

15. Strategies to Prevent Illegal Logging

Saskia Ozinga and Hannah Mowat

SUMMARY

A large proportion of tropical timber is logged illegally. In this chapter, we discuss different options available to tackle this major environmental problem, exacerbated by globalisation. Relatively successful instruments include the OECD Convention on Bribery, legislation against money laundering, self-regulation of the financial sector, the Convention on International Trade in Endangered Species, and forest certification. However, these instruments face considerable implementation problems, being either limited in effectiveness or cumbersome to apply. In both the United States (US) and the European Union (EU), two of the biggest timber importers, new legislation tailored to tackle illegal logging has been developed. The concerted efforts of non-governmental organisations (NGOs), who informed and lobbied their governments to use trade incentives, have been instrumental in the development of these laws. The US Lacey Act, a conservation law revised in 2008 to include illegal timber, requires businesses to demonstrate that their purchasing policies and mechanisms effectively avoid sourcing timber from illegal sources and demonstrate due diligence. Across the waters, with the understanding that addressing illegal logging demands cooperation between importing and exporting countries, the EU has been working since 2002 on a comprehensive plan to control illegal timber imports: the EU Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT). This Action Plan has led to new legislation to control illegal timber imports and support timber producing countries to improve forest governance. Although it is early to assess them, both initiatives seem to have a significant impact on addressing illegal logging and improving forest governance. By

contrast, the Reduced Emissions from Deforestation and Forest Degradation (REDD+) initiatives, supported by the World Bank and United Nations agencies, may side-line or even fundamentally undermine the progress that has been made with the FLEGT initiative.

INTRODUCTION

Illegal logging is a pervasive and widespread problem, causing enormous damage to forests, forest peoples, and the economies of producer countries. No exact figures exist, but reliable estimates suggest that about half of the tropical-timber imports into the EU are illegally sourced, as are a substantial part of timber imports from the boreal region. Costs to producer countries are high, with the World Bank (WB) estimating that illegal logging costs developing nations close to 15 billion US Dollars (USD) in lost assets and revenue annually.¹ Concern about the extent of illegal logging around the world has grown significantly in past years, with new legislation to address the problem being developed and implemented in the EU and the US. Their awareness and attention has developed out of a series of interlinked factors: the growing evidence of the link between forest destruction and the accompanying serious loss of government revenues, the growing emphasis on 'good governance' in international policy, and the increasing recognition of the role of consumer countries in fuelling demand for illegal products. In addition, there is an increasing consciousness of the crucial role played by forests in mitigating climate change – with forest loss contributing to between 12 and 17 per cent of annual global carbon dioxide emissions.²

Despite this growing concern, there remains a clear lack of immediate and well-coordinated action at the national and international levels to address the problem. The strengths and weaknesses of different options are listed below. The roles different stakeholders can and ought to play for any measures to be effective are described. We discuss existing agreements that can be used to address this problem, including the Convention on Bribery of the Organisation for Economic Co-operation and Development (OECD), the Convention on International Trade in Endangered Species (CITES), and money-laundering legislation. We also focus on forest-certification schemes and standards for the financial sector, as well as more recent EU legislation linked to the EU FLEGT Programme and the Lacey Act in the US.

¹ World Bank, 2002.

² Van der Werf, 2009.

THE PROBLEM OF ILLEGAL LOGGING

The Scale of Illegal Logging

Illegal logging causes enormous damage to forests, forest peoples, and the economies of producer countries. Some estimates suggest that the illegal timber trade comprises over a tenth of the total global timber trade, worth at least 150 billion USD a year.³ Although exact figures are difficult to obtain, given the illegal nature of the activity, reliable estimates indicate that more than half of all logging activities in particularly vulnerable regions – the Amazon Basin, Central Africa, Southeast Asia, the Russian Federation, and some of the Baltic states – is illegal.⁴ Activities constituting illegal logging include the harvest, transportation, purchase, and sale of timber in violation of national laws. The harvesting procedure itself may be illegal, including the use of corrupt means to gain access to forests, extraction without permission or from a protected area, the cutting of protected species, and the extraction of timber in excess of agreed limits. Illegal activities may also occur during transport, such as illegal processing and export, fraudulent declaration to customs, and the avoidance of taxes and other charges, with as much as 5 billion USD lost annually to governments because of evaded taxes.⁵

Although the clandestine nature of the illegal trade makes its scale and value difficult to estimate, extensive unlawful operations have been uncovered wherever authorities have tried to find them. As the WB observed, 'in many countries, illegal logging is similar in size to legal production. In others, it exceeds legal logging by a substantial margin ... Forest crime largely results from weak governance and subsequent poor law enforcement in the forest sector.'⁶ Illegal logging is the cause of widespread environmental damage and presents a grave threat to biodiversity. In addition, the scale of illegal logging represents an enormous loss in vital revenues for many countries. The substantial revenues from illegal logging sometimes fund, and thereby exacerbate, national and regional conflicts, as in Cambodia, Liberia, and the Democratic Republic of Congo.

³ OECD, 2001.

⁴ For further details on illegal logging, see Brack, 2007.

⁵ World Bank, 2006: xi.

⁶ World Bank, 2006: 1.

Box 15.1 Some facts about illegal logging

Selected Countries ⁷ production	Indicative Estimates of Illegal Logging in	
	Country	Percentage of total
	Cambodia	90
	Bolivia	80
	Peru	80
	Indonesia	70-80
	Ecuador	70
	Gabon	70
	Papua New Guinea	70
	Ghana	60
	Cameroon	50
	Myanmar	50
	Laos	45
	Columbia	42
	Thailand	40
	Brazil	20-47
	Vietnam	20-40
	Malaysia	Up to 35
	Russia	10-50(from North to East)

The vast extent of the illegal timber trade distorts the entire global marketplace for a number of key timber products such as logs and sawn timber. It robs governments of revenues, and undermines both legal and sustainable management, which has to bear the additional costs of good forest management and proper tax declaration. According to the WB, 'widespread illegal extraction makes it pointless to invest in improved logging practices. This is a classic case of concurrent government and market failure'.⁸

⁷ World Bank, 2006: 9.

⁸ World Bank, 1999: 40.

Trade Liberalisation and Illegal Logging

The globalisation of trade, the elimination of barriers to trade, and the increase of incentives to export have all, to some degree, facilitated not only international timber trade generally, an intended effect, but also the 'laundering' of illegal timber by providing opportunities to disguise the true provenance of logs, and by facilitating transport. Trade in timber grew from

Box 15.2 Laundering illegal logs

One example concerns the illegal logging of merbau in West Papua, Indonesia. A report by the Environmental Investigation Agency (EIA) reports that in 2005 predatory smugglers were smuggling up to 300,000 cubic meters of merbau a month into China to be used by China's booming wooden flooring industry.⁹ The report documents that in 2007, illegal logging was taking place in 37 out of the country's 41 national parks, and that Indonesia's lowland forests could be entirely lost by 2022.

29 billion USD in 1961 to 150 billion USD in 1999¹⁰ and 159.6 billion in 2009.¹¹ It is widely argued that trade liberalisation in the form of lowering tariffs on timber and timber products has contributed to this increase.¹² Although specific research regarding the impact of trade liberalisation on illegal logging is lacking, it is clear that the increase in illegal logging has gone hand in hand with the increase in international trade in timber and timber products. Furthermore, the breaking down of border controls (such as in the EU) and the increased transport of logs, sawn timber, and paper and pulp from one producer country to another have all facilitated the laundering of illegally sourced timber.

The Urgency of Revision and Reform of Forestry Laws

An immediate problem facing any attempt to control the trade in illegal timber and wood products lies in defining what constitutes illegality. In many countries, forestry legislation is simply unclear and insufficient in terms of legal certainty. For example, a 1998 review of Cambodian forest legislation by the White & Case law firm found that the legislation was 'difficult to obtain, difficult to analyse, provides few objective standards for forest protection and provides no integrated guidelines or standards for forest

⁹ EIA, 2008.

