix 111 which focuses on monitoring of international trade).
- The Convention on Biological Diversity (CBD) to highlight illegal logging affecting critical biodiversity reserves (refer to the Cartagena Protocol).
- The Ministerial Declaration on Forest Law Enforcement signed by ministers of leading East Asian Nations.
- Regional Forest Conventions (Helsinki, Montreal, Tarapoto, Central America, etc.) draw attention of high-level government ministers to illegal acts and corruption that are undermining adherence to the requirements of such conventions.
- The European Convention on Protection of EU Community Financial Interests.
- The Organization of American States (OAS) Inter American Convention against Corruption.
- OECD's Financial Task Force (FATF) on money laundering.
- The International Chamber of Commerce Rules of Conduct on Global Extortion and Bribery in International Business transactions.
- The Fonds Provenant d'Activites Criminelles (FOPAC) branch of Interpol.
- The Strasbourg Convention.
- The Vienna Convention.
- The Montreal and Basel Conventions.
- WTO's Government Procurement Agreement.
- Tabling corruption through activities of the United Nations Forum for Forests.
- Support the forthcoming G8 Forest Law and Governance Conference (scheduled for Brazzaville, Congo in the autumn of 2002).
- Table the issue of forest corruption during the World Summit on Sustainable Development (scheduled to be held in Johannesburg in September 2002).

REFERENCE DOCUMENTS

**POLICY AND LEGAL OPTIONS TO IMPROVE LAW
COMPLIANCE IN THE FOREST SECTOR**

Arnoldo Contreras-Hermosilla

*The opinions and concepts contained in this document do not necessarily represent the
position of FAO*

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Introduction

Almost everywhere, forest resources are under the threat of illegal acts by a number of unscrupulous loggers, traders, corporations, impoverished local communities and corrupt government officials. The World Bank calculates that illegal logging alone costs governments some US\$5 billion per year in lost revenues and that, in addition, US\$10 billion per year are lost to the economy of producing countries¹. (World Bank, 2001). In addition, trade research comparing import and exports records shows fraud in products volume and quality declarations in many exporting nations. Protected species of flora and fauna are routinely harvested for domestic or international markets. Almost universally, criminal exploitation of forest products and commerce prevail as large amounts are unlawfully harvested, traded against regulations in domestic markets or smuggled across borders, often with the willing participation of corrupt forest service officials and border police.

While most think that forest illegal acts are concentrated in those few developing countries blessed with abundant forest resources, this is a mistaken perception. In fact, forest illegalities do not spare industrialised countries. They are a global phenomenon affecting developing and industrialized economies, temperate, boreal and tropical nations. Agents of fraudulent processes, traders and powerful corporations, operate globally thus making actors in different nations responsible for the occurrence of these activities. Consumers everywhere, willingly buying forest products originating in illegal sources also contribute, although often unknowingly, to forest crime. While many small operators commit illegal acts (sometimes justifiably, as shown later), one of the important forces driving forest crime is the large operations feeding markets in developed countries.

Acts outside the law are so common that they constitute a main direct reason for the disappearance of the world's most valuable forests. As long as forest illegal acts flourish, there is little hope of controlling deforestation and forest degradation. Technocratic prescriptions aimed at promoting sustainable forest management have little chance of making a substantive contribution if a large part of the forest sector's economy continues to operate illegally.

This paper focuses on the actions that the governments of interested countries, as well as key actors of the private sector and the international community, can launch to improve law compliance in the forest sector. The first section provides background on the size of the problem by describing the variety and magnitude of illegal activities, while the second one analyses their economic, environmental and social effects. The section after that looks at the causes of illegal acts, while the following one – which constitutes the heart of the paper – discusses policy tools for reducing illegal activity.

¹ Just for the sake of comparison, the annual Official Development Assistance (ODA) financial flow in the forest sector is probably around US\$1.5 billion.

The nature and magnitude of illegal acts

Illegal acts include a great variety of deeds such as unauthorized occupation of public and private forest lands, logging in protected or environmentally sensitive areas, harvesting of protected species of trees, woodland arson, wildlife poaching, unlawful transport of wood and other forest products, smuggling, transfer pricing and other fraudulent accounting practices, unauthorized processing of forest products, violation of environmental regulations, and bribing government officials.

In developing countries, landless peasants, following logging operations or infrastructure works that increase accessibility to remote areas, invade forest lands to survive (Mahar and Schneider, 1994). Corporations or individuals extract timber from public or private forest lands without authorization; remove protected species in timber concessions, from outside concession zones or from areas where the law prohibits logging, such as steep slopes and riverbanks; and unlawfully export or import forest products without paying taxes and other duties to government. Some corporations inflate the price of imported inputs such as logging and transportation machinery and falsely deflate the price or volume of their exports to reduce nominal profits and tax liability and to transfer funds abroad clandestinely (see, for example, Barnett, 1992). In other cases, some large industrial complexes, such as pulp and paper processing firms, evade water pollution controls and emission rules (Ottawa House of Commons, 1998). Certain transnational corporations secretly create national subcontracting firms that appear as independent entities, thus enabling them to circumvent laws that limit the extent of timber concessions to any one single company.

Government officers at times award timber concession contracts in obscure and corrupt ways. Even in cases where the law requires bidding, corrupt officers manipulate prequalification requirements to eliminate competitors and award concession contracts to favoured parties. Similar procedures steer procurement contracts to selected companies.

The list of illegal acts is long (see box, page 48).

What is their magnitude? Because of their surreptitious nature, illegal acts are hard to quantify precisely, and assessments probably underestimate their real magnitude. However, the following examples, taken from recent investigations in various countries, leave little doubt that their scale is very large.

As much as 94 percent of all logging in Cambodia was illegal in the recent past, with large numbers of logs being stolen from concession areas, national parks and protected areas (World Rainforest Movement and Forest Monitor, 1998). Should such levels of illegal extractions continue to prevail, Cambodia's forests would disappear in less than a decade (UNDP, 1999; Global Witness, 1999a). Recent studies show that unauthorized extractions in Indonesia were so widespread that in 1997/98 they abundantly exceeded the legal forest harvest, with most (84 percent) concessionaires violating the law and extensive illegal logging taking place even in the most important national parks, the Gunung Leuser in Sumatra and the Tanjung Putting in Kalimantan (Scotland, 2000;

Environmental Investigation Agency, 1999; World Resources Institute, 2000a). Furthermore, research at the Center for International Forestry Research (CIFOR) provides evidence that about 40 percent, of the large Indonesian pulp and paper industry wood supplies come from undocumented sources (Barr, 2000).

Additional research reveals that massive illegal logging led to rapid deforestation in the Philippines during the 1980s, to the extent that today 90 percent of the primary forest is gone (World Commission on Forests and Sustainable Development, 1999). Yet the disappearance of natural forests did not discourage illegal loggers, which still supply an estimated 46 percent of the country's requirements (Acosta *et al.*, 2000).

In Papua New Guinea, an Independent Commission of Inquiry established the existence of pervasive forest crime in the country, identified companies that obtained illegal forest exploitation authorizations and found widespread collusion involving regional and national-level politicians and foreign companies, as well as massive tax evasion and extensive transfer pricing (Marshall, 1990).

Enquiries in Cameroon by the Global Forest Watch Initiative revealed that more than half of all active logging licenses were illegal and that the legality of allocations of 23 timber concessions was in doubt in 1999. Many of the companies operating outside the law were never prosecuted because of the influence of high government officials who protected them (World Resources Institute, 2000).

A recent assessment in Bolivia shows that at least 80 percent, and perhaps as much as 90 percent, of all forest clearing is illegal in that country (Contreras-Hermosilla and Vargas, 2002). Likewise, the Brazilian research institute IMAZON estimates that 90 percent of all deforestation in the Brazilian Amazon is illegal (Greenpeace, 1999). The National Network against the Trafficking of Wild Animals (RENCTAS), a coalition of NGOs, calculates that the Brazilian illegal traffic of wild animals reaches US\$1 billion per year.²

The World Bank estimates that between US\$10 billion and \$15 billion are lost to countries every year because of illegal logging.

² The international trade in animals is regulated by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). In the particular case of Brazil, the government has gone much further than the terms of the Convention by banning all trade of wild animals, endangered or not.

Examples of illegal practices in the forestry and forest industries sector

Illegal occupation of forest lands

- Invasion of public forested lands by rural families, communities or private corporations in order to convert them to agriculture or cattle ranching
- Practice of slash and burn agriculture in invaded lands
- Inducing landless peasants to occupy forested areas illegally to force governments to grant land ownership rights to them and then buying these lands from peasants

Illegal logging

- Logging protected species
- Duplication of felling licenses
- Girdling or ring-barking, to kill trees so that they can be legally logged
- Contracting with local entrepreneurs to buy logs from protected areas
- Logging in protected areas
- Logging outside concession boundaries
- Logging in prohibited areas, such as steep slopes, riverbanks and water catchments
- Removing under-oversized trees from public forests
- Extracting more timber than authorized
- Reporting high volumes extracted in forest concessions to mask the fact that part of the volume declared is extracted from non-authorized areas outside the concession boundaries
- Logging without authorization
- Obtaining logging concessions through bribes

Woodlands arson

- Setting woodlands on fire in order to convert them to commercial uses

Illegal timber transport and trade and timber smuggling

- Transporting logs without authorization
- Transporting illegally harvested timber
- Smuggling timber
- Falsifying and/or reusing timber transportation documents
- Exporting and importing tree species banned under international law, such as CITES.
- Exporting and importing timber in contravention of national bans

Transfer pricing and other illegal accounting practices

- Declaring lower values and volumes exported
- Declaring higher purchase prices above the prevailing market prices for inputs such as equipment or services from related companies
- Manipulating debt cash flows to transfer money to subsidiary or parent company, for example by inflating debt repayment to avoid taxes on profits
- Undergrading, undervaluing, undermeasuring and misclassification of species exported or for the local market

Corrupt procurement

- Restricting information about procurement contracts
- Establishing unnecessary prequalification requirements to exclude unwanted companies from procurement contracts
- Tailoring contract specifications to fit a specific supplier
- Leaking confidential bidding information to preferred contractor
- Manipulating bid evaluations to suppress competition

Illegal forest processing

- Operating without a processing license
- Ignoring environmental, social and labour laws and regulation
- Using illegally obtained wood in industrial processing

Source: Based on Contreras-Hermosilla, 1997.

Illegals do not vanish with industrialization and economic development. Thus, for example, the World Commission on Forests and Sustainable Development (1999) reports: “in 1994 the European Union charged several corporations for corrupt practices. A decade earlier, the European Union fined 40 major pulp and paper producers for similar reasons”. In Canada, an investigation by the House Standing Committee on Environment and Sustainable Development exposed several forest corporations that routinely ignored environmental laws. In 1996, twenty paper mills were caught discharging toxic effluents in Quebec (Ottawa House of Commons, 1998). Additional inquests in Ontario exposed various irregularities in 55 percent of logging operations in areas designated for protection (World Resources Institute, 2000b). In the Russian Federation, at least 20 percent of timber produced in the country originates in illegal forest operations, and in some regions, such as Primorsky and Khavarovsk, this proportion may reach 50 percent (Greenpeace, 2000).

Furthermore, large industrialized country markets tempt corporations of these countries to engage in illegal operations in developing economies. For example, various corporations from the industrialized world carry out illegal operations in the Democratic Republic of Congo. The Brazilian Environmental Agency (IBAMA) recently announced that a subsidiary Osaka-based transnational, Eidai Inc., would be fined the equivalent of US\$1.88 million for violating various environmental laws that protect Brazil’s rainforests (Greenpeace, July 2000). In 1999, a Belgian company was illegally importing Afrormosia logs from Cameroon (a species protected under CITES), while a French transnational was also caught importing Moabi undersized logs from Gabon and Cameroon. Some companies go as far as lobbying their government, which then acts on their behalf to secure preferential treatment in the host country (Ekoko, 1997).

The United States Fish and Wildlife Service carries out routine inspections at ports of entry and investigates animal smuggling rings. Each year it handles 4 500 cases. About 25 per cent of mahogany imports into the United States are illegal in defiance of CITES. In 1998, recognizing the responsibility of importing countries, the G8 formally declared that “international trade in illegally harvested timber exacerbates the problem of illegal logging” and asked members to improve their procedures for controlling international trade of illegally harvested timber.

While trade in illegally sourced forest products to feed demands in industrialized countries receives a great deal of attention, illegal international trade of forest products involving developing and emerging economies is also common. A study commissioned by the World Wildlife Fund for Nature (WWF) and Natural Resources concluded that most of the timber international trade among countries of Asia was illegal (Dudley, Jeanrenaud and Sullivan, 1995). A great deal of trade takes place between Cambodia and Viet Nam despite the legislation of these two countries that prohibits such trade (Global Witness, 1999). Substantial illegal trade takes place between Myanmar and China and between Thailand and India. The World Resources Institute estimates that about half of Myanmar’s exports are not declared (World Resources Institute, 1998). An undetermined but apparently large volume of logs is illegally exported from Siberia to China

(Greenpeace, 2000). A comparison of records of ramin exports from Indonesia to Taiwan, Province of China, with those of imports of ramin by Taiwan from Indonesia shows that the latter are ten times higher.

Military conflicts and the accompanying loss of authority over large areas of forests breeds ideal conditions for illegal logging, trade and other criminal activities affecting forest resources and involving foreign and national entities in a variety of arrangements. For example, in the Democratic Republic of Congo, there are several corporations from Uganda, Burundi and Rwanda that, in association with foreign armies and Congolese firms, harvest and export valuable wood with impunity. As reported by a United Nations Panel: “Exploitation of the natural resources of the Democratic Republic of the Congo by foreign armies has become systematic and systemic. Plundering, looting, racketeering, and the constitution of criminal cartels are becoming commonplace in occupied territories...” (UN, 2001).

Different reports substantiate instances of forest crime in various countries (Contreras-Hermosilla, 2001; FAO, 2001). This research paints a picture of widespread crime and corruption affecting forest resources in many parts of the world. In most cases illegal harvests and trade are larger than legal ones, sometimes by a substantial margin. There can be no doubt that illegal acts are a major threat to forest resources everywhere.

What are the economic, environmental and social consequences of forest crime?

In a sound policy and legislative environment, laws aim at improving resource management and maximizing economic, environmental and social beneficial impacts. Thus, by definition, operating outside the law leads to economic inefficiency, environmental degradation, greater inequality and poverty in rural areas.

However, unfortunately, in many countries, sound policy and legislative environments

are the exception rather than the rule. In these conditions, some analysts argue that illegal acts may be not only justified but also desirable. Most of these arguments focus on the impact of corruption, one of the prominent illegal acts in the forestry sector (see box aside for a definition of the concept). The justification of corruption is based on several parallel reasons. It is maintained that corruption is, in some cases, part of the “culture” of the country, and therefore acceptable to most, and that corruption is somehow morally acceptable. Furthermore, it is claimed that corrupt behaviour often allows main economic actors to

Corruption

There are many interpretations of what constitutes corruption. Corruption is variously defined as “the sale by government officials of government property for personal gain” (Schleifer, A. and R.W. Vishney, 1993), or “behaviour on the part of officials in the public sector, whether politicians or civil servants, in which they improperly and unlawfully enrich themselves, or those close to them, by the misuse of the public power entrusted to them” (Transparency International, 1996). The World Bank defines corruption as “the abuse of public office for private gain” (World Bank, 1997).

In this paper, corrupt deeds are illegal actions that:

- (i) *engage public officials.* A private individual stealing wood from public forests is performing a criminal act but, according to this definition, not a corrupt act. While corruption engages civil servants, most frequently a party from the private sector or the civil society is also implicated. But the participation of public officials in illegal actions makes corrupt acts particularly damaging.
- (ii) *involve public property and power.* Public property may be tangible (e.g. timber) or intangible (e.g. selling knowledge about government negotiating position on timber concessions).
- (iii) *are perpetrated for private gain.* Thus, a public official misusing public forests but not deriving private gain (financial or otherwise) from that action is a negligent and incompetent individual (and not free from prosecution) but not a corrupt one.
- (iv) *are intentional acts.* A public official who unknowingly uses public forest resources illegally is also a negligent and incompetent individual but not a corrupt one.
- (v) *are surreptitious.*

get around absurd, overly complicated and sometimes incoherent administrative requirements. In this view, corruption is the “grease of development”, equivalent to liberalization of economic activity of the sector, allowing enterprises to operate more efficiently without being overburdened by unnecessary government regulation.

That corruption and illegal acts in general are acceptable and part of the culture of a country does not resist even superficial analysis. If this were the case, these acts would be carried out in the open, not in surreptitious ways. In countries where illegalities and corruption are rampant, the public overwhelmingly detest their occurrence, as illegalities generally favour those few individuals who enjoy power and control but are suffered by the vast majority of those who are poor and powerless.

The economic point of view in favour of illegal acts, and in particular of corruption, is equally weak and is effectively demolished by at least four powerful counterarguments.

First, generally, forest laws prescribe forest management systems that include consideration of long-term effects and the non-market benefits of costs. For example, forests produce a series of economic and environmental benefits, such as watershed protection, scenic beauty, carbon sequestration and biodiversity wealth, that are not

traded in markets. The trouble is that private operators in search of commercial profits are not inclined to consider non-market benefits and costs in their commercial ventures, and also their time perspective tends to be different from that of society. Consequently, governments legislate to reduce the gap between private and social perspectives and values that determine private behaviour. Operating outside the law would negate the consideration of these non-market and long-term effects of forest management in decision-making processes.

Second, the most negative economic impact of illegal acts is that they depress the value of forest products in the market and thus jeopardize the possibilities of implementing legal sustainable management options. For example, since it can be assumed that most of the logging in some countries is illegal, it is also likely that the price of wood in the market is much lower than it would be if all followed the law. Should illegal activities be suppressed, legal operators would have a greater incentive to follow the law and implement sustainable forest management practices simply because the commercial value of their product would be a great deal higher.

Third, while responsible international investors shy away from countries where the rule of law is weak and investment risks are high, unscrupulous corporations find this kind of environment propitious to their operations. Thus, over time, it is likely that the composition of investment in the forest sector will tend to be biased in favour of those corporations that are adept at implementing “cut and run” operations which emphasize short-term returns and disregard the future sustainability of the resource. An aggravating factor is that the proceeds of these operations tend to be sent abroad, reducing their multiplier effect on the forest economy. Furthermore, a corrupt environment favours investments that offer officials the possibility to skim off larger sums, independent of their effect on the economy. Thus, large public infrastructure projects or substantial equipment purchases, which may not be needed urgently, may be preferred to investments that would make more sense in terms of their economic, environmental and poverty alleviation results.

Fourth, a corrupt law system that tolerates bribes and corruption is much more likely to create new laws and regulations that empower executives in the public sector with additional decision-making authority and thus, in turn, increase their capacity to extract bribes. In this case, corruption is self-sustained and expands as a system of governance (or lack of) of the forest sector. Firms may find that the cost of obtaining a government permit, or getting around that permit, may increase rapidly, thus adding further incentives for short-term cut and run operations that yield higher profits (Tanzi, 1998).

Finally, a further damaging effect is that, with illegal activities, the government is deprived of income from taxes, stumpage fees applied to public forest lands and other charges affecting operations in forest and industrial processing. Many illegal acts occur to avoid taxes and custom charges, and therefore reduce potential fiscal revenues. Furthermore, operators outside the law avoiding government payments enjoy a competitive advantage that enables them to drive honest competitors from the market and further reduces government income. Corruption also reduces the quality of government

expenditure, as investments that generate bribes are preferred to those that may make economic sense. As a result, illegal acts lead to a reduction of government revenue as well as to the erosion of the magnitude and quality of government services in the sector.

Common and unacceptable justifications for accepting corruption

1. “Corruption is everywhere and is uncontrollable.” But illness is everywhere too. Yet, this does not mean that we should accept illness passively. Like illness, corruption varies greatly, and appropriate prevention, detection and remedial measures can make a difference.
2. “Corruption always existed. Like sin, it is part of human nature. You cannot do anything about it.” Again, the observation is correct, but the conclusion is invalid. It is possible to constrain opportunities for illegal acts and corruption even if this tendency is ingrained in human nature.
3. “The concept of corruption is vague and culturally determined. In some cultures, corruption is considered as acceptable behaviour.” In fact, no culture accepts corruption. If this were the case, it would be carried out in the open, publicly acknowledged and condoned by the legal system.
4. “Cleansing society of corruption would require drastic changes in attitudes and societal values, and this can only be achieved after (a hundred years of education, drastic change in values, religious revival, etc.).” In fact, the record of moralization campaigns is not great. Ensuring better compliance with the law has more to do with creating the proper incentives for integrity.
5. “Corruption is the grease of development.” But empirical research shows that this is not the case at all. Illegal acts and corruption generate circular patterns that tend to feed themselves, with negative consequences for the economy, the quality of forest management and the well-being of the poor. It is more realistic to base the fight against illegal acts on these undesirable and objective facts rather than on purely moral grounds.
6. “There is nothing that can be done if the leaders are corrupt or if corruption is systemic.” True, the situation would be more difficult in these circumstances. However, even countries where corruption is systemic have made great strides in eliminating illicit behaviour. Sometimes illegalities perpetrated by government officials and their cronies have led to the fall of the regime.
7. “As free markets, economic development and democracy take hold, corruption will disappear gradually anyway, and therefore there is no real need to worry about it now.” This is akin to saying that poverty will eventually disappear with economic development and with the progress of today’s poor societies, and that consequently there is no need to worry about its existence now. Furthermore, corruption is a constant threat, even in rich and stable democratic societies.

