Chatham House Report

Alison Hoare

Tackling Illegal Logging and the Related Trade

What Progress and Where Next?

CHATHAM HOUSE
The Royal Institute of International Affairs

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July 2015

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Chatham House, the Royal Institute of International Affairs, is an independent policy institute based in London. Our mission is to help build a sustainably secure, prosperous and just world.

The Royal Institute of International Affairs

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About the Author

Alison Hoare is a senior research fellow at Chatham House who has expertise in forest governance, natural resource use and community forestry. She leads Chatham House's programme of work on illegal logging and forest governance, and is engaged in research on environmental crime and climate change. She worked previously with various environmental and forestry organizations, undertaking research, policy analyses and project management.

Acronyms and Abbreviations

AFLEG	Africa Forest Law Enforcement and Governance
AFOLU	agriculture, forestry and other land use
ASEAN	Association of Southeast Asian Nations
ATIBT	Association Technique Internationale des Bois Tropicaux
BV	Bureau Veritas
CATVS	Chinese Association-guided Timber Verification Scheme
CIFOR	Center for International Forestry Research
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CoC	chain-of-custody
COI	commission of inquiry
COMIFAC	Central African Forests Commission
CW	controlled wood
DEFRA	Department for Environment Food and Rural Affairs
DFID	Department for International Development
DOF	Document of Forest Origin
DRC	Democratic Republic of the Congo
EFI	European Forest Institute
EIA	Enviromental Investigation Agency
EITI	Extractive Industries Transparency Initiative
ETTF	European Timber Trade Federation
EU	European Union
EUTR	European Union Timber Regulation
FLEG	forest law enforcement and governance
FLEGT	European Union Forest Law Enforcement, Governance and Trade
FM	forest management
FSC	Forest Stewardship Council
IDH	Sustainable Trade Initiative [Netherlands]
ILPA	Illegal Logging Prohibition Act
IMF	International Monetary Fund
IM-FLEG	independent monitoring of forest law enforcement and governance
IM-REDD	independent monitoring of REDD
ITTO	International Tropical Timber Organization
KPK	Anti-Corruption Commission [Indonesia]
LEI	Indonesian Ecolabeling Institute
MoUs	memorandums of understanding
MTCS	Malaysian Timber Certification Scheme
NBER	National Bureau of Economic Research
ODI	Overseas Development Institute
OLB	Origine et Légalité des Bois
PEFC	Programme for the Endorsement of Forest Certification
PNG	Papua New Guinea
RA	Rainforest Alliance
RAFT	Responsible Asia Forestry and Trade
REDD+	Reducing Emissions from Deforestation and Forest Degradation
REM	Resource Extraction Monitoring
RWE	roundwood equivalent
SABL	Special Agricultural Business Lease
SDGs	Sustainable Development Goals
SGS	Société Générale de Surveillance
SVLK	Indonesian Timber Legality Verification System
TI	Transparency International
UN	United Nations
UNGA	UN General Assembly
US	United States
USITC	United States International Trade Commission
VLC	Verified Legally Compliant
VLO	Verified Legal Origin
VPA	voluntary partnership agreement

Preface

This report is the culmination of the multi-year 'Indicators of Illegal Logging' project, in which Chatham House has sought to monitor and understand what progress is being made in global efforts to improve forest governance and address illegal logging.

The first assessment, published in 2010, presented findings from 12 countries. For the second and current assessment, which is the subject of this Chatham House report, another seven countries have been added, with individual reports on all 19 countries published in 2014–15. The countries were selected on the basis of their relative importance in the world's forest sector. The nine producer countries account for about 10 per cent of global exports of wood-based products (in roundwood equivalent [RWE] volume), while the 10 processing and consumer countries account for approximately half of all global imports of wood-based products.

The findings and dataset for the project are available to download through a dedicated website: http://indicators.chathamhouse.org.

Project publications

International assessment

Lawson, S. and MacFaul, L. (2010), *Illegal Logging and Related Trade: Indicators of the Global Response*

Country reports

Brack, D. (2014), *Trade in Illegal Timber: The Response in the Netherlands*

Brack, D. (2014), *Trade in Illegal Timber: The Response in the United Kingdom*

Hoare, A. (2014), *Illegal Logging and Related Trade: The Response in Ghana*

Hoare, A. and Wellesley, L. (2014), *Illegal Logging and Related Trade: The Response in Indonesia*

Hoare, A. (2015), *Illegal Logging and Related Trade: The Response in Cameroon*

Hoare, A. (2015), *Illegal Logging and Related Trade: The Response in Malaysia*

Lawson, S. (2014), *Illegal Logging in the Democratic Republic of the Congo*

Lawson, S. (2014), *Illegal Logging in Papua New Guinea*

Lawson, S. (2014), *Illegal Logging in the Republic of Congo*

Lawson, S. (2014), *Illegal Wood Import and Re-export: The Scale of the Problem and the Response in Thailand, South Korea and India*

Momii, M. (2014), *Trade in Illegal Timber: The Response in Japan*

Momii, M. (2014), *Trade in Illegal Timber: The Response in the United States*

Saunders, J. (2014), *Illegal Logging and Related Trade: The Response in Lao PDR*

Saunders, J. (2014), *Trade in Illegal Timber: The Response in Vietnam*

Wellesley, L. (2014), *Trade in Illegal Timber: The Response in France*

Wellesley, L. (2014), *Trade in Illegal Timber: The Response in China*

Wellesley, L. (2014), *Illegal Logging and Related Trade: The Response in Brazil*

Methodology papers

Lawson, S. (2007), *Illegal Logging and Related Trade: Measuring the Global Response*

Lawson, S. (2014), *Methodology for Import-source Estimates of Illegally Sourced Wood Imports: Thailand, South Korea and India*

Hoare, A. (2014), *Methodology for Estimating Levels of Illegal Timber- and Paper-sector Imports: Estimates for China, France, Japan, the Netherlands, the UK, the US and Vietnam*

Executive Summary and Recommendations

The world's forests remain under threat from illegal logging – an issue that has serious implications for tackling climate change and achieving sustainable development. Illegal logging perpetuates corruption, undermines livelihoods, fuels social conflict, deprives governments of revenue and erodes countries' natural resource bases.

Important progress has been made in reducing illegality in the forest sector over the past decade. However, the problem remains widespread. In 2013 more than 80 million cubic metres (m^3) of timber – as measured by roundwood equivalent (RWE) volume – were illegally produced in the nine producer countries in this assessment. This is equivalent to nearly one-third of their total production of timber, and will have released at least 190 million tonnes of carbon dioxide into the atmosphere. To put this in perspective, the combined carbon dioxide emissions of Denmark, Norway and Sweden in 2010 amounted to 155 million tonnes.

Chatham House has been tracking the impact of efforts to tackle illegal logging since 2006. During this period, many measures have been taken. The use of certification and supply chain controls has increased in the private sector. Consumer-country governments have pursued various approaches, including introducing legislation to prohibit imports of illegal timber; promoting markets for legal timber; and pursuing bilateral cooperation with producer countries to improve governance and encourage legal exports. In parallel, producer governments have implemented extensive policy and governance reforms.

Advances in tackling illegal logging have slowed in recent years

Chatham House's first assessment of international progress in tackling illegal logging was encouraging. Published in 2010, it found that concerted efforts in the early 2000s to improve law enforcement had resulted in a significant decline in illegal logging in many countries.

This second assessment, conducted in 2012–14, presents a more mixed picture. At the national level progress is clearly evident. Nearly all the consumer countries assessed have reduced the shares of illegal timber in their imports. Although forest governance remains very weak in most of the producer countries, there has been continued improvement in numerous areas. Correspondingly, many of the producer countries assessed have reduced the shares of illegal timber in their exports.

However, at the global level progress has stalled. In the countries assessed, the volume of illegal timber imports had risen by a fifth since the end of the financial crisis to an estimated 60 million m^3 (RWE volume) in 2013, almost the level of a decade ago.

This development is disconcerting because it coincides with ambitious government action to tackle illegal logging. It comes at a critical moment for the international community: in 2015 governments are preparing for a new global climate agreement and a new framework for sustainable development, and are considering global priorities for development finance. To succeed, these processes will require radical improvements in the governance of the world's forests as well as sharp reductions in greenhouse gas emissions.

So what has happened? In short, efforts to tackle illegal logging have been eclipsed by three major changes in the forest sector. First, new markets for timber have diluted the impact of policies introduced by some developed countries. Half of all the trade in illegal wood-based products is now destined for China, the largest consumer as well as a major processing hub. At the same time, domestic demand for timber has been rising in producer countries, providing a market for both legal and illegal timber. Second, more forest is being cleared for agriculture and other land uses. As much as half of all tropical timber traded internationally now comes from forest conversion, of which nearly two-thirds is thought to be illegal. Third, logging by small-scale producers has soared in many countries. Such activity is often illegal and remains beyond the scope of many policy and regulatory efforts.

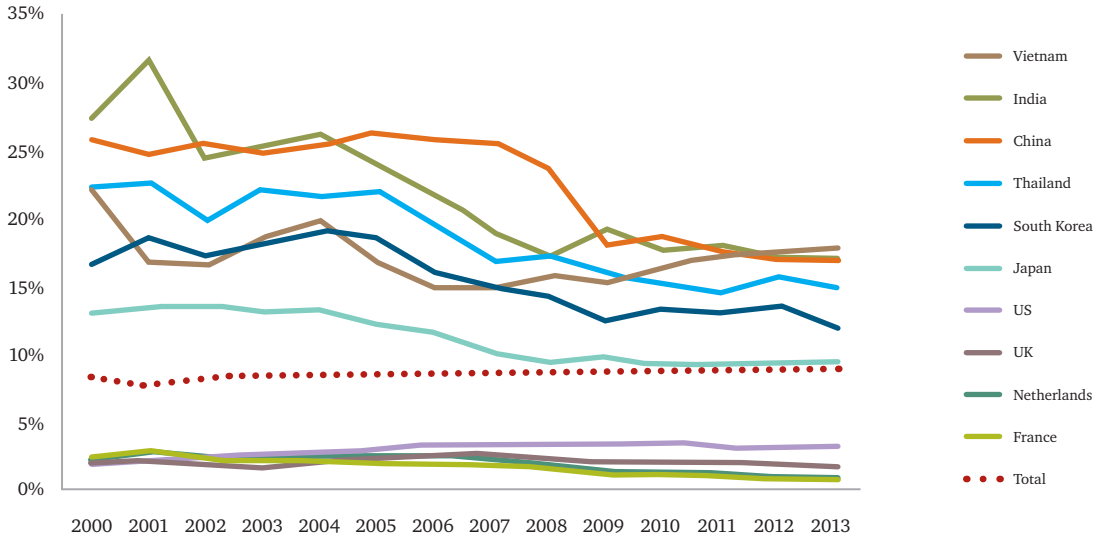
This second Chatham House assessment is based on research on nine producer countries (Brazil, Cameroon, the Democratic Republic of the Congo [DRC], Ghana, Indonesia, Laos, Malaysia, Papua New Guinea [PNG] and the Republic of the Congo), three processing countries (China, Thailand and Vietnam) and seven consumer countries (France, India, Japan, the Netherlands, South Korea, the UK and the US). It charts the progress in tackling illegal logging and related trade since 2000. At the same time, it offers recommendations on how efforts can be strengthened and adapted in response to the changes that have taken place in the sector.

Key findings

The share of illegal imports into nine out of the 10 processing and consumer countries declined during the period 2000–13. The most marked reductions took place in some of the 'non-sensitive' markets[1], where illegal imports

[1] 'Sensitive' markets are those in which there is a strong preference for legal timber owing to the existence of legislation or other policies and/or consumer choice. This assessment identifies the following as such markets: Australia, Canada, the EU, New Zealand, Norway, Switzerland and the US. All other markets are considered 'non-sensitive'.

Figure 1: Estimated percentage of imports of wood-based products at high risk of illegality into the 10 processing and consumer countries (by RWE volume), 2000–13



Sources: Based on illegality estimates by Chatham House; and official national trade statistics for the UK, France, Netherlands (Eurostat), Trade Statistics of Japan, the US (USITC Trade DataWeb), General Administration of Statistics of the People's Republic of China, Customs Service of the Kingdom of Thailand, South Korea (Korea Customs Service), India (UN Comtrade) and official statistics for the imports of Vietnam's partner countries. Data for all countries also draw on UN Comtrade and on analysis by Chatham House.

were very high at the turn of the century. For example, in China the share of illegal imports declined from 26 per cent to 17 per cent, and in India from 27 per cent to 17 per cent. The US was the one country that bucked this trend: the share of illegal imports increased from 2 per cent to 3 per cent between 2000 and 2007, and then stabilized.

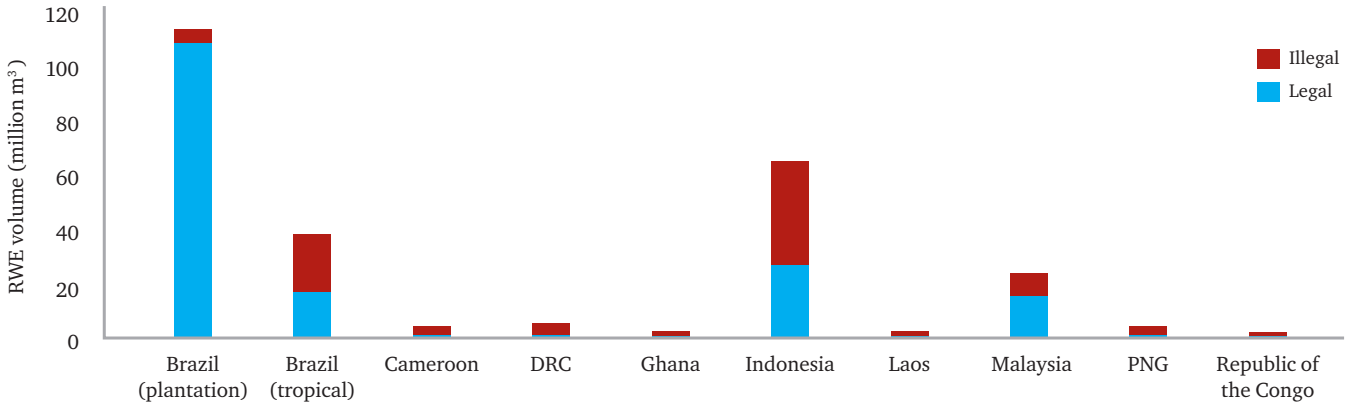
Measures to eliminate illegal timber imports into the EU and the US have had a positive impact, but the bulk of illegal trade is now to other countries. In 2013 volumes of illegal wood-based products imported by the US fell by one-third compared with their peak in 2006. In the case of the three EU countries in this assessment, volumes halved over the same period. Meanwhile, the quantity of illegal products imported by the emerging economies of China, India and Vietnam increased by over 50 per cent. This shift renders the policies of the EU and the US (so-called 'sensitive' markets) less influential.

The share of illegal products in international trade has remained the same since the turn of the century. Although most of the processing and consumer countries have reduced their illegal imports, there has been a shift, and overall growth, in trade to those countries with larger shares of illegal imports, most notably China. As a result, the share of illegal imports for all 10 countries has remained at just under 10 per cent since the turn of the century.

The enactment of legislation by all major processing and consumer countries could have a dramatic impact on the legality of the timber trade. The global trade in illegal wood-based products could be slashed by two-thirds if other consumer countries reduced their illegal imports to the proportions seen in the US and the EU. Owing to the scale of China's imports, the spotlight will be on that country's emerging policy framework. But wealthier Asian countries such as Japan and South Korea could lead the way.

Most illegal timber comes from three of the producer countries, but other countries have much higher shares of illegal production. The vast majority of illegal timber in 2013 came from Indonesia (around 50 per cent), Brazil (25 per cent) and Malaysia (10 per cent). This in part reflects the size of these countries' forest sectors, as they also produce large volumes of legal timber (see Figure 2). Other countries, such as the DRC, Ghana, Laos, Papua New Guinea and the Republic of the Congo, produce less timber overall but have much higher shares of illegal timber in their total production. For example, nearly all timber produced in the DRC comes from illegal sources.

Figure 2: Estimated production of legal and illegal timber in the nine producer countries, 2013



Sources: Chatham House estimates of illegality, ITTO, UN Comtrade and national agencies.

The nature of illegality in the forest sector is changing. The proportion of forest verified as legal or certified as sustainable has increased significantly since 2000. This corresponds to a decline in illegal practices relating to the allocation and management of large-scale forest concessions for selective logging. Furthermore, unlicensed large-scale logging is now less prevalent in many countries, particularly in Brazil and Indonesia. However, these gains have been offset by increased illegal timber production from forest conversion and from informal small-scale logging.

Investing in governance is crucial for reducing illegal logging. Countries that achieved a high score in the policy assessment, such as Brazil and Indonesia, tend to have lower levels of illegal production. Those with poor policy scores, such as the DRC and Laos, have high illegality rates (see Figure 3). However, no scoring system can capture the full complexity of the reality on the ground. Ghana does well in the policy assessment but has high rates of illegal logging owing to its rapidly growing informal small-scale sector. Malaysia has the lowest rates of illegal logging but scores poorly in terms of its policy framework; this is in part because of weaknesses in the legal framework relating to the allocation of logging rights.

Significant improvements in forest governance have been achieved in most producer countries. Indonesia, for example, has targeted corruption and financial crime in its forest sector, implemented a national system for timber legality assurance, and issued a landmark court ruling that provides for formal recognition of customary land rights. At the other end of the spectrum lie the DRC, Laos and the Republic of the Congo, where corruption is rife, government accountability lacking and law enforcement weak.