¹⁰ French, 2000.

¹¹ Union of concerned scientists, 2009.

¹² Rice et al., 1999.

management'.¹³ Much attention has been paid to the situation in Canada regarding the legality of tar-sand exploitation on indigenous land. In large parts of British Columbia, indigenous peoples hold the rights and titles to their ancestral lands; however, jurisdiction over resource management, including forest concessions, remains in the hands of the government, creating an unclear legal situation that has sometimes led to violent disputes over unceded lands.¹⁴

Lack of clarity in the legal framework can be linked to a second problem, which raises even more fundamental questions: the perceived legitimacy of the legislation. As noted in a study by CIFOR, 'Many existing forests and conservation laws have unacceptably negative impacts on poor people, ethnic minorities, and women, and in many places they are enforced in a fashion that is discriminatory and abusive'.¹⁵ Ways must be found to address the problems associated with illegal forestry activities that not only do not aggravate the negative impacts of existing regulatory efforts on the rural poor, but also strengthen the role local peoples play in forest management and their access to forest land. In many cases, this means a revision of forestry laws, taking into account local peoples' traditional and user rights. The examination of global options for addressing illegal logging should, therefore, be undertaken with the understanding that underlying issues of clarity and fairness of the national legal context, in addition to political commitment to implementing and enforcing such rules, are critical to the success of any action.

MEASURES TO ADDRESS THE PROBLEM

Effective control of illegal logging requires action across many policy areas: the promotion of good governance, action to tackle corruption, land reform, industrial and fiscal policy reform, development assistance, and so on. We focus principally on the control of imports of illegally produced timber and the financial transactions surrounding the illegal timber trade. Even when thus narrowing the focus, governments and civil-society organisations face many hurdles when attempting to address the problem. These include: proving illegality and cooperation with enforcement authorities in the countries of origin, which in many cases is poor or non-existent; entrenched political positions; collusion between the timber industry and the government, and a political climate that makes exposing illegalities dangerous.

¹³ Rice et al., 1999; Logging Off, 2011.

¹⁴ The United Nations Human Rights Committee has twice condemned the Canadian government for undermining indigenous peoples' legal rights to land.

¹⁵ Kaimowitz, 2003.

Moving from general to more targeted initiatives, we briefly discuss a selection of different measures to combat illegal logging. Subsequently, we will deal more extensively with specific legislation developed to tackle illegal logging, the aforementioned Lacey Act and the EU's FLEGT Voluntary Partnership Agreements (VPAs). Finally, we will describe some new threats to address illegal logging and sustainable forest management: REDD+. Forests top the political agenda again, particularly concerning the role that trees play in absorbing carbon dioxide. Attention peaked at the 15th Conference of Parties of the United Nations Framework Convention on Climate Change (UNFCCC), with the Copenhagen Accord referring to the immediate establishment of a mechanism including REDD+. The need to keep trees standing has never before seemed a more pressing issue. However, this enthusiasm to save the world's rainforests could have the opposite impact. There are multiple drawbacks that could materialise if the value of forests rises dramatically, as we will describe in our last section.

The OECD Convention on Bribery¹⁶

The OECD Convention on Bribery is a legally binding instrument whose requirements must be incorporated into, or implemented in, national legislation by its parties (OECD members and other signatory governments).¹⁷ This Convention makes it a criminal offence to bribe a foreign public official. As illegal logging involves bribery in a number of instances, the OECD Convention clearly has a role to play in controlling illegal logging. The problem often lies in proving that bribery has taken place. The Convention's effectiveness would increase if all parties to the Convention implemented the recommendations made by the OECD, such as excluding companies that have been found guilty of unrightfully bidding for public contracts.

The globalisation of international trade has contributed greatly to international initiatives to address corruption across governments and within industries, and in the past decade-and-a-half such initiatives have gathered momentum.¹⁸ It is recognised that, to be effective, the fight against corruption must be undertaken on a multilateral basis. The self-interest of the entities involved is what generates this momentum. As stated in the Preamble to the OECD Convention, bribery 'distorts international competitive

¹⁶ Aiolfi and Pieth, 2003; Cockcroft, 1999; Watson, 1998.

¹⁷ All EU member states have ratified and introduced amendments to their legislation to implement the Convention.

¹⁸ Examples are the 1996 OAS Inter-American Convention Against Corruption and the 1996 International Chamber of Commerce Revisions to its Rules of Conduct on Extortion and Bribery in International Business Transactions.

conditions'.¹⁹ The desire to compete on an equal footing, a principal impetus behind the Convention, may ultimately prove to be a significant factor in its success. Anti-corruption measures will be more assiduously applied if the perceived interest of industry lies, for competitive reasons, in eliminating the corrupt practices. The purpose of the Convention is to deter bribery in international business transactions, to criminalise the act of bribing a foreign official, and to give 'bite' in the national penal system to provisions punishing international corruption.²⁰ It approaches its goals with flexibility: state parties are required to implement the Convention's objectives, yet can choose the means most suited to their national legal traditions.²¹

Box 15.3 Links between bribery and illegal logging

The OECD Convention can play a role in controlling illegal logging and other illegal activities. Simply put, without addressing pervasive corruption, efforts in almost any domain to combat illegal logging will be thwarted. A recent investigation made by Transparency International (TI) demonstrates the correlation between governance issues and illegal logging, showing the higher the percentage of corruption, the higher the percentage of suspicious log supply.²² In the forestry sector, bribery and corruption occur regularly in several areas: in the allocation of forest concessions; in the setting up or operation of pulp and paper mills that do not respect standards of health and environmental protection or that cannot source sufficient legal timber for their operations; in the procurement of official documentation legalising 'illegal' timber, particularly export licences (e.g., CITES permits); in the illegal construction of logging roads; etc. Another recent report by Forest Trends and the Department for International Development (DfID) reveals that provincial authorities in Laos grant land concessions by circumventing legal practices in exchange for bribes.²³

¹⁹ OECD, 1997: 5.

²⁰ OECD, 1997: 5. Article 1(1): Each Party shall take such measures as may be necessary to establish that it is a criminal offence under its law for any person intentionally to offer, promise or give any undue pecuniary or other advantage, whether directly or through intermediaries, to a foreign public official, for that official or for a third party, in order that the official act or refrain from acting in relation to the performance of official duties, in order to obtain or retain business or other improper advantage in the conduct of international business.

²¹ In countries that already have the legal framework to prosecute their nationals for crimes committed abroad (for example, the US), this existing legislation must be amended to include bribery offences. In countries where the bribery of civil servants is listed as a criminal offence under money-laundering legislation, this legislation must be amended to include bribery of foreign civil servants.

²² Blundell and Harwell, 2009.

²³ Forest Trends and DfID, 2010.

The Convention entered into force in early 1999. In December 2009, the 10th anniversary of the Anti-Bribery Convention, 38 countries had ratified it, including Chile, Brazil, and Argentina, but many countries in which illegal logging occurs – such as Russia, Malaysia, Indonesia, Burma, Cameroon, Gabon, and Congo – are not signatories to the Convention. Nonetheless, the OECD secretariat has undertaken outreach efforts to raise awareness regarding the Convention and its objectives,²⁴ with the release of a ‘Recommendation for Further Combating Bribery of Foreign Public Officials’, and it is hoped that, if the Convention proves successful in addressing bribery generally, more members will be forthcoming.²⁵

As with any illegal activity, the problem often lies in proving that bribery has taken place. However, because this Convention addresses the *supply* of bribes, it adds a valuable dimension to efforts to eradicate bribery. It does not rely solely on the will of the government receiving such income to address the problem. For example, under this Convention, a western company providing a bribe can become a target of legal action.