Based on Klitgaard, R., 2000.

various ways, restricting logging and large-scale extractive uses, or even prohibiting any significant human intervention. Laws prescribe systems of forest management to ensure continuous production of the environmental services of forests. Private operators that do not respect these prescriptions adopt forest practices with negative environmental consequences.

There are many other justifications for why illegal activities take place and how their consequences may not be totally undesirable. Most of these arguments focus on attempts to justify corruption or on the concept that nothing can be done about it. They are plagued by poor logic or are contradicted by empirical evidence to the contrary (see box above).

What are the causes of illegal acts in the forest sector?

Analysis of the causes of illegal acts is a precondition for organizing effective counteractions. However, this aspect of forest governance has yet to be studied in the forest sector.

A first difficulty in the debate is the lack of agreement about what objectives should be pursued by the law and, particularly, with what intensity. What is illegal in one country may be legal in another. Universal standards of value are not available (see box below). This discussion will not deal with this thorny issue.

Second, empirical studies face the difficulty of “unbundling” causes, i.e. the separation of factors causing illegal acts from other forms of institutional inefficiency (poor financing, low implementation capacity, low stability of forest staff in their positions, etc.). In

Legal or illegal?

Governments enact laws to foster behaviour that is deemed desirable or advancing of the “public good”. For a multitude of reasons, this socially desirable behaviour would not happen spontaneously.

However, what constitutes a socially desirable objective varies from society to society. What may be legal in one country may be illegal in another. One nation may attribute a great deal of importance to environmental values, while another may choose to give an overwhelming priority to the exploitation of forests to improve the well-being of the very poor. A third one may choose to manage its forest resources for the production of global values (biodiversity, carbon sequestration, etc.). None of them is intrinsically “wrong”.

The debate on illegal forest activities is encumbered by a natural desire to impose certain global values on all countries, motivated to a great extent by the fact that countries and their forest resources are interdependent. Forest fires that are tolerated in one country negatively affect its neighbours. A government trampling on the traditional rights of indigenous populations may offend sensitivities in other nations. Allowing illegal logging in one country affects the competitive position of producers that abide by the law in other countries.

Because governments are reluctant to limit their sovereignty in order to satisfy global values, clashes are inevitable. What the international community considers as undesirable, and therefore as a candidate for prohibition and condemnation as an illegal activity, may not agree with the values of a particular country.

addition, the fundamental causes of forest crime are rooted in structural factors, such as power inequalities and the prevalence of democratic institutions, that are difficult to analyse.

While at this point it is impossible to disentangle completely the complex interactions and causality chains that determine the incidence of forest illegal acts and their variation across countries or regions, it is possible to advance some of the factors that probably contribute to creating favourable conditions for illegal acts to proliferate. Research shows that many of these underlying factors are important in other sectors of the economy and there is no

reason to believe that they would not be valid in the forest sector as well. Each of these underlying factors is probably insufficient to generate conditions that could be favourable to the propagation of illegal acts. Rather, their interaction, mutually reinforcing in many cases, is likely to create an environment that is propitious to forest crime.

The underlying factors that facilitate illegal actions in the forest sector can be classified as: i) a faulty legal system, ii) insufficient knowledge and poor knowledge management, iii) excessive discretionary power in both the public and private sectors, iv) poor implementation capacity of the public forest administration and enforcement agencies and v) lack of transparency (see matrix).

Examples of factors that contribute to the occurrence of illegal acts in the forest sector	
Factor	Problem
Failures of the law.	Law is “unfair”. For example, it does not recognize traditional rights.
	Law is unrealistic and unenforceable.
	Law is inconsistent. Forest laws and agrarian, mining and oil or infrastructure laws may clash.
	Law is confusing, with unclear rules.
	Law has a multitude of norms.
Insufficient knowledge and inadequate knowledge management.	Law does not generate sufficient incentives, imposing weak penalties for illegal acts while allowing high rewards.
	Poor knowledge about the condition of the forest resource and its changes over time (weak baseline data and monitoring capacity).
	Insufficient knowledge about the causes of such changes and their consequences.
Excessive discretionary power in the public sector and monopoly power in the private sector.	Even if knowledge exists, dissemination and use are deficient.
	Public decision-makers are empowered with considerable unaccountable, discretionary powers.
Poor implementation capacity of the public forest administration and enforcement agencies.	Private corporations enjoy monopoly conditions.
	Poor enforcement capacity of either the forest service or enforcement agencies. Inadequate coordination between agencies.
	Weak enforcement of laws outside the forest setting.
	Poor dispute resolution.
Lack of transparency.	Unclear property rights, including those of government.
	Government agencies or private entities are not required to make their decisions public. This is a variation of the problems related to too much discretionary power and to imperfect knowledge.

“Failures” of the law

A faulty policy or legal framework may cause illegal acts. Clashes of norms occur when legal rights to resources do not coincide with rights that people believe they are entitled to have. Legal norms in these cases are perceived as “unfair”, and some actors will resist their application. For example, a village may have used forests for obtaining fuelwood,

wildlife, construction materials, medicines and many other products. While these traditional uses for a long time were governed by unwritten rules, colonial powers may have totally ignored these traditional arrangements and declared forests under government property, failing to provide communities with formal rights. This is likely to translate into anger and contempt for the government. In these cases, the potential for illegal acts is high.

In other cases, laws and regulations governing the management of forest resources may require certain actors to comply with unrealistic rules. Thus, rural communities may be asked to prepare detailed and highly technical forest management plans before they can use their forests, but they may be unable to deliver these plans with the level of detail and technical sophistication required by law. Under these circumstances, the law may quickly become unrealistic and unenforceable.

Furthermore, linkages between the forest law and other related legal texts, such as those governing landownership, environmental, mining and trade laws, may open inducements and opportunities for forest illegal acts. For example, agricultural or landownership legislation may favour illegal deforestation. Thus, in some legal texts, proof of substantive presence has been a key factor in obtaining legal landownership. Since an easy way to demonstrate presence is to burn the forest and plant agricultural crops, land titling policies led to illegal deforestation in many countries. Latin American governments' initiatives to support settlement, agricultural expansion and cattle ranching in agricultural frontier areas during the 1960s and 1970s unintentionally led to a proliferation of illegal activities affecting forests. One of the lessons of the POLONORESTE project in Brazil was that it was necessary to ensure that institutional and enforcement capabilities were in place before embarking on massive development of agricultural frontier areas. Similarly, policies for mining and oil exploration, or for infrastructure development, are among those that cause the greatest damage to forest by increasing the propensity to commit illegal acts in the forest sector. For instance, the increasing accessibility to forest resources from new mining roads facilitates the illegal entry of landless populations to public forest resource areas.

Another common problem is the proliferation of norms that may be unclear or even contradictory, thus creating confusion in their application. In Bangladesh, the original forest law was issued in 1927, and many amendments have been passed since then with rural courts appearing to make decisions based on versions compiled decades before. Kosovo had laws written in Albanian, Serbian and English from its days as an autonomous region of Yugoslavia, from when autonomy was revoked and since the establishment of the current United Nations administration, respectively. Translations were poor and the new laws were written without a full understanding of the older laws (Rosenbaum, 2002). At the opposite extreme, sometimes laws are passed but their operational norms are never issued, thus causing uncertainty on how legal prescriptions should be applied in practice.

In addition, it is reasonable to expect that there will be a greater propensity to operate outside the law when net economic rewards of doing so are likely to be considerable.

High rewards are to be expected when forest resources are abundant and valuable, the probabilities of being caught are low and penalties for failing to follow regulations are not severe. This situation arises when forest monitoring systems are weak and when the law sets financial penalties in fixed monetary terms, which quickly lose their meaning through time as inflation reduces their real value.

However, legal failures do not affect only producing countries. International trade and the growing demand for forest products from the tropics in highly industrialized countries fuel many illegal acts, and these countries are ill-prepared to control them. For example, legal provisions in these countries do not yet allow for the confiscation of imported timber that has been illegally logged in an exporting country (EIA-Telepak, 2001). Since a large proportion of exported valuable tropical timber comes from countries where illegal logging is common, it is safe to assume that consuming countries are importing a large proportion of illegal timber. Until recently, there were no explicit policy directives or legal norms in these countries to differentiate between legally and illegally sourced timbers.³

Insufficient knowledge and inadequate knowledge management⁴

In forest-rich countries with low levels of economic development, knowledge about the attributes of forest resources is generally imperfect. Volumes, quality of forest resources, the distribution of species and their geographical location are only partially known. Forest inventories and forest management plans are either imperfect or non-existent. Governments may have clear boundaries on paper for their national parks and reserves, but these limits are seldom demarcated on the ground. Local peasants or companies entering these lands may not even know that they are trespassing. In all these cases, which unfortunately are not uncommon, there is a weak or completely absent information and knowledge baseline that would allow monitoring of changes in the forest condition, its causes and consequences. Loggers and other users of forests can enter forest lands and extract scattered valuable trees or other products, and this may go unnoticed for long periods.

Monitoring the quantity and quality of forest products is also difficult because these products are not homogeneous. Species may be misidentified for example.

Even when information is available, it is common to find that this information flows slowly between government agencies, and therefore has reduced value in terms of providing a basis for decision-making. There have been cases of land reform agencies giving land titles in national parks because of imperfect communication with national forest services. Whether this imperfection in information flows is due to weak

³ Some species are protected under CITES.

⁴ The distinction between information and knowledge is not always clear. Information is normally understood as a logical organization of data, while knowledge is something that is believed to be true and work in practice. Thus, knowledge may be information combined with experience, reflection and reference to specific contexts. There is no agreement on what knowledge management is either. Many prefer to use the terms “knowledge sharing” as a better reflection of the meaning of the concept.

institutional communication channels or to other factors, such as institutional rivalries, is an open question. What is clear is that these conditions facilitate illegal operations.

The remoteness of forest resources and the lack of accurate information mean that the public has only a vague idea of what is happening with the nation's forests and what the consequences of current uses may be. A uninformed public lacks the basis for organizing advocacy campaigns and political pressure to improve law compliance in the management of forests.

Consequently, the lack of information and of good access to knowledge for various stakeholders and the public appear as a key factor in the occurrence of illegal acts in the forest sector.

Excessive discretionary and monopoly power

As forests are often distant from decision-making centres and communications are difficult, most forest public administrations grant considerable discretionary powers to their field officers. Unsupervised local forest officers have a great deal of latitude to decide about what forest management practices should be employed and to certify compliance with the law. They may be the only government authority to certify volumes and species extracted from forest concessions or the compliance with sustainable management regulations.

Decision-makers in the forest public administration may have great discretion in awarding concession contracts and procurement orders and controlling staff promotions.

Substantial discretionary powers create a propitious environment for illegalities. Decision-makers also have an incentive to create more rules that would allow them to increase their discretionary power, thus generating a self-feeding mechanism fostering illegal actions. When there is great freedom for unaccountable decisions, staff merit may be less important in staff appointments and promotions, while their ability to follow and comply with the orders of a corrupt superior count more.

The counterpart in the private sector is monopoly power. Research results show that illegal acts, particularly corruption, are more frequent when there is a concentration of economic and political power in a few hands. In countries where there is a significant concentration of economic and political power, there is a higher risk that influential interests will seek to gain control of the sector, sometimes capturing the ability to influence key decisions made by the government. With concentrated power, there is less competition and a greater possibility for individuals or corporations to influence, not only the economic, but also the political scene and to operate at the margin of the law with a greater degree of impunity (World Bank, 2000b).

Limited capacity of the public forest administration and enforcement agencies

When the state is weak, there will be a greater inclination to commit illegal acts as the probability of being detected and punished is low. For example, crimes committed in the

forest sector may not be subject to prosecution because the judiciary and the police force may be ineffective. Accountability in these cases evidently tends to be very low, and the potential rewards of illegalities may easily abundantly exceed the probable costs, with the result that the inducements to forest crime are powerful. In these environments, even if the law and its regulations are sound, a second set of rules may dominate the public forest administration, based on relationships of friendship, common interest or power. In this shadow set of rules, oral commands count more than the written legal texts, and corruption expands.

In many countries, the government claims ownership rights to forest lands. Human resources of the public forest administration are too thinly extended with a few officers responsible for very large areas of public forests. In addition, in these countries, either because of the lack of resources of the public forest administration or land titling agencies, forest landownership rights are often unclear, or absent altogether. As already explained, this facilitates the invasion of publicly owned forests.

Moreover, government forest officers in charge of decisions that involve large financial values are on comparatively humble salaries. The propensity for malfeasance in these circumstances may increase although, as we will see later, the evidence from research on the subject is far from definitive.

Frequently, the main executives of the public forest administration are political appointees who must respond to the interests of higher political powers rather than to greater constituencies. Linear authority systems like this facilitate illegal acts if the superior officer is corrupt. A reluctant political appointee can be removed from a position and replaced by a more pliant one.

In some cases, owing to the lack of transparency and accountability and the high levels of unemployment existing in many poor societies, corrupt government recruitment officers are able to sell positions. The amount of bribes may increase if the position bought offers opportunities for corruption. In such a system, illegal acts may quickly become pervasive.

The main elements of a strategy to improve law compliance in the forest sector

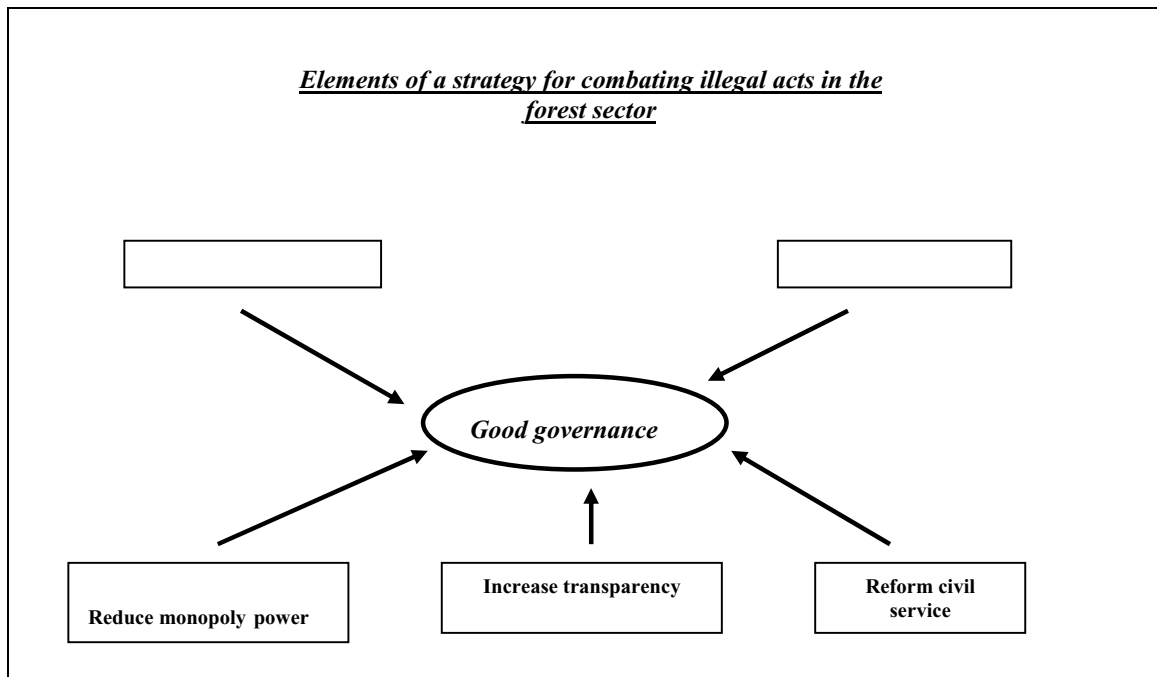
This section discusses *what* critical actions need to be undertaken to improve law compliance. The next section will examine *how* these actions can be implemented in practice.

From the above it is apparent that the cause of illegal acts in the forest sector are multiple and that individual remedies focusing on one or few of them, such as improving the legal framework or the capacity of the forest institution to enforce the law will probably not produce satisfactory results. A comprehensive set of activities has a greater chance of being effective, with governance programmes including actions on various fronts in different proportions and intensities – based on the specific circumstances that may be faced in a country.

The next sections analyse the main potential components of these programmes. As discussed, the propensity to commit forest crime is a function of failures of the law, imperfect knowledge, the existence of monopoly power, lack of transparency in decisions and weak institutions. These factors need to be the basis of a strategy for combating illegal acts (See diagram below).

These factors can be broadly categorized into three groups of actions aiming at: i) preventing illegal acts by changing the system of incentives (negative and positive) to modify behaviour, ii) detecting forest crime in an effective and fast manner, and iii) organizing fast and determined actions for suppressing illegal actions.

Ideally, illegal acts would be combated primarily by preventing their occurrence. Perfect knowledge about the need to impose society's values over private gain and the consequences of not doing so, as well as the setting up of proper incentives for aligning private action with the public good, would significantly reduce the propensity for illegal acts. But reducing the propensity to commit forest crime is not enough. These measures must be accompanied by the prospect of punishment when the law is broken. Law enforcement, to be effective, needs to rest on a capacity to monitor what is happening in the sector, on the ability to separate actions that are legal from those that are not and on effective means to impose regulations by inflicting adequate punishment on those who do



not comply with the rules.

Therefore, the objectives of prevention, improved detection and suppression have mutual dependencies and reinforce one another. For example, knowledge of the existence of an effective system to suppress forest crime is, in itself, a powerful deterrent. As is also the

case when potential illegal actors know that country counts have an effective structure to monitor what is happening in forest areas. Similarly, a good detection mechanism would facilitate proper enforcement of the law by providing early knowledge of the crimes being committed and solid evidence that would facilitate arrest and prosecution. Consequently, the suggested categories of reform actions described in the following paragraphs should not be seen as individually effective solutions to the problem of illegal activities in the forest sector, but rather as components of an integrated policy and legal reform package. The various interactions between these policy reforms are schematically displayed in the matrix on the next page.

Reduce law failures

Simplify rules as a way to limit discretionary powers. When illegal acts are detected, there is an understandable desire to regulate more, rather than less, to limit the possibility of action by increasing the number and detail of rules. However, this approach may backfire. In many cases, regulations are already so complex and numerous that the only way to get things done is to go around them. While, on occasions, this is done in ways that genuinely attempt to get things moving unhampered by absurd regulations, in other cases the intent is corrupt. As mentioned, frequently the proliferation of rules and complex procedures may be intentionally designed to extract bribes. The abundance of rules increases the possibility for discretionary decisions and creates additional avenues for corruption, the very problem that the new rules may try to solve. Furthermore, the multiplication of rules may be administratively expensive and may negatively affect economic efficiency.

Specific policy reforms to improve law compliance

	Law and norms	Knowledge management	Monopoly power	Transparency	Civil service reform
Prevention	<ul style="list-style-type: none"> *Simplify rules. *Recognize traditional rights. *Strive for realistic rules. *Introduce safeguards in legislation in other sectors. *Reduce discretionary powers. *Establish clear property rights. 	<ul style="list-style-type: none"> * Promote public education. * Carry out resource assessments. * Improve statistical systems. * Require forest management plans. * Promote certification. * Foster buyer groups. 	<ul style="list-style-type: none"> * Promote competition. * Split decisions into smaller components. * Promote meritocracy. * Obtain balance between industrial demands and capacity of forest resources. * Support codes of conduct. * Make use of incentive contracts, performance bonds. * Increase penalties for non-compliance. * Promote certification. * Foster codes of conduct. 	<ul style="list-style-type: none"> * Privatize selected functions of government. * Widely publicize bidding of timber concessions and procurement orders. * Improve auditing, inspecting and investigating. * Demand public hearings. * Reform disclosure rules to facilitate public access to information. 	<ul style="list-style-type: none"> * Clarify property and use rights. * Increase salaries. * Promote certification. * Depoliticize the public forest administration and foster meritocracy. * Foster codes of conduct. * Promote buyer groups. * Engage NGOs. * Secure help from international assistance organizations.
Detection	<ul style="list-style-type: none"> * Provide for audits, inspections and investigations. * Provide for public hearings. * Facilitate independent reporting. 	<ul style="list-style-type: none"> * Generate baseline information. * Promote public knowledge. * Strengthen resource monitoring systems. * Require forest management plans. * Promote certification. * Facilitate independent reporting. * Establish efficient product tracking systems. * Employ survey diagnostic tools. 	<ul style="list-style-type: none"> * Promote certification. * Foster codes of conduct. * Facilitate independent reporting. * Employ survey diagnostic tools. 	<ul style="list-style-type: none"> * Improve auditing, inspecting and investigating. * Demand public hearings. * Reform disclosure rules to facilitate public access to information. * Facilitate the work of ‘whistle-blowers’. * Facilitate independent reporting. * Employ survey diagnostic tools. 	<ul style="list-style-type: none"> * Promote certification. * Foster codes of conduct. * Engage NGOs. * Facilitate independent reporting. * Secure help from international assistance organizations.
Suppression	<ul style="list-style-type: none"> * Establish realistic penalties for forest crime. 	<ul style="list-style-type: none"> * Require forest management plans. * Promote certification. 	<ul style="list-style-type: none"> * Promote certification. * Foster codes of conduct. 	<ul style="list-style-type: none"> * Promote certification. * Foster codes of conduct. 	<ul style="list-style-type: none"> * Engage law enforcement agencies and the army. * Increase administrative checks and balances. * Promote certification. * Foster codes of conduct. * Secure help from international assistance organizations.