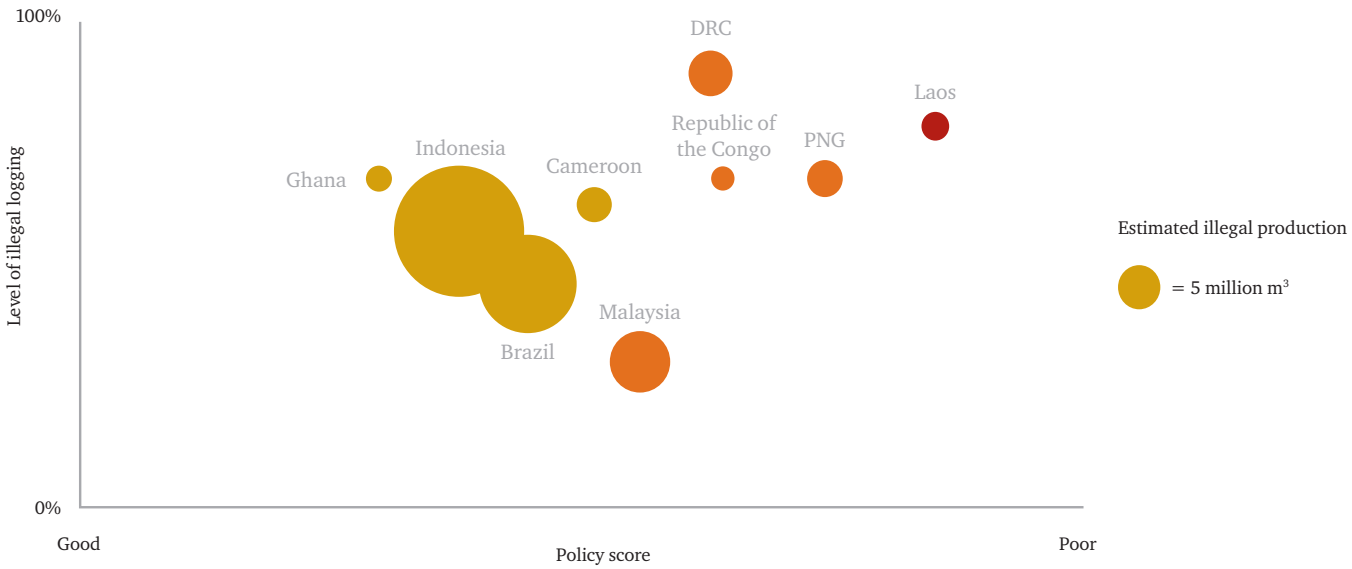
Despite improvements in forest governance, gaps remain and reforms must continue. Many countries have taken important steps towards more open and participatory decision-making processes, and improved legal clarity. However, more must be done to ensure these gains are embedded: for example, new laws await implementation; effective institutions and freedoms need to be in place so that additional data on the forest sector can be used to hold governments to account.

Recommendations

Illegal logging remains widespread. However, this state of affairs should not be interpreted as signalling the failure of recent efforts *per se*. In fact, there is considerable evidence to the contrary: initiatives to tackle illegal logging have yielded success in a number of important areas. The problem is that recent efforts have not kept pace with rapid changes in timber production and trade.

This issue cannot be addressed through the individual efforts of a few enlightened governments, important though these are. The scale of the challenge demands a coherent and decisive international response. Under current proposals, the new UN Sustainable Development Goals (SDGs) could galvanize the international community into tackling important supply-side issues such as forest management and governance. The SDGs could also promote private-sector efforts to establish sustainable supply chains. However, success also requires significant reductions in the markets for illegal timber.

Figure 3: Policy scores and levels of illegal production, 2013



*Shading reflects the score for the relevant policy area as a percentage of the possible maximum: **red** = 25 per cent and below; **orange** = >25–50 per cent; **yellow** = >50–75 per cent; and **green** = above 75 per cent.

Sources: Chatham House policy assessment, ITTO, UN Comtrade and national agencies.

The EU and US are well placed to provide global leadership on this agenda, building on their successes and disseminating best practice. Working with others, the goal should be to marshal and harmonize the efforts of key producer, processing and consumer countries alike. For example, bilateral arrangements such as the EU's voluntary partnership agreements (VPAs) could be extended to include a third consumer or processing country such as China. Producer governments could cooperate to disseminate best practice on tackling illegal logging. With donor support, this could be formalized through a capacity-building and knowledge network.

Looking more broadly, the G20 could provide a forum to help establish a stronger international regime, incorporating supply- and demand-side measures. Its members account for more than 90 per cent of global tropical timber imports and include both 'sensitive' and 'non-sensitive' markets, as well as the leading exporters of tropical wood-based products – namely, Indonesia and Brazil. Building on the legacy of the G8's Action Programme on Forests, a G20 commitment to tackle illegal logging could push the issue up the political agenda in countries such as Brazil, China, Japan, Russia and South Korea.

A revitalized global agenda to tackle illegal logging would require action on five fronts. It should seek to:

1. Go deeper

Following early gains, governance reforms in many producer countries have slowed. Getting back on track will require a step change in political commitment and willingness to tackle the more difficult remaining governance issues – such as corruption. Priorities include:

- Establishing properly resourced and empowered anti-corruption agencies in producer countries;
- Enabling monitoring of the forest sector by civil society, including creating an institutional framework to respond to findings;
- Strengthening enforcement efforts in producer countries, including through capacity-building in the judicial sector;
- Making more concerted efforts in the EU and US to implement legislation prohibiting illegal imports;
- Fulfilling existing commitments to ensure transparency in producer countries, and including

- the forestry and agriculture sectors in those states' submissions to the Extractive Industries Transparency Initiative (EITI); and
- Requiring logging companies to disclose payments to governments of countries in which they are operating, and developing rigorous standards for company reporting on forest impacts.

2. Go wider

The most progressive demand-side approaches remain confined to a small subset of developed consumer countries, which account for a declining share of global imports of wood-based products. Comparable efforts should be undertaken by other developed countries – such as Japan and South Korea – as well as by emerging consumers and processors such as India and China. In addition, producer-country governments should tackle the rapidly growing consumption of illegal timber at home. Priorities include:

- Passing legislation in the major processing and consumer countries to prohibit the import or sale of illegal wood-based products and require companies to perform credible due diligence (this should be supported by international cooperation to share best practice and ensure alignment of approaches);
- Considering the introduction of rigorous public procurement policies in the major processing and consumer countries as an interim measure; and
- Implementing measures to promote a domestic market for legal timber in each producer country, including rigorous procurement standards for both the public sector and businesses.

3. Get smaller

Efforts to date have focused on large-scale logging concessions, but small-scale production should be given much more attention. Priorities include:

- Incorporating small-scale producers and processors into the formal sector by reducing barriers to entry and facilitating legal compliance (in many cases this will require producer governments to undertake legal reform and adapt legality verification processes, while in all cases significant investment in capacity-building and extension services will be needed);
- Developing VPAs or other bilateral cooperation agreements that focus specifically on the small-scale sector;
- Introducing public procurement policies for legal timber from small-scale producers in more producer countries; and
- Establishing long-term, supportive partnerships between traders and retailers, on the one hand, and small-scale producers and processors, on the other.

4. Get smarter

The pervasive lack of data, particularly in the public domain, undermines efforts to monitor logging by civil society, to implement best practice by the private sector, and to develop effective policies by producer and donor governments. The reporting and accessibility of data should be improved and new technologies explored. Priorities include:

- Investing further in statistical services in producer countries to enable the supply of robust data on production, consumption and trade (the G20 could play a key role in galvanizing action and supporting international cooperation in this area); and
- Implementing systematic government monitoring of the impact of policies and development assistance on forest governance and levels of illegal logging, particularly in donor countries.

5. Go further

Increasingly, illegal timber production is resulting from the expansion of agriculture, mining and infrastructure. There is an urgent need for coherent cross-sector strategies that extend efforts to tackle illegal logging beyond the forest sector. Priorities include:

- Clarifying and enforcing laws related to land-use planning and management by producer-country governments (it is in the interests of the private sector to encourage governments to act, since private businesses will otherwise find it difficult to fulfil commitments to establish legal and sustainable supply chains);
- Ensuring that initiatives to tackle illegal logging – including legality assurance systems – cover timber from the illegal clearance of forest for other land uses;
- Developing processes by producer-country governments through which past illegalities related to forest conversion can be reviewed and, where appropriate, redressed (for example, through applying sanctions or renegotiating permits);

- Developing policies in consumer countries to reduce the trade in non-forestry products linked to illegal deforestation (for example, through legislation prohibiting such trade, through public procurement policies, and through requirements for corporate reporting on environmental policies and impacts); and
- Developing stronger safeguards within free trade agreements to facilitate the mitigation of any negative impacts on forests.

Looking ahead

During the past 15 years, efforts to tackle illegal logging have made significant gains, despite growing pressure on the world's forests. But much more needs to be done.

In 2030 governments will be measured against the commitments they make later this year: to cut greenhouse gas emissions as part of a new global climate deal, and to establish a new set of SDGs. Illegal logging is inimical to both of those undertakings. Concerted international action on the five fronts identified above can turn the tide against illegal logging. It can create a global forest sector that absorbs carbon rather than emitting it, that generates sustainable livelihoods rather than causing social conflict, and that contributes to public revenues rather than bolstering illicit finance.

1. Introduction

Forests have enormous potential to contribute to sustainable development: a quarter of the world's population relies on forests for its livelihood,[2] while the international trade in wood-based products is worth more than US$250 billion.[3] At the same time, forests provide a wealth of ecosystem services, including the regulation of climate processes through the role they play in the water and carbon cycles. However, the benefits that forests provide are threatened by illegal logging and poor governance; and much more needs to be done to address those issues.

Despite marked improvements in governance since the beginning of this century, progress in tackling illegal logging has slowed in the past few years. In many countries the vast majority of timber production remains illegal. The implications are far-reaching, not least in fiscal terms: governments of developing countries are losing significant amounts of potential revenue. Illegal logging is also causing the loss and degradation of forests, depleting livelihoods and contributing to social conflict and corruption.

As a result of concerted efforts in the early 2000s to improve law enforcement, the level of illegal logging declined significantly in many of the countries in this assessment. Further progress was supported by the introduction of a range of 'demand side' measures in consumer countries aimed at reducing the market for illegal timber, most notably in the EU and US, and various 'supply side' measures focused on improving forest governance in producer countries. However, fundamental changes have been taking place in the forest sector that are impeding further progress and pose a significant challenge for the future.

Demand for natural resources and competition for land are increasing, while timber markets in many developing and emerging economies are burgeoning. China is now the world's largest importer and consumer of wood-based products, as well as a key processing hub. This means that the progressive policies of Western importers, such as the EU and US, have less influence overall. Meanwhile, the growing importance of small-scale producers and the increasing volume of timber sourced from forest clearance for other land uses have resulted in challenges for which current policy frameworks are inadequate.

Later this year, a new international agreement on climate change aimed at limiting global warming to 2 degrees Celsius or less will be concluded. The negotiations to date have paid significant attention to the 'reduction of emissions from deforestation and forest degradation' (REDD+).[4] Wide-ranging initiatives have already been implemented and significant funding leveraged to pilot various approaches and to support countries in drawing up REDD+ strategies.[5] New global Sustainable Development Goals (SDGs) will also be agreed this year, setting a framework for action until 2030. Forests have been given high priority in the current draft list of goals, which include the sustainable management of forests.[6]

Success in both the REDD+ and SDG processes will require drastic reductions in greenhouse gas emissions and radical improvements in the way the world's natural resources are governed. The forest sector is responsible for 10 per cent of global greenhouse gas emissions,[7] and illegal logging is a major factor in the problem: at least one-third of the tropical deforestation between 2000 and 2012 has been attributed to illegal forest conversion.[8] Thus, tackling illegal logging and strengthening forest governance are essential not only for achieving global objectives for climate and development, but also for putting the world on a path to sustainable development.

In its first assessment of illegal logging, in 2010, Chatham House reported that illegal logging had declined by nearly a quarter since 2002 and that imports of illegal wood-based products – having peaked in 2004 – had dropped by 30 per cent during the same period. The 2015 assessment provides an update on those findings, taking into account research and developments within the sector since 2010. It aims to determine what progress has been made in improving forest governance and tackling illegal logging since the previous Chatham House assessment, and since the turn of the century. It also examines the implications of the changes that have been taking place in the forest sector, in the form of new modes of production and shifts in international trade. On the basis of those findings, this report considers what direction future policy efforts should take.

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[2] See http://www.fao.org/forestry/livelihoods/en/.
[3] This estimate is based on the export value of wood-based products and draws on analysis of UN Comtrade data by Chatham House.
[4] See http://unfccc.int/land_use_and_climate_change/redd/items/7377.php.
[5] These include initiatives funded by the UN-REDD programme (http://www.un-redd.org); the Forest Carbon Partnership Facility (http://www.forestcarbonpartnership.org/); and the Forest Investment Program (http://www.climatefundsupdate.org/listing/forest-investment-program).
[6] UNGA (2014), 'Report of the Open Working Group of the General Assembly on Sustainable Development Goals', A/68/970, 12 August 2014.
[7] Smith, P. et al. (2014), 'Agriculture, Forestry and Other Land Use (AFOLU)', in Intergovernmental Panel on Climate Change (2014), *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press (at https://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml#1).
[8] Lawson, S. (2014a), *Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations*. Washington, DC: Forest Trends.

Illegal logging defined

Illegal logging is defined in this assessment as all illegal practices related to the harvesting, processing and trading of timber. This definition is thus not confined to activities in forests themselves; rather, it extends to breaking the law at any point along the supply chain – for example, logging under an illegally acquired licence or in protected areas, exceeding permitted harvest quotas, processing logs without the necessary licences, tax evasion and exporting products without paying export duties.

This definition also includes illegal clearance of forests for other land uses (a practice known as 'forest conversion'). The practice can involve converting forest land without the necessary permit or operating under a licence that has been obtained illegally, including through corrupt processes. Such conversion may involve illegalities in other sectors – for example, the breach of requirements enshrined in agricultural or mining legislation. The harvesting of timber from illegally established plantations is also included in this definition of illegal logging.

Another aspect of illegal logging is often described as 'informal' logging. This term refers to logging activities by small-scale producers that may be operating illegally because of the challenges of complying with the law – for example, because parts of the legislation may be unclear or because compliance may either be too expensive or involve lengthy bureaucratic processes.

The methodology

The analysis in this assessment is based on the findings of a project run by Chatham House that seeks to monitor and understand what progress is being made in global efforts to improve forest governance and address illegal logging. Launched in 2006, the project has developed a series of indicators that enable comparisons to be made over time and across countries.

The first assessment, published in 2010, presented findings from 12 countries. For this current assessment, another seven countries have been added – individual reports on all 19 countries were published in 2014–15.[9] The countries were selected on the basis of their relative importance in the world's forest sector as producers, processors or consumers of wood-based products. The nine producer countries assessed in 2013 account for about 10 per cent of global exports of wood-based products (in roundwood equivalent [RWE] volume), while the 10 processing and consumer countries account for approximately half of all global imports of wood-based products. The countries assessed are shown in Figure 4.

Figure 4: Focus countries

[9] All the reports are available through the project website: http://indicators.chathamhouse.org. The reports on Thailand, South Korea and India were consolidated in a single publication.

The indicators on which this assessment is based were developed through pilot testing in five countries (for further details of the methodology, see Annex 1). They draw on a wide range of data (see Table 1 below), relating both directly to levels of illegal logging and to the broader governance environment. Together, the data enable a picture to be painted of the risks of illegality in the forest sector and how various stakeholders (government, the private sector and civil society) have been responding to the issue.

It should be highlighted that the indicators do not allow for a detailed evaluation of the nature or causes of illegal logging – indeed, that is not their main objective. Rather, as noted, the goal of this assessment is to consider what progress is being made in tackling illegal logging and what kinds of intervention are proving most valuable in various contexts.

Table 1: Chatham House indicators

Indicator	Data sources
Attention paid to the issue of illegal logging and the related trade	Review of international and domestic media coverage
Government response	Assessment of national policy and legal framework (both design and implementation)
	Analysis of enforcement and forest revenue data
	Expert perceptions survey evaluating government response
Private-sector response	Analysis of data on voluntary legality verification and sustainability certification*
	Analysis of trade data to assess shifts in trade between 'sensitive' and 'non-sensitive' markets**
	Expert perceptions survey evaluating private-sector response
Levels of illegal logging and the related trade	Trade data discrepancies
	Wood-balance analyses
	Analysis of trade data for both exporting and importing countries
	Expert perceptions survey on the scale of illegal logging

* Sustainability certification is a voluntary process that allows for the labelling of products from forests that have been managed in accordance with certain standards of good practice. The two largest schemes for forest products are the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC).

** 'Sensitive' markets are those in which there is a strong preference for legal timber owing to the existence of legislation or other policies and/or consumer choice. This assessment identifies the following as such markets: Australia, Canada, the EU, New Zealand, Norway, Switzerland and the US. All other markets are considered 'non-sensitive'.

2. Forestry – a Changing Sector

Key points

- Since the 1990s a broad consensus has emerged that tackling illegality in the forest sector and improving governance are essential for enhancing sustainability.
- Developed countries such as the US and EU member states (classified here as 'sensitive' markets) have responded to the issue of illegal logging with a range of measures aimed at reducing the trade in illegal timber and supporting legal production.
- But these 'sensitive' markets account for a declining share of timber consumption owing to demand growth in both emerging and developing economies.
- At the same time, there have been dramatic changes in the way timber is produced: production from timber plantations has increased rapidly, as has the clearance of forest for other land uses. It is possible that forest conversion now accounts for half of all internationally traded tropical timber.
- These shifts in both demand and the modes of production have implications for the effectiveness of existing policy tools in bringing about the changes necessary to achieve a legal and sustainable forest sector.

The forest sector has changed significantly since the turn of the century: the ways in which timber is produced have altered, and patterns of consumption and trade have shifted. During this same period, the policy environment has evolved too. Not only has there been a proliferation of efforts aimed at tackling illegal logging, but forests have also risen up the agenda in international policy processes related to sustainable development and climate change.

The changes in timber supply and trade raise crucial questions for the implementation of the various policy measures, and for their effectiveness in achieving the objectives of tackling illegal logging and establishing a sustainable forest sector.

The international policy context

The issue of illegal logging gained prominence in international policy discussions during the 1990s. Tackling illegality in the forest sector and improving governance were recognized as essential for improving the sustainability of the sector – with respect to both the environment (through facilitating better forest management) and the economy (through boosting government revenues).