The instrument is, however, imperfect. A weakness of the Convention is that foreign subsidiaries of companies are not explicitly covered. This is a serious omission, since payments are often made through subsidiaries.²⁶ That said, the Convention casts a wide net in providing criminal liability for complicity in bribery, and this could or should, as NGOs would argue, be instrumental in covering parent companies.

In sum, one of the Convention’s strengths lies in the self-interest that generated it: the will of the industries affected to eliminate the unfair competitive advantage gained and/or the cost of bribery from business transactions. The initiative should be supported by the NGO community, since in the absence of addressing the rampant corruption in the forestry sector, any other measures adopted to do so will fail. Increased efforts to encourage more timber-producing countries to become parties could be useful. Furthermore, a peer-monitoring framework exists, covering implementation on paper and on the ground, in which civil society can hope to participate actively. With genuine monitoring and participatory procedures in place, even where substantive implementation is lacking, it can be hoped that lessons learned from experience will be incorporated into measures and used to improve performance.

In order to meet these challenges, we recommend that governments take the following measures. First, governments should develop – at the

²⁴ Cockcroft, 1999.

²⁵ The Recommendation for Further Combating Bribery of Foreign Public Officials was released on 9 December 2009, when the OECD marked the tenth anniversary of the entry into force of the OECD Anti-Bribery Convention.

²⁶ Cockcroft, 1999.

national, international, and regional levels – forestry-sector guidelines for tax inspectors and public prosecutors to help them identify the possible forms that bribery and corruption can take in the forestry sector. Second, governments should send a questionnaire to all public prosecutors to ensure that they report all cases involving the application of bribery legislation to forestry-sector-related crimes. Problems preventing prosecutions should also be reported.

Money-Laundering Measures

According to WB studies, anti-money-laundering and asset-forfeiture laws are important tools to fight forest crime, corruption, and organised crime.²⁷ The Financial Task Force on Money Laundering (FATF), which is recognised as the international standard setter for anti-money-laundering efforts, has specified 40 recommendations for abating money laundering and has specifically designated corruption and environmental crime as a predicate offence.²⁸ All EU member states and many other countries – such as Indonesia, which added forestry crime and environmental crime to its 2003 money-laundering law – have legislation on money laundering. Money laundering is the processing of the crime proceeds in order to disguise their illegal origin. National legislation allowing authorities to tackle money laundering and seize the proceeds of criminal activity has grown in importance with the expansion of the illegal trade in narcotics. With the increasing focus on international organised crime and, particularly in recent years, on international terrorism, the scope of money laundering legislation has broadened accordingly.²⁹ If illegal logging and the trade in illegally sourced timber are criminal offences under member states' law, then the proceeds of these activities can be subject to money-laundering legislation, provided they are deposited or disposed of within the EU. To date, no EU country has attempted to use this legislation to tackle the laundering of the proceeds of illegal logging.

As with efforts to address international corruption, anti-money-laundering efforts are a current international focal point, following the 11 September 2001 events; again, the challenge is to try to make an existing instrument with broad potential work for the specific purpose of addressing illegal activities such as illegal logging. A report by Chatham House that looks into the aptitude of applying money-laundering legislation to illegal logging concerns in the UK, suggests that it does provide a basis for legal

²⁷ Kishor and Damania, 2007.

²⁸ World Bank, 2006.

²⁹ Brack, 2006.

action against imports of illegal timber and any associated investments.³⁰ Enhancing such provisions could eventually encourage, or even require, financial organisations to take a more proactive approach to exercising due diligence in conducting research into their clientele. Companies known to be involved in the illegal timber trade, or indeed in any illegal activity, should be rejected by the legitimate financial and credit community. With sufficient awareness of the problem and the willingness to interpret provisions in a manner applicable to the trade in illegally sourced timber, the proceeds – since it is the proceeds that are important, not the timber itself – of this trade could be subject to seizure. A challenge for the national NGOs, therefore, is to undertake awareness campaigns aimed at both authorities and the affected financial institutions regarding the destructive consequences of the illegal trade in timber, in terms of lives disrupted, loss of state revenues, and environmental devastation.

The use of such legislation is not without difficulty. Setting aside the difficulties of proving that a shipment of timber is illegal,³¹ there is the potential hurdle of political and institutional will. Not only must member state authorities be willing to take action to interpret the provisions in ways relevant to the forestry sector, and to act when they receive reports of suspect activities or clients, but the institutions and persons subject to the Directive's provisions must also cooperate actively. Furthermore, in the case of offences committed in foreign countries, the success of action taken under money-laundering legislation requires cooperation with enforcement and judicial authorities in the countries of origin, which may not always be forthcoming.

For the Directive to be an effective tool, institutions and persons subject to the Directive must alert the appropriate member-state authorities of suspect activities. Therefore, at a practical level, the Directive's effectiveness also hinges on the level of awareness of the institutions carrying out those transactions. It is likely that many of these institutions are not familiar with the extent of criminal activity in the forestry sector. Information and guidance are still needed. The institutions that may handle the proceeds of the crime – banks, accountants, lawyers, etc. – should be alerted to the possibility that clients with interests in the forestry sector, particularly in countries where illegal logging is widespread, may be engaging in money laundering, if this Directive is to be successful.

Indeed, a key to success in using any money-laundering provision to combat illegal logging lies in inspiring banks and other relevant institutions and persons to exercise due diligence in carrying out reviews, with a full awareness of the likelihood of certain clients' involvement in such activities.

³⁰ *Ibid.*

³¹ Brack et al., 2002.

They must also alert authorities where they have reason to believe that a client may be engaged in criminal activities. Given that the majority of logging activities in many countries are generally accepted to be illegal, this should be a strong signal to a bank that clients operating forestry businesses in those countries may be committing forestry crimes. Such due diligence measures would be good business practice, as illegality, by definition, means increased risk. As with anti-corruption measures, international efforts to address corruption (above) and money laundering can be expected to reinforce each other.

In sum, the main advantage of anti-money-laundering legislation is that the international pressure to eradicate money laundering has increased recently. The significant disadvantage is that the application of such provisions to the laundering of the proceeds of the illegal timber trade is very difficult to apply: it not only involves problems of proof, but is based upon the willingness of political and institutional actors to take meaningful action.³² The will to act already exists in those member states that have provisions applicable to illegal logging in their penal codes. A positive point is that lack of awareness of the illegal logging industry may be an obstacle that is relatively easy to remove; in the right ear, targeted information provided by NGOs could bring concrete results. As with anti-corruption measures, a few successful prosecutions could have genuine impact.

Financial Institutions³³

Finance from private sources – banks, investment and pension funds – can be important for logging companies and other sectors of the forestry industry to enable their activities. Although these financial institutions may not be directly cutting trees illegally, in many cases they are contributing indirectly to illegal logging by providing finance for companies that do not meet environmental and human rights standards; sometimes they even fail to comply with the law. NGO reports have demonstrated that this support is ‘blind’: with no ‘ground-truth’ investigation work to assess projects, these financial institutions do not take into account environmental or social issues.³⁴ The EU and member-states authorities must take action to require financial institutions, many of whom are taxpayer funded, to develop policies and action plans that go beyond economic considerations and ensure that they do not finance companies involved in illegal logging practices. This should mean being subject to binding environmental, human rights, and transparency standards by which other public-sector agencies are governed.

³² Pillon and Pettenella, 2006.

³³ Large parts of this section are based on Van Gelder et al., 2003.

³⁴ FERN, 2008.