As a rule of thumb, regulations that increase monopoly or discretionary power and that are obscure will tend to increase illegalities. On the other hand, regulations aimed at dismantling the influence of powerful vested interests, that reduce arbitrary decisions and that force greater transparency in decision-making are likely to help. Regulations that are imposed in environments characterized by poor information, lack of competition or high uncertainty may also help in deterring forest crime.

However, in most cases, the reduction in number and the simplification of rules are important steps in fighting forest crime. To mention an example of how simplification of norms may diminish opportunities for illegal acts, the Bolivian Government, in reforming its timber concession policies, decreed that the concession fee would be US\$1 per hectare per year. The rule is simple and clear: a concession covering 100 000 hectares must pay US\$100 000 in concession fees per year. There is no room for interpretations or modifications of this amount based on doubtful criteria. Monitoring compliance and prosecution are extremely easy, as the evidence is transparent. While the economic soundness of charging a uniform fee in various timber concessions which may have very different commercial values is questionable, the new norm has the undeniable advantage of diminishing the incidence of corruption or arbitrariness in determining concession fees.

Strive for realistic rules particularly with regard to the recognition of traditional rights.

Evidently, laws and norms should be feasible or they will fail to be implemented. However, this obvious principle is often forgotten. Requiring impossible deeds from actors of the private sector or the civil society is a sure recipe for forcing these operators to act outside the law. In particular, developing countries affected by colonialism may make special efforts to recognize traditional rights of local populations that were ignored by colonial powers. It is not realistic to expect that local populations will surrender rights that they have enjoyed for generations.

Several former colonies have begun to reform their policies and laws to allow for greater recognition of land tenure and other rights by local communities. The United Republic of Tanzania, Uganda, Lesotho, Malawi and Namibia have made substantial progress in this respect. For example, since 1999 Tanzania's land law allows village councils to allocate village lands and to assign their use, rights that these councils have used extensively (Wily and Mbaya, 2001). Such reforms allow communities to operate within the law and formalize de facto rights previously dismissed by the government.

The above does not mean that the law should *always* completely surrender control to local communities. The broader public interest may clash with the narrower interests of local communities. In these cases, if the public interest is to be served, the law may include the possibility of some form of compensation to local communities to balance the loss of traditional forest rights and to defuse the propensity to operate outside the law. In addition, a clear explanation of *why* such limitation of community rights may be needed would go a long way in securing local support and compliance with the law.

Make every effort to introduce safeguards in legislation in other sectors. As already mentioned, development in other sectors may have an important effect on the propensity for illegal acts in the forest sector. Realization of the negative effects of policies in infrastructure, mining, agriculture and other sectors has led institutions such as the World Bank to consider these impacts in their support to governments, and there is a strong case for governments also to include these impacts as a matter of routine in their sector development schemes. For example, environmental or infrastructure legislation can include provisions for environmental impact assessments; often new roads can be redesigned to keep them a certain distance away from protected forest areas, thus reducing the possibility of illegal invasion of these areas, and so on. The design of a Chad-Cameroon Petroleum Development and Pipeline Project, a multimillion-dollar venture supported by the World Bank which includes the drilling of some 300 wells and the construction of a pipeline that would cross a variety of ecological zones over more than 1 000 kilometres, included detailed environmental and social impact assessments, as well as safeguards to minimize environmental and social disruptions. Projects of this magnitude implemented without the necessary safeguards, may lead to large-scale illegal access and to the unnecessary destruction of valuable forest areas.

Provide for rules that would facilitate the establishment of clear property rights. As unambiguous property rights are fundamental for establishing a clear separation between legal and illegal uses, the law should dedicate particular attention to establishing the rules of the game in order to achieve a better definition of property rights. These may include the acceptance of traditional rights discussed in previous paragraphs, and also the rights of other owners, including those of the government which often owns forest lands that are already occupied by others and have boundaries that may be subject to challenge.

Establishing clear property rights is not easy or cheap. Overlapping landownership claims may be numerous, and disentangling them is an intricate task. The situation grows in complexity when other privileges, such as the right to collect fuel or hunt, overlap on physical spaces claimed by others.

Facilitate independent reporting. The law can foster independent reporting of forest crimes by creating incentives for citizens to look for, detect and provide testimony for illegal acts. In certain cases, the law can provide protection for whistle-blowers or rewards such as a substantial proportion of the monetary value recuperated being given to those who detect, report and document illegal activities.

Reporting may originate in many different ways, by officers of the government or by private individuals or corporations. Formal and confidential reports or informal leaking of information to the press are established avenues along which whistle-blowers operate. Formal reports by government officers may be more problematic in terms of notions of loyalty to superiors, the institution and colleagues. The reporter's prospects for career advancement may be damaged. Anonymous reporting may solve some of these problems but, in many cases, governments do not allow action to be initiated on anonymous reports, because of the obvious possibilities for abuse. Regulations that mandate

reporting, as well as statutory protection for the reporter, may contribute to reducing possible reticence to uncover illegal acts.

Establish realistic penalties for forest crime. The problem of financial penalties losing their real value because of inflation is so common that, in many cases, it may be advisable to legislate on how penalties will be set and what procedures will have to be followed in order to preserve their force. Ideally, penalties should be commensurate with the offence committed. In some countries, illegal products are confiscated, as is the equipment associated with the crime such as trucks, sawmills and so on. In addition, fines can be imposed as well. Governments also have the option of blacklisting companies that commit illegal acts, thus barring them from further government contracts. The nature of the crime and the penalties imposed can be widely publicized, with the twin purpose of damaging the image of the perpetrator and informing honest operators of the dangers of doing business with the offending company.

One word of caution is necessary. Excessively harsh penalties may not work. Judges may be reluctant to impose penalties that they perceive as disproportionate to the gravity of the illegal act committed.

Increase and disseminate knowledge

Perhaps the most effective way to reduce incentives to illegal actions in the forest sector is to increase the general level of knowledge about the features of forest resources, how they are being managed by public and private sector actors and the consequences of alternative management schemes on the quality of the resource and the environment, the forest-dependent poor and the economy.

The power of public and international knowledge should not be underestimated. Although it would be an overstatement to assert that recent policy reforms in Brazil and Cambodia, prohibiting logging of mahogany and logging in general, respectively, were due exclusively to a better understanding by government and the public of the consequences of indiscriminate and illegal logging, it is plausible that expanded publicity and the pressure on national and international public opinion had an important role in such decisions.

Create baseline information. Carry out resource assessments and link physical changes in resource quantity and quality to human well-being. As already mentioned, without knowing the main features of forest resources, their economic, environmental, cultural or social values, there is very little reason for anybody to be concerned about their disappearance or degradation. Unfortunately, most developing countries simply do not know the extent of their forest resources, how they are being managed or mismanaged and what the consequences may be for the economy as a whole, for particular groups and for the environment. In particular, the public is not informed about the values involved, how these are depressed because of illegal activities and how these depressed values affect the commercial possibilities of sustainable forest management options.

In these circumstances, it is extremely difficult to form coalitions of interests or to mobilize public opinion and political groups to introduce reforms to fight forest crime. Illegal forest acts may not be perceived as important enough to deserve greater attention or effort, especially in societies where there are many competing demands for government attention. Hence, increasing the knowledge of the public, public decision-makers, politicians and the judiciary is a significant element in securing better law compliance.

An essential element for detecting and facilitating suppression of forest crime is adequate baseline information as well as a scheme for tracking the evolution of the forest, the movement of forest products and the financial consistence of production and trade operations.

To help with these tasks, modern technologies, developing at a fast pace and at prices that are more affordable, are within the reach of most forest services. Remote sensing tools can provide a wealth of knowledge about the condition of forest resources and can detect, in real time, changes in their condition or provide quick information about developments that may threaten their integrity, such as the illegal construction of penetration roads or illegal mining operations. While satellite imagery may still be too costly to use on a continuing basis, it is effective in tracking major disturbances. Periodic and relatively inexpensive flights can spot illegal operations because the areas involved are generally considerable.

Global positioning systems (GPS) is a worldwide radio-navigation system formed by a group of 24 satellites and their ground stations. GPS measures locations on earth by using a satellite triangulation system that is accurate to within 1 centimetre. GPS receivers are small and very economical, making this technology accessible to almost any forest service. Receivers operate under forest canopy. GPS enormously facilitates the identification of property limits, demarcation and legalization of forest lands, as well as detection of illegal operations taking place on those lands.

In addition, systems have been developed to track logs and forest products from origin to market (chain of custody). Tracking technologies are available, but few governments have made serious efforts to introduce them in the forest sector although the need is acute.

These, and other modern technologies that still have to be widely used in the forest sector, provide the means to increase knowledge about the evolution of the sector and can provide essential information for detecting and prosecuting illegal operators.

Abundant information can also help in obtaining the support of the public in combating illegal actions affecting forests. This requires translating cold assessments of the quality and quantity of the resource and the nature of its changes, its causes and the impacts that all this is having on the quality of environment, the economy and the well-being of the populations that are most affected by such changes. And a good understanding of the

Recent notable policy reforms to stem forest crime in Cambodia

During the last two years, and despite constant efforts to the contrary by various parties, illegal logging has been steadily increasing in Cambodia. Since 1999, Global Witness has worked in partnership with the government and with the support of the international community to monitor independently developments in the forest sector. During this period, the independent monitor reported various cases of illegal activities in all timber concessions. Illegal logging was believed to be quickly leading to the total exhaustion of Cambodia's forest resources. These events were widely publicized.

Recently, Prime Minister Hun Sen declared the suspension of all logging operations starting 1 January 2002.

consequences of illegal resource use is likely to trigger political support for government, as well as private sector, action against forest crime.

Improve statistical systems to increase information about production and trade of forest products. Increased knowledge about the condition of forest resources can be complemented with information about how products are manufactured and traded. Various criminal acts that are not detected at the forest can be noticed at the subsequent stages of transport, industrial processing and trade. An efficient information system that can register data

about how forest raw materials are processed and then traded in national and international markets can be a powerful deterrent to forest illegalities involving false declarations of species and volumes used in manufacturing and import and export assessments of value.

For example, comparisons of export quantities and values and corresponding figures registered by importing countries can easily uncover underpricing and transfer pricing schemes. Thus, in 1995 importer countries reported some 276 000 additional cubic metres of logs over and above those declared as exports by Myanmar. This could be equivalent to about US\$86 million being undeclared, or almost half of Myanmar's forest exports revenues that year (World Resources Institute, 1998). If exporters knew a scheme were in place to detect this kind of inconsistency (and if penalties were harsh), the propensity to produce false declarations would be reduced.

Require forest management plans and foster certification. One of the best ways to secure proper deterrents by facilitating detection of forest crimes is to demand forest management plans. The knowledge of what is intended to happen in a certain forest and the possibility of contrasting this with what is happening in practice are a powerful deterrent, facilitates detection and prompts action to suppress illegal acts. The Bolivian case shows that even a country affected by lack of financial and human resources can put a large proportion of its forest resources under sustainable forest management plans. The Bolivian case is also interesting because the law required plans that largely coincided with the requirements of independent certification. Thus, the government accepted independent certification as evidence of compliance with the law. A large number of concessionaires and timber owners saw certification as a way to comply with legal requirements but also as a means to secure a market share (if not better prices) in industrialized country markets. Consequently, Bolivia is now the certification leader in the developing world with about a million hectares of forests already certified as being under sustainable forest management. This is a clear case of a government that managed to produce the right combination of incentives affecting various actors in the sector.

Promote public education and awareness to induce greater participation and to create pressure for introducing and sustaining reforms. As already discussed, reformers may contribute to increasing awareness by publicizing the results of resource and product assessments and tracking in easily understood language. Give people the facts about resource use that may affect their well-being, and civil servants in democratic countries may think twice about breaking their trust. Private corporations abusing the law may also think twice about the effect of market actions by an informed public on their profitability. Well-intentioned reformers will probably achieve little unless the people affected by illegal acts and corruption take up the fight themselves. This will not happen if they are not informed.

The civil society and some NGOs can effectively educate the public about the value of forest resources and the ways in which they are being managed. Knowledge about the incidence of illegal acts and the associated deterioration of the value of forests can help mobilize public opinion and create political pressure on the government and private corporations to manage forests in accordance with the law. A recent notable example of an NGO raising national and international public awareness about undesirable illegal operations is the case of Greenpeace' very effective action, in partnership with the government, in the Brazilian Amazon. Another one is the action of Global Witness in Cambodia, which plausibly had an important role in the recent decision to suspend all logging in that country. (see box, page 69).

Moreover, illegal acts sometimes occur simply because of ignorance of the law and its rationale. Better knowledge by the public, the government and the private sector would thus contribute to better law compliance.

The Government of Bolivia enacted regulations that force the forest administration to inform the public about its activities. Periodic reports must be issued and public hearings must be held to give account of the administration's activities to anybody who may be interested. The public also has access to official documents. This procedure has contributed to getting the public involved in decisions affecting forest resources, and in preventing, detecting and forcing action for suppressing corruption and other illegal activities.

Brazil: Stopping illegal mahogany logging and trade

Early in 2000, Greenpeace's Amazon Guardian, a 58-metre vessel with a crew of 31, initiated a four-month trip covering the Amazon River and various tributaries to document and expose illegal logging of mahogany and of rare Samauma. Illegal mahogany logging and trade has driven the construction of perhaps thousands of kilometres of logging roads into pristine and inaccessible areas of the Brazilian Amazon, thus being a mayor cause of degradation and deforestation, as well as of the destruction of traditional cultures in the region.

Greenpeace established a partnership with IBAMA, the Brazilian environment and natural resources institute. The campaign attracted great national and international attention, especially when Greenpeace exposed large-scale illegalities on Indian lands in the Amazon. A report, documenting illegal logging and trade, "Partners in Mahogany Crime" was delivered to the federal prosecutor and various environmental authorities and was posted by Greenpeace on the Internet, thus making it widely available.

Based on information contained in the report, IBAMA and Greenpeace conducted several inspections which in five days netted the largest volume of illegal mahogany logs in Brazilian history: 7 165 cubic metres, valued at US\$7 million. This major feat was also widely reported by the press and on environmental conservation advocacy Internet sites.

Simultaneously, the head of the Greenpeace Amazon campaign spent a month in Europe and North America raising awareness of the problem among government executives and industrialists, thus attracting further public interest among the major mahogany consumer countries.

On 6 December, IBAMA's President announced that the government had stopped all forest plans for logging mahogany in the states of Pará, Mato Grosso and Acre, excluding only those that were in the process of being certified as resulting in sustainable forest management.

This is a striking example of how increasing knowledge and raising national and international public awareness created the right conditions for the government to move decisively against the powerful interests behind illegal mahogany logging and trade. While campaigns against illegal mahogany logging and trade are a constant feature of international discussion of the Amazon, it is plausible that public awareness acquired over the years, and particularly through the striking findings of the Greenpeace/IBAMA research, provided the final decisive push that tilted the balance in favour of decisive action. The Government decision is likely to find a very favourable reception, not only in Brazil but also in the international community and the public in consuming countries. This is a broad constituency and is significant in terms of numbers as compared with the few who benefited from criminal logging and trade schemes and who will now see their options closing.

Reduce monopoly power

When key decisions are concentrated in a very few hands, the conditions are right for illegal acts and corruption. A typical case in the public management of the forest sector involves decisions awarding forest concessions to the private sector. Methodologies for rationalizing the management of forest concessions have received a great deal of attention in the past but, despite efforts for decades by national institutions and international agencies such as FAO (see, for example, FAO 2001a), timber concessions continue to be a source and example of mismanagement almost everywhere. True, some of the sources of inefficiency are related to lack of knowledge, lack of institutional capacity or other reasons, but many others have their origin in conscious efforts to avoid the law by corrupt officers with too much discretionary power and by companies that dominate the market. The following policy options may help to reduce these situations of concentrated power.

Encourage competition. Competition for timber concessions or procurement contracts can be encouraged by various means such as establishing clear rules and specifications, opening competition to international bidders or contacting bidders and providing them

with the necessary information. Assuring potential bidders of a clean and objective process in awarding contracts can also foster competition. This may be more credible if an independent agency is contracted to prepare bids and assess the relative advantages of the various bidders, and if the elements of assessment and final decisions are open to scrutiny by the public and potential competitors. Competition can also be more intense if there is an independent and efficient judiciary that would allow for fast consideration and resolution of challenges to decisions. Making use of the following options can also induce competition.

In cases where decisions involve massive amounts of money and resources, there may be an opportunity for splitting operations and decisions into smaller components. This may expand the number of competitors bidding for a concession or a procurement contract by reducing a barrier to entry, and may involve more people in the decisions, thus making it more difficult to keep dubious awards secret. Various smaller decisions reduce the comparative power of large companies, which perhaps would have been the only ones able to bid on larger contracts.

Carefully select personnel in charge of awarding timber concessions and large procurement orders. Foster promotions and assignment of responsibilities based on staff performance. The government should ensure that the highest possible quality of people serve in positions that are responsible for making decisions involving large amounts of money. In some cases it may be desirable to elevate decisions higher in the hierarchy, but this may be time-demanding and reduce efficiency. In addition, frequently, officials deciding on procurement orders and concession contracts are poorly paid and insufficiently trained. Still, linking promotions and responsibility to adequate performance is preferable to letting arbitrary advancement determined by a willingness to bend the rules reign.

Strive to obtain a reasonable balance between industrial demands and the level of sustainable forest harvest. Recent research illustrates the dangers of fostering a few large industrial forest investments, such as those in the pulp and paper industry, to levels that exceed the capacity of forests to produce raw materials on a sustainable basis (Barr, 2000). Investments in industrial capacity are so large that the concentration of power and the associated political pressure to keep plants operating is very strong, even if in some cases it may mean obtaining forest raw materials in illegal ways. Industrial development policies should therefore ensure a reasonable balance with the capacity of forest resources to produce the raw materials required.

Support the development and adoption of corporate codes of conduct. Responsible corporations have an interest in adopting rules of the game that would favour those that follow the law simply because this would level the playing field, that is to say it would contribute to eliminating the comparative advantage of those that operate outside the law. The development of codes of conduct is, in a way, a reaction to government inability to control illegal acts in the forest sector. It is also a commercially inspired reaction to consumers who may demand products originating in environmentally and socially (and therefore legally) sound sources. Thus, transnational companies that may enjoy monopoly

powers in the extraction of forest products in forest-rich countries but competitive conditions in their international markets, may be interested in adopting codes of conduct. For example, a transnational company from an industrialized country may enjoy monopolistic advantages in a small underdeveloped tropical country where it obtains its raw wood to produce furniture, doors, etc. That company may choose not to abuse this potential advantage in the tropical country and adopt codes of conduct that would assure consumers at home and in its other industrialized country markets that its operations follow the law in the host country. The incentive to do so is largely commercial, particularly if those corporations that ignore legal norms can be identified against the objective framework of the code.

Voluntary codes of conduct complement weak laws or laws that are difficult to enforce. The point is that, when government law enforcement is weak, independent initiatives pushed by market concerns may induce transnational corporations voluntarily to adopt codes of conduct that would improve their commercial position in sensitive industrialized country markets and, at the same time, satisfy the law in host countries. And, in doing so, undermine the competitive position of those corporations that choose to pay little attention to the law. Clearly, government policies should favour the adoption of codes of corporate conduct and should foster monitoring procedures that would document compliance. The advantage of this type of initiative is that it does not depend on the vague ethical connotations of law compliance, but rather on the more realistic creation of market incentives to ensure legal actions. This subject is closely related to that of independent certification, discussed later in the text.

Encourage incentive contracts and performance bonds and increase penalties for non-compliance. Changing rewards and penalties in dealing with monopolistic enterprises may go a long way in altering their behaviour. Incentive contracts that reward companies that perform above established norms, for example in the implementation of timber concession contracts, may consist of an explicitly favourable and objective treatment in the awarding of future contracts, a differential tax treatment linked to a clear standard of performance or a public recognition of commendable corporate efforts to comply with legal standards. These measures can be simultaneously tied to increased penalties and policies for non-compliance, such as those requiring “performance bonds” that explicitly link monetary penalties to impartial contract implementation indicators, imposing severe criminal sanctions and publicly blacklisting companies that choose to disregard the law. Publicity used to damage company names and images can be an effective deterrent.