One reason why this approach had traction was that it received support from a wide range of stakeholders. Producer governments saw the focus on legality as supporting their sovereignty (whereas discussions about forest conservation and sustainability were often regarded as infringing on this). For donor governments, it aligned with their objectives of promoting sustainable development and reducing poverty. For the private sector, it offered a means to prevent legitimate businesses from being undercut by cheap, illegal timber. At the same time, much of civil society supported the legality approach as an essential element of establishing a more sustainable and equitable sector (although many were also concerned about the risks it might pose for forest-dependent communities).[10]

Illegal logging was included in the 1998 G8 Action Programme on Forests. During the first half of the following decade, the World Bank organized a series of regional conferences on 'forest law enforcement and governance' (FLEG). This contributed to a growing political consensus on the need to tackle illegal logging. A number of bilateral agreements were signed between producer and consumer countries aimed at improving collaboration to tackle the issue.[11]

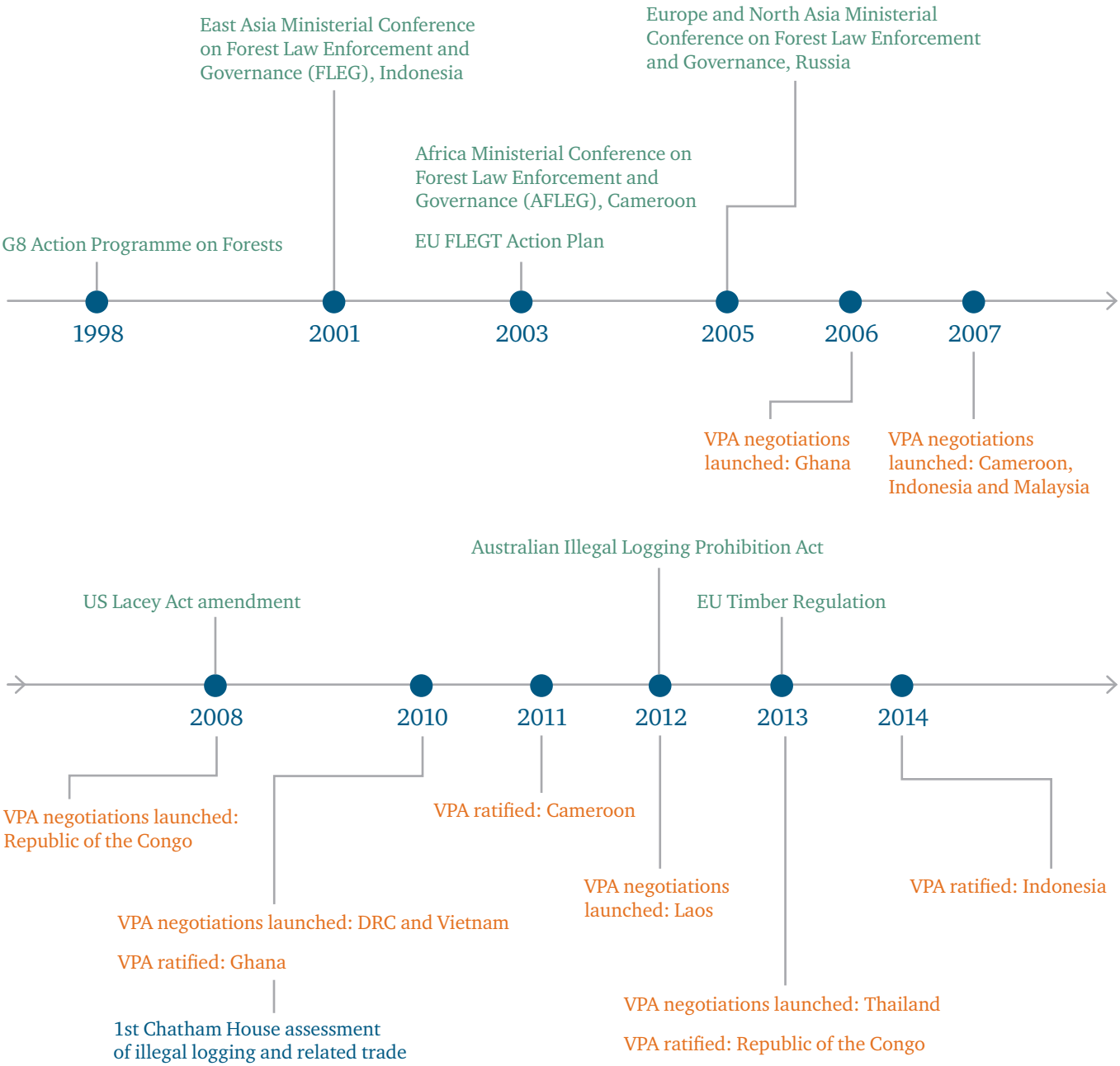
The EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, which arose out of this growing consensus, has framed the European approach to tackling illegal logging since 2003, when the plan was agreed.[12] Recognizing that the EU was an important market for illegal wood-based products, the plan sought to use trade as a lever to support governance improvements. It set out a range of measures aimed at preventing illegal imports into Europe and increasing demand for legal imports, while at

[10] Humphreys, D. (2006), *Logjam: Deforestation and the Crisis of Global Governance*. London: Earthscan; Colchester, M. et al. (2006), *Justice in the Forest: Rural Livelihoods and Forest Law Enforcement*. Bogor, Indonesia: Center for International Forestry Research (CIFOR); and Kaimowitz, D. (2005), 'Illegal logging: causes and consequences', paper delivered at the Forests Dialogue on Illegal Logging, Hong Kong.

[11] Humphreys (2006); and Overdevest, C. and Zeitlin, J. (2014), 'Assembling an experimentalist regime: Transnational governance interactions in the forest sector', *Regulation & Governance*, 8(1), pp. 22–48.

[12] For the full text of the EU FLEGT Action Plan, see http://ec.europa.eu/environment/forests/illegal_logging.htm.

Figure 5: Timeline of key developments



the same time supporting producer countries' efforts to improve legality in their forest sectors. Perhaps the two most significant developments have been the introduction of the EU Timber Regulation (EUTR) prohibiting illegal timber from being placed on the European market, which came into force in 2013;[13] and the elaboration of voluntary partnership agreements (VPAs), under which only timber licensed as legal (that is, with a FLEGT licence) can be imported into Europe from partner countries (see Box 1, below).

In parallel with European efforts, the US developed legislation prohibiting imports of illegal timber: in 2008 it amended the Lacey Act to this effect.[14] Australia introduced similar legislation in 2012, in the form of the Illegal Logging Prohibition Act.[15]

These policy developments in the EU, the US and Australia have been changing practices within the industry. At the same time they have served to strengthen the actions of many other countries and to maintain interest in the issue at the international level. Indeed, it has been argued that these various efforts amount to a global regime for tackling illegal logging (see Chapter 6).[16] It is, at best, a nascent regime, however; and it remains to be seen whether it can respond to the changes that have been taking place in the forest sector.

Changing modes of production

Since 2000 there have been significant changes in how timber is produced in many countries. In particular, there has been a marked increase in production from timber plantations as well as in the clearance of forests for other land uses.

Box 1: What is a FLEGT voluntary partnership agreement (VPA)?*

A VPA is a legally binding trade agreement between the EU and a timber-exporting country outside the EU. To date, six countries have signed VPAs with the EU, nine countries are negotiating agreements and another 11 have expressed interest in pursuing this approach. The VPA process has three stages:

Stage 1: Formal negotiations

The content of the VPA is determined through a series of negotiations between representatives of the partner country and the EU based on a multi-stakeholder consultation process in the partner country. The negotiations encompass the scope and details of a national definition of legality and a legality assurance system as well as forest governance commitments, which are included in annexes to the legal text of the agreement.

Stage 2: Ratification and implementation

Once the VPA has been ratified into law by both parties, the partner country starts developing the systems to control, verify and license legal timber. At the same time, it establishes an independent auditor to check that the legality assurance system is operating correctly. A joint implementation committee, made up of representatives from the partner country and the EU, is responsible for oversight and dispute resolution during this stage.

Stage 3: Licensing

During the licensing stage, each shipment of timber or timber products from the partner country to the EU must be accompanied by a FLEGT licence. The licence states that the shipment is legal in accordance with the requirements set out in the VPA. Shipments from a partner country not accompanied by a licence are to be rejected at the EU border.

* Further information about VPAs can be found at http://www.euflegt.efi.int/vpa.

[13] Regulation (EU) No. 995/2010, available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010R0995.

[14] For amendments to the Lacey Act from H.R.2419, Sec. 8204, see http://www.aphis.usda.gov/wps/portal/aphis/ourfocus/planthealth?1dmy&urile=wcm%3apath%3a%2Faphis_content_library%2Fsa_our_focus%2Fsa_plant_health%2Fsa_import%2Fsa_lacey_act%2Fct_lacey_act.

[15] The Illegal logging Prohibition Act 2012 entered into force in November 2012; under the act, it is a criminal offence to import illegal timber. The Illegal Logging Prohibition Amendment Regulation 2013 has been in effect since November 2014; it requires businesses to conduct due diligence and to assess and manage the risk of importing illegal timber (see http://www.agriculture.gov.au/forestry/policies/illegal-logging).

[16] Overdevest and Zeitlin (2014).

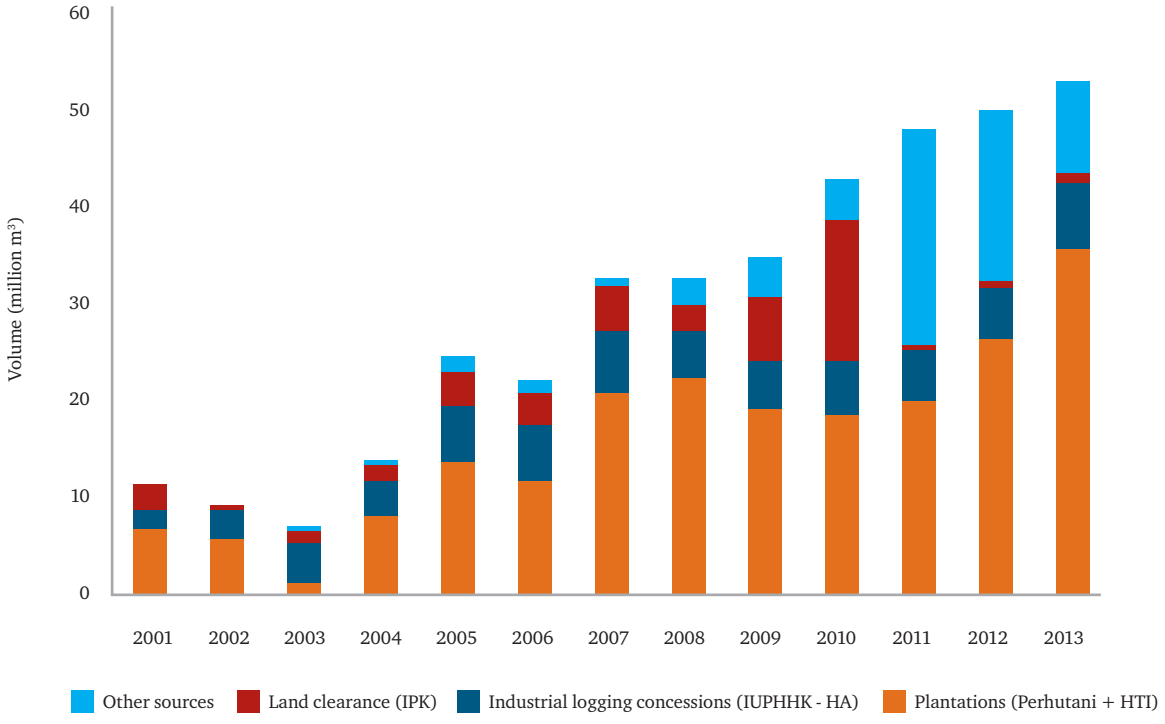
The increase in plantation production has been driven by commercial interests: there is strong market demand for cheap and reliable sources of plantation products. But it has also been promoted by government policies that see plantations as a means of maintaining supplies for forest industries, reducing pressure on natural forests and boosting rural development.[17]

Indonesia and Brazil both offer clear illustrations of this shift towards plantations. In 2006 the Indonesian government introduced a policy aimed at massively expanding the area of plantations in the country.[18] This is reflected in the country's timber production statistics, which show that the volume of timber from plantations more than quadrupled over the period 2001 to 2013 (see Figure 6).

In Brazil, there has been a shift in production away from natural forests and towards plantations: in 2012 plantations accounted for more than three-quarters of the country's commercial log production volume; this is the reverse of the situation in 1990, when three-quarters of Brazil's commercial log production came from natural forests.[19]

Another expanding source of timber is land cleared of forest for other uses – mainly for agriculture but also for mining and infrastructure development. The countries in which such conversion is now a major source of timber include Indonesia, Laos, Malaysia and Papua New Guinea.[20] Besides reflecting the growing demand for forest land for other uses, this development has resulted from weak land-use planning and poor governance of other sectors. Owing to these two

Figure 6: Timber production in Indonesia, 2001–13



Source: Indonesia Ministry of Forestry annual reports 2001–13.

[17] Indufor (2012), *Strategic review on the future of forest plantations*, report prepared for the FSC; Pöyry (2014), 'Reinventing plantation forestry', http://www.poyry.com/sites/default/files/imce/images/services/0021_reinventing_plantation_forestry_web.pdf; Kröger, M. (2012), 'Global tree plantation expansion: A review' in ICAS Review Paper Series No. 3

[18] Obidzinski, K. and Chaudhury, M. (2009), 'Transition to timber plantation based forestry in Indonesia: Towards a feasible new policy', in *International Forestry Review,* Vol. 11(1).

[19] Tomaselli, I. (2013), 'Trends in Brazil's production and international trade', presentation at the ITTO Annual Market Discussion in Gabon in November 2013.

[20] See Lawson (2014a) and the relevant country reports in the Chatham House assessment.

factors, conversion is a relatively cheap and easy source of timber; and much of the timber sourced this way is illegal (see Chapter 3).

The importance of plantations and forest conversion for many countries raises questions about the extent to which efforts to improve legality are effective in enhancing environmental sustainability within the sector. This issue is discussed further in Chapter 6.

Shifts in the timber trade

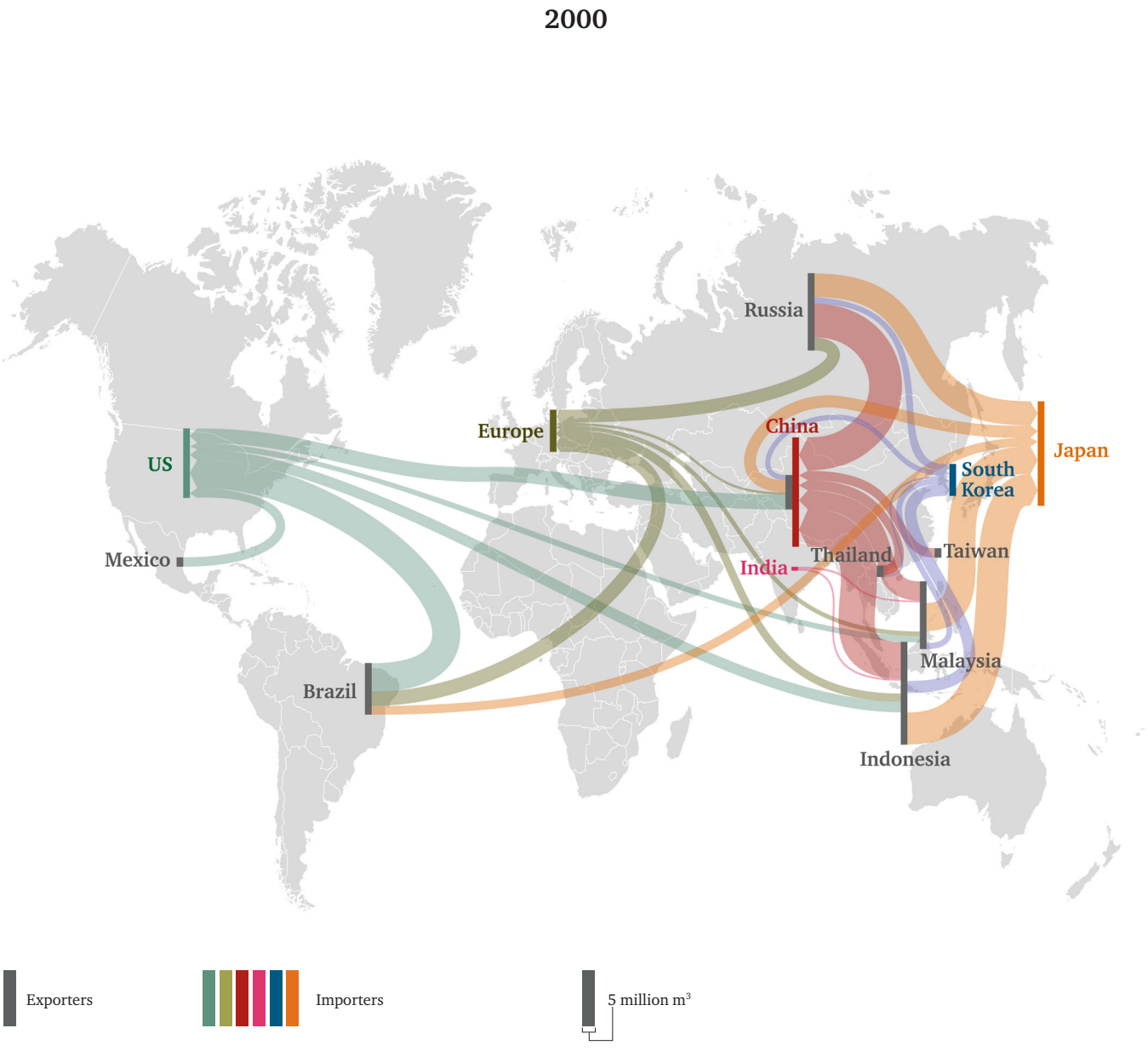
Over the past 15 years there has been rapid growth of markets in many developing and emerging economies (see Figure 7). Most prominent among these has been China, which is now the world's largest importer and consumer of wood-based products.[21] Besides its growing domestic market, China's demand for timber reflects its status as a processing hub for the world's forest sector. Consequently, an increasing proportion of wood-based products are being traded via China, which means there is much less direct trade between producer and other end-consumer countries (see Chapter 4).