The timber industry, the pulp-and-paper industry, the extractive industries, and agribusiness all contribute to forest loss; linkages with illegal (logging) practices have been clearly documented in all these sectors. The more capital-intensive the industry, the more important is the involvement of financial institutions. Capital-intensive sectors (such as the pulp-and-paper industry, extractive industries, and agribusiness) rely, to some extent, on financial institutions to enable them to operate. These financial institutions can be either private financial institutions – including private banks and institutional investors or pension funds – or (semi-)public financial institutions, including multilateral development banks, foreign development agencies, and export-credit agencies. A 2002 study by Profundo identified 21 financial institutions prominently involved in financing logging operations in the Congo Basin in Africa (including ABN-AMRO, HSBC, Credit Lyonnais, and Deutsche Bank).³⁵ A later study by FERN in 2008 demonstrated the links between illegal forestry activities and the lack of due diligence in researching proposed activities on the part of export-credit agencies as well as private financial institutions.³⁶ The study draws on case studies in Indonesia, China, and Peru, where illegal logging practices are fuelled and funded by financial institutions.

Box 15.4 Financing destruction

A clear case of financial investors tumbling over each other to finance an environmental, social, and economic disaster concerns a fully unsustainable paper mill in Indonesia, Asia Pulp and Paper (APP). Over 300 international financial institutions were heavily involved in providing finance and guarantees to Asia Pulp and Paper, inflating the company with a 13.4 billion USD debt. These institutions failed to recognise that there was insufficient supply for the paper mill: the plantations that were to feed the mill were not ready and by no means able to provide the supplies, leading to large destruction of primary forests and human rights abuses. As a study by CIFOR pointed out, Indonesian pulp producers may have obtained as much as 40 per cent of the wood they consumed between 1994 and 1999 from illegal sources.³⁷

Without the financial backing of these institutions, many destructive and illegal activities would not be possible. Despite this, the role of these institutions has been given limited attention in intergovernmental debates on illegal logging.

³⁵ Van Gelder, 2002.

³⁶ FERN, 2008.

³⁷ Barr, 2001.

Because of the lack of attention given to the financial sector in relation to illegal activities, few existing regulations provide effective options to address the above-mentioned concerns. An international framework for risk assessment, developed by the Basel Committee on Banking Supervision, was adopted in the Basel Accord, but does not include any reference to environmental risks or risks related to illegal activities.³⁸ The renewed discussion in Europe and the US and in the Committee on Banking Supervision following the financial crisis, has shone more light on the role that credit-rating agencies played in this crisis. New laws and policies are being developed in the EU to scrutinise their activities. These could play a role in stimulating rating agencies and banks to give sufficient attention to risks associated with illegal activities in forest-related and other sectors, although it is unlikely this will happen.³⁹ NGOs have been active in convincing export-credit agencies to adopt binding standards, with some success: the OECD adopted a non-binding agreement in 2003, amended it in 2007 to include more references to international standards, and revised this agreement again in 2010.⁴⁰

Box 15.5 Making financiers pay

The first regulatory attempt to cast a wide net in making polluters pay – and financiers co-responsible for the environmental degradation caused by the (illegal or legal) activities of their clients – was the US's forward-looking Comprehensive Environmental Response, Compensation and Liability Act or 'Superfund' of 1980. The Act does not hold financiers explicitly liable, but, in the famous 'Fleet Factors' court case in 1990, a bank was nevertheless held responsible for the environmental pollution of its client. The outcome of this trial sent a shockwave through the US and the international banking community. Banks found liable were obliged to pay remediation costs and some banks even went bankrupt.⁴¹ Some years later, modifications limited the liability of financial institutions.

The EU has a difficult history of attempts to adopt a stringent Directive on Environmental Liability; the scope of proposals has steadily shrunk and liability has shifted from strict to fault-based. It is unlikely that EU legislation will soon make financial institutions liable for financing damaging activities. Though political will seems to fall increasingly short of imposing liability on financial backers, the accountability of financial institutions in a less legal sense must continue to gather momentum.

³⁸ BIS, 2003.

³⁹ Van Gelder et al., 2003.

⁴⁰ OECD, 2003, 2007.

⁴¹ Van Gelder et al., 2003.

In sum, when addressing illegal practices such as illegal logging, the role played by financial institutions cannot be overlooked. Private commercial banks as well as (semi-)public export-credit agencies appear to be looking more seriously into risk assessments of their lending practices; however, more is needed. NGOs have been at the forefront in confronting financial institutions with the impact of their financial activities, and must continue to do so. Without continued NGO interest and pressure, such initiatives risk becoming paper tributes to a cosmetic public-relations exercise.

In this respect, we make the following recommendations to governments and financial institutions. First, financial-sector regulators should issue specific and binding industry guidelines for forestry-sector activities, specifying that companies wishing to raise equity on financial markets must disclose potential risks linked to forestry crime. Second, governments develop specific definitions of export-credit agencies' due diligence to ensure that they have environmental- and social-screening procedures in place that guarantee projects will not lead to illegal forestry-sector activity. They should also increase the information-disclosure practices of their export-credit agencies regarding basic project information, impact assessments of environmental, social, and human rights, as well as economic analyses. And they should implement independent third-party monitoring of the projects in respect of the above-mentioned rules, once they are in force, in part to combat bribery and corruption.⁴²

CITES

The 1973 CITES convention aims to protect endangered species from overexploitation by controlling international trade, employing a system of import and export permits. The 19 tree species classed as endangered are placed on three different lists or appendices, depending on how endangered they are. However, an evaluation of 255 tree species carried out in 1998 against the CITES listing criteria found that about 15 new species could be added to Appendix I (the most stringent one) and almost 100 to Appendix II, if there were the political will to do so.⁴³ Such additions to Appendices I and II need to be agreed by the Conference of the Parties, and any proposal to add

⁴² A coalition of over 60 European NGOs has presented a list of environmental and social guidelines for ECAs (FERN, 2002).

⁴³ World Conservation Monitoring Centre, 1998. The species evaluated were chosen to provide 'a reasonable representation of tree species from various regions, climates and grades of commercialisation and conservation' (p. 2). The availability of information on individual tree species varied considerably.

substantial numbers of new species, particularly those important in international trade, would almost certainly rouse strong opposition.

Until the Lacey Act amendment in the US was adopted, CITES was the only legal agreement that could be used to control at least part of the trade in illegally harvested timber. To date, it is also the only legal agreement to have been used by some EU member states to halt the import of illegally sourced timber, such as in the UK in 2003, when a shipment of 130,000 UK Pounds (GBP) of ramin-wood picture-frame mouldings was seized when it failed to hold the necessary CITES permit.⁴⁴ However, the adoption of the EU illegal timber law, which took place in June 2010, will change this. The main advantage of CITES is that it is already in existence and is widely, if imperfectly, implemented.

Box 15.6 Disappointing judicial review

The question of the validity of export permits has arisen with regard to exports of big-leafed mahogany from Brazil. The species is listed under Appendix III of CITES, and, in 2001, the Brazilian government ordered a complete ban on its logging and export. Nevertheless, exports to Europe and North America continued in the first months of 2002. Shipments reaching the USA, Canada, and a number of EU countries were seized by the authorities pending further enquiries. In March, the European Commission issued advice to EU management authorities that they should not accept imports of Brazilian mahogany since reasonable doubt existed over their legality.

The willingness of the European Commission to take action was welcome: in this case, the UK government nevertheless declined to take action. The arguments in a subsequent court case brought by Greenpeace against the UK revolved around whether the export permits had been validly issued and under what circumstances the authorities in the importing state were justified in delaying the shipments and requiring further information on the validity of their export permits. Greenpeace lost its application for judicial review in the Court of Appeal: two of the three judges concluded that to allow importing countries to query the validity of export permits, even when some doubt existed, would introduce too great a level of uncertainty into international commerce. The third judge, however, dissented, accepting the argument that the survival of endangered species should be given higher priority.