Reduce length of concession contracts. Long-term concession contracts are usually considered to be conditional on respecting the law and implementing long-term sustainable forest management plans. However, this type of contract effectively discourages competition unless it is subject to periodic reviews and performance standards. It may be much more advisable to simulate competitive market conditions and grant concessions for a limited period only, with the proviso that they will be extended if certain well-established and transparent standards of performance are satisfied. This would provide an incentive for following the law and would subject all concessionaires to market forces that would contribute to generating incentives for following the law.

Promote certification. Some systems of independent certification of forest products contribute to eliminating illegal logging and trade, and therefore to cancelling some of the

Forest Certification

Some large forest products markets, responding to concerns about deforestation and misuse of global forest resources, are requiring that forest products be certified as originating in sustainably managed forests.

Certification assesses various activities in the forest production chain and corroborates compliance with certain rules at each stage. At present, most of the attention is focused on forest management. However, forest products made from raw materials from certified forests are also being certified. Certified products guarantee that sound forest management practices are being employed in the production.

Depending on circumstances, certification may include aspects such as compliance with the law. In other cases, compliance is implicit, as sustainable forest management is frequently a declared forest policy and legislative objective; forests that are certified as being sustainably managed can safely be assumed to comply with the law.

While forest certification is still in its infancy, certified forests may cover as much as 90 million hectares worldwide (Bourke, 2001). There are many certification schemes, including those of the Forest Stewardship Council, the Pan European Forest Certification Scheme, the International Organization for Standardization (ISO) 14001 Environmental Management System standard, the Canadian Standards Association and the American Forests and Paper's Association Sustainable Forestry Initiative.

Overwhelmingly, the greatest area of certified forests is still in industrialized countries, obeying the location of demand for certified products, concentrated in Western Europe and, to a lesser extent, the United States. In major developing markets, such as those of Indonesia and Brazil, internal demand for certified products is much more limited, but these countries are also main producers and exporters to Europe and the United States and are thus interested in having their products for the international markets distinguished by certification.

While certification does not appear to guarantee higher export prices, it is of interest to exporters because, in many cases, it does constitute a growing requisite for international market access. For example, Indonesia developed criteria and indicators for auditing the operations of forest concessionaires and Malaysia formed a National Certification Council, which is also establishing a set of criteria and indicators that will facilitate monitoring and evaluation of forest operations in that country (FAO, 2001). At the time of writing, Bolivia had about a million hectares of certified forests, starting practically from zero in 1996 (Contreras and Vargas, 2001). Certification is a promising "soft" policy instrument to promote compliance with the principles of sustainable forest management required by most forest laws around the world.

incentives to forest crime associated with monopolistic corporations. While certification may not be the solution or magic bullet to the problem of forest crime, it enhances market signals in favour of forest products obtained from sustainably managed forests and, therefore, in compliance with most forest laws. Some schemes, including the popular Forest Stewardship Council (FSC), require explicitly that the parties seeking certification demonstrate compliance with the law of the country and its international agreements (see box above).

Increase transparency in public decision-making

As mentioned, many illegal acts occur because public officials have considerable discretionary power in making decisions which can be less than transparent. These conditions breed an ideal environment for corruption. The following policy measures can help in dealing with these factors.

Privatize selected functions of the public administration and increase the use of decisions based on market forces. Frequently, some decisions can be transferred to the

private sector or to groups of the civil society. Sometimes, forest administrations are reluctant to do this because of the inherent differences between the public good and private interests that characterize many of the decisions in the forest sector. However, second best situations can still be better than exclusive public management. Procedures to plan and award timber concessions or for procurement, for example, can be carried out by specialized international agents of the private sector utilizing more transparent and open processes based on market prices, rather than on administrative decisions. The government can also substitute contracts for specialized operations based on open bidding processes, such as the harvesting of a certain volume of species in a given area by entities of the private sector, for awarding all-inclusive concession contracts.

Specialized agencies such as the Société Générale de Surveillance have experience in handling these types of operations. While the utilization of these agents does not eliminate enticements to commit illegal acts, their international nature and the value of their reputation for integrity create powerful incentives to operate honestly.

Common corrupt practices in awarding concession and procurement contracts

1. Artificially increasing discretion in awarding contracts. For example, by splitting contracts into smaller subcontracts and thus circumventing requirements of higher-level approval.
2. Restricting information about the contract in order to let preferred parties increase their monopoly power.
3. Establishing unnecessary prequalification requirements that can only be satisfied by the preferred party.
4. Tailoring specifications that only a preferred party can satisfy.
5. Leaking confidential information about supposedly competitive bids to a preferred party.
6. Distorting the evaluation phase of bids by introducing unclear criteria for selection and obscure exceptions to the contract award rules.
7. Potential bidders entering into collusive arrangements.
8. Potential bidders offering bribes to bid evaluators.
9. Potential bidders offering unrealistic performance in order to win the bid and then offering bribes to controllers to avoid penalties.
10. Drafting ambiguous bidding and contract rules to increase discretionary power of decision-makers.

Based on Wesherrv. 2001.

Widely publicize bidding for concessions and procurement contracts. Whether bidding is carried out by the public forest administration or by private agents, there should be a careful planning of the rules governing the process, including provisions for changes in the rules of the game, and once these conditions are established, they should be publicized with three purposes in mind. First, wide publicity would contribute to eliminating monopoly conditions related to asymmetric information where only one or few preferred firms may have access to available opportunities. Second, publicized rules create a widely known information baseline that allows better public monitoring and evaluations of the impacts of deviations from the established prescriptions of the contract. Third, public processes also reduce the discretionary power of a few decision-makers, which may breed conditions for corruption, and replace it by a more profound consideration of a wider variety of interests, by a blend that most likely would be closer to societal objectives. Some common bidding tricks to watch are described in the box.

Reform disclosure rules and strengthen oversight mechanisms.

Greater transparency in government and private sector operations can be achieved by strengthening the three oversight mechanisms of auditing, inspecting and investigating. The law can be reformed to demand that information on decisions and their effects be given to the public. Public

hearings can be held regularly to report major decisions and activities of the forest public administration. This is in addition to regular audits that can also be effective in introducing greater transparency in decisions. Rules can be reformed to allow for greater disclosure and access of the public to government documents. The prospect of independent and surprise inspections of operations and documentation can be a useful deterrent. Modern investigative tools such as corruption surveys and computer-assisted detection of patterns of illicit behaviour (for example in procurement) can also help in increasing the transparency of decisions and, thus, preventing illegal acts.

In some cases, simple procedures and publicity can prevent illegal acts. For example, Poder Ciudadano, the Argentine Chapter of Transparency International, promoted accountability in procurement by simply comparing prices of standard goods purchased by various agencies. Results showing substantial variations between agencies were published on the Internet and this led to a considerable drop in the prices of goods procured.

Institutional and civil service reforms

Even with perfect laws, adequate knowledge, competitive markets and transparent decisions, forest institutions may be inadequate to ensure law compliance.⁵ While there are many institutional factors that facilitate illegal acts, the following areas of policy reform merit special attention.

Establish clear property and use rights. Carry out delimitation and demarcation of priority forest lands. It is self-evident that vague property or use rights are not easy to enforce. Indisputable forest landownership rights are a necessary condition for better law compliance. Furthermore, uncertain rights discourage investments in forest management because of higher risks, and they increase cut-and-run operations.

The establishment of clear property rights is not an easy task and it does not come cheap. While new technologies now make it easier to determine the physical parameters of a property on the ground, the legal process to take care of conflicting claims is generally quite complex and time-consuming.

Furthermore, and quite separate from who owns the land, often various use rights may exist on the same piece of land. Different groups use the same piece of land for different purposes (fuelwood collection, hunting). However, it is hard to see how illegal activities can be controlled in an environment of weak or non-existing formal property or use rights.

In certain cases, where the discrepancies between social and private values are not considerable, the government may consider privatization of some public forest lands, with the costs of clearing property and use rights charged to the proceeds of sale. In other situations, where global or local non-market values such as biodiversity, water and soil protection and conservation of the natural heritage are significant, forest lands will

⁵ Institutions are here understood as being organizations and the rules of the game, formal or informal, that rule human interactions.

probably remain in the hands of the State, clear limits will need to be established and demarcated and use rights properly recognized. The government may give priority to those lands where the threat of illegal activities is greatest but, in other cases, the opposite may be advisable, with clarification of property and use rights concentrating on those lands that are still relatively inaccessible and where the threats of illegal entry and use are less intense. The decision will depend on the probability of effectively enforcing rights in areas that are the most vulnerable.

Increase staff remuneration. Although it is not entirely clear that better salaries will deter corruption (higher paid officers may simply demand more substantial bribes to engage in corrupt activities in order to compensate for the risk of being caught and losing a now more desirable, better-paid job). The best paid officers sometimes are the most corrupt. However, it is plausible that when salaries are so low that officers can hardly feed their families, the tendency to commit illegal acts may be higher. In these cases, officers consider corruption as a legitimate part of fair compensation. Hence, increasing salaries would eliminate it. But, as explained, these arguments are not definitive, and the question of the links between salary level and the propensity to engage in illegal acts remains largely unanswered.

Furthermore, in many cases large increases in salaries are not politically acceptable. Most public forest administrations find it difficult to generate the resources for salary increases (although reducing corruption and other illegal acts may raise substantial new financial resources for the administration). In certain cases, foreign assistance money can be used for supplementing the meagre domestic salaries of public administration staff. In others, “wage compression”, i.e. reducing the differential between higher and lower salaries, has been tried. In still others, downsizing or encouraging early retirement are employed to raise additional resources. In addition to salary increases, other complementary measures can be implemented. These include objective promotions based on merit and performance, travel, special assignments, desirable transfers, and the provision of a house or a vehicle.

However, even a combination of these measures has not yet proven very effective in reducing illegal acts. Research results on the subject remain ambiguous (Shand and Sohail, 2001).

Reforming salary scales and fringe benefits in order to ensure better compensation are probably a necessary but not a sufficient condition to preventing illegal acts. Other factors such as the quality of bureaucracy, the probability of detection, the severity of penalties and so on may be of equal importance.

Depoliticize the public forest administration and foster professionalism and advancement based on performance. In many countries, forest authorities are political appointees that are susceptible to higher-level pressures to circumvent the law.

Forest services can be shielded from excessive political interference by designing rules that would advance meritocracy instead. For example, the new Bolivian forestry law

prescribes that the head of the forest public administration, the Superintendente, must be designated by the President who, in turn, can only choose from a list of three names provided by the Congress. The Superintendente is appointed for a period of six years, thus straddling the presidential period, which is five years. This procedure is followed in order to avoid undesirable interference from political groups that in the past made the position a very unstable one and subject to pressure from narrow political interests. This procedure contributes to preventing some of the most blaring illegal uses of public office.

In other cases, high-level officers are required to declare and make public their wealth so that styles of personal expenditure can be contrasted for consistency with levels of income. If discrepancies are detected, the burden of explaining them may rest with the public officer.

Form coalitions to complement government action. It is unlikely that the public forest administration will reduce forest crime by improving knowledge, increasing penalties or morality campaigns alone. It is also unlikely that a reduction of forest crime will be the result of government action alone. The government should not attempt the monumental task of doing everything to ensure compliance with the law. Increasing government openness to sectors of the civil society and the private sector can be an effective tool in reducing the influence of vested interests and improving law compliance (Stiglitz, 1998). Various independent environmental NGOs can act as watchdogs, often in close collaboration with the press, and be instrumental in uncovering illegal activities and in forcing corrective actions. Systems can be established for whistle-blowers to report illegal activities and for governments to provide attractive rewards for reporting forest crime. The government can promote the adoption of codes of conduct by key corporations and support the creation of buyers' groups. It can also facilitate the investigative and knowledge dissemination work of the press and engage the help of international groups such as Transparency International or the Global Forest Watch in designing and implementing policy tools for law compliance. These are all deterrents to forest crime that depend mainly on private, rather than public, action.

Engage law enforcement agencies and the army. Because forest service officers are seldom trained in law enforcement operations, help from specialized law enforcement agencies of the government may be needed. In some countries, the forest authority has its own enforcement corps. But there is always the option to call the regular police force and, in some cases, even the armed forces to impose the law.

Because many of these operations take place in remote areas, where it is easier to dispense with human rights and civil liberties, there must be adequate regulations in place to ensure accountability and use of force that is commensurate with the gravity of the situation. Also, in some cases the police or the army may be as corrupt as the criminals they are supposed to stop. The military has been known to act in complicity with illegal loggers to appropriate the benefits from national forest resources. Thus, suppression by these forces may need to be independently verified in a transparent manner. In some cases, it may be advisable to generate overlaps between agencies, thus reducing the discretionary power of one single agency. For example, forest guards may control the

transport of forest products, but this could also be done by the regular police force. Collusion in these circumstances is less likely (although, unfortunately, not impossible: operators may have to pay bribes twice). Also, the probability of illegal acts going undetected diminishes.

Privatize. Privatization is not only an instrument for increasing transparency but also for divesting certain functions to the private sector, thus diminishing the administrative burden on the public forest administration. Policy reformers must identify the core functions of the public forest administration, those that nobody else can perform adequately and that are the central responsibility of the State. Broadly, government institutions should not do things that individuals or corporations are doing already or have a comparative advantage to do better (see box, page 78). Concentrating on these functions would improve efficiency and would enable the public forest administration to design better laws and ensure better compliance.

However, privatization carries its own risks of illegalities. The very act of privatization can be corrupted and, therefore, the appropriate safeguards must be in place to avoid these dangers.

Decentralize. Centralized government forest institutions generally lead to disappointing results. Centralization often leads to a lack of transparency in decision-making, corruption and lack of the participation that would contribute to establishing a proper system of checks and balances. With decentralization, decisions have the potential of being more sensitive to local conditions and local talents can be exploited more fully. Good governments are closer to the people and, thus, the rationale for decentralization is closely related to questions of local political participation and democracy, often sought as political objectives per se, but also because of their potential to control illegal acts. With decentralization, there is a possibility for greater coincidence between the traditional rights and formal norms imposed by government, thus reducing an incentive to deviate from the law. Decentralized schemes offer opportunities for resisting political interference from the centre, more transparency in decision-making and less corruption.

As local constituencies derive greater benefits for forests, rather than having financial proceeds sent to the central government, these approaches have the potential advantage of promoting greater accountability.

The limits to privatization: role of the public forest administration

The State is the sole basis of legitimate power to make people do, if necessary by force, certain things. No other institution has this power. There are several reasons why the public forest administration must intervene:

Imperfect markets. Free markets do not always produce the optimum result for society as a whole. There are monopolies. Monopolists tend to produce too little and to charge too much for their products. Similarly, monopsony, a single buyer, may dominate in a local forest market. When this happens, a single buyer has so much market power that it will pay forest owners too little for their product. A first element in the role of the State is to eliminate the negative effects of imperfect markets.

Externalities. There are consequences of managing or not managing forests that have no reflection in market outcomes because some of the services from forests have no markets and no prices. If they have no prices, they do not affect private decisions, but the provision of these services – biodiversity conservation, soil protection, etc. – may be desirable. Society would want more than what free markets are likely to produce. Similarly, a private operator that deforests does not pay for some of the costs of its actions such as increased carbon dioxide released into the atmosphere or the increased costs of protecting dams downstream. Society would prefer less of these damaging effects. These are goods and services that are “external” to the market. Markets left unaffected by government policy and action would produce an amount of desirable goods and services that is too low for the preferences of society as a whole. Similarly, unencumbered markets would produce too much of the harmful outputs.

Time preference and discounting. Society and private agents conditioned by the market “discount” the future in different ways. Society as a whole gives more importance than private individuals do to the future. Society discounts the future at a lower rate because of its longer “life” and because of its obligations to future generations.

Asymmetric information. Market information is always imperfect and, because of this, markets seldom provide an optimal amount of forest goods and services. Parties to a market transaction hardly ever share the same information. Sometimes producers of forest products know more than consumers about the product they are selling. The nature of timber in complex and immensely varied tropical forests makes it difficult to assess its true value. Loggers may know a great deal more than the sellers of timber. Transactions in these cases lead to social suboptimal economic results.

Poverty reduction. It is very feasible for perfect markets to produce inequitable results. The elimination of poverty is an objective common to most governments and is justified not necessarily on economic efficiency grounds but on ethical or political foundations. Often, the poorest are those who depend on forests for their subsistence.

Merit goods. The State also has a paternalistic role, forcing people to do certain things because it is “good for them”. Examples are forced minimum-level education and the compulsory use of safety belts in cars. In the case of the forest sector, the State may impose restrictions on the use of resources, for example on hunting, because of their biodiversity values or because, by doing so, it may ensure a continuous and abundant supply of wildlife for local poor communities.

However, these substantial potential advantages, depending on the local context, are

matched by equally formidable potential dangers. Decentralization may increase administrative difficulties and breed conditions for illegalities. The coordination of forest sector fiscal, administrative and other policies among the many tiers of national, regional and local government is, in most cases, a great institutional challenge that most countries are ill-prepared to face. The uncertainty and confusion created may contribute to forest crime and corruption. Decentralized organizations may not have the human and organizational resources to absorb the new responsibilities, to implement preventive measures, to monitor developments and to impose sanctions when the law is broken. If local governments benefit substantially from the exploitation of local forest resources there may be an increased propensity for local government to evade national laws. Furthermore, accountability at the local level may be weak, possibly weaker than if revenue raising and expenditures were centrally controlled. Local governments are as adept as national ones at using public resources for political patronage. Local deeply entrenched elites can effectively use decentralized institutions for their own purposes. Corruption at the local level may simply replace that at the central level.

As in the case of many other policy options for combating illegalities, in the case of decentralization, there are no clear recipes of generalized validity. The context is all important and decentralization, as other policy options, should be examined in the circumstances that prevail in a particular situation. As expressed by an observer: “We do not know enough empirically to make definitive recommendations about what types of decentralization are best for which services in which institutional settings. But we do know that the best design will vary depending on circumstances and institutions and that this complexity has sometimes been overlooked in the haste to offer policy advice” (Masood, 1998). Given these uncertainties, some basic rules for proceeding with decentralization are listed in the box below.

Decentralization

Success with decentralization is generally dependent on:

- (i) a proper identification of the core functions of the central administration, which in turn depend on sectoral national objectives, such as community participation, economic efficiency, poverty alleviation and improved or more sustainable forest management;
- (ii) adequately matching the role of the central forestry administration to its capability;
- (iii) the existence – or the possibility to create – effective and efficient decentralized public institutions, private entities or community organizations;
- (iv) the possibility to ensure national policy coherence through either incentives or regulations; this implies establishing a national “architecture” for the core functions of central national forest administration. It also implies understanding the interests of the main stakeholders and the potential for political support for reform;
- (v) the possibility of establishing a coherent and integrated political, administrative and fiscal decentralization scheme;
- (vi) the existence of mechanisms for ensuring results monitoring based on simple indicators and quick feedback to decision-makers, for accountability and transparency in decision-making and the use of resources. This implies increased participation of citizens and organizations of the civil society and the private sector in the decentralized structures of decision-making;
- (vii) transaction costs that are likely to be lower than the potential benefits of decentralization.

Cross-cutting implementation issues

The policy measures that can be adopted to fight forest crime are many and are unlikely to work in isolation. This poses a formidable challenge to those intending to reform the sector's policies and laws, as well as its institutions to improve law enforcement. A few reforms will not suffice. In fact, the aims of improving policies and law compliance coincide with the objective of achieving a better level of governance in the sector, and therefore policy, legal and institutional reforms cannot realistically be expected to take place or render results in a short period. The management of multifaceted interactions involving changes in attitudes, economic incentives, gathering and interpretation of information, raising public awareness and spawning necessary political support for introducing reforms creates great challenges and, almost certainly, desired results cannot be achieved quickly.

This raises strategic questions about how best to proceed in order to increase the probabilities of success and effectiveness in the implementation of policy, legal and institutional reforms: how to measure the incidence of corruption and other illegal acts (how can we diagnose the problem?); where to start, or what is the most desirable sequencing of reforms discussed above (what are the main remedies and how can we apply them?); and who should do what, to improve governance (who are the main remedial agents and how could they be mobilized)?

Diagnosing the magnitude and characteristics of illegal acts

Policy-makers often rely on anecdotal evidence on illegal activities, but this information is generally misleading, incomplete and subject to challenge. The first step in a strategy to combat illegal activities is to develop procedures to measure illegality objectively, to detect its magnitude, causes and effects. Measuring forest crime and its effects helps to establish priorities for reform, depersonalizes the debate and establishes a baseline against which action can be assessed. Diagnostic surveys are also useful in raising public awareness.

There is an immediate need to develop objective methods to assess illegal acts in the forest sector. And it is likely that much of the future work will be related to assessments of corruption just because either forest resources are owned by the government or the government has the central responsibility for directing their management even if they are owned or controlled by private or community groups.

A helpful development is that techniques for the assessments of corruption have already been developed and tried in other sectors or on economy-wide exercises. Although not specifically designed to cover forest issues, these techniques show promise for diagnosing illegalities in the forest sector.