Consumption of timber has also been increasing rapidly in other countries, for example Brazil, India and South Korea, as well as in many of the traditional producer countries. This has meant that domestic markets and trade within regions have grown significantly. In some countries – for example Brazil, Cameroon, the Democratic Republic of the Congo (DRC) and Ghana – the bulk of domestic timber production now supplies the domestic market (see also Chapter 3).

Owing to the growth of these 'new' markets, Europe, the US and other 'sensitive' markets account for a declining proportion of global consumption of timber (see Figure 14 in Chapter 4). For this reason, their efforts to tackle illegal logging will have less influence. Such efforts include the legislation introduced by the US, the EU and Australia to prohibit illegal timber imports. Furthermore, it has become more difficult to enforce this legislation: because of the shift in trade via processing countries, timber cannot be traced as easily.

[21] Wellesley, L. (2014a), *Trade in Illegal Timber: The Response in China*. London: Chatham House.

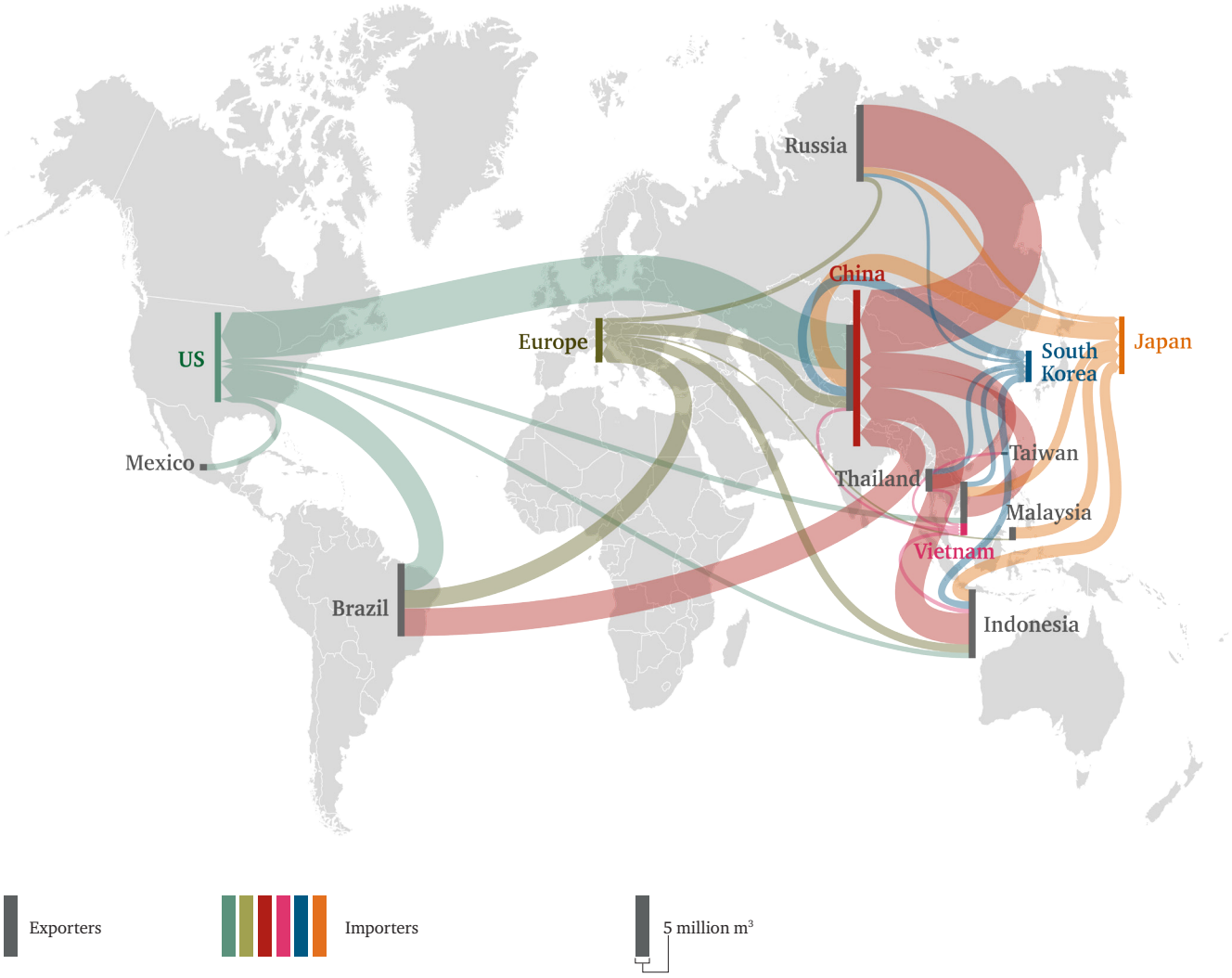
Figure 7: Changes in wood-based product trade, 2000 and 2013.



Note: Figure represents top five import flows (> 0.5 million m³ [RWE])

Source: Based on official national trade statistics for the UK, France, Netherlands (Eurostat), Trade Statistics of Japan, US (USITC Trade DataWeb), General Administration of Statistics of the People's Republic of China, The Customs Service of the Kingdom of Thailand, South Korea (Korea Customs Service), India (UN Comtrade) and official statistics for the imports of Vietnam's partner countries. Data for all countries also draw on UN Comtrade and on analysis by Chatham House.

2013


Russia
China
US
Europe
South Korea
Japan
Mexico
Taiwan
Thailand
Malaysia
Vietnam
Brazil
Indonesia
Exporters
Importers
5 million m³

3. Levels of Illegal Logging

Key points

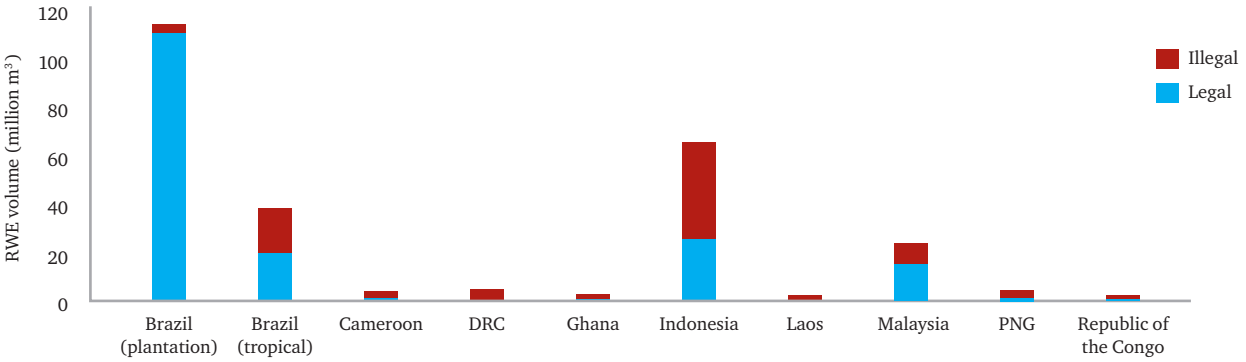
- Levels of illegal logging are estimated to have dropped in the first decade of this century. However, progress in tackling the problem has slowed since 2010 and the bulk of timber production in the countries assessed remains illegal.
- It is estimated that the nine producer countries in this assessment produced more than 80 million m^3 of illegal timber in 2013.
- In many of the countries assessed there have been improvements in large-scale concessions, although illegal practices continue to be widespread. Better enforcement and clarification of legal frameworks, particularly in VPA partner countries,[22] have been key in driving progress. Private-sector action has had a positive impact, too, partly owing to market demands.
- By contrast, there is scant evidence of progress in tackling burgeoning illegal activity in the small-scale sector. A radical change in approach – one aimed at rebalancing the sector in favour of small-scale producers – is needed.
- Meanwhile, growth in illegal forest conversion is negating some of the improvements in forest governance and progress in reducing illegal practices. Addressing this issue will require political commitment, as there are strong economic incentives for both illegal and legal conversion.

In 2010, when Chatham House last undertook an assessment, it concluded that in terms of production volume, illegal logging around the globe had fallen by nearly one-quarter between 2002 and 2009. Better enforcement was considered a major factor in this development, allowing more blatant forms of illegal logging to be tackled. However, it was noted at the time that entrenched types of illegal activity still needed to be addressed, and that this would require fundamental reforms of both policy and practice.

Since then, progress has been limited. The evidence suggests that levels of illegal logging have remained more or less unchanged in most of the countries assessed, while the situation has worsened in some countries. In nearly all of the countries, the bulk of timber production is still likely to be illegal (see Table 2). It is estimated that the nine producer countries included in this assessment produced more than 80 million m^3 of illegal timber in 2013.[23]

Of this total, most of the illegal timber comes from three

Figure 8: Estimated production of legal and illegal timber in the nine producer countries, 2013



Sources: Based on illegality estimates by Chatham House; and official national trade statistics for Brazil (AliceWeb); Cameroon (Association Technique Internationale des Bois Tropicaux [ATIBT]); Forestry Commission of Ghana; Indonesia (Badan Pusat Statistik); Malaysian Timber Industry Board and Department of Statistics Malaysia. Trade statistics for Laos, Republic of the Congo, the DRC and Papua New Guinea are based on corresponding import data for partner countries. Data for all nine producer countries also draw on UN Comtrade, ITTO production data and on analysis by Chatham House.

[22] 'Voluntary partnership agreement', see Chapter 2 for definition and explanation.

[23] Total illegal production was estimated on the basis of available statistics for national production, domestic consumption and exports, and Chatham House assessments of levels of illegal logging (sources are provided in the relevant country reports). Where information was lacking on the size of domestic consumption, an estimate was produced based on ITTO statistics.

major producer countries, partly reflecting the size of their forest sectors: Indonesia (accounting for about 50 per cent), Brazil (25 per cent) and Malaysia (10 per cent) (see Figure 8). The other countries in this assessment produce less timber overall but have much higher shares of illegal timber in their total production. For example, in the Democratic Republic of the Congo (DRC) nearly all timber comes from illegal sources.The persistent high levels of illegal logging reflect the fact that governance reforms have slowed in some countries, not least because some of the more challenging issues, such as corruption, are now being confronted. However, there are two other important reasons why illegal logging continues to predominate. First, informal small-scale production has been growing rapidly in many tropical countries and remains largely unregulated and uncontrolled. Second, widespread forest conversion has become a major source of timber. Owing to weak governance of land-use planning and management, much of this timber is illegal.

Types of illegal activity and the evidence for change

Large-scale logging concessions

Illegal practices among concessionaires are widespread and include the absence of management plans, over-harvesting, logging in prohibited areas, non-compliance with requirements to consult with or obtain the consent of local communities, and non-payment of fees and taxes. However, in many of the countries assessed, there have been improvements in the level of legal compliance, as indicated by the findings from the 2008 and 2013 expert perceptions surveys: in both surveys, a majority of participants considered that illegal practices among large-scale concessionaires had declined during the preceding year. Further evidence of improved legal compliance comes from the increase in legality verification and certification, most of which is accounted for by large-scale concessionaires (see Figure 9). In the case of Cameroon, the independent monitor reported a decline in illegal activities by concessionaires.[24]

These improvements are in part the result of better enforcement and, in the case of VPA partner countries, the elaboration of national legality assurance systems that have helped to clarify the legal framework and improve compliance.

At the same time, private-sector action has played an important role, in part driven by market demands. This is apparent from the different picture that emerges for companies exporting to 'sensitive' rather than 'non-sensitive' markets. Thus the level of certification and legality verification is much higher among companies that export significant volumes to Europe and the US. For example, in the Republic of the Congo, all certified forests are found in the northern part of the country, where concessions export

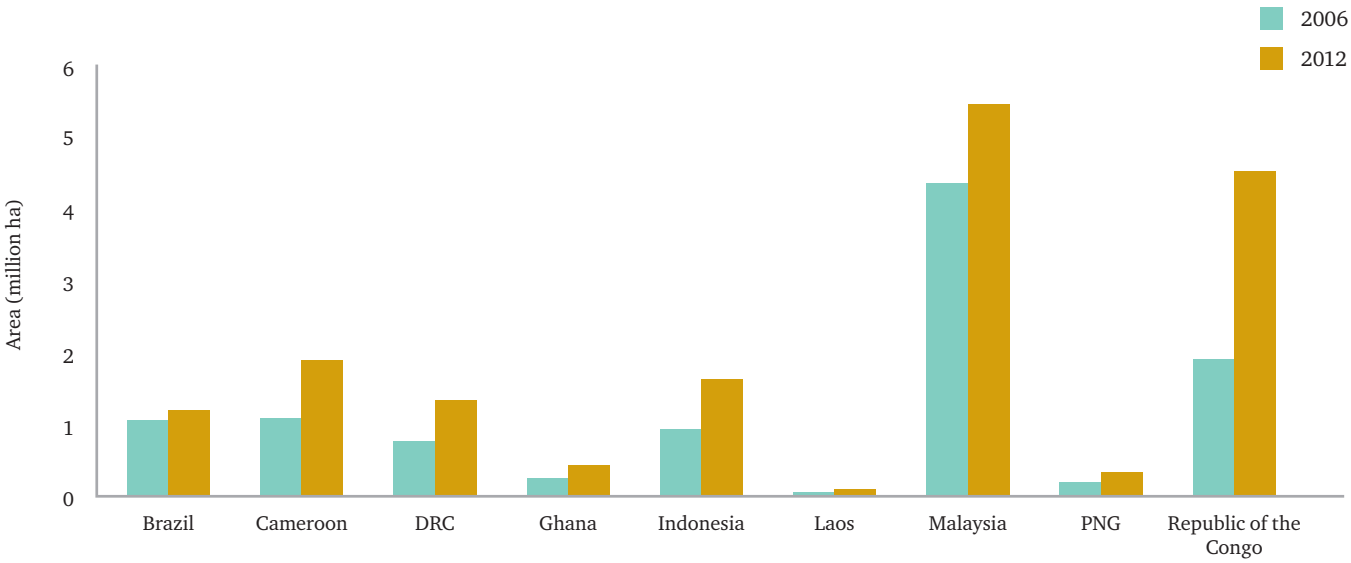
Table 2: Percentage of total timber production estimated to be illegal, 2013*

Brazil (tropical timber)	> 50%	→
Cameroon	65%	↘
DRC	>90%	↘
Ghana	70%	→
Indonesia	60%	→
Laos	80%	→
Malaysia	35%	→
PNG	70%	→
Republic of the Congo	70%	→

*See Annex 2 for details on how the estimates of illegality were calculated. The arrow represents the likely recent trend in the level of illegal logging, with a downward-pointing arrow showing that the situation has worsened; and a level arrow indicating no change.

[24] Resource Extraction Monitoring (REM) (2009), *Progress in tackling illegal logging in Cameroon*, Independent Monitor of Forest Law Enforcement and Governance (IM-FLEG).

Figure 9: Level of voluntary certification and legality verification in the nine producer countries, 2006 and 2012



Sources: FSC Forest Management (FM); FSC Controlled Wood (CW); Malaysian Timber Certification Scheme (MTCS); Indonesian Ecolabeling Institute (LEI); Société Générale de Surveillance (SGS) Verified Legally Compliant (VLC); SGS Verified Legal Origin (VLO); Bureau Veritas (BV) Origine et Légalité des Bois (OLB); Rainforest Alliance (RA) VLC; RA VLO.

mainly to the EU; concessions in the southern part of the country export largely to China.[25] This clearly suggests that market forces are influential. Owing to the growing proportion of exports to 'non-sensitive' markets – above all China but also India, Japan and South Korea – the need for further action in these countries is becoming more urgent.

Small-scale and artisanal production

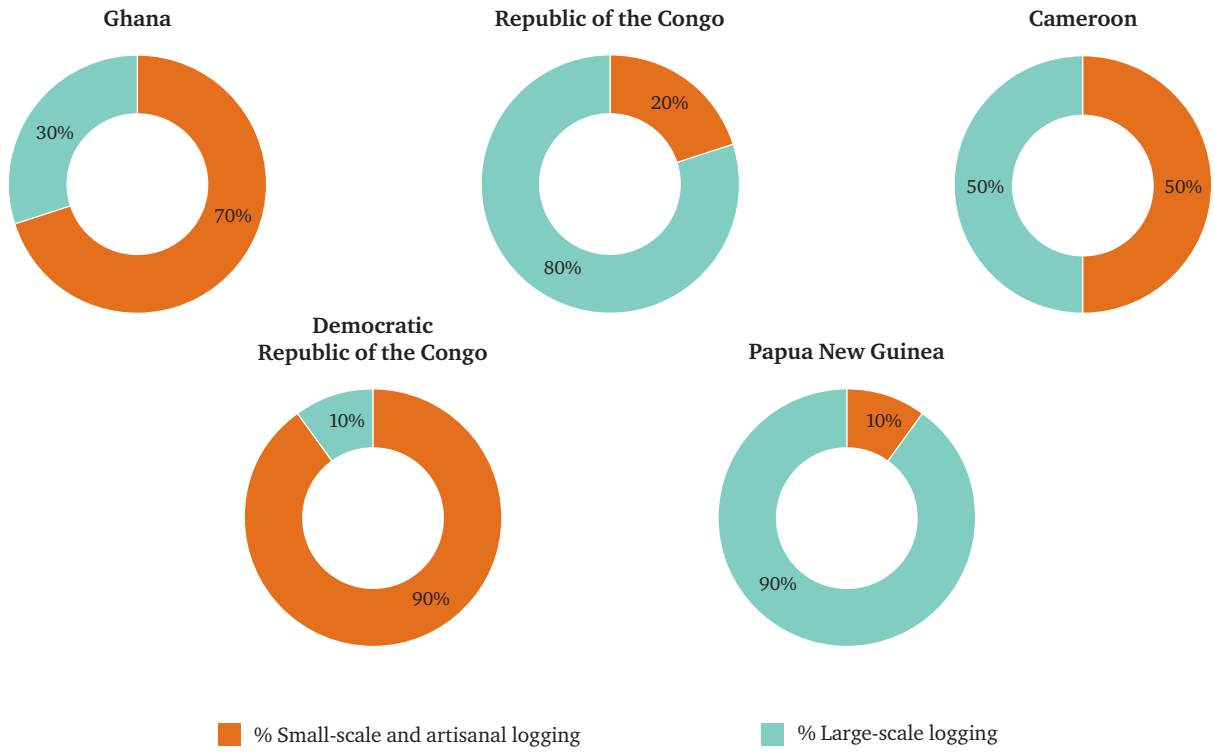
In contrast with large-scale concessions, there is little evidence of progress in tackling illegal small-scale and artisanal production. The majority of such producers remain outside the formal sector in many countries. In Cameroon, the DRC and Ghana, artisanal producers account for an estimated 50 per cent, 90 per cent and 70 per cent, respectively, of annual timber harvests[26] (see Figure 10); in all three countries, the vast majority of such production is illegal. The problem is by no means confined to this region, however: high levels of illegality have been documented among small-scale producers in Brazil, Indonesia, Papua New Guinea (PNG) and the Republic of the Congo.