Yet, the effectiveness of CITES is not only hampered by the limited number of tree species it covers but also by weaknesses in the verification of trade documents. A key weakness is that the export and import permits

⁴⁴ Brack, 2006.

effectively acquire a value, opening up possibilities of fraud, theft, and corruption. A lack of personnel and resources to verify compliance with state rules is an impediment to adequate implementation of CITES rules. Furthermore, corruption also frequently plays a significant negative role in the issuance of permits. A further weakness lies in the cross-checking of the documents against each other, since CITES lacks a comprehensive and independent system of monitoring and verifying the issuance and use of permits. Cross-checking of permits against actual timber species presents further difficulties. Central reporting and cross-verification of data would enhance the possibilities of verification that fraud has not occurred.

In sum, CITES cannot be expected to address the problem of illegal logging as a whole, but rather with regard to certain tree species. CITES' track record has been proven over three decades, although difficulties persist concerning fraud in permits, the listing of timber species, and the lack of willingness of authorities to take action, even when aware of problems. As in the above Greenpeace case, NGOs must continue to insist on the effectiveness of action taken under this Convention and maintain a high profile where this is being undermined.

Forest Certification

Forest certification is a tool to help consumers choose products from forests managed following certain social and environmental standards. The crucial link between forest certification and the verification of legality lies in the tracking of the production and movement of the timber and wood products through the supply chain. Forest certification schemes that have a rigorous chain-of-custody control from the forest to the point at which the product is labelled, and that have a certification standard specifying legal compliance, can contribute to controlling the trade in illegally sourced timber. In targeting the trade in timber and timber products, governments have at their disposal a range of instruments that can be used to increase the market share for products that are positively identified as having been legally produced. These include government procurement policies. Here, we highlight the possibilities and problems of using forest certification schemes to combat illegal timber.⁴⁵

The process of certification involves the assessment of particular forests against publicly available criteria, and only if the forests meet these standards is timber certified. For forest certification to work, consumers must be able to identify timber, wood products, or paper that come from forests managed following the standards set out by the certification body. These

⁴⁵ For a more detailed overview of these tools (including government procurement), see Brack et al., 2002; Garforth, 2004.

products, therefore, need to be labelled. Once a forest has been certified, the forest owners obtain the right to label products from those forests with the names of certifiers or logos. There is, however, a long and often complicated path from the forest to the point of sale: the product supply chain. To be able to guarantee the consumer that a particular product comes from a well-managed forest, this supply chain needs to be certified as well. The ownership and control aspect of the product supply chain is referred to as the 'chain of custody'.

Box 15.7 Legal is not sustainable and sustainable is not legal

The certification of responsible forest management is different from legal verification. Legally sourced timber may not come from well-managed forests; indeed, it often does not. It is clear that 'legal' does not mean 'sustainable', as many requirements other than simple legality are linked with sustainability. The award of a Forest Stewardship Council certificate, for example, requires 10 principles and 56 specific criteria of good forest management to be met. Only the first principle relates specifically to legal compliance; the others relate to other essential requirements of sustainability. Furthermore, illegally harvested timber does not necessarily mean unsustainably produced timber. In countries where existing forestry regulations are inadequate or unjust, many undesirable practices in the forestry sector – such as the allocation of concessions on indigenous-peoples' lands – may in fact be legal, under existing laws. In these cases, harvesting of the timber in a sustainable manner by the local people is seen as 'illegal'.

To use a label indicating that a forest product comes from a well-managed forest as verification that the wood is legally sourced, three conditions must be fulfilled: (1) the forest-certification standard must clearly require compliance with all relevant national laws; (2) the standard must be implemented effectively; and (3) an effective chain-of-custody control, from the forest to the point at which the product is labelled, must take place. In order to exclude non-certified content effectively, a credible chain of custody should include three main elements: identification, segregation, and documentation. Segregation requires clients to keep certified wood physically separate from uncertified wood at all phases of transportation, production, distribution, sale, and export. Accurate digital records must be maintained for the production of certified products. To date, no forest certification scheme meets these requirements. However, as noted by a WB-WWF alliance,⁴⁶

⁴⁶ SGS Global Trade Solutions, 2003: 2.

‘these ‘quality assurance’ [forest certification] systems have not been designed as tools to enforce the law and to be made compulsory. They are not based on regular and unannounced audits and on continuous sampling and they rely on paper-based chain-of-custody systems that are possible to forge. Given this, certification schemes do not provide the level of confidence that is likely to be required to demonstrate legal origin’.

In sum: forest certification schemes would need to improve and strengthen their chain of custody from the forest to the point at which the product is labelled, and need to ensure that their certification standard specifies legal compliance with all relevant laws – after a thorough review of relevant national environmental, forestry, human rights, and customary rights legislation. Only then can they effectively contribute to controlling the trade in illegally sourced timber. Therefore, governments should ensure that all certification schemes operational within the EU meet stringent compliance conditions. Besides, a clear distinction should be made between certification and labelling for sustainable forest management, and verification of legal compliance.

SPECIFIC LEGISLATION FOR TACKLING ILLEGAL LOGGING

Despite the wide range of policies and measures briefly described above that *could* affect the trade in illegally logged timber, none of them is specifically targeted at this problem. Undoubtedly, more could be done with existing legislation, or with relatively straightforward adaptations of provisions. There are, however, several drawbacks to this approach. First, existing legislation requires close cooperation with enforcement authorities in producing and exporting countries, which may not always be forthcoming, owing to lack of capacity, corruption, intimidation, etc. Second, existing legislation requires the cooperation of enforcement and other authorities in the importing countries, which, similarly, may not always exist under the current framework, given other priorities such as the fight against terrorism and drugs trade. Third, action that relies on judicial enforcement may take several years to show results, if a case is ever brought.

Therefore, further legislative initiatives directly targeted at the problem of importation of illegal timber have been developed, both in the EU and in the US.

US Lacey Act

Since 2008, the import of illegally sourced timber in the USA has been covered by an amendment to the Lacey Act.⁴⁷ The Act prohibits the possession, transportation, and trafficking of wood and wood products into/ in the US that is derived from illegally logged forests.⁴⁸ A two-tiered penalty scheme exists, creating both misdemeanour and felony offences, partially dependent on the level of knowledge of the laws violated by the accused. The penalties can involve imprisonment and/or fines, and forfeiture of equipment involved in offences. In all cases, the defendants need not be the ones who violated foreign law; the fact that the timber was obtained illegally is the important point. The Lacey Act also requires that these shipments be accurately marked and labelled on the shipping containers. The import declaration must specify the scientific name of the timber contained in the importation, as well as a description of the value of the importation, the quantity of material being imported, and the name of the country from which the timber originates. Failure to provide this declaration will make the shipment inadmissible in the US and is a civil offence punishable by a fine. In all cases, federal agents are authorised to seize any wildlife that they have reasonable grounds to believe was taken, held, transported, or imported in violation of any provisions of the underlying laws. This may be done even if defendants can show that they were not aware that the timber was illegally obtained.

US prosecutors make frequent use of the Lacey Act, which has been in operation for plants and wildlife since 1900. Since the amendment regarding illegal logging was adopted in 2008, there has been one official enquiry, that of the Gibson Guitar Corporation, accused in November 2009 of importing illegal mahogany or rose wood from Madagascar.⁴⁹ As a cautionary note, this type of provision may be vulnerable to producer countries lowering the threshold of illegality to get round the law, although to date there is no evidence this has happened. Also, reliance on successful court cases to prove its deterrent effect can take years, though the act of giving additional powers to customs to make seizures may have a rapid deterrent effect. The impact of the Gibson Guitar case will make this clear.

⁴⁷ The Lacey Act was amended in May 2008 as part of the revision of the Food, Conservation and Energy Act of 2008 (also known as the Farm Bill). The amendments extend to the prohibition of the possession, transportation, and trafficking of wood and wood products into/ in the United States that is derived from illegally logged forests.

⁴⁸ SGS Timber Legality and Traceability Fact sheet – Amendments to the Lacey Act (2008), version 3 April 2009.

⁴⁹ Grant, 2009.