Diagnostic surveys have been employed to identify illegal actions and to determine which ones are the most important. Thus, they can provide a starting point, a baseline for designing remedial actions. Surveys can focus on government officials, local communities, NGOs, or private corporations to obtain a reasonably clear picture of the

main law enforcement problems. Contrary to initial scepticism, experience shows that respondents are normally quite honest and informative in their responses. Survey diagnostics have proven to be an effective tool in providing a more objective focus to the policy reform dialogue by providing quantitative measures of forest crime (see box).

Survey diagnostic tools

“The design and implementation of agency-specific, in-depth diagnostic surveys for public officials, household or users and enterprises constitute an innovation that provides tangible inputs for countries committed to implementing capacity building and institutional change programmes.... Challenging conventional wisdom, the new surveys of public officials, enterprises and citizens find respondents willing to provide detailed information on misgovernance that they have observed and experienced (as opposed to merely indicating their vague perceptions about countrywide corruption, for instance)”.

“Survey respondents report on embezzlement of public funds, theft of state property, bribery to shorten processing time, bribery to obtain monopoly power and bribery in procurement. In these diagnostic surveys, detailed statistics are collected on the frequency and cost of bribes paid by enterprises to regulators in different agencies as well as the shortcomings of public service delivery and other performance and effectiveness indicators. A multiplicity of governance dimensions is included in these diagnostics, permitting an in-depth analysis of issues such as meritocracy, discretionality, budgetary transparency, and poverty alleviation focus and impact. The analysis of these statistics then serves as a vital input for prioritising in the formulation of a governance improvement reform program....”

“When data were presented to members of the business community, major civil society, and the executive and legislative branches, the policy debate abruptly changed from vague, unsubstantiated, and often personalized accusations to one focused on empirical evidence and systemic weaknesses that needed to be addressed”

Source: *The Quality of Growth*, Chapter 6 (Thomas *et al.*, 2000)

However, diagnostic surveys need to be designed with much care and the employment of independent surveyors, as well as clear and rigorous methodologies, or their results will lack credibility. They need to employ proper sampling procedures to produce statistically valid results (Kaufmann, Pradhan and Ryterman, 2001). An independent reputable firm could be hired to maintain the credibility of results.

Policy reform priorities and sequencing

Even when diagnostic surveys can provide a wealth of information about the most serious illegal acts, there is always uncertainty about where to start with policy and legal reforms. The most important forest crimes may be the most difficult to control, and it may be advisable to start with a few simpler success cases that are not as important but that may demonstrate that a fight for better governance is possible and can succeed. Easier cases also carry lower costs as compared with larger and more complex ones which may lead to protracted and costly prosecution. Also, reforms may attack first those cases of illegalities that, for whatever reason, are the most annoying to citizens, such as dumping illegal effluents in watercourses. A few simple and visible cases of success may help to gather political support to embark on the more serious cases and to sustain the political drive to improve governance.

Appropriate sequencing of reforms appears to be far from an objective exercise. The context of reforms is all-important, and it is impossible to design a blueprint that can be applied to a variety of circumstances.

Inter-agency coordination

Perhaps one of the most intractable problems of ensuring greater law compliance is how to make sure that the different agencies that must be involved organize a coordinated effort to enforce the law. There must be entities in charge of accounting and auditing functions, policing (sometimes national, sometimes local and sometimes forest police), prosecutors, courts at various levels, regional and local governments, etc. that must work in a coordinated and effective fashion. Prevention, detection and suppression of forest crime will not work unless a number of agencies work in coordination. This is not easy to accomplish. Some countries, such as Cambodia or the United States, have created separate bodies to detect forest crime and to facilitate joint enforcement action, but this is not necessarily a model that can be applied to all settings.

In some cases, the help of international aid agencies can be enlisted to fill some of the possible weak links in the coordinated work of the various national agencies. For example, a foreign agency may be interested in supporting the installation of forest monitoring remote sensing schemes, in establishing better statistical systems or in creating systems for tracking the origin and movement of forest products. Aid agencies can also cooperate in procurement, taxation compliance or systematic and objective diagnostic surveys of illegalities.

Forming coalitions

As already mentioned repeatedly, it is unlikely that reforms for enhanced law compliance will work by simply imposing great moral pressure or the threat of severe penalties. Strategies that rely on the conviction of major stakeholders that law compliance is in their best interest have more chances of success.

It is equally improbable that government institutions in isolation can organize effective action. Participation is likely to work better. Reforms for better law compliance can be introduced and better sustained by encouraging the public forest administration, groups of the civil society and the private business community to participate in the process. In other words, better law compliance needs participatory action motivated by adequate incentives.

Coalitions can strengthen the political determination for fighting illegal acts and give greater vitality to the civil society and the private sector by bringing together groups that are interested in levelling the playing field. Coalitions can contribute to change cultural values and the way the public thinks about poor governance and to increase awareness that forest crime is either avoidable or controllable.

But coalitions are not easy to form. First, there is little hope that much will be accomplished unless there is a strong political will in government to improve law compliance and reduce apathy and opposition. Without a strong political commitment to reform, most

campaigns to improve governance and reduce corruption are ineffective and sometimes are little more than political window dressing, generating insignificant change. Abuses are likely to continue unabated. While groups of the civil society and of the business community participating in a coalition can perhaps countervail the lack of political commitment, they must have a good reason to believe that this will have a chance of genuine change.

Many coalitions prove difficult to sustain over time. It is extremely difficult to create a blueprint for forming coalitions motivated by coincidental interests and able to share both the planning and execution of specific actions, as well as the rewards from success (or the blame for failure). There are many reasons for organizations to be reluctant to join coalitions, including the needed sharing of scarce resources and the possible loss of the organization's identity.

Costs of illegal forest acts are often diffuse, shared by the whole society and, as explained earlier, probably more compelling for the poorest, who also happen to be the ones that have the least powerful voice. Benefits instead tend to be concentrated on the few who commit forest crime, are well-connected and have economic and political power.

Consequently, there is often a weak propensity or low incentives for organizations or individuals to enter into coalitions to fight illegal acts.

**Coalition-building in practice:
lessons of experience**

1. Political commitment is indispensable. Throughout all levels of government, this is a crucial condition for achieving comprehensive reforms.
2. Surveys are a useful method for raising awareness and designing, monitoring and evaluating reforms. To give credibility to the reform effort, independent, reputable, consultants should conduct the survey.
3. Participatory approaches are needed to ensure consensus.
4. The consensus building approach enhances the sustainability of the reforms. Because a broader section of the citizenry becomes involved in defining priorities and determining trade-offs, they demand efficiency in the execution of projects. As stakeholders, they have been empowered to care about projects and monitor their performance. In turn, the propensity for citizen participation in government is increased.
5. An innovative mix of political will, technical capacity to execute reforms and a strong partnership with civil society in the drive to enhance efficiency, equity and transparency may have powerful beneficial effects.

Based on Gonzales de Asis, 2001.

Other factors make forming coalitions difficult. Members that agree on a broader front may disagree on some of the details. For example, there may be a substantial agreement on the need to stop illegal logging, but some organizations may differ on how to achieve this goal. Some may prefer confrontational and very public approaches that would shame the public forest administration into action, while others may prefer taking the less controversial way of providing the administration with better information and, perhaps, some of the human resources needed to reduce illegal logging. Since combating illegal activities implies taking on powerful groups in an environment where the rule of law is generally weak, risks are usually high, and thus these differences in approach are not surprising. In addition, the broader the coalition becomes, the more difficult it will be to achieve coincidence of objectives and procedures.

Despite these problems, there are a number of groups working to build coalitions to combat illegal acts and, particularly, corruption. According to some authors, the coalitions that have been able to sustain activities focus on causes rather than on issues, stress cooperation rather than confrontational, conflicting, approaches and struggle to avoid antagonizing the regime (see box). They are also content with achieving incremental rather than large discrete changes (Kpundeh and Johnston, 2001). In practice, this means focusing on positive incentives to fight illegal acts, including the generation and provision of information, which may be addressed by technical assistance agencies, vulnerability evaluations, surveys of illegal acts, training programmes, auditing and so on. Coalitions could broker integrity pacts and codes of conduct among large firms in the private sector, among bidders for timber concession contracts, etc.

What approach will be most appropriate in a given society is an open question. There are no clear blueprints for forming coalitions.

International actions

While action to improve law compliance by individual countries will help, it is difficult to implement in isolation because it has to work against the stiff international competition of those in other countries that continue to operate outside the law. For example, and since stopping forest crime and ensuring sustainable management of forests carry financial costs, strictly enforcing legislation in a producing country would undermine that country's market competitive position. Illegal timber is cheaper, and before long unscrupulous producers would be in a position to push aside law-abiding ones. In a similar fashion, an importing country willing to stop imports of illegally sourced timber may find its efforts frustrated by a neighbouring country that allows the re-export of laundered timber. Given these interdependencies, international action, in addition to national efforts, is advisable.

International awareness of the huge magnitude of illegal activities has increased sharply in the last few years. In particular, governments of consumer countries are more conscious about their responsibility and the need for their contribution to improve governance in the forest sector of producing countries and that changes in their policies and legislation are needed. Conditions are favourable for increasing the pace of international programmes to improve law compliance.

CITES. At present, and still lacking other relevant legislation, CITES is the only way producing and consumer countries can limit trade of endangered forest species. It is the only tool that importing countries can use to seize illegally sourced timber legally. Producer countries use CITES sparingly and thus only a few species are included, although the potential for including many others is large. For example, using CITES, Indonesia recently placed ramin on Appendix III, with a zero quota, thus outlawing imports of ramin by any CITES signatory (excepting already harvested timber or certified ramin timber). *Interested producer countries may consider a greater use of CITES to prevent illegal trade of threatened species.*

However, CITES, although useful, nevertheless has some problems. It only covers threatened species. It also suffers from problems of implementation. Already, illegally sourced Indonesian ramin appears to be laundered through false certificates and re-exported as legitimate wood by other countries.

Action by consuming countries. Thus, other instruments are needed. *Action by importing countries as a group specifically targeted against illegally sourced wood (whether of threatened species or not) would be desirable.* This could include tighter import controls and prohibitions on wood imports that cannot be certified as originating in legal sources. A first step in this direction was taken by the G8 countries at their meeting in Birmingham in 1998 when they approved an Action Programme on Forests, which included actions against illegal logging and trade. They confirmed their commitment to fight illegal forest acts at their Okinawa meeting in 2000. The same year and as part of this initiative, the United Kingdom started implementing a series of measures to improve timber purchasing procedures by government agencies, reduce consumption of illegal wood in the United Kingdom and work with other countries to improve governance in the forest sector. Other countries of the European Union (EU) have yet to enact similar legislation, thereby not only making it difficult for the United Kingdom to implement it unilaterally, but also allowing the persistence of trade of illegally sourced timber into Europe (given the European single market). *It would be desirable to extend the effective application and enforcement of this agreement throughout the European market. Other consumer countries outside the EU and, particularly, members of the G8 group could consider adopting similar rules.* At the same time, the implications of these restricting policies in terms of their consequences in the framework of the World Trade Organization (WTO) rules should be studied.

An international plan of action? As in the case of the EU experience, the implementation of other international initiatives has lagged behind. This may be owing in part to the limitations of partial actions involving only a group of countries. Considering the multiple calls for action and various regional and international schemes to combat illegal forest activities worldwide, conditions are now probably ripe for formalizing commitments in an *international plan of action for controlling illegal activities in the forest sector*. This plan could follow a similar structure and organization to that of the FAO proposed International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and would build on existing initiatives such as the Inter-American Convention Against Corruption of the Organization of American States, the Organization of African Unity (OAU) Draft Convention on Combating Corruption, and the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions. Given that the adoption of a global plan is probably a difficult proposition, the international plan could start at a more modest level, involving only groups of interested countries – either groups of consumer and producer countries or regional groups of nations. The feasibility of this latter approach has received a boost with the recent first effort aimed specifically at the forest sector, the Ministerial Declaration on Forest Law Enforcement and Governance issued by ministers of East Asian Nations.

Such an initiative would provide a common framework for ensuring organized global action for greater compliance with legislative principles everywhere, in consumer and producing countries, and would thus contribute to producing a more even competitive environment for everyone. The plan would effectively contribute to eliminating the commercial advantage of illegal wood, and thus provide a powerful disincentive against forest crime. It is plausible that the production, discussion and adoption of the plan could also contribute to strengthening the political will and commitment of countries that today find themselves isolated in the fight against illegal forest acts and spread that commitment to other countries that so far have been hesitant to adopt similar measures.

Technical and financial assistance. The tasks faced by producing countries, many of which lack the technical capacity and the financial resources needed to improve the rule of law, are many and complex. International multilateral and bilateral technical and financial assistance agencies could therefore integrate considerations related to forest crime prevention, detection and suppression in their programmes of aid to countries.

The new FAO National Forest Programme Facility will contribute to policy reforms in member countries by strengthening the knowledge base of the country and disseminating it to the public, decision-makers and other interested parties, thus increasing awareness and generating the basic conditions for policy and legal reforms. The Facility could be adapted to include considerations related to illegal activities in its programme of action. Similarly, the ITTO programme of work includes research in import and export records that would help countries identify inconsistent declarations related to international trade and would then contribute to raising awareness about the magnitude of the problem of illegal trade and, presumably, generate additional interest and public support for initiatives supporting enhanced law compliance.

In 1997, the World Bank launched a major initiative to fight corruption in bank-financed projects and help countries and international efforts to reduce corruption. In 1998, the World Bank-World Wide Fund for Nature Alliance was launched. The alliance seeks the protection of 50 million hectares of forest areas under threat and 200 million hectares under certification by 2005. Although the alliance does not aim at fighting illegal acts, achieving its certification targets will contribute indirectly to this objective. The World Bank new forest policy consults activities for improving governance through the support of reforms to concession and subsidy policies and, specifically, for containing illegal activities and corruption by improving laws, regulations and the law enforcement apparatus of member countries. One of the quantitative outcomes sought is to reduce illegal logging losses by US\$5 billion per year, mainly by strengthening institutional capacity. *Other institutions of technical and financial assistance to producing countries could also integrate the objective of better law compliance in the sector as a key component of their assistance to interested countries.*

References

Acosta, R.T., Guiang, E.S., Paat, L.A. & Pollisco, W.S. 2000. *The control of illegal logging: the Philippine experience*. Paper for the Seminar on Control of Illegal Logging in East Asia, Jakarta, Indonesia, August 28-29.

Barnett, T. 1992. Legal and administrative problems of forestry in Papua New Guinea. In S. Henningham and R.J. May (editors) *Resources, development and politics in the Pacific Islands*. Bathurst, Crawford House Press.

Barr, C. 2000. *Profits on paper: the political economy of fiber, finance and debt in Indonesia's pulp and paper industries*. Bogor, Indonesia, CIFOR.

Contreras-Hermosilla, A. 1997. The "Cut and run" course of corruption in the forestry sector. *Journal of Forestry*, 95 (12).

Contreras-Hermosilla, A. & Vargas, M.T. Forthcoming. Social, environmental and economic impacts of forest policy reforms in Bolivia. *Forest Trends and CIFOR*.

Dudley, N., Jeanrenaud, J.P. & Sullivan, F. 1995. *Bad harvest? The timber trade and the degradation of the world's forests*. London, Earthscan.

EIA-Telapak. 2001. *Timber trafficking*. Indonesia. Environmental Investigation Agency and Telapak.

Ekoko, F. 1997. *The political economy of the 1994 Cameroon forestry law*. Paper presented at the Africa Public Hearing of the World Commission on Forests and Sustainable Development.

Environmental Investigation Agency. 2000. *Illegal logging and trade*. www.eia-international.org/Campaigns/Forests/Regulation/Illegal/Index.html

FAO. 2001. *State of the World's Forests 2001*. Rome.

FAO. 2001a. *Governance principles for concessions and contracts in public forests*. FAO Forestry Paper No. 139. Rome.

Global Witness. 1999. *Made in Vietnam – cut in Cambodia*. Briefing Document, London. www.oneworld.org/globalwitness/reports/vietnam/cover.htm

Global Witness. 1999a. *The untouchables. Forest crimes and the concessionaires. Can Cambodia afford to keep them?* Briefing Document, London. www.oneworld.org/globalwitness/reports/untouchables/untouch.pdf

Greenpeace. 1999. *Buying destruction*. www.greenpeace.org

Greenpeace. 2000. *Illegal logging in Russia – summary of report Illegal forest felling activities in Russia.* July.

www.greenpeace.org/~forests/resources/forestRussia_july00.htm

Greenpeace. July 2000. *As G-8 foreign ministers talk, Greenpeace continues to take action.* www.greenpeace.org/pressreleases/forests/2000jul12.html

Kauffmann, D., Pradhan, S. & Ryterman, R. 2001. New frontiers in diagnosing and combating corruption. In *Improving governance and controlling corruption.* Washington DC, The World Bank Institute.

Kpundeh, S. & Johnson, M. 2001. Anti-corruption coalitions and sustainable reform. In *Improving governance and controlling corruption.* Washington DC, The World Bank Institute.

Mahar, D. & Schneider, R. 1994. Incentives for tropical deforestation. Some examples from Latin America. In Brown, K. & Pearce, D. (editions) *The causes of tropical deforestation*, p. 159-171. London, UCL Press.

Marshall, G. 1990. *The Barnett Report, a summary of the Report of the Commission of Inquiry into Aspects of the Timber Industry in Papua New Guinea.* Hobart, Tasmania, Australia, The Asia Pacific Action Group.

Masood, A. 1998. Foreword to J. Litvack, J. Ahmad and R. Bird: *Rethinking decentralization in developing countries.* Washington DC, World Bank.

Ottawa House of Commons. 1998. *Enforcing Canada's pollution laws: the public must come first.* www.parl.gc.ca/InfocomDoc/36/1/ENSU/Sutdies/Reports/ensurp03-e.htm

Rosenbaum, K. 2002. *Illegal actions and the forest sector: a legal perspective.* Discussion Paper for FAO.

Scotland, N. 2000. *Indonesia country paper on illegal logging.* Paper prepared for the World Bank-WWF Workshop on Control of Illegal Logging in East Asia, 28 August, Jakarta, Indonesia.

Shand, D. & Sohail, S. 2001. The role of civil service reform in combating corruption. In *Improving governance and controlling corruption.* Washington DC, The World Bank Institute.

Stiglitz, J. 1998. *Redefining the role of the State: What should it do? and how should these decisions be made?* Paper for the Tenth Anniversary of the MITI Research Institute, Tokyo.

Tanzi, V. 1998. *Corruption around the world: causes, consequences, scope and cures.* International Monetary Fund, Staff Papers, Vol. 45:4. December. Washington DC.

UNDP. 1999. *Monitoring Cambodian forestry to improve forest management*. Project of the Royal Government of Cambodia. United Nations Development Programme.

UN. 2001. *Report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo*. United Nations, Report to the Security Council, S/2001/357, New York.

Wily, L. & Mbaya, S. 2001. *Land, people, and forests in Eastern and Southern Africa at the beginning of the 21st century*. International Union for Conservation of Nature and Natural Resources.

World Bank. 2001. *A Revised Strategy for the World Bank Group*. Draft, 30 July, Washington DC.

World Commission on Forests and Sustainable Development. 1999. *Our forests our future*. Cambridge, UK. Cambridge University Press.

World Rainforest Movement and Forest Monitor. 1998. *High stakes. The need to control transnational logging companies: a Malaysian case study*. www.forestmonitor.org/reports/highstakes/title.htm

World Resources Institute. 1998. *Logging Burma's frontier forests*. Washington DC.

World Resources Institute. 2000. *An overview of logging in Cameroon*. Washington DC, Global Forest Watch.

World Resources Institute. 2000a. *Trial by fire; forest fires and forestry policy in Indonesia's era of crisis and reform*. Washington DC.

World Resources Institute. 2000b. *Canada's forests and a crossroads; an assessment in the year 2000*. www.wri.org/gfw/canada.html

**ILLEGAL ACTIONS AND THE FOREST SECTOR:
A LEGAL PERSPECTIVE**

A Discussion Paper for FAO

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Overview

This paper offers a legal perspective on the issue of illegal acts related to forests. In particular, it considers the roles of legal reform in addressing these problems.

Such an approach has an element of paradox. Illegal activities imply a failure of the rule of law. How can enacting more or different laws improve the situation when the basic tool – the law – has already failed?

In some cases the answer is a direct one. The law itself is at fault. The illegal act ought to be legal.

In some cases, the law reflects a good standard of behaviour, but the law is written in a way that is difficult to implement. In that case, we need to look for better ways to control undesirable behaviour.

In some cases, the issue is not the prohibitions in the law so much as the institutions that create and enforce the prohibitions. Here, the role of legal reform is to shape the workings of government or to promote public support of the law.

After some words of caution on the danger of looking at illegal acts from too narrow a legal perspective, this paper lists some of the kinds of failures in the law and the legal system associated with illegal activity. Some of these failures encourage illegal activity. Some fail to stop it.

Next the paper lists some general approaches to legal reform designed to counter illegal activity.

Finally, it offers some observations on the nature of effective change. What is the relation of forest sector reform to the larger arena of social reforms promoting the rule of law? What kinds of changes are likely to be most effective?

Putting legal issues in perspective

The term “illegal forest activities” invites legal analysis of the problem. As a practical matter, however, there is a danger in looking at illegal activities from only a legal point of view.