Output by small-scale producers has grown significantly over the past two decades. For example, the production of chainsawn timber is thought to have doubled both in the DRC (since the mid-1990s)[27] and in Cameroon (since 2000).[28] This development has largely been in response to increased demand from urban markets within these countries, although limited livelihood opportunities in rural areas are also a contributory factor.

The growth in informal small-scale production has been undermining progress in tackling illegal logging in many countries. For example, while there have been improvements in the legality of logging concessions in Cameroon, the growth in illegal chainsaw milling has offset these. It is estimated that in 2000, 40 per cent of timber production in the country was illegal, of which one-quarter (or 10 per cent of the total) was by informal small-scale chainsaw millers.[29] However, by 2012 illegal production was estimated to have risen to 65 per cent, of which three-quarters (50 per cent of the total) was by chainsaw millers (see Figure 11).

[25] Lawson, S. (2014b), *Illegal Logging in the Republic of Congo*. London: Chatham House.
[26] The sources for these three figures are, respectively: Cerutti, P. and Lescuyer, G. (2011), *The domestic market for small-scale chainsaw milling in Cameroon: Present situation, opportunities and challenges*, CIFOR Occasional Paper No. 61. Bogor, Indonesia: CIFOR; Lescuyer, G. et al. (2014), *The domestic market for small-scale chainsaw milling in the Democratic Republic of Congo: Present situation, opportunities and challenges*, CIFOR Occasional Paper. No. 112. Bogor, Indonesia: CIFOR; Marfo, E. (2010), *Chainsaw Milling in Ghana: Context, Drivers and Impacts*. Wageningen: Tropenbos International; and Hoare, A. (2014a), *Illegal Logging and Related Trade: The Response in Ghana.* London: Chatham House.
[27] Lescuyer et al. (2014).
[28] Cerutti and Lescuyer (2011).
[29] Lawson, S. and MacFaul, L. (2010), *Illegal Logging and Related Trade. Indicators of the Global Response*. London: Chatham House

Figure 10: Proportion of production by artisanal/small-scale producers



Sources: Hoare (2014a); Lawson (2014b); Cerutti and Lescuyer (2011); Lescuyer. et al. (2014); Lawson, S. (2014c), *Illegal logging in Papua New Guinea*. London: Chatham House.

A key factor in the high levels of illegality is that in many countries the regulatory framework is not designed to support the small-scale sector. For small producers, the framework is often bureaucratic or complex, making legal compliance difficult; this is the case, for example, in Brazil and PNG. Elsewhere, policies are frequently not supportive of this part of the sector or may, in fact, actively discourage its development; such is the case in both Cameroon and Ghana, where artisanal chainsaw milling is prohibited. A particular problem in some countries is that large-scale operators abuse the legal provisions for small-scale production because of less stringent requirements for permit allocation or forest management in this part of the sector; this has been documented in Brazil, Cameroon, the DRC and Ghana.[30] Another factor may be the limited capacity of small-scale producers: in Brazil, for example, the involvement of smallholders in illegal operations has been partly due to their exploitation by logging companies that have taken advantage of smallholders' limited access to finance and information.[31]

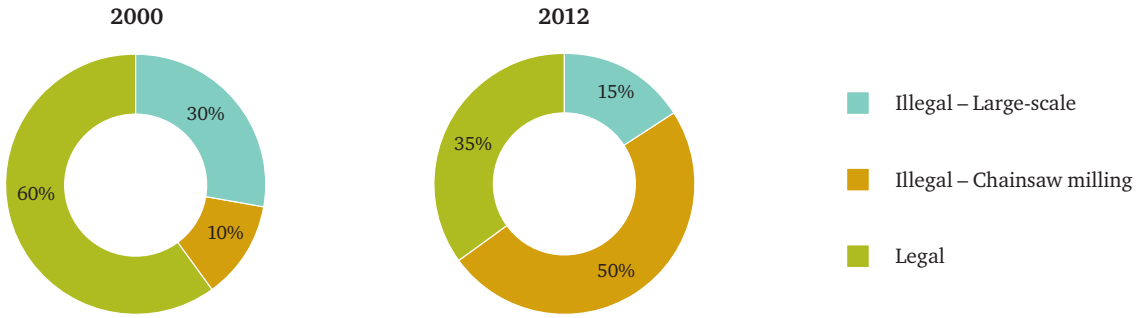
These issues are being addressed in many of the countries included in the Chatham House assessment. In Brazil, the processes by which smallholders can agree logging contracts have been simplified,[32] while in Indonesia considerable effort and resources have been put into helping small enterprises become certified under the country's national legality

[30] See the relevant country reports available at www.indicators/chathamhouse.org. With regard to all three African countries mentioned here, this problem is documented in Global Witness (2013a), *Logging in the Shadows: How Vested Interests Abuse Shadow Permits to Evade Forest Sector Reforms*. London: Global Witness. With regard to the DRC, see also Global Witness (2012), *The Art of Logging Industrially in the Congo: How Loggers are Abusing Artisanal Permits to Exploit the Democratic Republic of Congo's Forests*. London: Global Witness.

[31] Carneiro, M., Amaral Neto, M., Miranda, K. and Sablayrolles, P. (2011), 'Politicas Publicas e os Desafios para Consolidação do MFCF em Assentamentos e Unidades de Conservação na Amazônia Brasileira', in Cruz, H., Sablayrolles, P., Kanashiro, M., Amaral, M. and Sist, P. (eds), *Relação empresa / comunidade no contexto do manejo florestal comunitário e familiar: uma contribuição do projeto Floresta em Pé*. Brasilia: IBAMA, pp. 285– 307; and Humphries, S. and McGrath, D. (2014), 'Legal Compliance and Verification of Small-Scale Producers in Brazil's Forest Sector', unpublished report by Earth Innovation Institute commissioned by Chatham House.

[32] Wellesley, L. (2014), *Illegal Logging and Related Trade: The Response in Brazil*. London: Chatham House.

Figure 11: Estimated illegal timber production in Cameroon, 2000 and 2012



Note: The figures are based on the following assumptions: that half of national timber production is from informal chainsaw milling to supply the domestic market, as was the case during the period 2004–08 according to Cerutti and Lescuyer (2011); and that 30 per cent of production for exports is illegal, as estimated by the Chatham House expert perceptions survey, Chatham House wood-balance analysis and reports by independent monitors and NGOs (see Hoare, A. [2015a], *Illegal Logging and Related Trade: The Response in Cameroon.* London: Chatham House).

verification system.[33] In Ghana, there is a multi-year work programme aimed at finding solutions to the high level of illegal artisanal logging,[34] while the informal timber sectors of Cameroon, the DRC and Indonesia have all been the subject of extensive research aimed at improving their legality and sustainability.[35] In addition, the VPA processes have helped increase the attention paid to this sector. The VPAs of both Ghana and Cameroon identify their respective domestic markets as priorities for legal reform and technical support, while the VPA for the Republic of the Congo specifies that legislation on community forestry should be developed.

Progress, though, has been limited; and the sector remains too far down the list of overall priorities. For example, in the DRC there are still gaps and contradictions in the legal framework for artisanal production, while the draft legislation on community forestry took more than three years to be approved by the government and (at the time of writing) has yet to be implemented. In Cameroon, permits for artisanal producers were not included in the first iteration of the country's legality assurance system developed under the VPA. And in a number of countries, the participation of small-scale producers in the policy discussions initiated under the VPAs has not always been adequate.[36]

The limited success to date of the various initiatives to improve legal compliance among small-scale producers suggests that a more radical approach is required – namely, one aimed at rebalancing the sector in favour of these producers.

Forest conversion

In recent years, there has been growing awareness of widespread illegal logging linked to the clearance of forests for other land uses. This has been well documented in PNG (see Box 2), and it is a major issue in many of the other countries included in the Chatham House assessment.

As noted earlier, as much as half of all tropical timber traded internationally is estimated to come from the clearance of forests for other land uses; of that volume, nearly two-thirds is from illegal conversion. In Indonesia, at least 80 per cent of forest conversion for commercial agriculture between 2000 and 2012 was illegal; in Brazil, the figure was between 68 per cent and 90 per cent.[37] Similarly, in Laos, most timber is thought to have come from forest conversion in recent years, not least owing to infrastructure projects and plantation expansion; infractions of laws related to conversion are widespread in that country.[38] In Cameroon, forest conversion has been taking place as a result of infrastructure and mining developments as well as agricultural expansion – much of it without the required

[33] See, for example, the activities of the multi-stakeholder forestry programme funded by DFID at http://www.mfp.or.id/index.php/en/

[34] The EU-funded project 'Developing Alternatives for Illegal Chainsaw Milling through Multi-Stakeholder Dialogue' is being implemented by Tropenbos International in cooperation with the Ghana Forestry Commission and the Forest Research Institute of Ghana. See http://www.tropenbos.org/projects/addressing+chainsaw+milling+in+ghana+and+guyana+through+multi-stakeholder+dialogue.

[35] See, for example, the CIFOR Proformal project at http://www1.cifor.org/pro-formal/home.html.

[36] Lesniewska, F. and McDermott, C. (2014), 'FLEGT VPAs: Laying a pathway to sustainability via legality lessons from Ghana and Indonesia', *Forest Policy and Economics*, Vol. 48, pp. 16–23; Regional FLEGT Facility and ETTF (2013), *Regional Synthesis Report. Supporting and enabling the timber trade sector in Central Africa. Constraints and needs of forest SMEs. Cameroon, CAR, Congo Republic, DRC, Gabon*; Cerutti et al. (2014), 'Policy options for improved integration of domestic timber markets under the voluntary partnership agreement (VPA) regime', CIFOR Infobrief No. 80.

[37] Lawson (2014a).

[38] Saunders, J. (2014), *Illegal Logging and Related Trade: The Response in Lao PDR.* London: Chatham House.

permits. While conversion currently accounts for a relatively small proportion of Cameroon's timber-sector exports (an estimated 5 per cent), its share looks set to increase.[39]

This growth in illegal forest conversion is negating some of the improvements in forest governance and the reduction in other types of illegal practice. For example, in Indonesia, owing to the increase in timber from illegal conversion, the proportion of illegal timber being produced has not declined as dramatically (compared with the situation in 2000) as was expected. In 2010 Chatham House reported that illegal logging had accounted for an estimated 80 per cent of national production in 2000 but had halved to just 40 per cent in 2006 (although it was noted at the time that the latter figure did not take into account possible illegal forest conversion).[40] According to Chatham House estimates, the share of illegal production in Indonesia in 2012 was about 60 per cent, at least half of which was from illegal conversion (see Figure 12). Since governance of the land-use allocation process remains weak and forest conversion continues apace, levels of illegal logging in the country are unlikely to decline in the near future.

Brazil has achieved dramatic reductions in illegal forest conversion in the Amazon region over the past decade: deforestation rates fell by 70 per cent during the period 2004–11[41] thanks to strict law enforcement as well as the expansion of protected areas and policies to limit the production of various agricultural commodities.[42] Other countries, too, have been seeking to address illegal conversion. Indonesia, for example, has been reviewing existing permits for palm oil and mining concessions; and revisions have been made to the country's timber legality verification system to address some of the risks posed by illegal forest conversion. In Cameroon, the

Box 2: Use of Special Agricultural Business Leases (SABLs) in Papua New Guinea

More than 10 per cent of PNG's land area has been allocated for conversion under SABLs. The use of these leases expanded rapidly after 2007 following amendments to the Forestry Act that made it easier for them to be used to access timber. Evidence suggests that logging has been the prime motivation for most leaseholders. In 2012 more than 30 per cent of PNG's log exports from natural forests originated from the clearing of forests under SABLs.[a] Meanwhile, a review of 36 oil palm plantation projects under SABLs found that only five were likely to be implemented.[b]

In response to mounting international criticism questioning the legality of many SABLs, a moratorium on the issuance of such leases was announced in 2011 and a parliamentary Commission of Inquiry (COI) convened.[c] The COI found that only four out of 42 SABLs examined had proper landowner consent and viable agricultural projects.[d] It also found evidence of widespread fraud and misconduct by the government agencies responsible for issuing the leases.[e]

In June 2014 the government agreed to cancel all illegally issued SABLs and to revise those provisions of the Land Act that provide for SABLs to be granted. A year later, however, this decision has yet to be implemented; in the meantime, leaseholders are able to continue logging.[f]

[a] Lawson, S. (2014c), *Illegal logging in Papua New Guinea*. London: Chatham House.
[b] Nelson, P. et al. (2014), 'Oil palm and deforestation in Papua New Guinea', Conservation Letters, Vol. 7, Issue No. 3; article first published online on 27 August 2013 and cited in Lawson (2014c).
[c] *PNG Post Courier* (2011), 'Abal orders inquiry'; cited in Lawson (2014c).
[d] Pacific News Agency (2013), 'Reports on land leases reveal corruption: PM O'Neill'; cited in Lawson (2014c).
[e] Winn, P. (2012), *Up for Grabs: Millions of Hectares of Customary Land in PNG Stolen for Logging*. Ultimo NSW: Greenpeace Australia Pacific; cited in Lawson (2014c).
[f] Oakland Institute (2014), 'Papua New Guinea must act now to cancel SABL land leases and return land to local communities', available at http://www.oaklandinstitute.org/papua-new-guinea-must-act-now-cancel-sabl-land-leases. See also http://www.radionz.co.nz/international/programmes/datelinepacific/audio/20167884/png-landowners-look-ahead-after-sabl-order and https://pngexposed.wordpress.com/tag/sabl/.

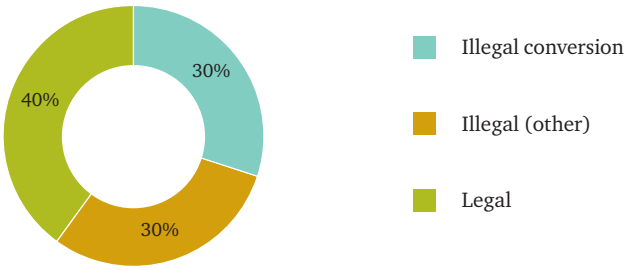
[39] Lawson (2014a); Hoare (2014a); and Hourticq, J. et al. (2013), *Deforestation trends in the Congo Basin: Agriculture*, World Bank Working Paper 1.
[40] Lawson and MacFaul (2010), pp. 94–95.
[41] Godar, J. et al. (2014), 'Actor-specific contributions to the deforestation slowdown in the Brazilian Amazon', *Proceedings of the National Academy of Sciences*, 111(43), 15591–96.
[42] Assunção, J., E Gandour, C. and Rocha, R. (2012), *Deforestation slowdown in the Brazilian Amazon: Prices or Policies?*, Climate Policy Initiative Working Paper (at http://climatepolicyinitiative.org/publication/deforestation-slowdown-in-the-legal-amazon-prices-or-policie/); Arima, E., Barreto, P., Araujo, E. and Soares-Filho, B. (2014), 'Public policies can reduce tropical deforestation: Lessons and challenges from Brazil', *Land Use Policy*, 41, pp. 465–73; and Nepstad, D. et al. (2014), 'Slowing Amazon deforestation through public policy and interventions in beef and soy supply chains', *Science*, 344 (6188), pp. 1118–23.

allocation of permits for timber extraction from development projects is currently under discussion within the context of VPA implementation.

However, both Indonesia and Cameroon need to make significant governance improvements to land-use planning in order to improve legal compliance on a large scale. A key challenge is that the economic incentives for forest conversion (both legal and illegal) are often very strong.

Indeed, the development strategies of many countries are based on a model of expanding agriculture and industry – such is the case in Cameroon and Laos. However, the example of Brazil shows that reducing conversion is possible. In order to achieve such a reduction, economic policy must consider forests and the forest sector as integral to a country's development strategy and there must be a high level of political commitment to implementing such an approach.

Figure 12: Estimated illegal timber production in Indonesia, 2012



Note: The 60 per cent estimate was calculated as follows (see also Table 2): production for export (estimated at 80 per cent of total timber production): wood-balance analysis suggests that there is at least a 25 per cent shortfall of legal timber supplies, while 38 per cent is estimated to come from illegal forest clearance (60 per cent of timber-sector products [~25 per cent of total exports] and 30 per cent of paper-sector products [~75 per cent of total exports]); production for the domestic market: half is estimated to be illegal (no quantitative estimates have been published, but high levels of illegality are noted in Cerutti et al. [2014] and Obidzinski, K. et al. [2014], 'Timber legality verification and small-scale forestry enterprises in Indonesia', CIFOR Infobrief No. 76).