EU FLEGT Action Plan and Related Legislation

In 2003, with the adoption of the FLEGT Action Plan, the EU set in motion a whole range of actions to address illegal logging and the trade in illegally sourced timber. It clearly signaled the wider objective of sustainable forest management. With the Action Plan, the EU is pursuing a strategy that supports timber-producing countries to improve forest governance. By improving participation of all stakeholders and creating transparency in the timber sector, the Plan strengthens civil-society actors in these countries and legislates against the import of illegally sourced timber. The central plank is the development of bilateral FLEGT partnership agreements between the EU and timber producing countries, with the aim to consolidate efficient and coherent trade agreements between the main wood-producing and wood-importing countries.

The EU FLEGT Action Plan consists of four key elements: government procurement policies, financial due diligence, Voluntary Partnership Agreements (VPAs) between the EU and timber-producing countries, and illegal logging legislation to control timber imports from non-VPA countries. We will briefly address each of these elements, beginning with the procurement policies. The Action Plan encourages EU member states to address illegal logging via procurement policies that have environmental and social criteria. So far, Belgium, Denmark, France, Germany, the Netherlands, and the UK have developed and implemented a timber procurement policy with clear environmental and social standards. Spain and Sweden are in the process of developing such a policy. The EU has also established an EU Ecolabel for wood-based products, including paper. Unfortunately, the standards for this Ecolabel are meaningless at best and misleading at worst. In a recent report by FERN,⁵⁰ it was shown that an EU Ecolabel was handed out to the Indonesian company Pindo Deli, part of APP (see Box 15.4), which does not get its timber from well-managed forests and in all likelihood sources illegal timber. This case thus shows the EU Ecolabel is not a reliable label for legal timber, let alone for sustainable timber.⁵¹

Next, regarding financial due diligence, the FLEGT Action Plan states that banks, financial institutions, and specifically EU-based export-credit agencies should ensure risk assessments and due diligence to ensure that large-scale investment in the forestry sector does not increase illegal logging. The Action Plan also mentions that EU Money Laundering Directives should treat illegal logging as a serious offence. This has, however, not been taken up, but there are possibilities in some member states

⁵⁰ Lang, 2010.

⁵¹ Ibid.

to use national legislation on money laundering – discussed above – and stolen goods to address the problem of illegal imports.

The VPA is the third element of the Action Plan. A legally binding trade agreement between the EU and timber-producing and timber-exporting countries, it is the central plank of the FLEGT Programme. The VPAs set out the commitments and actions of both parties to tackle illegal logging, including measures to increase participation of non-state stakeholders and rights-holders, recognise rights of communities to land, and address corruption. To date, the EU has signed VPA agreements with Cameroon, Congo, and Ghana, and is negotiating agreements with Liberia, Gabon, the Democratic Republic Congo, the Central African Republic, Indonesia, Malaysia, and Vietnam. The Congo, Cameroon, and Ghana agreements concluded so far were developed through a multi-stakeholder process with the timber industry, environmental NGOs, social NGOs, and/or representatives of communities, who all sat around the table with the government. For all three countries, it was the first time they partook in a legally binding trade agreement that had the full support of civil-society actors and the timber industry.

All VPA agreements require the focal country to define what qualifies as ‘legal timber’ in a multi-stakeholder process. The legality definition of the VPA is based on the laws and procedures of the timber-producing and timber-exporting country, with the exporting country proposing a set of laws which define ‘legality’ for the purpose of the VPA. Once that has been defined, a timber-tracing-and-controlling system must then be established, called the ‘legality-assurance system’ (LAS). The LAS must ensure that timber from unverified operations does not enter the production chain, and includes a verification process of legal compliance and a licensing process. The third element of the VPA involves appointing an independent auditor to carry out checks to ensure the system works and no illegally sourced timber can be exported or sold, as all three VPAs include all exports and the domestic market.⁵² Though not a required part of the VPA, two of the three countries that have signed a VPA have also included the appointment of an Independent Monitor as part of the agreement. This monitor is appointed to check illegalities and provide information to the independent auditor, and is a service provided by independent bodies, for the most part NGOs. Once a VPA has been signed and an LAS is in place, the EU will ban all non-licensed imports from that country. Although three VPAs have been signed, there is no operational LAS in place yet. The first FLEGT-licensed timber is only expected to arrive in the EU in 2011. All

⁵² Although it is as yet not exactly clear how the domestic market will be addressed.

three agreements require the country to ensure all exports and domestic production is legally sourced.

The VPA legislation is now complemented by another piece of (draft) EU legislation: an illegal-timber regulation, which will come into force in 2012. This fourth and final element of the FLEGT Action Plan was developed to deal with the danger of illegally harvested timber entering the EU from countries that do not have a VPA agreement. This 'illegal timber' legislation means that EU companies will be required to prove they are buying and selling only legally harvested timber and wood products. All operators will be required to trace timber back to the country and concession of harvest, as well as verify wood products considered at risk of being illegal under a new due-diligence system proposed by the European Commission.

However, there are some key flaws that must be addressed if this legislation is to fulfil its potential. The first of these is that internal traders do not fall under the prohibition to trade illegal timber. While they are required to provide basic information on their suppliers and their buyers to enable the traceability of timber and timber products up to the first point of sale on the EU market, this could still become a loophole. This is because there is no check in the system once timber has been put on the market and because some countries fail to enforce the law rigorously. Another serious omission is that printed products as well as recycled products are not covered by the regulation. However, a review clause might be inserted that would allow for a review to ensure the inclusion of printed products in five years time. The law will in any case send out a clear signal to the market that illegal timber is prohibited and will not be tolerated, in line with the US Lacey Act. It is also hoped that this new legislation will further strengthen the VPA Programme.

New Threats

With proper safeguards, the EU FLEGT process has the capacity to bring about real improvements to forest governance, since it addresses the underlying and direct causes of illegal logging. By remedying core governance failures, FLEGT could furthermore bring about broader improvements in the way citizens participate in policy-making and policy-implementation, thereby being able to hold their governments accountable. But FLEGT cannot address the problem of rich nations' overconsumption of forest, agricultural, and/or mineral products that pose a serious threat to the world's forests, leaving its potential still relatively limited. Even then, the potential gains from FLEGT risk being undermined by a new development: REDD. Led today by the WB and the UN, it was originally proposed by Papua New Guinea and Costa Rica. Their initial idea was quite simple: industrialised countries pay tropical forest countries to keep their forests

standing and hence capturing carbon, in return for lowering their own greenhouse gas emission-reduction obligations. The payments would be in the form of carbon-offset credits, an essential part of existing carbon-trading schemes.⁵³ This is problematic for many reasons, the first being that it simply will not work. The Intergovernmental Panel on Climate Change, the leading body for the assessment of climate change, has pronounced that to remain within the 2 degree temperature rise – required to prevent catastrophic climate change – we would need to reduce our emissions globally by 50 to 85 per cent by 2050, with other groups forecasting the need for much deeper and sooner cuts.⁵⁴ A process of ‘offsetting’ (i.e., simply replacing emission reductions) would, therefore, not be a solution. With a temperature rise of more than 2 degrees the negative impact on tropical forests would be serious, with the Amazon forests starting to disappear.⁵⁵ REDD, if financed by carbon offsetting and hence carbon trading, would thus make matters worse for the world’s forests and climate.