The norms of behaviour that law embodies are part of the greater phenomenon of cultural norms, which in turn are affected by social conditions generally, including politics, the economy and social history. Illegal activities are not simply legal problems; they are social problems with legal, political, economic, moral, social and historical facets.

Law can play a role in solving these problems. However, the legal reformer must keep in mind the complexity of illegal activities. Specifically, any reformer should consider the following points.

Root causes. Problem solvers, whether engineers, physicians or policy-makers, ideally follow a similar path: information gathering, analysis and diagnosis, selection of remedy, implementation and, finally, follow-up and evaluation.

Again ideally, the problem solver wishes to identify and address the root causes of the problem, as well as the symptoms. Only if the root causes of the problem remain obscure or cannot be promptly resolved does the problem solver fall back and focus on the symptoms.

The root causes of illegal activities are seldom purely matters of law. Economics, politics and other factors are frequently part of the picture.

Law is a far-ranging and flexible tool. People use law to address economic and institutional issues. However, the solutions to these problems frequently take much more than the passage of a law or two. Law may simply be the first step in a larger programme of social reform. And some aspects of these problems are beyond the reach of law.

Those who wish to stop illegal activities through legal reform must look to the larger picture of cause and effect.

Interdependence of actions. Illegal activities include a complex collection of problems, and the solutions to some can possibly make others worse.

For example, if people are stealing timber from the forests, new requirements for transportation permits or increased powers of arrest for forest guards may help deter thefts. Unfortunately, they may also create new opportunities for bribery of guards and permit issuers.

Another example much on the minds of the international community is the effect of harvest bans in large consuming nations. The harvest bans in Thailand in 1989 and China in 1998 have led to increased illegal harvests in neighbouring countries (Environmental Investigation Agency and Telapak Indonesia, 2001).

Shaping of institutions. Illegal activities, by definition, involve the breaking of prohibitions. The attention of the legal reformer might be drawn to these prohibitions and the penalties associated with them.

However, more potent legal reforms may involve the shaping of institutions. This is especially the case where the illegal activities involve corruption. In those cases, institutional reforms that increase the transparency of government may be important steps to take. It may even be possible to remove control of timber from a corrupt institution and transfer it to a new agency or a cleaner branch of government.

Institutional reform may also be helpful in the case of timber theft. Independent institutions certifying lumber origins or otherwise tracking commerce in timber may make illegal activity more difficult to hide.

Process of adoption. As the FAO Development Law Office has stated, the process of reform can be as important as the substance of reform (FAO, unpublished memo). Law must have public support or it becomes almost impossible to implement. Public participation in the adoption of laws can help educate people about the need for reform, educate them about what is illegal, and create social pressure for the observance of new law.

The legal reformer may need to consider innovations in both the substance of the law and the process of adopting it.

Transplantation of solutions. When faced with a complex problem, a problem solver's instinct is to look for examples of similar problems and consider how they have been solved. This can be a powerful approach and, for some difficult problems, the most practical approach.

Because law has such strong cultural roots, transplanted laws may not function vigorously in their new surroundings. Legal reformers must consider, not just the effect of law on social problems, but also the effect of society on the law.

Incrementalism. Most bodies of law develop incrementally. The legal system adjusts to the needs of the society in many small steps. Often, many changes are happening at the same time with little coordination and no grand design.

This process works if the legal system is responding well to feedback. Some changes may be too little, or ineffective or even counterproductive. The system can eventually react and change again.

Faced with a complex problem such as illegal forest activities, the legal reformer should take advantage of the power of incremental change to shape legislation. This means that reform may need to occur in several steps. Perhaps this may mean revising the law from time to time. Perhaps it means filling in the gaps of law later with regulations.

It also means that the reformer should build feedback into government institutions and processes in order to facilitate future reform.

Kinds of failures of the legal system

This paper divides failures of the legal system into two types: failure of the law, and failure of legal institutions. Failures of the law are those in which the law embodies norms that do not fit the situation in the forest sector. Failures of legal institutions are those in which the government and the larger society fail to apply the law effectively, consistently and fairly.

Failures of law

Clashes of norms

Clashes of norms occur when the rights to resources as set out in law are not the same as the rights that people or communities believe that they are entitled to have. The result is a lack of respect for the law, which can lead to illegal activities and difficulties in enforcement. Whether the law is flawed or the community norms are flawed is sometimes a matter of perspective. However, in some cases the law is clearly to blame.

A historical example comes from the United States (Knowlton, 1972). A great portion of the southwestern United States was once part of Mexico, ceded to the United States in 1848 in the Treaty of Guadalupe Hidalgo, which ended the Mexican-American War. Article VIII of the treaty guaranteed that the residents of the ceded lands would retain their property rights.

Communities held some of the lands and resources as social properties. The common law that prevailed in most of the United States had no concept equivalent to social property. These social properties, including water and grazing rights, became public properties, owned by the United States. Communities lost lawful access to these resources in favour of settlers coming from the established states who understood how to secure access to public resources under the new legal regime. This loss became a source of enduring resentment among the local communities.

More recent examples are easy to find. In the Philippines prior to 1986, the law gave the government title to all forests. Rural residents had no legal claim to the forest and no incentive to protect its resources (FAO APFOS, Working Paper No. 22).

In Cambodia, local people collect resin from certain forest trees. Resin tapping is an important source of outside income for some communities. The local people recognize an individual's rights to particular resin-producing trees, which can be tapped sustainably over many years. The government does not recognize or record these rights and has regularly sold the resin trees for harvest to loggers (Global Witness, 2001).

Some rural residents in Cambodia have also found that the law has priced them out of the timber market. The law reserves 10 to 20 percent of concession harvests for domestic consumption. However, the price of concession timber reflects concession fees and taxes and is often too expensive for rural people, who turn to illegal sources (Global Witness, 2001).

Another United States example illustrates that, when norms clash, the modern legal norm is not clearly wrong. In the northwestern states of Oregon and Washington, the northern spotted owl is listed under the federal Endangered Species Act as threatened (The Act is codified at 16 US Code §§1531-1544; the listing regulation is in 7 Code of Federal Regulations §17.11). This puts local forest owners in danger of criminal prosecution for harming habitat occupied by owls. Many locals believe that the government has no right to limit economic uses of private land in order to protect public values such as

biodiversity. They have brought unsuccessful challenges to the law in the courts (for example, *Babbitt v. Sweet Home Chapter of Communities for a Greater Oregon*, 515 US 687 [1995] [US Supreme Court]), and there has allegedly been clandestine illegal hunting of the owl to prevent its occupancy of private lands.

A cause of concern in developing countries is where the law fails to recognize, or bans, uses that were previously unregulated and part of traditional life. For example, a village may traditionally have used a plot of forest for fuelwood, small amounts of structural wood, hunting or non-wood commodities. The uses may be quite sustainable. However, a colonial-era law, never enforced, may have put the forest in public ownership. The potential for conflict exists if the government begins to enforce the law. If rule of law and fairness are important to the development of the country, the country may want to adjust the law to grant the village its traditional rights.

The legal norm may not be clearly wrong, however. For example, shifting agriculture in tropical forests may be sustainable when human population densities are low, but the system may collapse as densities increase and the time between reuse of plots decreases. Similar concerns about sustainability may arise from increased harvest of fuelwood or bushmeat. A law that tried to limit these traditional harvests to sustainable levels might be wise, even if it is locally unpopular.

The case of the monarch butterfly reserves in Mexico offers an example of changing a norm to promote sustainability, making formerly legal local forest uses illegal (Environmental Law Institute, 1998). In this case, the law established a reserve to protect the forested winter habitat of migratory butterflies. The reserve was primarily on social properties owned by farming communities known as *ejidos*. The reserve law did not change who owns the land; it only changed the rights that attach to ownership. The *ejidos* had relied on the forests for wood for their own use and occasional sale. The reserve law outlawed these harvests, but the harvests have continued to varying degrees. The trees remain the property of the communities, and many apparently are willing to harvest their trees without regard to the restrictions for the butterflies.

Failure to make the law reflect norms is not just a matter of squaring national laws with rural traditions. On a global level, no one approves of trade in stolen property. Yet no developed country's law allows customs officials to bar or seize imports of illegally harvested timber (Environmental Investigation Agency and Telapak Indonesia, 2001).

Undetectable violations

A second type of failure of law is when the law is written in a way that makes it difficult to enforce. Typically, this means that it is difficult to spot illegal behaviour or to tell the difference between legal and illegal behaviour.

Usually, this kind of flaw is so obvious that drafters build enforceability into laws from the beginning. The desired policy may be to outlaw transport of illegally harvested wood. A law that simply said, "It is illegal to transport illegally harvested wood on public roads" would be almost impossible to enforce. Legal wood looks much like illegal wood. Instead

the law will require legally harvested logs to be marked and be accompanied by permits or other papers. “It is illegal to transport unmarked logs or logs lacking the proper permits” is much easier to enforce.

However, sometimes the flaw is subtle. For example, Russian law prohibits harvest of Korean pine in the Russian Far East. This kind of ban is easy for a trained forester to enforce in the field, but foresters cannot watch all the pines all the time. The customs officials can keep an eye on timber passing through the ports, but it takes an expert to distinguish planks of Korean pine from other conifers. So at the point where the ban might be effectively enforced, it is most difficult to enforce (Bureau for Regional Oriental Campaigns, Friends of the Earth-Japan and Pacific Environment and Resources Center, 2000).

Even in the forest setting, lawmakers sometimes overlook the possibility of crafting prohibitions that are easy to enforce. For example, criminals often act under cover of darkness. Activities then are harder to detect. The enforcer must not only find the criminal, but must also determine that the particular load of logs is being hauled illegally. The darkness may make it more difficult to notice evidence of fraudulent papers and log markings. The suspect may make claims that cannot be verified with government officers or landowners until the following day. Gathering evidence may require seizure of the logs and vehicles and placing them in official custody. To make law enforcement easier, it may be simpler and more effective simply to ban transport at night.

Weak penalties

A fundamental principle of enforcement is that the punishment must be great enough to deter the crime. The punishment should reflect both the potential profit from breaking the law and the probability of being caught. Very profitable crimes require large penalties, and so do crimes that are difficult to detect.

Sometimes the penalties are just too small. In the Russian Far East, timber operators find that potential civil and criminal penalties together are too small to make illegal logging unprofitable. Only the potential of confiscation of timber is an effective deterrent, but this can be sidestepped through bribery (Bureau for Regional Oriental Campaigns, Friends of the Earth-Japan and Pacific Environment and Resources Center, 2000). In Cameroon, recent penalties as high as 20 million CFA have failed to discourage companies from illegal practices (Greenpeace, 2000c).

A common problem is that law sets penalties as fixed amounts of money, but these become less effective deterrents as inflation lowers their true value. The rates of inflation in some developing countries make this a serious concern.

Another possibility is that, as a commodity gets more rare, the profit from obtaining it rises, making the penalty less effective. This may be what has happened in the case of some forest animals, such as tigers or bears, whose organs are used in traditional medicines.

This paper discusses the design of effective penalties in the section on strategies to combat illegal activities.

Failures of implementation

Poor dispute resolution

One function of the law is to resolve disputes promptly, inexpensively and fairly. If the legal system fails to do so, it invites solutions outside of law that may involve or prolong illegal activity.

In Bangladesh, for example, many disputes exist over who owns land. In particular, there are disputes over whether land set aside by the government as reserved forest includes lands subject to private ownership or rights of use. The 1927 Forest Act set out an administrative process to resolve such claims (Forest Act sections 4 to 24). In practice, the process has become bogged down in politics, and many of the disputes have lingered for decades. Until this process is complete, it is not possible to tell which uses are lawful and which are unlawful.

The expense of resolving disputes complicated the historical case in the American Southwest that was described earlier in this paper. Small, cash-poor villages had to participate in trials or hearings to assert their rights, which required them to hire attorneys. To pay the attorneys, they often had to sell or hand over some of the resources that they had fought to claim.

Unfair application of the law

The legal systems of some countries are less than fair. Describing the nature and varieties of injustice could probably fill several volumes, and every legal system is certainly guilty of some. The various arms of the government involved in enforcement – the forest agencies, the police, the customs service, the prosecutors or the courts – all exercise some discretion in the application of the law, and each may play a role in bias. The bias may be overt and intentional, or it may be so subtle and deeply ingrained that the government officials are not aware of it. In the second case, the victims of the bias may be aware of it nevertheless.

Officials may favour the ruling interests that appointed them or favour their own social or ethnic groups. In many countries, the social groups long established in the forests are living on the margins of society, literally and figuratively. They live far from the centres of ruling power and may be socially distinct from them. They are probably more often the victims of bias than the beneficiaries.

Sometimes favour follows patronage. Forests Monitor (1998) reports that patronage plays a role in the award of forest concessions in Papua New Guinea, the Solomon Islands, Guyana, Suriname and the Congo Basin. Global Witness (2001) reports that, in Cambodia, many low-level government staff are also on the payrolls of concession-holders – a conflict of interest that the law apparently does not prohibit.

Power and discretion can also set the stage for bribery, and bribery by definition is unjust. Bribery is all too common (see, for example, the discussions of bribery of police, foresters and others in the Russian Federation in Bureau for Regional Oriental Campaigns, Friends of the Earth-Japan and Pacific Environment and Resources Center, 2000; and in Environmental Investigation Agency, undated, where timber companies in Indonesia were quoted as preferring the “accepted bribing system” to a new law imposing higher logging fees). Systems open to bribery favour those with wealth and political connections. Bribery is often the catalyst that enables other kinds of illegal activity to proceed unimpeded.

The law cannot eliminate the exercise of discretion. At best, the law can disperse power and set standards for its use. It can also increase transparency, and so bring social and legal pressures to bear on unfair exercise of discretion.

The forest agencies do not follow the law

It takes an administrative infrastructure and a strong rule-of-law tradition to have forest agencies follow the law at every level.

In terms of infrastructure, there must be property records and surveys to make clear who owns rights to the forests. In many rural areas, such surveys are rare and expensive. And in many countries, the property records have fallen victim to changes in government or clerks willing to accept bribes to make changes. If the rights are unclear, the forest agencies cannot clearly and fairly enforce them.

In addition, the forest agencies cannot implement or enforce the law if they do not know what the law is. This can happen when there is no adequate legal infrastructure to disseminate current versions of the law. The author has encountered this in two recent field projects undertaken for FAO. In Bangladesh, only one forest officer had taken the time to compile all the amendments made to the 1927 Forest Law to produce an authoritative and current version, and rural courts were said to be deciding cases based on versions compiled decades before. In Kosovo, the province had forest laws written in Albanian (from its days as an autonomous region of Yugoslavia), Serbian (from general Yugoslav laws that applied to the autonomous province and from Serbian laws after autonomy was revoked) and English (from the current United Nations administration). English translations of the older laws were often poor, and the newest laws were sometimes written without full understanding of the older laws.

In Cambodia, Global Witness (2001) reports two kinds of failure to follow the law. The law regarding the use of marking hammers had apparently never been written down. Different officials were following different protocols for hammer marking. The law prohibiting sale or transportation of “old” logs was clearly promulgated, but still ignored by local officials.

This second failure is typical of the frontier mentality seen in some rural or isolated forest regions, where the central authority has trouble maintaining standards. The Russian Far East has been called the “Wild East”, alluding to the lawlessness of the American “Wild

West” in the late nineteenth century (Forests Monitor; 2001; Bureau for Regional Oriental Campaigns, Friends of the Earth-Japan and Pacific Environment and Resources Center, 2000). The analogy is apt; with regard to resource use, modern historians have called the race to plunder the American West in the 1870s “The Great Barbeque” with “fraudulent schemes...so varied and colourful that no summary can do them justice” (Wilkinson, 1992, p. 121).

In some countries, several agencies have authority over forest lands, and not all may honour the laws equally. In Mexico, for example, the land reform agencies have been known to grant land to land-poor people inside the boundaries of protected natural areas managed by sister agencies (Environmental Law Institute, 1998). Some local politicians in Mexico encourage squatters to settle protected lands and then bargain with the environmental agencies to solve the resulting land-use problems (Jordan, 2001).

Sometimes the law is so out of date or unworkable that it invites people to ignore it. In Bangladesh in the late 1990s, the legal prices for certain non-wood forest products were set by regulations that had not been updated for 20 to 40 years. The agency appeared to pay no attention to these regulations and did not feel any strong need to revise them. The agency simply charged what it considered market prices.

Lack of capacity: enforcement

Forests are inherently difficult places in which to enforce laws. They are usually less densely populated than urban and agricultural areas, meaning that there are fewer honest eyes around to spot illegal activity. Often, forest lands have been passed over for urban or agricultural uses because they are too rugged or remote. These characteristics make them difficult to travel through or communicate from. Added to this, they are almost always economically less productive than agricultural or urban lands, often meaning that there is less investment in travel and communication infrastructure.

Socially, they may also be separate from the surrounding lands. They may be home to tribal peoples, tradition-bound villages, migrants seeking new lands or booming communities of transient workers employed to harvest the resources. In a few instances, forests shelter groups in rebellion against central governments. Whatever the case, forest communities may have little interest in helping to enforce laws made in distant cities.

The responsibility for enforcement may thus fall heavily on the forest agency. And many forest agencies simply lack the capacity to enforce the law.

Enforcement has several facets. The enforcer hopes to *prevent* illegal acts from happening in the first place. When the acts do happen, the enforcer wants to *detect* the violations. And when a violation is detected, the enforcer wants to prosecute or *suppress* the illegal action. These facets are not entirely independent. A strong and public prosecution effort can act to prevent future acts. So can an obvious presence of officials in the forest pursuing detection tasks.

Prevention starts with making sure that people can tell which acts are illegal. People need to know what rights exist before they can be expected to honour them. That may involve educating people on what the law is and why it is in their interests to obey the law. Extension foresters are more effective at this kind of task than traditional forest managers, but extension is an underfunded programme in some forest agencies.

Practical prevention may also mean locating and marking boundaries and maintaining associated physical objects marking off rights, such as signs, fences and gates. In remote forest areas, the lack of ability to set boundaries often makes it impossible to determine whether a person is acting lawfully.

The next tasks of prevention are to reduce the motives, means and opportunities to violate the laws. Motives for forest crime are often economic, although they may also have subsistence, social or traditional roots. (For example, a group of forest dwellers may follow a tradition of setting fire to the forest from time to time to improve hunting.) The most common legal approach to the issue of motive is to increase penalties, making the chance of profit from the crime lower. In the case of bribery, increasing public salaries may decrease the motive to accept bribes. Also, effective prevention of commerce in stolen wood can reduce the motive to cut it in the first place. Strictly speaking, these are not capacity issues, however.

The law can directly regulate the means for committing some forest crimes. For example, some Mexican states have experimented with outlawing chainsaws. Again, this is not a capacity issue.

Reducing the opportunities for committing crimes is often a capacity issue. Because criminals seek the opportunity to act unobserved, the simplest way to reduce opportunities is to increase surveillance. For example, Wardojo, Suhariyanto and Purnama (2001) estimate that Indonesia needs 15 000 forest guards, rather than the 9 700 it now employs. Capacity may be also a matter of technology. The Environmental Investigation Agency (2001) declares that Indonesia's Integrated Forest Security Teams are underfunded and underequipped.

A forest agency can also increase surveillance by recruiting allies among forest residents and NGOs active in the forests. (Ironically, the traditional foresters in the government may view these groups as their natural enemies.) One surveillance strategy is to hire local people as forest guards or honorary forest officers. Besides reducing opportunity for crime, by providing an income to local people, the government may reduce their motive to engage in illegal acts.

Sometimes perverse incentives in the forestry law itself discourage surveillance in favour of other aspects of enforcement. The Bureau for Regional Oriental Campaigns Friends of the Earth-Japan and Pacific Environment and Resources Center (2000) report that Russian Far East forest agencies can keep the proceeds from confiscated timber. Therefore, they have no incentive to prevent crimes. They would far rather detect and seize the timber after the crime occurs.

Usually, however, surveillance and detection go hand-in-hand. A strong capacity for surveillance helps find evidence of illegal activities.

Good detection requires people trained in detection techniques. Detection takes managerial talent. The enforcement officers need to allocate limited resources wisely. Detection requires knowledge of the resource base. And detection requires understanding of the law – both the specific laws applying to the forest and the procedural laws applying to searches, seizure of property and preservation of evidence.

Being able to protect evidence is also one of the capacity challenges of *suppression*. Suppression requires understanding of the laws governing use of force, arrest, detention, interrogation and prosecution.

A final observation in this area: in analysing failures of enforcement, it is important to look at both capacity and will. In particular, when corruption destroys the will to enforce, increases in personnel or equipment may not make much difference.

Lack of capacity: administration

There is a second class of capacity issues, which are related to corruption and lack of respect for the law. These issues have more to do with workforce and day-to-day administrative duties than with crime-fighting skills.

Owing to inefficiency or understaffing, many forest agencies are far behind on the tasks that the law assigns to them. As a result, there is a great backlog of work waiting to be done. One danger of backlogs is that they invite favouritism and create opportunities for bribery. If there is a queue of people waiting for government approvals, there is a possibility of bribing someone to go to the head of the queue, to be considered out of turn.