4. Where is the Illegal Timber Going to?

Key points

- Direct trade with 'sensitive' markets has become much less important for nearly all of the producer countries assessed, owing to the growth of markets in developing and emerging economies. In particular, there has been substantial growth in exports to China: the volume of exports to China from the nine producer countries assessed rose from 12 million m^3 in 2000 to 34 million m^3 in 2013.
- Illegal imports into the 10 processing and consumer countries assessed were estimated at nearly 60 million m^3 in 2013, the equivalent of US$17 billion in terms of import value.
- In most of the countries assessed, the volume of imports of wood-based products at high risk of illegality declined during the period 2000–13. The three exceptions were China, India and Vietnam, in each of which the volume of illegal imports at least doubled.
- The proportion of illegal imports into all 10 processing and consumer countries assessed is estimated to have remained at just under 10 per cent throughout the period 2000–13.
- Indonesia, Russia, Malaysia and Brazil are the main sources of illegal wood-based products for the processing and consumer countries assessed. Much of this illegal timber is processed in China; for this reason, more highly processed products (such as furniture) from China account for an increasing proportion of illegal imports into consumer countries.

As noted in Chapter 2, the global timber trade has changed significantly since the turn of the century. From the perspective of producer countries, two big changes have occurred. First, their domestic markets have grown, as have those of neighbouring countries. Such markets are supplied primarily by informal, small-scale producers because they are easier to access, entail lower transportation costs and are subject to less strict requirements on product quality and evidence of legality.[43] In most countries, there is little information on the size of these markets, in part because of their informal nature. However, as highlighted in Chapter 2, the available data indicate that they are sizeable.

The second big change has been the growth of the Chinese market. Since 2000 China has emerged as the main processing hub for the world's forest sector (Vietnam is another important processor, albeit on a smaller scale). During the same period, China's domestic consumption of wood-based products has grown enormously; since the second half of the last decade, this has been the main reason for the continued growth in imports to China. Thus, while in 2008 China's imports and exports of timber-sector products stood at 45 million m^3 and 44 million m^3 of roundwood equivalent (RWE) respectively, in 2013 imports had risen to 94 million m^3 but exports to just 53 million m^3.

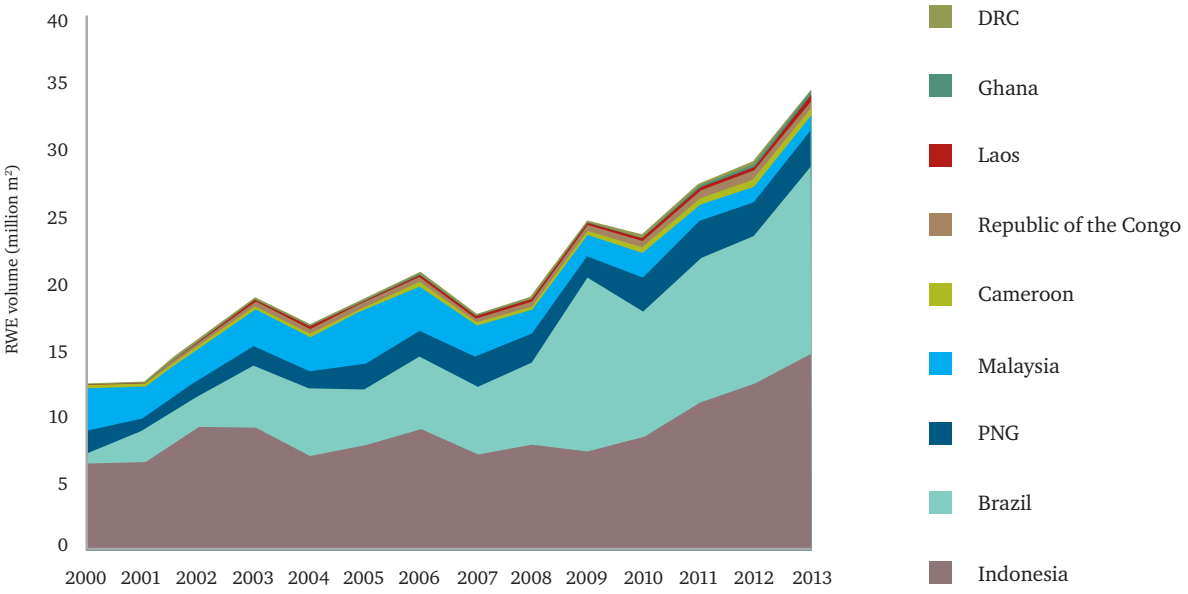
In parallel with this development, the volume of exports from the nine producer countries in the Chatham House assessment to China rose from 12 million m^3 in 2000 to 34 million m^3 in 2013 (see Figure 13). Correspondingly, the share of those countries' combined exports to China increased significantly – from 10 per cent of all exports in 2000 to 23 per cent in 2013.

These shifts in trade have meant that 'sensitive' markets have become much less important for nearly all the producer countries, at least in terms of direct trade (see Figure 14). For example, in the case of Ghana, the proportion of exports to 'sensitive' markets declined from 76 per cent to 24 per cent of the total during the period 2000–13. At the same time, the proportion of exports to other African countries increased from 10 per cent of the total to 30 per cent, while shipments to China rose from 1 per cent of the total to 20 per cent. Similarly, the proportion of Cameroon's exports to the EU declined from 70 per cent of the total to 40 per cent between 2000 and 2013, while the figure for the country's exports to China rose from 6 per cent to 33 per cent. (The one exception is Malaysia, which has seen a slight increase in exports to 'sensitive' markets because of the growth of paper exports to the EU.)

Owing to the growing proportion of exports destined for 'non-sensitive' markets, there is a risk that incentives for reform and tackling illegal logging will dwindle in those countries. The same is true for countries with voluntary partnership agreements (VPAs): although the agreements concluded cover all exports from partner countries, reduced

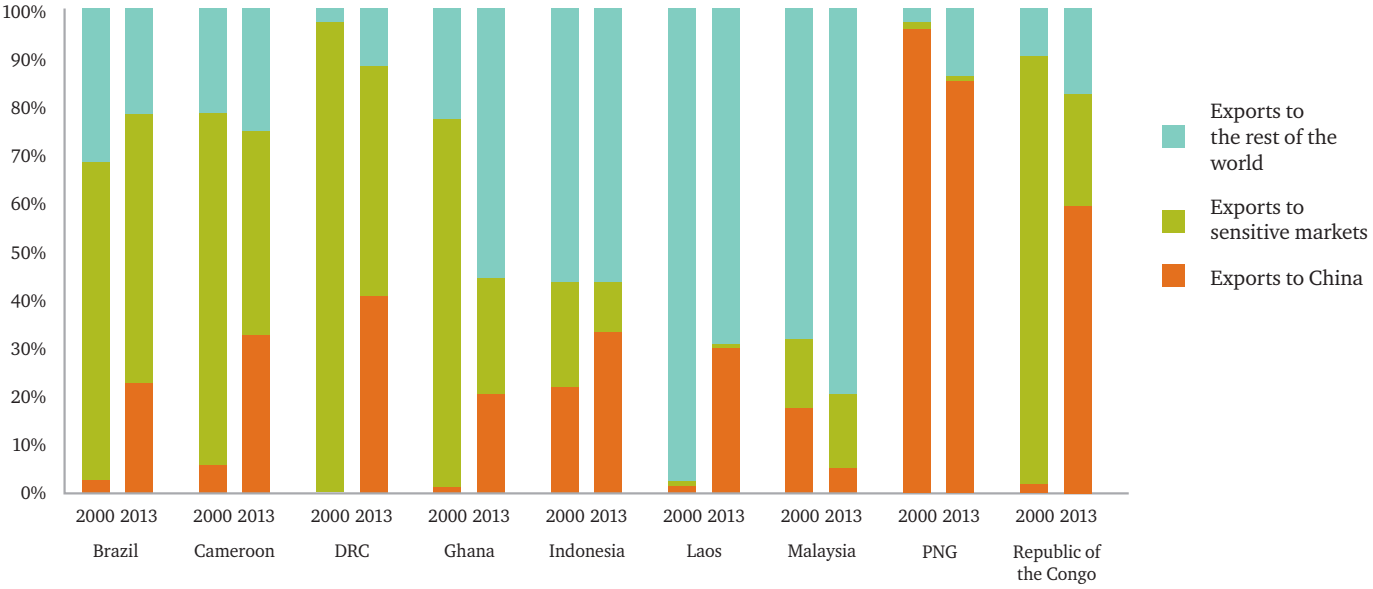
[43] See, for example, Cerutti et al. (2014); and WWF (2012), *Timber Movement and Trade in Eastern Democratic Republic of Congo and Destination Markets in the Region*.

Figure 13: Estimated RWE volume of exports of wood-based products destined for China from the nine producer countries, 2000–13



Sources: Based on official national trade statistics for Brazil (AliceWeb); Cameroon (Association Technique Internationale des Bois Tropicaux [ATIBT]); Forestry Commission of Ghana; Indonesia (Badan Pusat Statistik); Malaysian Timber Industry Board and Department of Statistics Malaysia. Trade statistics for Laos, Republic of the Congo, the DRC and Papua New Guinea are based on corresponding import data for partner countries. Data for all nine producer countries also draw on UN Comtrade and on analysis by Chatham House.

Figure 14: Estimated proportion of wood-based product exports to China and 'sensitive' markets from the nine producer countries (RWE volume), 2000–13



Sources: Based on official national trade statistics for Brazil (AliceWeb); Cameroon (Association Technique Internationale des Bois Tropicaux [ATIBT] for 2000–12 and UN Comtrade for 2013); Forestry Commission of Ghana; Indonesia (Badan Pusat Statistik); Malaysian Timber Industry Board and Department of Statistics Malaysia. Trade statistics for Laos, Republic of the Congo, the DRC and Papua New Guinea are based on corresponding import data for partner countries. Data for all nine producer countries also draw on UN Comtrade and on analysis by Chatham House.

trade with the EU and other 'sensitive' markets could lower incentives for developing and implementing national timber legality assurance systems. That said, Ghana has maintained momentum in implementing its VPA, despite the marked drop in its exports to the EU. This suggests that smaller trade incentives can still be influential and that other factors are important too – including domestic pressure (civil society has played an important role in Ghana) and the influence of donors.

Trends in illegal imports

Estimates of the likely levels of illegality for various products and trade flows are used below to indicate trends in the imports of the 10 processing and consumer countries in this assessment.[44]

The analysis suggests that the total volume of estimated illegal wood-based products imported into those countries grew during the period 2000–05, declined over the subsequent four years and then increased again (Figure 15). The drop in illegal imports was partly a consequence of the global financial crisis in 2008–09, which resulted in a downturn in global trade. From 2010 onwards trade picked up, including that in illegal wood-based products, which reached nearly the same level as in 2005 – the peak year before the financial crisis. Illegal imports into the 10 processing and consumer countries were estimated at nearly 60 million m^3 in 2013, compared with 46 million m^3 in 2000; in terms of import value, that is the equivalent of US$17.3 billion and US$9.5 billion, respectively.

However, as is evident from Figure 15, nearly all of this increase is accounted for by the rise in illegal imports into China, which have almost doubled in volume during the period 2000–13: from 17 million m^3 to 33 million m^3. India and Vietnam, too, have seen significant growth in illegal imports, although the volumes are much smaller: such imports into India are estimated to have increased from 1 million m^3 to 4 million m^3 over the same period, and those into Vietnam from 1 million m^3 to 2 million m^3. For all the other countries assessed, illegal imports are estimated to have declined or stayed at about the same level. Japan has witnessed a particularly marked decline, as has the US since 2005 (illegal imports are estimated to have increased in the preceding five years).

The proportion of total trade in wood-based products estimated to be illegal has declined for most countries (see Figure 16). This has been most marked for the 'non-sensitive' markets, including those countries that have seen an increase in the absolute volume of such imports. Thus, in the case of China, the proportion of illegal imports is estimated to have declined from 26 per cent to 17 per cent of the total during the period 2000–13, in India from 27 per cent to 17 per cent, and in Vietnam from 22 per cent to 18 per cent. Over the same period, the proportion of illegal imports is estimated to have declined in most of the 'sensitive' markets (France, the Netherlands and the UK) included in this assessment. The exception is the US, which has seen a slight increase – from 2 per cent to 3 per cent between 2000 and 2013.

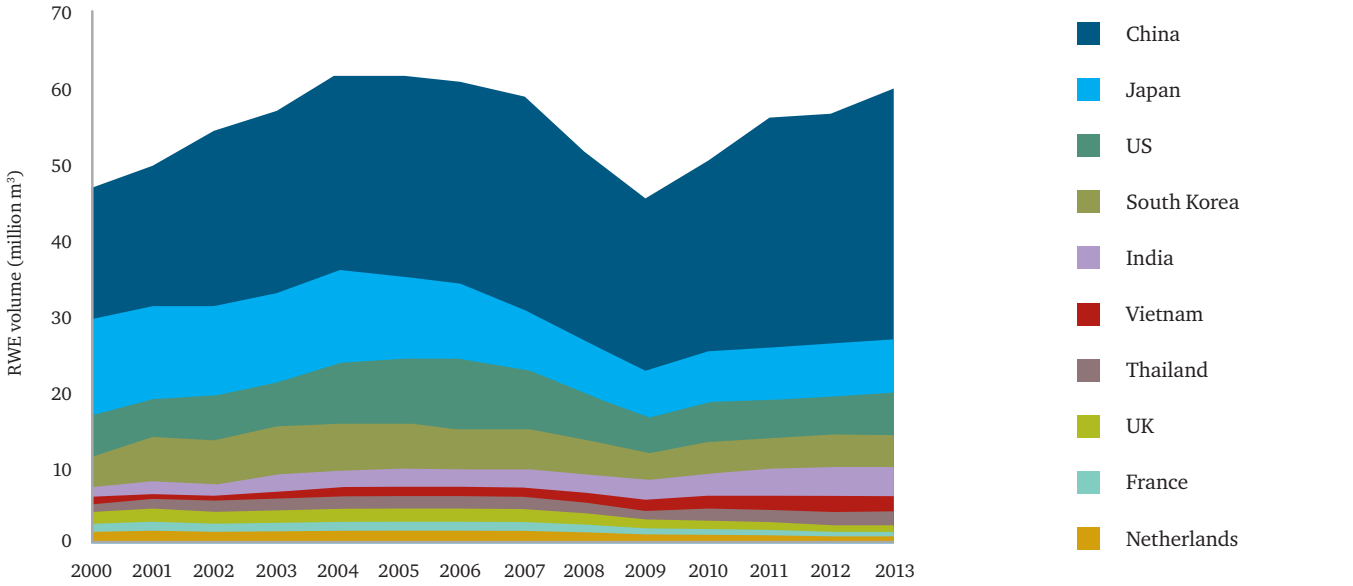
In most countries, the bulk of the reduction took place before 2009. As the global economy has recovered from the financial crisis, estimated illegal imports have risen more or less in line with the overall increase in trade. Thus, the proportions of illegal imports have levelled off.

Taking into account trade into all 10 processing and consumer countries, it is estimated that the proportion of illegal imports stayed at roughly the same level – about 9 per cent – during the period 2000–13. Although national data indicate that countries are becoming more selective, the impact of that development is cancelled out by the shift, and overall growth, in imports into countries with higher percentages of illegal imports, most notably China. For its part, China has significantly decreased the proportion of its illegal imports, but this metric remains significantly higher than that for many other countries, while its market share has increased markedly.

There is a slight difference in the proportions of illegal timber-sector exports and paper-sector exports (see Figure 17). While the latter has been on an upward trajectory, the former has remained more or less unchanged, with just a slight decline since 2008. The estimated increase in imports of illegal paper-sector products reflects, in part, the assumptions on which the relevant estimates have been based. Thus, in the case of the illegal conversion of forest to plantations, all production from such plantations was assumed to be illegal if there had been no formal process of 'legalization'. Although in some countries there have been improvements in the licensing procedures for establishing

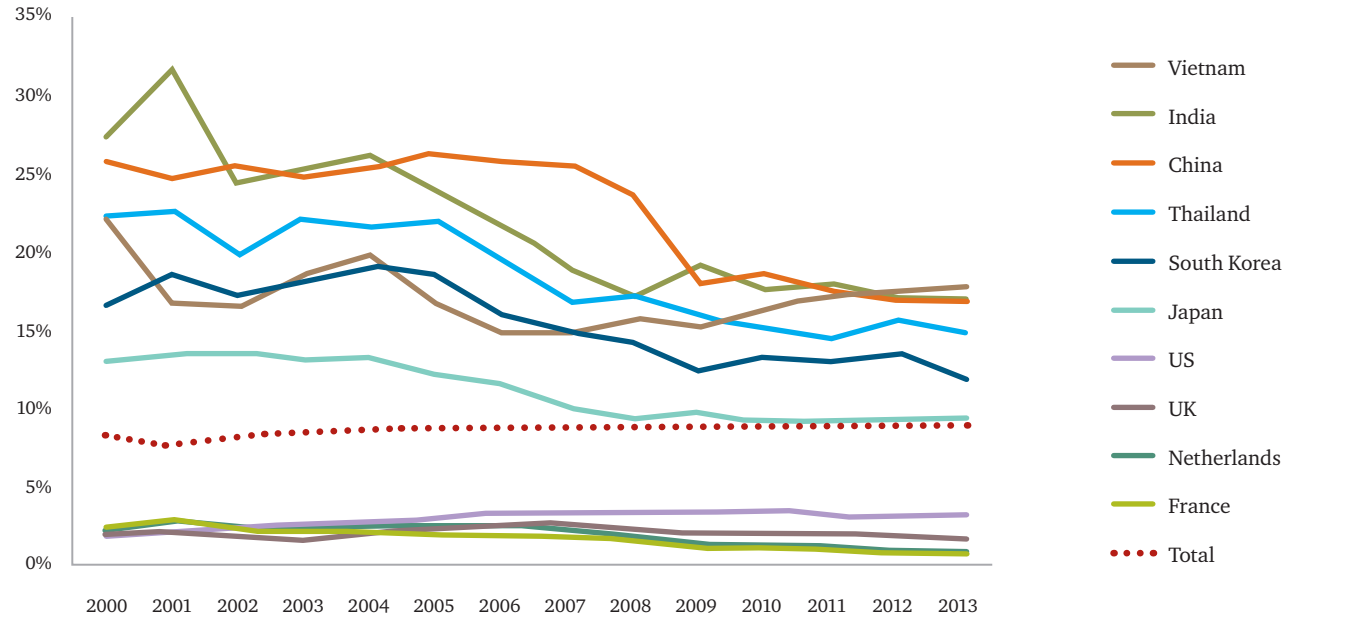
[44] Hoare (2014b), *Methodology for Estimating Levels of Illegal Timber- and Paper-sector Imports: Estimates for China, France, Japan, the Netherlands, the UK, the US and Vietnam*. London: Chatham House; and Lawson, S. (2014d), *Methodology for Import-source Estimates of Illegally Sourced Wood Imports: Thailand, South Korea and India*. London: Chatham House.