Even if consensus were to be found that forest credits would not enter the carbon market, and REDD would be funded by taxes or public and private funds, REDD still poses many problems. First, in recent years REDD, has become REDD+, the + standing for the inclusion of plantation development, sustainable forest management, and conservation. In practice this means that countries could even claim carbon-offset credits for logging intact forests and developing plantations in their place. REDD+’s claim that it will contribute to mitigating climate change is thus notably undermined. Second, since one of the underlying reasons for forest destruction is unclear land tenure rights of local communities and, therefore, unclear status around the carbon, REDD should first and foremost tackle this issue.⁵⁶ Without this, any REDD regime is bound to fail. Furthermore, for REDD to be effective, it would need to improve forest governance, not undermine it, and thus be developed in an inclusive national-level multi-stakeholder process, clarifying tenure rights and increasing accountability of the government. Experience to date shows that national-level REDD plans led by the WB and UN agencies are doing the opposite: tenure rights are largely overlooked and plans have not been developed through an inclusive and effective multi-stakeholder process.⁵⁷ They are being developed within a very short time frame and without analysing the key causes of forest loss. In addition, the plans bring with them the promise of funds without requiring needed changes to governance or clarification of rights. By doing this, they strengthen control

⁵³ Kill, 2010.

⁵⁴ IPCC, 2007a.

⁵⁵ IPCC, 2007b.

⁵⁶ Sunderlin et al., 2008.

⁵⁷ Dooley, 2011.

over the forest resource by central government, thus undermining the demand for recognition of their rights to land by local communities and indigenous peoples, and compromising existing democratic processes aiming to address similar issues, such as the FLEGT VPAs. Governments are increasingly seeing REDD as an easy way to get money without having to address the governance requirements specified by FLEGT-type processes.

Though we are yet to see the full implications of the REDD+ programme on the illegal logging agenda, field work examining national-level REDD processes in Congo, Ghana, and Indonesia shows that it is likely that REDD will both fail to achieve its own objectives (reducing emissions from deforestation) and make the possible benefits of the FLEGT process unattainable.⁵⁸

CONCLUSION

As seen in section one, illegal logging is a vast problem with considerable negative economic, social, and environmental consequences. Despite growing international concern, the problem is far from being solved. However, there has been some progress, notably that the problem is being recognised, which was far from the case ten years ago. This recognition has meant that tailored legislation now exists in the US and the EU. As a general consideration, many existing forest and conservation laws have an unacceptable negative impact on local communities. There is a clear danger, then, that focusing blindly on law enforcement has a negative impact on local peoples' livelihoods. Efforts to ensure that loggers and other entities in the forestry industry comply with (forestry) regulations must go well beyond the chain-of-custody system and examine the general legal environment. Furthermore, without addressing the existing pervasive corruption in the logging industry, efforts in almost any domain to combat illegal logging or any other illegal activity will be thwarted. The forestry industry does not exist in a vacuum. If the underlying system is corrupt, it is likely that forest governance is corrupt as well, showing that tackling illegal logging requires a systemic reformation.

The EU FLEGT Action Plan, and notably the development of bilateral agreements between the EU and timber producing countries, has been key in integrating these concerns into the process by stimulating a truly multi-stakeholder approach. The development of these agreements has been made possible by a process that sought to gain consensus among all stakeholders, including communities, timber trade, social and environmental

⁵⁸ Leal Riesco, 2009; Dooley et al., 2010; Hoare, 2010; Dooley, 2011.

NGOs, and the government. This process has, therefore, provided a way to address the underlying causes of illegal logging. The process has also recognised that independent monitoring and effective participation of stakeholders and civil society are essential factors in ensuring that these efforts have practical results. The US Lacey Act, which renders the import of illegally sourced timber a criminal offence, as applied to the recent investigation of the Gibson Guitar Corporation, has been a clear deterrent to timber importing companies.

To conclude, the climate surrounding the forest debate has dramatically changed in the last decade, and much progress has been made to address illegal logging, with significant advancements made in US and EU legislation. Some of this progress now risks being undermined by new programmes aiming to keep forests standing because of their carbon claims, but failing to look at the real causes of illegal and unsustainable forest management. To keep forests standing, we would need to look at the global picture of resource consumption, and come to a more equal distribution while strengthening civil-society organisations in forest-abundant countries to allow them to hold their governments responsible for the development and implementation of national-forest and land-use policies.

REFERENCES

- Aiolfi, G. and M. Pieth (2003), 'How to make a convention work: The OECD recommendation and convention on bribery as an example of a new horizon in international law', *OECD Working Group on Bribery in International Business Transactions (CIME)*, JT00122279, Paris: Organisation for Economic Co-operation and Development.
- Animal Welfare Institute (2000), 'Lacey Act turns 100', *Animal Welfare Institute Quarterly*, **49**(4).
- Barr, C. (2001), *The Financial Collapse of Asia Pulp & Paper: Moral Hazard and Implications for Indonesia's Forests*, CIFOR, Asian Development Forum-3, Bangkok, 12 June.
- BIS (2001), 'Customer due diligence for banks', Basel Committee Publications, **85**, Basel: Bank for International Settlements, <http://www.bis.org/publ/bcbs85.htm>.
- BIS (2003), 'The Basel Committee on banking supervision', Basel: Bank for International Settlements, <http://www.bis.org/bcbs/aboutbcbs.htm>.
- Blundell, A. and E. Harwell (2009), 'An analysis of corruption in the forestry sector', <http://www.illegal-logging.info/uploads/Forestsectorcorruptiontoolsnov09FINAL.pdf>.

- Brack, D. and G. Hayman (2001), 'Intergovernmental actions on illegal logging', London: Royal Institute of International Affairs, <http://www.riia.org/sustainabledevelopment>.
- Brack, D., G. Hayman, and K. Gray (2002), 'Controlling the international trade in illegally logged timber and wood products', London: Royal Institute of International Affairs, <http://www.riia.org/sustainabledevelopment>.
- Brack, D., C. Marijnissen, and S. Ozinga (2002), 'Options to control the import of illegally sourced timber', London: FERN/Royal Institute of International Affairs, <http://www.fern.org>.
- Brack, D. (2007), 'Illegal logging', London: Chatham House, http://www.chathamhouse.org.uk/files/9384_bp0707illegallokking.pdf.
- Callister, D. (1992), *Illegal Tropical Timber Trade: Asia-Pacific*, Cambridge: TRAFFIC International.
- CITES (1973), 'Convention on international trade in endangered species of wild fauna and flora', Washington, DC, <http://www.cites.org/eng/disc/text.shtml>.
- Cockcroft, L. (1999), *Implementation of the OECD Convention: The Conditions for Success*, presented at seminar on corruption and bribery in foreign business transactions, Vancouver: Transparency International Canada, 4-5 February.
- Colchester, M., M. Sariat, and B. Wijardjo (2003), *Implementation of FSC Principles 2 and 3 in Indonesia: Obstacles and Possibilities*, Jakarta: WALHI (Friends of the Earth Indonesia)/AMAN (Alliance of Indigenous Peoples of the Archipelago).
- Degli Innocenti, N. (2003), '54 countries pass "Conflict Diamonds Test"', *Financial Times*, July 31.
- Dooley, K., S. Ozinga, and I. Leal Riesco, (2010), *Lessons learnt from FLEGT for REDD*, FERN.
- Dooley, K., T. Griffiths, F. Martone, and S. Ozinga (2011), 'Smoke and mirrors', Brussels: FERN and FPP, www.fern.org.
- EIA/Telapak (2008), 'Environmental crime, a threat to our future', <http://www.eia-international.org/files/reports/171-1.pdf>.
- EU Forest Watch (2002), 'Special report on climate change and forests', Issue 65, <http://www.fern.org/sites/fern.org/files/pubs/fw/fw650702.pdf>.
- European Commission (1991), *Directive 91/308/EEC, OJ L 166*, Brussels: European Commission.
- European Commission (2001), *Directive 2001/97/EC, OJ L 344/76*, Brussels: European Commission.
- European Commission (2003), *Communication from the Commission to the Council and Parliament: Forest Law Enforcement, Governance and Trade, Proposals for an EU Action Plan*, COM 251 final, 21 May, Brussels: European Commission.
- FATF (2002), 'Third FATF review to identify non-cooperative countries or territories: Increasing the worldwide effectiveness of anti-money laundering measures', http://www.fatf-gafi.org/NCCT2002_en.htm.