If the backlogged tasks involve bureaucratic actions mandated by law, the response of the agency may be to ignore the requirements. For example, the law may require the forest agency to prepare long-term management plans before harvesting wood on the publicly owned forests. The agency may lack the capacity to prepare these plans in a timely fashion. Rather than suspend harvests until the plans are complete, the agency may simply manage the forests under short-term operational plans or, worse, no plans at all. These kinds of shortcuts encourage a general disrespect for the requirements of the law.

In the Russian Far East, the law instructs officials to set levels of cutting based on existing inventories. In some cases, officials have used clearly bad inventory data to allow overcutting, despite legal calls for sustainable harvests (Bureau for Regional Oriental Campaigns, Friends of the Earth-Japan and Pacific Environment and Resources Center, 2000).

Lack of coordination

Effective implementation of the law requires government agencies to act in coordination. Sometimes this means coordination with agencies that do not usually deal with forest

matters. For example, enforcers must have banking disclosure laws plus the cooperation of banking officials to track the financial aspects of illegal forest trade or forest-related tax evasion (Kaimowitz, 2001). In another example, in the Russian Federation, the Ministry of Economy has failed to coordinate with the forest agencies and has issued export permits that are greater than the allowable cut, and immigration officials have allowed foreign timber brokers to work without appropriate visas (Bureau for Regional Oriental Campaigns, Friends of the Earth-Japan and Pacific Environment and Resources Center, 2000).

Sometimes this means coordination between forest agencies and other land management or environmental agencies. Global Witness (2001) reports that, in Cambodia, the forest and parks agencies often block each other's attempts to put in place regulations that happen to affect the other agency's lands.

Almost always, there must be coordination among the forest management agency, the on-the-ground enforcers and the prosecutors. Lack of cooperation among these different branches may lead to ineffective enforcement.

For example, in Kosovo, the forest agency has had great difficulty in getting police agencies to stop log trucks in order to verify their permits. The reasons vary in different parts of the province. In one area, there is a dispute between the forest agency and the forest owners over the validity of the laws, and the police want the dispute settled before they become involved. In another region, the police suspect that the foresters are issuing or denying permits in order to extract bribes, and they do not want to be complicit in that practice. In another area, the police simply have other enforcement tasks that they consider to be higher priorities.

The military, a potential enforcer, can also be a significant illegal actor. The Indonesian military has been seen transporting illegal logs (Environmental Investigation Agency, undated), and the Cambodian military has been accused of being a major source of wildlife poachers (Global Witness, 2001).

Prosecution of forest offences usually requires cooperation of government lawyers. If there are specialized forest or environmental prosecutors, these may be understaffed. They may be open to bribery. Or, even if the prosecutors are beyond bribery, they may disfavour forest offences as relatively unimportant compared with other cases before them. They may seek penalties that are too low or may fail to pursue the cases at all.

Almost everything that applies to prosecutors applies equally to the courts. Failure of the courts to adjudicate forest crimes fairly and seriously can make enforcement impossible. Judges may be open to corruption. Or, honest judges may not understand that forest crimes have environmental consequences for the forest that go well beyond the economic value of the wood or wildlife involved. They may be reluctant to assess meaningful penalties or damages. For example, after the devastating forest fires of the 1990s in Indonesia, a group of NGOs brought a civil suit against major forest companies seeking Rp 11 trillion in damages. The court found the companies liable, but only awarded court

costs and ordered the companies to adopt fire prevention measures (Barber and Schweithelm, 2000).

Lack of enforcement of other laws outside the forest setting

The focus of this paper has been on laws that apply within the forest or shortly after harvest, but illegal activities also take place in the sale and export of forest products. The previous section mentioned banking, tax, export and immigration laws. As pressure grows for global “fair trade” in timber, activists will press for application of labour, pollution control and human rights standards. All of these have already been raised in allegations of illegal forest activity. For example, in the Solomon Islands, Greenpeace (2000b) has reported unlawful labour conditions in logging operations, breaches of pollution control laws and invasion of sacred sites, including burial grounds.

Forest officers may be poorly equipped to detect these kinds of offences. Police and other enforcement officers may be poorly trained to deal with forest matters. As a result, there may be a lack of capacity to handle enforcement in these areas.

Lack of government oversight

Just as the government must watch the forest to prevent crime by the public, someone must watch the government to prevent inefficient and illegal government acts.

In Bangladesh, the author found that oversight was non-existent or illusory. District forest officers oversaw their own accounts. The Forest Department accounting officer at headquarters had no actual authority to initiate audits. The author was told of regular audits by the financial ministry, but saw no evidence of them. The constitution of the country provided for a national ombudsman to accept and investigate citizen complaints against the government, but that office had never been filled.

According to Global Witness (2001) the Cambodian Government has failed to make the regulations governing concessions freely available. It is therefore impossible to know whether the government is following its own rules.

Good oversight requires several institutional structures. Government accounts, laws and records should be open. Government decisions should be made publicly “in the sunshine”. Independent offices should exist inside or outside the forest agency, with institutional incentives to uncover waste, fraud and abuse of power. Whistle-blowers should have protection under law.

Strategies to combat illegal activity by improving the law

The previous section discussed illegal activities and offered some remedies. This section expands on the discussion of how legal reform can help combat illegal activities.

This section focuses on the substance and processes embodied in the law. It bears repeating, however, that the process of adopting the law can itself build support for the

law. People are more likely to honour the law if they have had an opportunity to influence its content.

Respect for local rights and interests

Local people are key players in combating illegal acts in the forests. They are the ones with the greatest opportunity to commit illegal acts and the greatest opportunities to deter illegal acts through surveillance. If local people do not understand and support the forest laws, enforcing the laws will be an uphill battle.

Recognize traditional rights

The law should recognize the traditional rights and expectations of local people if people are to exercise those rights sustainably. If people believe that the law has suddenly deprived them of a long-held right, they will respond with anger and contempt. Only fear of detection and the resulting punishment or social stigma will keep them from ignoring the law. If contempt for the law is widespread, social pressures may even encourage people to break the law.

The corollary to this principle is, if the law cannot respect local rights, the government needs to make a case to the local people explaining why that is so. If local support is a concern, the law may need to compensate people in some way for what they see as their lost property.

Resolve disputes fairly, promptly and inexpensively

Conflicts over rights to the forest, or indeed to resources generally, are universal. The history of law is a history of disputes, and land is often at the centre of them. A legal framework that aims to end disputes is doomed from the start. A good legal framework must anticipate that disputes will arise, and must provide for workable ways to settle them.

Often the law has no separate mechanism for forest disputes. They are handled like other legal disputes, within the judicial system. In that case, forest law will say little about how disputes are resolved.

However, the law may prescribe administrative processes for some forest disputes, such as those that arise between the public and the government. Some laws allow people to appeal forest agency decisions to higher authorities within the government. Some laws allow forest officers to set and collect penalties for forest offences (“compounding”). Administrative dispute resolution offers the possibility of low-cost and quick results, but it does not assure justice. Whether the venue is administrative or judicial, the mechanism should be unbiased quick, and inexpensive to the parties. Rulings should carry the force of law.

Dispute resolution systems that favour the wealthy or educated may have a built-in bias against forest-area residents. Legal systems that are open to bribery are also a concern.

In some cases, the best way to handle local disputes may be to use traditional mechanisms rather than to impose complex and costly new procedures. In other cases, the traditional mechanisms themselves may carry biases, and outside mechanisms ought to at least be available as options.

Give local people a stake in forest protection

A legal system that protects a resource will have the backing of the people who get to benefit from the resource. If the support of local populations is important, the law must assure those populations benefits from the forests.

These benefits may take any number of forms. In some cases, people will want access to forest commodities such as fuelwood or pasturage. In some cases, they will want a direct share of the income that the forest generates. Or they may be looking for indirect economic benefits associated with outside investment in the forest, such as jobs and tax revenues. People who wish to preserve the existing social structures may want the right to exclude others from the forest, such as immigrants and developers.

Simple and direct laws

Make laws with clear standards that are easy to enforce

The discussion of laws that are difficult to enforce introduced the solution of simplicity and clarity of standards. The following are a few general observations on designing laws to aid enforcement.

Enforcement is easier where the activity is naturally exposed to surveillance. Thus, it is usually easier to enforce laws dealing with transport (on the public highways or rivers) or export (at least through normal commercial channels) than laws dealing with harvest in the woods.

Enforcement is easier if the regulated class is small and obvious. So, it is easier to control the import, manufacture or sale of logging equipment than it is to control its use in the woods, because there are fewer importers, manufacturers and dealers than there are users. Similarly, it may be easier to enforce controls on a few dozen sawmills than on hundreds of loggers. It may be easier to enforce bans on private zoos or public sales of bushmeat than to control illegal hunting directly.

Bans are easier to enforce than regulatory systems. The standard in a ban is inherently clear. For example, if a country regulates the amount of mahogany that can be harvested, every instance that enforcers find of mahogany being cut, transported or exported is potentially legal. If a country bans the cutting, transport or export of mahogany, every instance is illegal. The standard could not be clearer.

The disadvantage of bans is that they can be overbroad. Their sweeping nature can have undesirable impacts and side-effects. For example, a ban on mahogany harvest may lock up a resource that could sustain a low level of harvest. Local artisans who have used

small amounts of the wood for years become outlaws if they continue. Small harvesting operations may lose the one item that made them profitable.

Set clear standards for the exercise of discretion by officials

Allowing officials to exercise their power without constraints invites two closely related evils. First, officials may use their power to favour one group over another unfairly. Second, officials may accept bribes to influence how they use their authority.

Drafters, who are taught the value of simplicity and flexibility in laws that apply to the public, must learn to write constraints into laws that bind government officials. This is always a challenging task. It is hard to anticipate all the situations in which a law will be applied and to write a law that will be fair and effective in all cases.

One area where forest law needs to have clear standards is in the sale of forest resources. Laws may require the government to hold auctions for valuable items such as timber. If the law does not set minimum prices for the auction, the government could be cheated through collusion to keep bids low or to disqualify higher bids. On the other hand, officials need some discretion to throw out bids from unreliable purchasers, so requiring the government to accept the highest bid is not necessarily good law.

Where it is impossible to set standards to cover all contingencies, the drafter can require the exercise of discretion to be transparent. In the case of an auction, all bids should become a matter of public record. A public record of decision should state which bid was selected and why. If the drafter trusts the courts, the law may give them the power to overturn awards that lack a reasonable basis.

Set meaningful penalties

As discussed previously, if penalties are too weak, people will ignore the law no matter how it is enforced. And if penalties are arbitrarily high, the courts may be reluctant to apply them.

Penalties can have many purposes, including punishment, rehabilitation (of the offender), restitution (for the victim), prevention of recidivism and deterrence.

For the purposes of discouraging illegal forest acts, deterrence is the first concern. For illegal acts involving the taking of commercially valuable resources, the penalty must be at least as great as the value of the resource. However, this alone is not enough. In basic economic terms, the penalty must also reflect the risk of being detected. For example, if only half of all timber thieves are caught, and the penalty is a fine of less than twice the value of the stolen goods, it makes economic sense for the thieves to steal.

The law can impose things besides monetary penalties. These can include imprisonment and public reprimands. (Note that deterrence has a public aspect, and even if shaming the criminal is not the point of deterrence, publicizing successful prosecutions does have its own deterrent effect.) They can also include loss of public privileges, such as the right to hold a government position (a potentially important deterrent in bribery cases).

If the concern is theft by a forest-sector business, the punishment can include the loss of the right to purchase forest products from public lands or a broader loss of the right to conduct business. This can be a strong tool against fraud by timber purchasers. Corporations may try to get around this kind of penalty by creative use of subsidiary corporations and corporate shells. The drafter must be alert to these possibilities.

The second concern of the drafter should be prevention of recidivism. What can the law do to discourage this person from committing future crimes? Some of the deterrent tools also work against recidivism. Bribe takers should lose their jobs. Thieves should go to jail, where they cannot steal for a time. Businesses should lose their licenses. All serious offenders should risk the loss of the ability to make future contracts or receive forest-related benefits from the government.

Confiscation of equipment used in criminal acts can prevent the equipment from being used in other crimes, but this is a difficult penalty to apply fairly. If a thief borrows a neighbour's tractor to haul stolen fuelwood, should the neighbour lose the tractor? If a sawmill buys logs knowing that they are stolen, should the mill be forfeit? Giving some officials this kind of discretionary authority would raise a danger of abuse.

Restitution is often the measure of damages in civil actions (as opposed to criminal prosecutions), but the availability of restitution can also have a deterrent effect. By allowing injured parties to seek double or triple damages, the law increases the deterrent value of civil suits. There is usually a fair justification for awarding greater damages than the value of timber taken. Unless the theft is from a stand ready for commercial harvest, the theft probably did more harm to the future value of the stand than is represented by the market value of the trees taken.

Another approach to increase the deterrent value of civil suits is to allow the plaintiff to seek the cost of restoring the forest rather than the cost of the resources damaged or taken. This is especially appropriate where the injury affects non-commodity values of the forest, such as preservation of biodiversity, protection against soil loss or improvement of water quality. Restitution is also appropriate in timber cases involving young stands. For example, if trespassing cattle destroy a new plantation, it is reasonable to require the cattle's owner to replant the area rather than to pay the value of the lost seedlings.

Increase transparency

Increasing transparency is an accepted approach to combating corruption today. It offers the potential to deter and expose corruption by “letting the sun shine” on otherwise hidden aspects of government decision-making. Alone it does nothing, but it empowers a concerned society to police its government.

Transparency efforts in forestry often run into the problem of piecemeal application of a principle that ought to apply across the entire government. That is, governments ought to have general laws allowing access to government documents, auditing of government accounts and contracts, and so forth. The forest law drafter may be faced with the task of

introducing a specialized law for the forest sector, with the expectation that, in the future, a broader law will apply to the entire government.

Public access to agency documents

Several kinds of forest agency documents ought to be available for public inspection. A good starting point is all documents related to sale of public forest resources. Here, a group of people – the unsuccessful bidders for the resources – will have a natural incentive to police the sale process and will take advantage of the open access.

Forest plans ought to be open to public inspection. At the planning stage, the decisions reflected in the plan may suggest favouritism and point the way towards cases of bribery or abuse of power. At the implementation stage, failure to follow the plan may similarly be a symptom of corruption.

The law can require that a written record of decision accompany important government decisions on forest use. This requirement may fit neatly with environmental impact assessment requirements. Any forest decision significant enough to require an impact assessment should have a record of decision justifying the decision in light of the assessment. A decision in writing is easier to analyse and challenge if it falls outside the law.

Agency expenditures ought to be a matter of public record. The public should be able to look into the amounts spent in ordinary procurement, as well as the expenses paid for government employees.

Both the public and the government budget writers may appreciate requiring the forest agency to produce an annual report detailing income and expenditures, liabilities and assets. Such a report provides an orientation to the agency's finances and can serve as a starting point for further inquiries.

There may be reasons to exempt some public documents from disclosure in order to discourage illegal activity. For example, the government may not wish to disclose the location of high-value resources that are particularly prone to theft, such as sandalwood. Also, the government may want to protect the location of rare wildlife habitats that might be damaged by poachers or even overenthusiastic ecotourists.

Disclosure of conflicts of interest

The government forest officer owes loyalty to the government. Any competing claim on the loyalty of the officer poses a conflict of interest. This is a matter of ethics, but the law can repeat or reinforce the ethical duty.

Ideally, the law would prohibit forest officers from exercising their authority in circumstances where they have a conflict.

As a next-best approach, the law can require forest officers to disclose potential conflicts. For example, the law could require the forest officer to file an annual report on ownership

of forest lands or forest sector businesses. The requirement could extend to close family members as well.

The law can also require forest officers to report on receiving gifts or other things of value from people outside the immediate family. Besides outright gifts, the law can apply to favourable loans, travel, lodging and sales of property or services at prices below market value.

Note that prosecutors can use disclosure laws as a backup to bribery laws. Where it may be difficult to prove that money exchanged hands for a particular favour, it may be easy to prove that the recipient failed to report the “gift” as required by law.

Independent auditing and oversight

Without an outside eye looking in from time to time, even the most honest person can be tempted to stray from the legal path. A forest agency that does not face audits is a forest agency beyond legal control.

The quality of audits depends on the quality of the auditors as well as the extent of their access to agency records. Audits should go beyond looking at the accuracy of the financial records and should examine whether the agency is following the law. Auditors should have training in the agency’s field, and the auditors themselves should face monitoring and evaluation.

Besides traditional auditing, two other oversight mechanisms are worth considering. The first is an oversight or advisory board. This should be a panel of experts in forestry, public administration or other relevant fields. They should have the tasks of advising the forest agency and making recommendations to the government and the public on matters of forest policy and administration. And they should have unrestrained access to forest agency staff and records.

The second is a mechanism to respond to citizen and whistle-blower complaints. This could be a task of the oversight board. However, it also could be a separate office within the forest bureaucracy, independent of the forest agency it oversees, or it could be an office outside the forest ministry. The office might be known as an inspector general, an ombudsperson or a forest advocate. This office could investigate allegations of corruption, illegality and mismanagement.

Allow citizen enforcement

If a nation has an independent court system, allowing citizens to bring complaints against the government or against other citizens can be an effective addition to government oversight and enforcement.

Suits against the government often raise technical legal issues, such as the following:

- Sovereign immunity: can the government be sued in its own courts?
- Standing: can a single citizen bring suit to complain about an issue that affects the public generally?

- Remedies: if the citizen wins, can the court order the government to adopt the action or policy that the citizen seeks?

Sometimes legislation can clarify these points and so encourage these suits.

Another way to encourage these suits is to provide for awards of court costs and attorney fees to the successful citizen, or to shield the citizen from paying the costs of the government if the suit does not succeed.

Some countries reserve prosecution of violations to the government, but a few allow citizens to bring private prosecutions. In some countries, these private prosecutions are limited to criminal matters. In some, they are available to recover money owed to the government, with a portion of any recovery going to the citizen as a form of reward. In some cases, they are available to allow citizens to enforce specific laws.

The United States has such “citizen suit” provisions in several of its environmental laws, including the Endangered Species Act. During times of slack enforcement by the government, NGOs have used these provisions aggressively. Though NGOs lack the funding and legal capacity to replace completely the missing government enforcement, the success of the suits serves to embarrass the government and encourage stronger enforcement.

Setting priorities for action: a systems framework

The following is an attempt to use a systems theory framework to set priorities for combating illegal forest activities. As with any tool, theory has its limits. Some arise out of the weakness of the theory, and some out of weakness of the analyst. Theory is offered here to stimulate further thought on how best to approach the problems at hand.

To a systems analyst, the forest sector is a system. Like all systems, it has materials flows, information flows, feedback loops, constraints and incentives. It is complex, and it functions on many levels — economic, political, social, biological and geographical. Understanding it and bringing about beneficial change are challenging.

In 1997, the systems analyst Donella Meadows published an informal guide to “Places to Intervene in a System”. She identified nine general strategies for bringing about change and ranked them according to their likely strengths.

9. The ninth and least likely strategy to be effective is to adjust numbers. That means to change the parameters of the system without affecting its structure. Examples might be to increase the number of forest guards, reduce the volume of timber sales, or increase the frequency of patrols. By themselves, changes in numbers tend to do little unless the system is unstable to begin with or the changes affect structures or feedback mechanisms discussed in the following. So, for example, if there are no forest guards to patrol a protected area, then surveillance structure is missing entirely, and changing the number

from zero to one or two can make a big difference. But if there are already six guards, adding one more may not be the most effective change we can imagine.

8. The eighth strategy is to change material stocks and flows. An example would be to change the way timber is transported, so that logs must move through a single checkpoint or exports must flow through controlled ports. Such changes can be effective, but are often expensive or impractical to achieve. Another approach in this category is to develop buffers (materials storage) or alternative sources of supply. Thus, a buyer with a large stockpile of timber or with many alternative suppliers can more easily afford to turn down an offer of supply from an obviously illegal source.

7. The seventh strategy is to regulate negative feedback loops. Negative feedback loops are features that bring stability to a system. A mechanical example is a thermostat. When the temperature drops, the thermostat detects that and turns the heater on. When the temperature rises past a set point, the thermostat turns the heater off. In economics, rising prices communicate negative feedback to reduce demand, while falling prices tend to decrease the incentives to supply. In forests, the negative signals include the physical difficulty of securing the logs (so do not build roads into protected areas), the economic cost compared with income from illegal activities (so decrease the demand for illegal wood or increase the cost of obtaining it), the social stigma of illegal activity (so do not let illegal loggers become folk heroes or civic leaders), and the likelihood, size and nature of legal sanctions (so do not let the punishment be dwarfed by the profit).

6. The sixth strategy is to drive positive feedback loops. Positive feedback loops provide incentives. Can we reward behaviour that is inconsistent with illegal activity? Can we make legal harvest more lucrative? Can we provide lawful employment to the labour base that would otherwise be available for illegal activities? Can we increase the incentives for effective law enforcement? Can we promise honest civil servants a decent standard of living through government wages?