Figure 15: Estimated RWE volume of imports of wood-based products at high risk of illegality into the 10 processing and consumer countries, 2000–13



Sources: Based on illegality estimates by Chatham House; and official national trade statistics for the UK, France, Netherlands (Eurostat), Trade Statistics of Japan, US (USITC Trade DataWeb), General Administration of Statistics of the People's Republic of China, The Customs Service of the Kingdom of Thailand, South Korea (Korea Customs Service), India (UN Comtrade) and official statistics for the imports of Vietnam's partner countries. Data for all countries also draw on UN Comtrade and on analysis by Chatham House.

Figure 16: Estimated percentage of imports of wood-based products at high risk of illegality into the 10 processing and consumer countries (by RWE volume), 2000–13



Sources: Based on illegality estimates by Chatham House; and official national trade statistics for the UK, France, Netherlands (Eurostat), Trade Statistics of Japan, US (USITC Trade DataWeb), General Administration of Statistics of the People's Republic of China, The Customs Service of the Kingdom of Thailand, South Korea (Korea Customs Service), India (UN Comtrade) and official statistics for the imports of Vietnam's partner countries. Data for all countries also draw on UN Comtrade and on analysis by Chatham House.

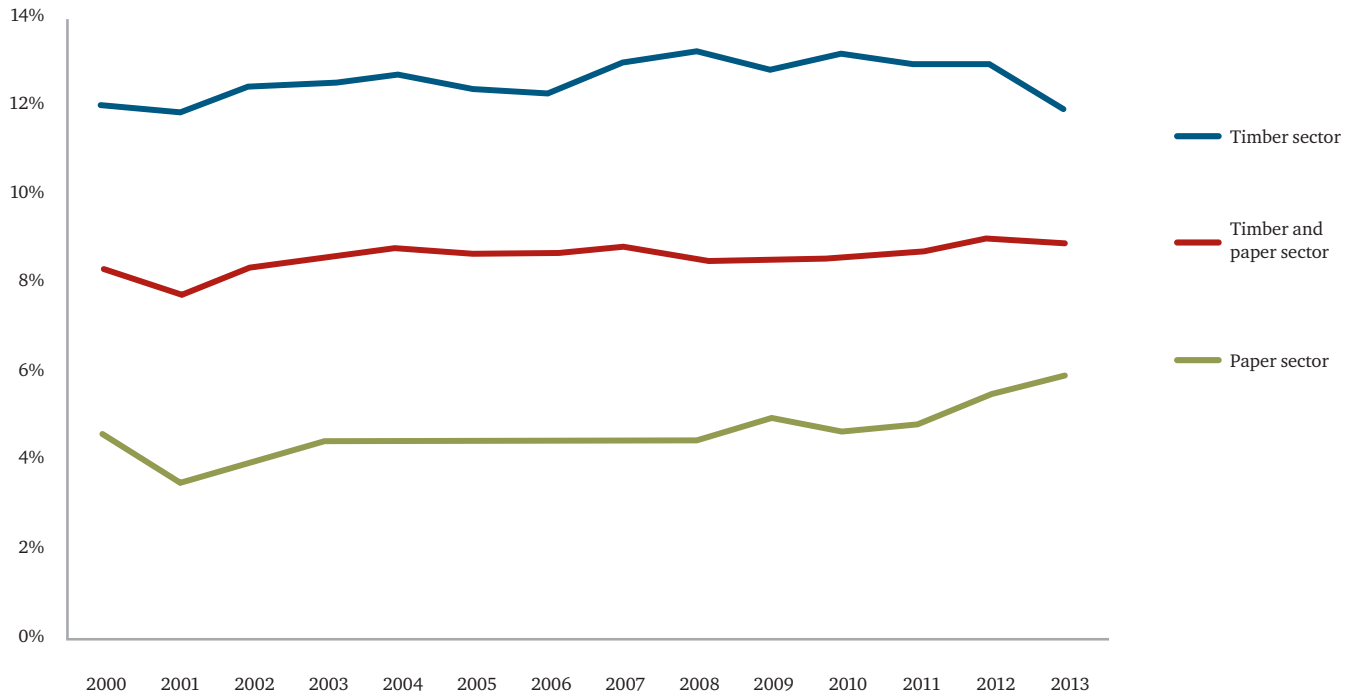
plantations in recent years, these newer plantations are not yet producing timber or pulp, and for this reason it was assumed that illegality levels have not declined markedly.

Only a small number of countries have processes that are in place and sufficiently well implemented to address past illegalities in the establishment of plantations. While it is not possible to address all illegalities committed earlier, formal processes should be established for the review of plantation permits, as well as transparent decision-making processes to determine what actions should subsequently be taken. Such processes could entail renegotiating permits, applying sanctions (such as fines or imposing requirements to reforest land or implement social development projects) and/or granting amnesties.[45]

Changes in countries exporting illegal products

For the three processing countries in this assessment (China, Thailand and Vietnam), the two main sources of illegal products are Indonesia and Russia (see Figure 18). Such imports from Indonesia decreased until 2007, reflecting lower levels of illegal logging since the turn of the century. The estimated increase in illegal imports after 2007 is due to growth in paper-sector exports, which have involved relatively high levels of illegal forest conversion (for the establishment of new plantations). Since 2000 Russia's role as a source of illegal imports has grown considerably, in parallel with the rapid increase in its total exports of wood-based products during the period 2000–13. Implementation of the Russian Roundwood Act, which was approved in December 2013, could help tackle some of this illegal trade since it provides for

Figure 17: Estimated percentage of timber- and paper-sector imports at high risk of illegality into the 10 processing and consumer countries (by RWE volume), 2000–13



Sources: Based on illegality estimates by Chatham House; and official national trade statistics for the UK, France, Netherlands (Eurostat), Trade Statistics of Japan, US (USITC Trade DataWeb), General Administration of Statistics of the People's Republic of China, The Customs Service of the Kingdom of Thailand, South Korea (Korea Customs Service), India (UN Comtrade) and official statistics for the imports of Vietnam's partner countries. Data for all countries also draw on UN Comtrade and on analysis by Chatham House.

[45] See also Lawson (2014a), pp. 88–89.

a system to document and trace roundwood.[46] Other countries that have become significant sources of illegal products for the processing countries are PNG, the Solomon Islands, Myanmar and Laos. This development is due to the growth in trade with these countries as well as the lack of progress in lowering levels of illegal logging there.

With regard to the seven consumer countries, Indonesia is one of the key source countries of illegal products (see Figure 19). However, owing to the reduction in illegal logging noted above, the country has becomome less significant in this respect. At the same time, volumes of illegal imports from China are increasing owing to the growth of overall imports from that country: the total volume of illegal Chinese products imported into the seven consumer countries is estimated to have more than doubled during the period 2000–13. This growth has been particularly marked in the UK and the US, for which China is now estimated to be the main source of illegal imports – accounting for more than 60 per cent of the volume of such imports into each of those countries (see Figure 20).

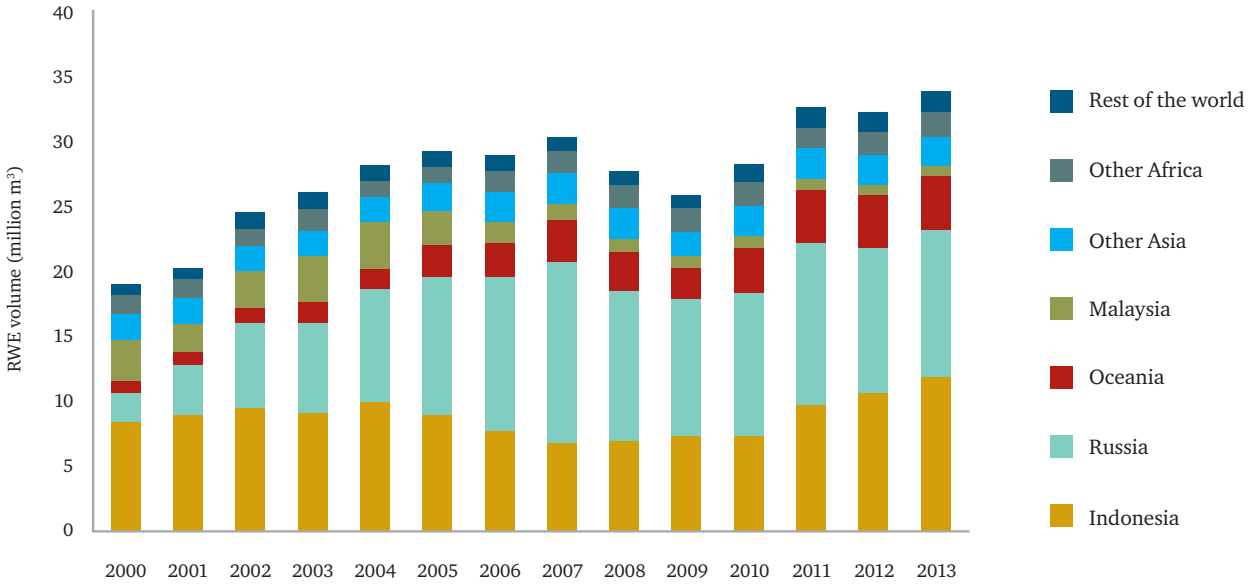
Malaysia, Myanmar and Russia, too, supply significant volumes of illegal products to the consumer countries assessed. Besides China, the main markets for illegal exports from those countries are India, Japan, South Korea and Thailand.

What stands out from the data presented in figures 18 and 19 below is the predominance of three countries as sources of illegal products: China, Indonesia and Russia. This highlights the need for more concerted action in those countries to tackle illegal logging.

Changes in types of product being traded

Owing to the rise of China as a processing hub for the global timber trade, there has been a shift in the relative importance of the types of product – both legal and illegal – being traded. Thus, Chinese imports of relatively unprocessed products, such as logs and sawnwood, have increased. In 2000 China imported 14 million m^3 of logs and 4 million m^3 of sawnwood (accounting for 17 per cent and 4 per cent of all countries' imports of these products, respectively); in 2013 those figures had risen to 45 million m^3 and 24 million m^3 (58 per cent and 25 per cent). During the same period, Chinese exports of more highly processed products to consumer countries have grown, including those of panels, joinery and furniture.

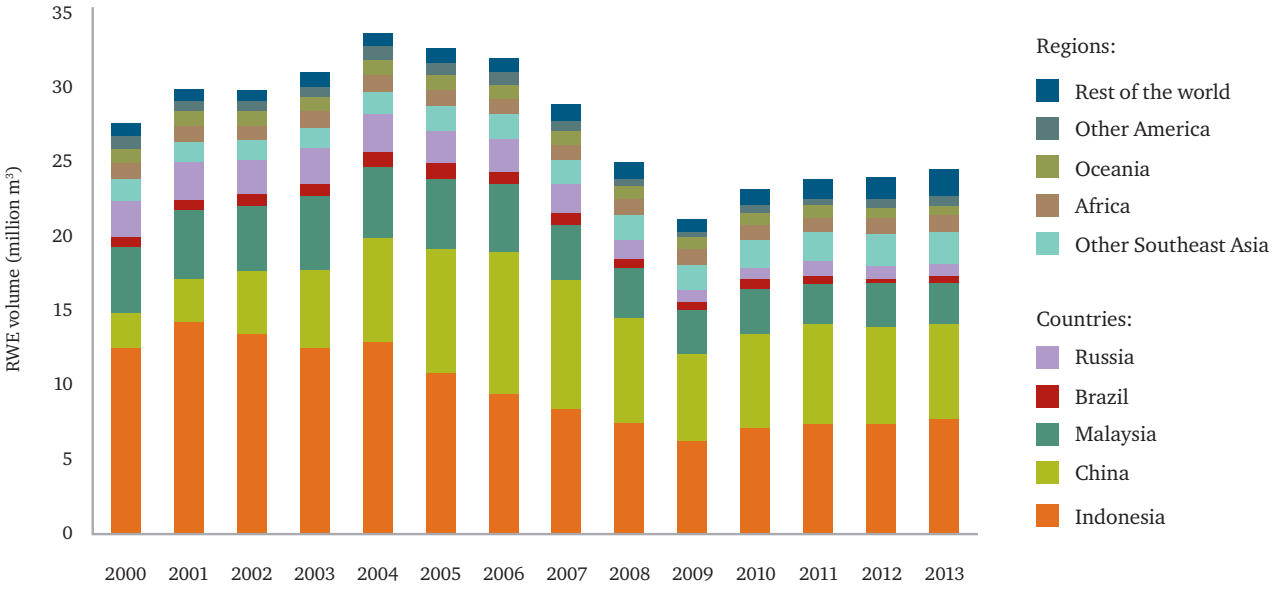
Figure 18: Estimated RWE volume of imports at high risk of illegality into the three processing countries by source country or region, 2000–13



Sources: Based on illegality estimates by Chatham House; and official national trade statistics: General Administration of Statistics of the People's Republic of China, the Customs Service of the Kingdom of Thailand, and official statistics for the imports of Vietnam's partner countries. Data for all countries also draw on UN Comtrade and on analysis by Chatham House.

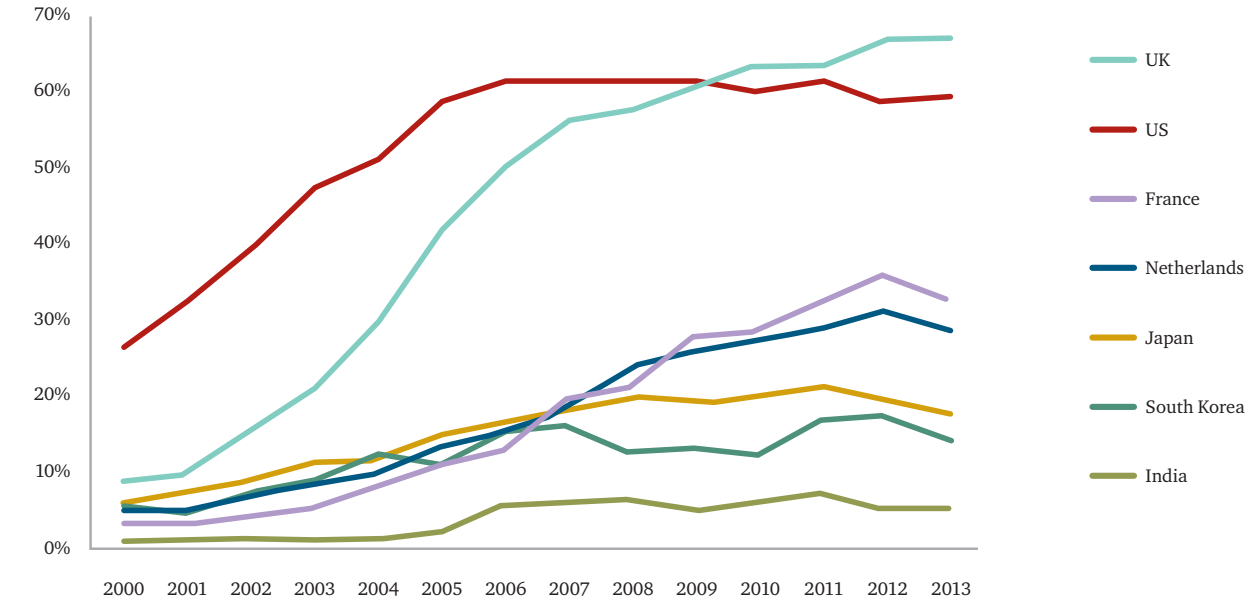
[46] Forest Trends (2014), 'Analysis of Russian Roundwood Act', at http://www.forest-trends.org/publication_details.php?publicationID=4453.

Figure 19: Estimated RWE volume of imports at high risk of illegality into the seven consumer countries by source country or region, 2000–13



Sources: Based on illegality estimates by Chatham House; and official national trade statistics for the UK, France, Netherlands (Eurostat), Trade Statistics of Japan, the US (USITC Trade DataWeb), South Korea (Korea Customs Service) and India (UN Comtrade). Data for all countries also draw on UN Comtrade and on analysis by Chatham House.