- FBE (2000), *Observations on the Proposal for a Directive Amending the 1991 Directive on Prevention of the Use of the Financial System for the Purpose of Money Laundering*, Brussels: Fédération Bancaire de l'Union Européenne.
- FERN (2002), 'Key reforms needed for European export credit agencies', <http://www.fern.org>.
- FinCEN (2003), '2003 National money laundering strategy', http://www.fincen.gov/int_main.html.
- Forest Trends and DFID (2010), 'Timber markets and trade between Laos and Vietnam: A commodity chain analysis of Vietnamese-driven timber flows', http://147.202.71.177/~forestr/publication_details.php?publicationID=2365.
- French, H. (2000), *Vanishing Borders: Protecting the Planet in the Age of Globalization*, Washington, DC: WorldWatch Institute.
- Garforth, M. (2004), 'To buy or not to buy: Timber procurement policies in the EU', FERN, <http://www.fern.org/node/823>.
- Global Witness (1999), 'The untouchables: Forest crimes and the concessionaires: Can Cambodia afford to keep them?', London: Global Witness, <http://www.eldis.org/assets/Docs/28372.html>.
- Global Witness (2003), 'Kimberley process finally agrees membership list but lack of monitoring undermines credibility', London: Global Witness, <http://www.globalwitness.org/library/kimberley-process-finally-agrees-membership-list-lack-monitoring-undermines-credibility>.
- Grant, A. (2009), 'Is your company prepared for the Lacey Act?', World Resources Institute, <http://www.wri.org/stories/2009/12/your-company-prepared-lacey-act>.
- Greenpeace (2003), 'Partners in crime: A Greenpeace investigation of the links between the UK and Indonesia's timber barons', London: Greenpeace, <http://www.greenpeace.org.uk/media/reports/partners-in-crime-0>.
- ICG (2001), 'Indonesia: Natural resources and law enforcement', *Asia Report*, **29**, Brussels/Jakarta: International Crisis Group.
- Illegal-logging.info (2003), 'Japan and Indonesia make a joint announcement of cooperation on illegal logging', <http://www.illegal-logging.info/news.php?newsId=23>.
- International Union of Concerned Scientists (2009), 'International timber trade review', http://www.ucsusa.org/global_warming/solutions/forest_solutions/international-timber-trade.html
- IPCC (2007a), 'Summary for policymakers', in M. Parry et al. (eds), *Climate Change 2007: Impacts, Adaptation and Vulnerability*, Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge: Cambridge University Press.
- IPCC (2007b), 'Emissions trajectories for stabilisation', IPCC Fourth Assessment Report: Climate Change 2007, Intergovernmental Panel on Climate Change, http://www.ipcc.ch/publications_and_data/ar4/syr/en/mains5-4.html.

- ITFMP (1999), 'Illegal logging in Indonesia', *ITFMP Report*, EC/99/03, Jakarta: UK Tropical Forestry Management Programme.
- Kaimowitz, D. (2003), 'Forest law enforcement and rural livelihoods', *International Forestry Review*, 5(3), 199-210.
- Kill, J., S. Ozinga, S. Pavett, and R. Wainwright, (2010), 'Trading carbon, how it works and why it is controversial', Brussels: FERN, www.fern.org/tradingcarbon.
- Kimberley Process Certification Scheme (2002), 'Section 1, definitions', <http://www.kimberleyprocess.com/news/documents.asp?id=14>.
- Lang, C. (2010), 'EU Ecolabel allows forest destruction : The case of Pindo Deli', Brussels: FERN, <http://www.fern.org/node/4684>.
- Kishor, N. and R. Damania (2007), 'Crime and justice in the Garden of Eden: Improving governance and reducing corruption in the forestry sector', in E. Campos and S. Pradhan (eds), *The Many Faces of Corruption: Tracking Vulnerabilities at the Sector Level*, Washington, DC: World Bank.
- Leal Riesco, I. and K. Opoku (2009), 'Is REDD undermining FLEGT?', Brussels: FERN, <http://www.fern.org/REDDunderminingFLEGT>.
- Logging Off (2011), 'European Commission briefing note no. 1', www.loggingoff.info.
- Marijnissen, C. (2003) 'Illegal logging: what's in the European Commission's FLEGT Action Plan?', Brussels: FERN, <http://www.fern.org/node/2709>.
- OECD (1997), 'Convention on combating bribery of foreign public officials in international business', <http://www.oecd.org/dataoecd/4/18/38028044.pdf>, Paris: Organisation for Economic Co-operation and Development.
- OECD (2001), *OECD Environmental Outlook*, Paris: Organisation for Economic Co-operation and Development.
- OECD (2003), 'Recommendation on common approaches on environment and officially supported export credits', <http://www.oecd.org/dataoecd/26/33/21684464.pdf>, Paris: Organisation for Economic Co-operation and Development.
- OECD (2007), 'Revised council recommendation on common approaches on environment and officially supported export credits', <http://www.oecd.org/officialdocuments/displaydocument.pdf>, Paris: Organisation for Economic Co-operation and Development.
- Ozinga, S. (2004), 'Footprints in the forest: Current practice and future challenges', Brussels: FERN, http://www.fern.org/media/documents/document_1890_1900.pdf.
- Pillon, B. and D. Pettenella (2006), 'EU FLEGT initiative: Analysis of national legislation of relevance to excluding illegal timber from EU market: Italy study', http://www.illegal-logging.info/item_single.php?it_id=109&it=presentation.
- Rice, T., C. Marijnissen, and S. Ozinga (1999), 'Trade liberalisation and the impact on forests', FERN, <http://www.fern.org/node/536>.

- Scotland, N. and S. Ludwig (2002), *Deforestation, the Timber Trade and Illegal Logging*, paper for EC workshop on Forest Law Enforcement, Governance and Trade, Brussels, 22–24 April.
- SGS Global Trade Solutions (2003), 'Legal origin of timber as a step towards sustainable forest management', Washington, DC: World Bank/ WWF Alliance, http://www.illegal-logging.info/item_single.php?it_id=303&it=document.
- Sunderlin, W., J. Hatcher, and M. Liddle (2008), *From Exclusion to Ownership: Challenges and Opportunities in Advancing Forest Tenure Reform*, Washington, DC: Rights and Resources Initiative.
- USC (2004), 'Title 16, Chapter 53, Section 3372', <http://www4.law.cornell.edu/uscode/16/3372.html>.
- Van der Werf, G., D. Morton, R. DeFries, J. Olivier, P. Kasibhatla, R. Jackson, G. Collatz, and J. Randerson (2009), 'CO2 emissions from forest loss', *Nature Geoscience*, 2, 737-738.
- Van Gelder, J. (2002), *The Financing of African Logging Companies*, Castricum: Profundo.
- Van Gelder, J., E. Wakker, and W. Richert (2003), *Sources of Investment for Forestry: Preventing Flows of Finance to Illegal Activities*, discussion paper, London: Royal Institute of International Affairs.
- Watson, G. (1998), *The OECD Convention on Bribery*, American Society of International Law, <http://www.asil.org/insights/insight14.htm>.
- White & Case (1999), *Report to Senior Officials of Royal Government of Cambodia and International Donors: Summary of Recommendations*, New York: White & Case.
- World Bank (1999), *Forest Sector Review*, Washington, DC: World Bank.
- World Bank (2006), *Strengthening Forest Law, Enforcement and Governance*, Washington DC: World Bank.
- World Conservation Monitoring Centre (1998), *Contribution to an Evaluation of Tree Species Using the New CITES Listing Criteria*, Cambridge: World Conservation Monitoring Service.
- World Resources Institute (1997), *Logging Burma's Frontier Forests: Resources and the Regime*, Washington, DC: World Resources Institute.