5. The fifth strategy is to alter information flows. Feedback loops, negative and positive, depend on information. Improve information flows, and the feedback gets stronger or entirely new feedback loops arise. Create a reliable forest certification system, and consumers may start to apply pressure on producers to log legally. Increase transparency in government, and corruption must run to find the remaining dark corners. Bring in international auditing of forest law enforcement efforts, and countries must accept that they will be compared favourably or unfavourably with their peers.

4. The fourth strategy is to change the “rules” of the system. Can we create new incentives, punishments and constraints? Many potential legal remedies fall into this category: reducing the discretion of government officials; creating new legal avenues such as citizen prosecutions of wrongdoers; creating new punishments such as confiscation of property used to commit crimes; or changing tenure systems to recognize new rights to control forest use. Note that these remedies are potentially powerful, but not guaranteed to be entirely good or effective.

3. The third strategy is to affect the system's power of self-organization. Societies change themselves. How can we encourage changes that fight illegal activity? Some of these actions are quite general but powerful. These include supporting and empowering civil society groups that are pressing for change; empowering the social groups that tend to be harmed by illegal activity; exposing the costs of illegal activity; educating decision-makers; and promoting the rule of law (which may make change easier than it would be in societies bound by tradition or dictatorial discretion).

2. The second strategy is to change the goals of the system. Strong leadership can focus societies on new goals. Sustainable development can overshadow immediate needs. Preserving the nation's forest heritage can outweigh immediate economic gains. Public service can be more important than personal enrichment.

1. The first strategy is to change the mindset out of which the goals grow. What are the shared ideas that underlie the forest system? Does the society believe that the forest resource is renewable or worth protecting? Does it see the world as stable and predictable enough to make long-term investments in forests? Does it believe it can afford to protect its forests? Does it believe corruption is inevitable? If we can change underlying assumptions and beliefs, we can change the functioning of the whole society.

Meadows' framework is far from perfect. Her categories are not neatly drawn. Some of the "most effective" steps raise issues of practicality and, when dealing with independent nations, sovereignty. But she does offer a provocative starting point that may fuel future discussions.

References

- Barber, C.V. & Schweithelm, J.** 2000. *Trial by fire: forest fires and forestry policy in Indonesia's era of crisis and reform*. Washington DC, World Resources Institute.
www.wri.org/forests/pdf/trialbyfire.pdf
- Bureau for Regional Oriental Campaigns, Friends of the Earth-Japan & Pacific Environment & Resources Center.** 2000. *Plundering Russia's Far Eastern Taiga: illegal logging, corruption, and trade*.
www.pacificenvironment.org/PDF/logging_final.pdf
- Environmental Investigation Agency.** Undated. The Politics of Extinction Web site.
www.eia-international.org/Campaigns/Forests/Indonesia/PolExtinction/timber05.html
- Environmental Investigation Agency & Telapak Indonesia.** 2000. *Timber trafficking: illegal logging in Indonesia, South East Asia and international consumption of illegally sourced timber*. www.eia-international.org/Campaigns/Forests/Reports/timber/timber.pdf
- Environmental Law Institute.** 1998. *Legal aspects of forest management in Mexico*.
www.eli.org/pdf/irmexico.pdf
- FAO APFOS.** Working Paper No. 22 (Philippines).
www.fao.org/forestry/fon/fons/outlook/asia/apfsos/22/apfsos12.htm
- Forests Monitor.** 1998. *High stakes, the need to control transnational logging companies: a Malaysian case study*.
www.forestsmonitor.org/reports/highstakes/part2b.htm
- Global Witness.** 2001. *The credibility gap — and the need to bridge it: increasing the pace of forestry reform*.
www.oneworld.org/globalwitness/reports/credibility/credibilitygap.htm#4
- Greenpeace.** 2000a. *Plundering Cameroon's rainforests: a case study of illegal logging by the Lebanese Logging Company Hazim*.
www.greenpeace.org/~forests/resources/hazimreport2109.pdf
- Greenpeace.** 2000b. *Spotlight on the illegal timber trade: Asia Pacific*.
www.greenpeace.org/~forests/resources/Asiasupplement.pdf
- Greenpeace.** 2000c. *Spotlight on the illegal timber trade: Cameroon*.
www.greenpeace.org/~forests/resources/Cameroonsupplement.pdf
- Jordan, M.** 2001. Unfamiliar turf: saving the environment. *The Washington Post*, December 28, page A1.

- Kaimowitz, D.** 2001. Forest law enforcement: issues and challenges for East Asia. (presented at the regional Forest Law Enforcement and Governance Conference sponsored by the World Bank and others).
wbln0018.worldbank.org/eap/eap.nsf/Attachments/FLEG_S1-2/\$File/1+2+Daivd+Kaimowitz+-+CIFOR.pdf
- Knowlton, C.S.** 1972. Culture, conflict and natural resources. In W.R. Burch Jr., N.H. Cheek Jr. and L. Taylor (editors) *Social behavior, natural resources, and the environment*, p. 109-145. New York, Harper and Row.
- Meadows, D.H.** 1997. Places to intervene in a system. Originally published in *Whole Earth*, 91: 78-84. www.wholeearthmag.com/ArticleBin/109.html
- Wardojo, W., Suhariyanto & Purnama, B.M.** 2001. *Law enforcement and forest protection in Indonesia: a retrospect and prospect*. Presented at the regional Forest Law Enforcement and Governance Conference sponsored by the World Bank and others.
wbln0018.worldbank.org/eap/eap.nsf/Attachments/FLEG_S1-3/\$File/1+3+Boen+Purnama+Speech+-+GOI.pdf
- Wilkinson, C.** 1992. *Crossing the next meridian*. Washington DC, Island Press.

**FOREST CERTIFICATION AND FOREST LAW
COMPLIANCE:
SOME BACKGROUND**

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Certification: a high-profile subject

Forest certification has become one of the high-profile subjects in forestry. It thus remains a complex, and often controversial, subject. There is a long list of areas where it is suggested that certification may contribute to improved management and protection of forests. There have also been recent suggestions that it be used as a means of controlling, or at least limiting, illegal activities such as illegal harvesting and illegal trade. It is suggested that it can improve awareness, monitoring and recognition by identifying and limiting the flow of illegal logs.

This background note provides a summary of what certification is, how it operates and what its current status is, and indicates some of the issues that are relevant to any consideration of whether it may contribute to controlling or limiting the extent of illegal activities. Some support the view that it may be of assistance – others suggest it may not be a very effective tool for this.

What is certification?

In simple terms, forest certification is the process of assessing the standard of the management of a forest by evaluating what is being done against some predefined standard of what represents sound (or sustainable) forest management as seen from a social, economic, environmental and biological perspective. The assessment of conformity with the standards is carried out by some (preferably independent) “qualified” person or organization, and forests “meeting” the criteria are issued with a certificate.

Following certification of the standard of forest management, certification of the products that are made from wood from these forests may occur. This latter involves tracing the raw material from the certified forest to its final use (through any intermediate products that are manufactured from it) in order to verify that the products come from forests that have been certified as sustainably or well-managed. This process is known as “chain of custody” assessment, and is essentially a formal tracking by checking of documents and the physical checking and marking of wood and the products as they move from the forest through processing to a final buyer. This tracking thus covers all transport of the material and products and the processing of material into products.

The standard process followed is for a certifier to carry out an assessment of the forest situation against a set of criteria that have been established as basic to good (or ultimately sustainable) management of the forest(s) being assessed. The process involves initial certification – which requires a successful report based on a detailed evaluation of a range of factors, such as records, management plans, field activities, etc. and must include a field assessment. Following the granting of a certificate, regular visits are made to ensure that the standards are being maintained.

The reason for certification

Certification is one of a number of market-based instruments that may be able to contribute to improved management of the forests and to improved forest sector development. It was originally proposed and promoted by environmental groups as a means of “saving” tropical forests from destruction by using market forces to encourage improved management of these forests. It was therefore originally specifically promoted to address the problems of the tropical forests. The aim was to link trade (generally international) to the sustainable management of the forest resource. It was argued that trade pressures and incentives could be brought to bear on forest management (in its broadest sense) by using the power of buyers who were concerned about environmental issues, in general, and forests, in particular. The logic of the groups that promoted the idea and have been pushing it hard was (and still is) that buyers would show a preference for certified products (and pay more for them), which in turn would either encourage producers to improve their forest management in order to tap this demand, or force them to do so under the threat of losing markets if they did not.

The basic assumption behind certification is therefore that there is a market demand for products made from wood that comes from sustainably or well-managed forests.

There are therefore two main components to certification in forestry:

- certifying the standard of *forest management*; and
- certifying the *products* that are made from wood from these forests.

However, the main motivation of those undertaking certification at present is probably for marketing reasons. Suppliers see certification as a promotional tool to gain an advantage over other suppliers in some ecologically sensitive markets. This can either increase the market share of the supplier or at least avoid loss due to boycotts or restrictions.

While, as noted, certification rests on the basic assumption that there is a market demand for products made from wood that comes from sustainably or well-managed forests, or one can be developed or forced, there are other benefits being suggested from certifying. (It should be noted that there are differing opinions on many of these points.) The benefits may therefore cover some of the following:

- increased market share, or at least protection from loss of the existing market share (mainly against other wood products but also against non-wood products);
- a market premium from selling a “green” product;
- greater insurance of the markets against market restrictions;
- long-term supply security because of the sustainability of the supplying forests;
- independent evaluation of forest management practices;
- basis of comparing different management practices, and setting common standards;
- improved commitment to forest resource management;
- improved image with a range of interest groups;

- basis for improved control or policing of resource holders;
- protection from action by environmental groups.

However there are also disadvantages suggested, such as:

- high cost (both financial and management);
- reduced (short-term) revenue due to reduced output volumes;
- focus on it distracts management attention from other important activities;
- loss of some control to other groups (e.g. to those developing the certification standards or those less close to the resource).


Certification: current situation

Area of forests certified

Certification is still in its infancy and is in a continual state of flux as new certification schemes emerge, old ones become modified or systems come to some level of agreement or recognition. While certification was originally focused on tropical timber and timber products, it has been expanded to include timber from non-tropical sources and from timber products to pulp and paper products. There are also preliminary moves to consider the certification of non-wood forest products. At present, a wide, and growing, number of activities are under way throughout the world, in both developed and developing countries, although only a few are currently operational.

The area of forests being certified continues to grow. However, while increasing, the area certified is still minor in regional or global terms. Depending on how the term “area certified” is defined, the total global area of certified forests may at present be around 90 million hectares (FAO estimate)⁶ (see Figure 1). This represents about 2.3 percent of the world’s forest area. Of considerable significance given the original goal of certification is the fact that most (about 97 percent) of the area certified is in temperate countries, almost exclusively in Europe and North America. Latest FAO Forest Resource Assessment (FAO, 2001) estimates indicate that between 1990 and 2000 the average annual net decline in forest area in tropical regions was 12.3 million hectares per year, while in non-tropical regions the average area increased by 2.9 million hectares per year. The greatest loss of forests continues to be in Africa, followed by Latin America. Thus, little of the area certified is in tropical or developing countries, where the forests are furthest from being well managed, and which were the original reason for promoting certification.

⁶ Includes only areas certified under specific third-party forest certification schemes. Certification to ISO 14000 has not been included unless the area has also been certified under a forest certification scheme.



Global Forest Area Certified

Region	Area certified (million ha.)
Africa	1.0
Asia	0.2
Oceania	0.4
Europe	54.7
North America	34.6
Latin America	3.0
TOTAL AREA	93.9

Source: FAO

9 FAO Forestry Department

Figure 1. Forest area certified by region

Main certification processes

International or regional schemes:

- *Forest Stewardship Council (FSC)*. Global coverage, but the main forests certified are in Europe and the United States.
- *Pan-European Forest Certification Framework (PEFC)*. Forests certified are in Europe.

National schemes:

- National certification schemes in Finland, Sweden, Norway, Germany, Austria, the Czech Republic, France, Latvia and Switzerland. These have been recognized by the PEFC system.
- The American Forest and Paper Association (AF&PA) has developed a *Sustainable Forestry Initiative (SFI)*. Areas certified in the United States and Canada.
- *American Tree Farm System (ATFS)*. Areas certified in the United States.
- *Canadian Standards Association (CSA)*. Areas certified in Canada.
- *United Kingdom Woodland Assurance Scheme (UKWAS)*. A United Kingdom standard that has also been recognized by FSC, and thus is shown in FSC figures.

A number of other systems are in the process of being developed but are not yet operational. Of note among these are schemes in Indonesia, Malaysia, Ghana and Brazil. Countries such as Cameroon are investigating the subject, and there are moves under way by the European Foundation for the Preservation of African Forests Resources, an

industry grouping, and the African Timber Organisation (ATO) to develop a Pan-African Certification Initiative.

The areas certified by the main operational schemes are given in Figure 2.

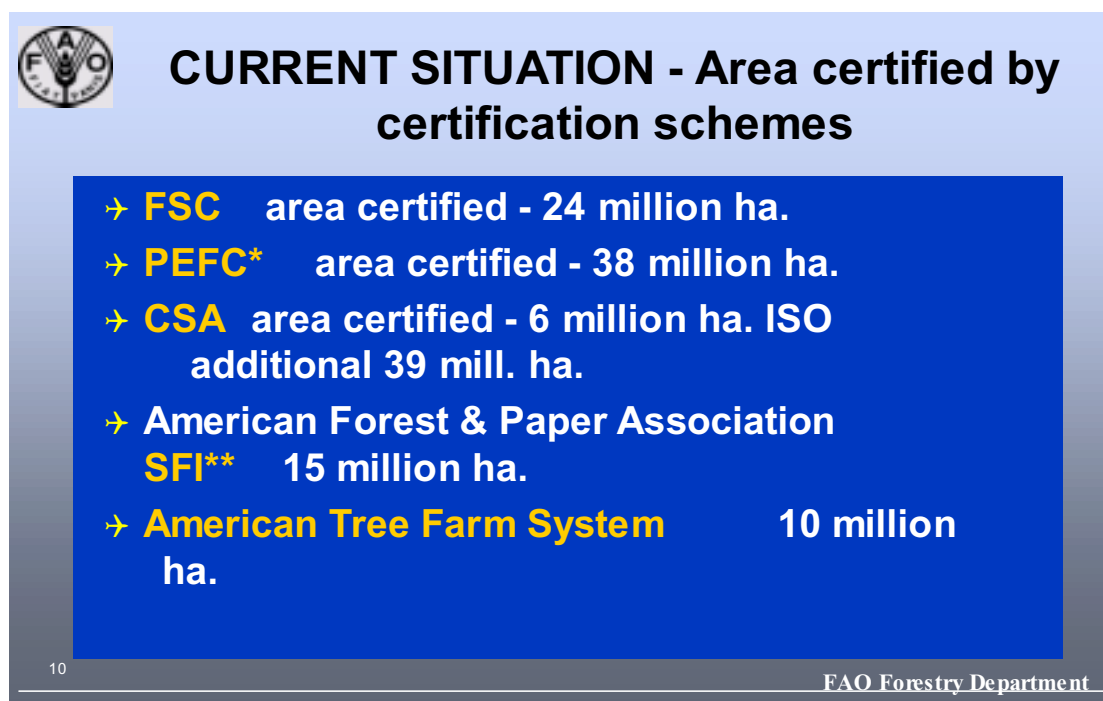


Figure 2. Forest areas certified under the main certification systems (as of late 2001)

Notes:

* Area certified under national schemes in Finland, Norway, Germany, Austria, Sweden and Switzerland.

** Includes area certified in Canada

Markets for certified forest products

Currently, despite its stated purpose of being developed in order to improve forest management in forests at risk, the main motivation of most of those undertaking certification or promoting it appears to be to seek the marketing benefits it may offer. Producers interested in exporting are largely moving to certification because they are concerned to maintain access to some markets – or as an insurance policy in case conditions become more restrictive. Many suppliers feel that they can use the certification as a promotional tool to gain an advantage over other suppliers in some ecologically sensitive markets. This can either increase the market share of the supplier or at least avoid loss due to threats of consumer boycotts or restrictions such as are increasingly common, particularly in some parts of Europe and the United States.

Greatest interest in certification is found in countries that have active environmental groups and trade interests that see a market advantage from providing certified products. Interest in buying certified timber is greatest in (and largely restricted to) Western Europe, especially the United Kingdom, Germany and the Netherlands, and to a lesser extent the United States. Major Asian timber importing markets such as Japan, the Republic of Korea and

China are currently showing little or no interest in certification. Important markets in Latin America, such as Brazil, are also only showing limited interest.

In the case of major producing countries, most interest and activity is understandably in those countries whose main markets are showing greatest interest. These are countries that wish to gain access to markets that appear to be likely to demand certified products. Thus, groups in Canada, Malaysia, Indonesia, the United States, Finland and Sweden, to name major exporters, are all actively developing certification schemes. In most cases, the domestic markets in these countries are not insisting on certified products, but those wishing to export to Western Europe can see that many of their markets are likely ultimately to insist on some form of certification.

What is the reality of certification at present? In summary:

- limited areas certified, but growing rapidly from a small base;
- few operational certification schemes;
- demand restricted to a small number of countries – especially in northern Europe and the United States;
- promoted as an incentive to improved forest management, but the links to the problems of deforestation and degradation are still unclear;
- the primary motivation is to gain market benefits, or avoid market penalties.

Issues of significance to forest law compliance

One of the main issues that has consistently been stressed and agreed in international discussions on certification has been the importance of legal compliance and the control of illegal activities. In this respect, most certification standards specify or assume the respect of all national and local laws and any relevant administrative requirements of a country. They also assume adherence to international treaties and agreements. The following are examples of this.

The FSC standards include the following:

1.1 Forest management shall respect all national and local laws and administrative requirements.

1.2 All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.

1.3 In signatory countries, the provisions of all binding international agreements such as CITES, International Labour Organization (ILO) Conventions, the International Tropical Timber Agreement (ITTA), and the Convention on Biological Diversity, shall be respected.

1.5 Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.

The Pan-European Forced Certification Framework (PEFC) system specifies that: “National Criteria will respect the relevant legal requirements, national policies and programmes.” It also notes that “The Pan-European Operational Level Guidelines are designed to be applied in the context of, and in full respect to, national and/or regional instruments and actions. They cannot be used in isolation to determine sustainability in forest management. Their purpose is to identify complementary actions at the operational level which will further contribute

to sustainability of forest management. This should reflect national, economic, ecological, social and cultural conditions, research and traditional knowledge, and must respect forest and environmental legislation, decisions on protected areas, other general principles, as well as codes for forest practice such as standards used for forest management in any given country.”

However, it should be noted that this aspect is not the primary focus of forest certification. Its objective is sound management of the forests, taking account of economic, social, environmental and ecological values. The aspects that relate to compliance with laws are therefore only one (in most situations minor) issue.

There are many aspects of certification as it currently exists that may limit its short-term direct contribution. For example:

- the main focus of certification is on forest management – in its widest sense – illegalities are only one aspect;
- certification schemes are voluntary and do not have any legal status in the country they operate in;
- they are a market-based tool that only applies to those forest owners or managers who see a benefit to them;
- certification does not have any enforcement role;
- the only “penalty” for not maintaining the certification requirements is withdrawal of the certificate – which may or may not be a real “penalty”;
- current forest areas certified or in the process of being certified are small on a global basis and oriented to developed and temperate/boreal forest countries;
- few tropical developing countries are certified or involved in efforts that will result in them becoming certified in the short term;
- the main trade of most developing countries is to the domestic market; across-border to neighbouring developing countries; and to importing countries that currently have limited interest in certified timber and products (and therefore limited financial incentive for exporters);
- most certification involves individual forests – the process is therefore slow;
- the focus of much certification is on individual forests – and on the management unit. Thus there is no attempt to check country-level flows and cross-flows;
- certification can be costly – and to date there are few clear financial gains evident that may offset the cost;
- it is a slow way of addressing large areas of forest;
- there is limited on-the-ground checking. After the initial certification, field visits are normally not more frequent than once per year;
- the certification requirements only address what is against the law – not what may involve corruption.

Conclusions

In summary, certification processes are not designed to address law compliance in any detail, and even less to address corruption. However, certifying forests should ensure that the forests certified are not harvesting illegally, and chain of custody operations should

ensure that illegal trade does not occur. But its contribution in those countries where illegal activities are currently greatest is unlikely to be significant since those engaged in illegal activities are unlikely to wish – or be able – to move to certification rapidly. As shown by the forests being certified at present, progress towards certification in developing countries has been slow. And, since most sales of forest products from most developing countries are first directed to their domestic markets, second sold across borders and third exported to markets that are currently showing little interest in certified products, there is little strong incentive/pressure for producers in these countries to move into certification.

Certification schemes do, however, have many features and procedures that might be of assistance in efforts to monitor or control illegal activities or aid forest law compliance. Certification may offer some opportunities to assist in monitoring activities on the ground and ensuring compliance, as well as some experiences that may assist other activities. There may be situations where current certification mechanisms may be able to be adapted to assist, or where they may already have the infrastructure in place to aid in ensuring compliance with laws and regulations. For example, chain of custody systems could be used to track legally harvested timber – but the chain of custody system could also be used without immediately requiring full certification.