Figure 20: Proportion of wood-based product imports at high risk of illegality from China into the seven consumer countries (by RWE volume), 2000–13



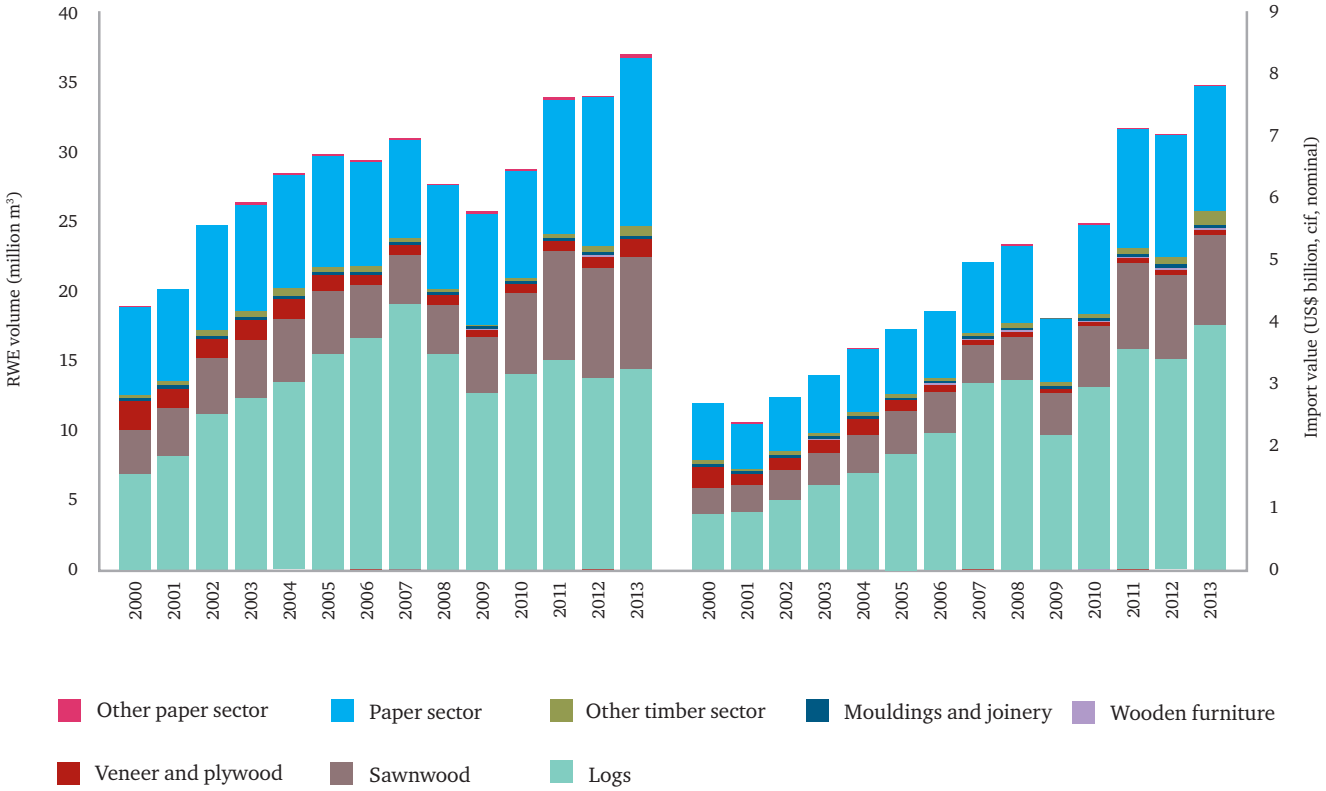
Sources: Based on illegality estimates by Chatham House; and official national trade statistics for the UK, France, Netherlands (Eurostat), Trade Statistics of Japan, the US (USITC Trade DataWeb), South Korea (Korea Customs Service) and India (UN Comtrade). Data for all countries also draw on UN Comtrade and on analysis by Chatham House.

These trends are reflected in the patterns of trade in illegal products. In 2013 logs accounted for the majority of illegal imports into the three processing countries (China, Thailand and Vietnam). Illegal sawnwood imports have increased in recent years, too (see Figure 21). This largely reflects a shift by a number of producer countries away from exporting raw logs in order to increase domestic processing, for example through introducing log export bans or quotas, or by raising taxes on log exports. Paper-sector products are the other main type of illegal import, especially wood chips for pulp manufacturing. This reflects not only the large volume of this trade but also the fact that illegal forest conversion accounts for a significant proportion of such products.

As noted above, the reason for much of the recent growth in timber-sector imports into China is increased demand in its domestic market. In particular, since 2010 there has been a surge in imports of high-value hardwood logs – above all, rosewood species (see Box 3).[47]

The shift towards the processing of timber-sector products in third countries – above all, China – is also reflected in the types of illegal product being imported into the consumer countries. Thus, the proportion of illegal imports of logs, sawnwood, veneer and plywood has declined since 2000, while that of furniture has increased (particularly in terms of import value). The value of illegal imports of furniture into the consumer countries doubled during the period 2000–13 (see Figure 23). The UK and the US are among the main destinations for illegal imports of furniture, as both import large quantities of

Figure 21: Estimated RWE volume and value of imports at high risk of illegality into the three processing countries by product type, 2000–13



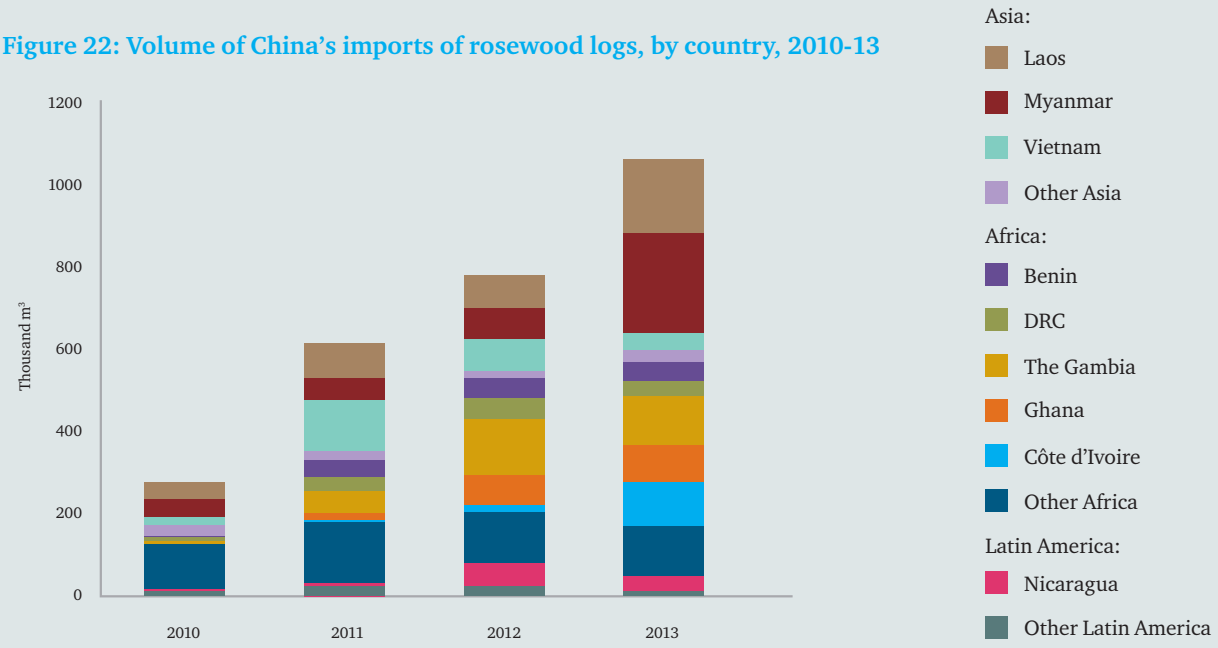
Sources: Based on illegality estimates by Chatham House; and official national trade statistics: General Administration of Statistics of the People's Republic of China, the Customs Service of the Kingdom of Thailand, and official statistics for the imports of Vietnam's partner countries. Data for all countries also draw on UN Comtrade and on analysis by Chatham House.

[47] Sun, X. (2014), *Forest Products Trade between China and Africa. An Analysis of Import and Export Statistics*. Washington, DC: Forest Trends (see Figure 10b, p. 11, and Box 1, p. 16).

Box 3: China's demand for rosewood

Demand for rosewood in China has grown rapidly in recent years, as reflected in the huge increase in the value of this type of wood. During the period 2005–12, the market price of one species, *Dalbergia cochinensis*, grew 15-fold, to US$15,000 per m³.[a] Rosewood, of which there are some 40 species, is sourced from throughout the Mekong region in Southeast Asia and increasingly from Africa. Its high value means that illegal logging and smuggling are rife.[b]

Figure 22: Volume of China's imports of rosewood logs, by country, 2010-13



Source: General Administration of Customs of the People's Republic of China.

During the period 2010–13, imports of rosewood into China more than quadrupled – from 240,000 m³ to over 1 million m³. While many source countries are striving to control the trade, they are struggling in the face of this large and lucrative business which is often facilitated by high-level corruption.

These valuable species have huge potential to provide the basis for a sustainable industry. However, because of weak governance in many source countries and the few available means to control illegal imports into China, realizing that potential is not feasible in the short term. An immediate priority must be to reduce demand for these species.

[a] Wenbin, H. and Sun, X. (2013), *Tropical Hardwood Flows in China: Case Studies of Rosewood and Okoumé*. Washington, DC: Forest Trends.
[b] See, for example, Global Witness (2015), *The Cost of Luxury: Cambodia's Illegal Trade in Precious Wood with China*. London: Global Witness; Environmental Investigation Agency [EIA] (2014), 'Myanmar's Rosewood Crisis: Why key species and forests must be protected through CITES'; EIA (2014), *Routes of Extinction: The Corruption and Violence Destroying Siamese Rosewood in the Mekong*. London: EIA; Singh, S. (2013), *The Socio-Economic Context of Illegal Logging and Trade of Rosewood Along the Cambodian-Lao Border*. Washington, DC: Forest Trends; and Global Witness and EIA (2010), *Investigation into the Global Trade in Malagasy Precious Woods: Rosewood, Ebony and Pallisander*. Washington, DC: Global Witness and EIA.

furniture – predominantly from China. Furniture imports are estimated to have accounted for 8 per cent of the UK's illegal imports of wood-based products (in RWE volume) in 2000, rising to 20 per cent in 2013. In the case of the US, the figure rose from 23 per cent in 2000 to 30 per cent in 2013. Illegal imports of pulp and paper have also risen, due to increased trade and the relatively high levels of illegality for some sources, such as Indonesia.

Owing to the increase in imports of processed goods and the growing number of products imported via processing countries rather than directly from producer countries, it is becoming more difficult to trace timber and thereby ensure its legality. This, in turn, makes compliance and enforcement of legislation in the EU, the US and Australia more challenging.

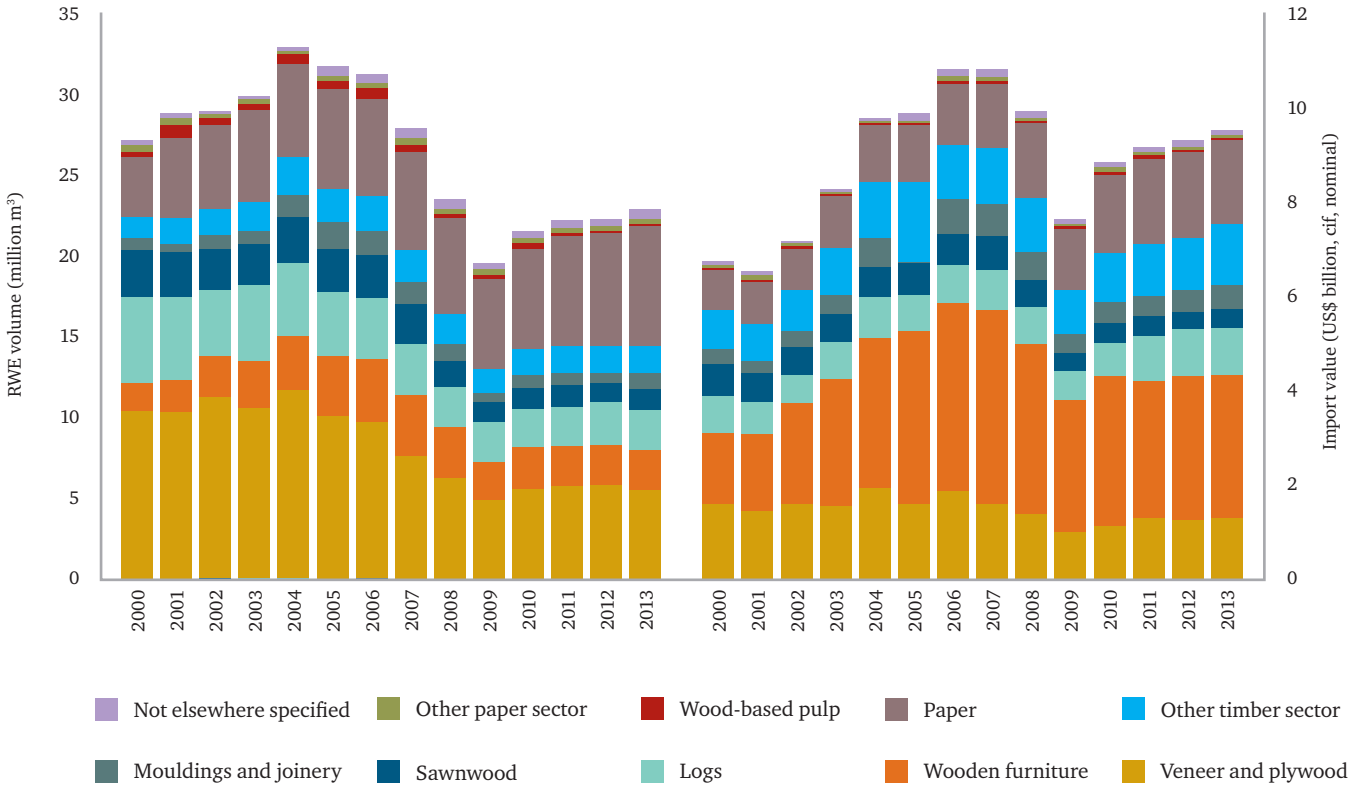
Changes in types of product being traded

What is driving these trends? In particular, to what extent have the estimated declines in the proportion of illegal imports been due to the purchasing decisions of companies in the processing and consumer countries?

One important reason for the decline in the proportion of illegal imports has been the reduction in illegal logging in some countries. But another significant factor has been the increase in the proportion of timber being sourced from low-risk countries. For example, in the case of China, the proportion of its combined imports from Canada, New Zealand and the US rose from 18 per cent in 2000 to 35 per cent in 2013 (by RWE volume). India has been sourcing an increasing volume of pulp and paper from Brazil, Canada and the US, and logs from New Zealand: 40 per cent of its imports of wood-based products were from these four countries in 2013, compared with 30 per cent in 2000. And in France, there has been an increase in the proportion of wood-based product imports from within Europe – from 7 per cent of the total in 2000 to 85 per cent in 2013.

It is difficult to determine the drivers underlying these trends. However, it is clear that broad developments within the industry have played a role, in particular the increased availability of cheap and reliable sources of plantation timber. However, there is anecdotal evidence that companies are increasingly sourcing lower-risk timber, in part by turning to lower-risk countries.[48]

Figure 23: Estimated RWE volume and value of imports at high risk of illegality into the seven consumer countries by product type, 2000–13



Sources: Based on illegality estimates by Chatham House; and official national trade statistics for the UK, France, Netherlands (Eurostat), Trade Statistics of Japan, the US (USITC Trade DataWeb), South Korea (Korea Customs Service) and India (UN Comtrade). Data for all countries also draw on UN Comtrade and on analysis by Chatham House.

[48] This was noted by private-sector representatives in discussions with Chatham House.

5. Forest Governance: Evidence of Change in Producer Countries

Key points

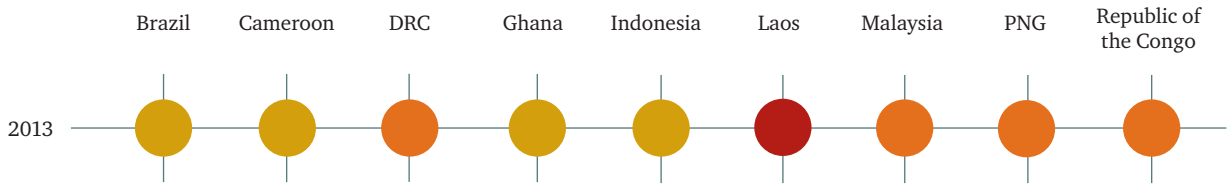
- Forest governance remains weak in many of the producer countries assessed, and there is cause for concern across a range of policy areas. But there are now many positive experiences that provide a foundation on which to build. Brazil, Ghana and Indonesia all stand out in terms of overall improvement since 2000.
- Although many countries have improved their legal frameworks, implementation remains patchy. Unclear or contradictory laws and policies are still common.
- Anti-corruption agencies and civil-society monitors have proved they can contribute effectively to anti-corruption strategies – provided they are sufficiently resourced and empowered.
- Despite significant investment, none of the countries assessed has yet put in place sufficiently robust or comprehensive information management systems. Better information is needed on rights holders, production and processing activities, trade and finance.
- While the availability of information on the sector has improved in many countries, progress is hindered not only by limited infrastructure and capacity but also by a deep-seated resistance to transparency.
- Targeted strategies for law enforcement have proved effective, as has independent monitoring. Corruption and the massive under-resourcing of enforcement agencies remain significant challenges, however.
- The development of systems to verify the legality of timber has improved business practices. But close monitoring and auditing are required to limit the risk of fraud. Such efforts should be complemented by measures to encourage compliance, such as reform and extension strategies.

Changes in forest governance

Forest governance is very weak in many of the producer countries covered in the Chatham House assessment. In most cases, the scores assigned for 2013 were less than half the maximum possible in a majority of policy areas – the exceptions being Brazil, Ghana and Indonesia. However, both the 2010 and more recent assessments showed evidence of progress. Of the five countries that have been assessed twice,[49] Ghana and Indonesia are the two in which momentum for change has been maintained. Elsewhere, progress has been more mixed.

The findings, summarized in Figure 24 above, are discussed in more detail below with regard to the following aspects of governance: the legal framework, corruption, international trade, resource allocation, information management, transparency, enforcement and legality assurance.

Figure 24: Level of governance in the nine producer countries (as % of maximum score)



*Shading reflects the score for the relevant policy area as a percentage of the possible maximum: **red** = 25 per cent and below; **orange** = >25–50 per cent; **yellow** = >50–75 per cent; and **green** = above 75 per cent. Laos, the DRC, the Republic of the Congo and PNG were not assessed in 2008.

[49] Brazil, Cameroon, Ghana, Indonesia and Malaysia.

Establishing clear and equitable legal frameworks

Unclear, contradictory and inequitable legal frameworks remain a major factor behind much of the illegal logging taking place in the countries assessed. For example, in the Democratic Republic of the Congo (DRC) many of the regulations required to implement the overarching forest law are absent, including those on various taxes, export procedures, artisanal logging and forest zoning.

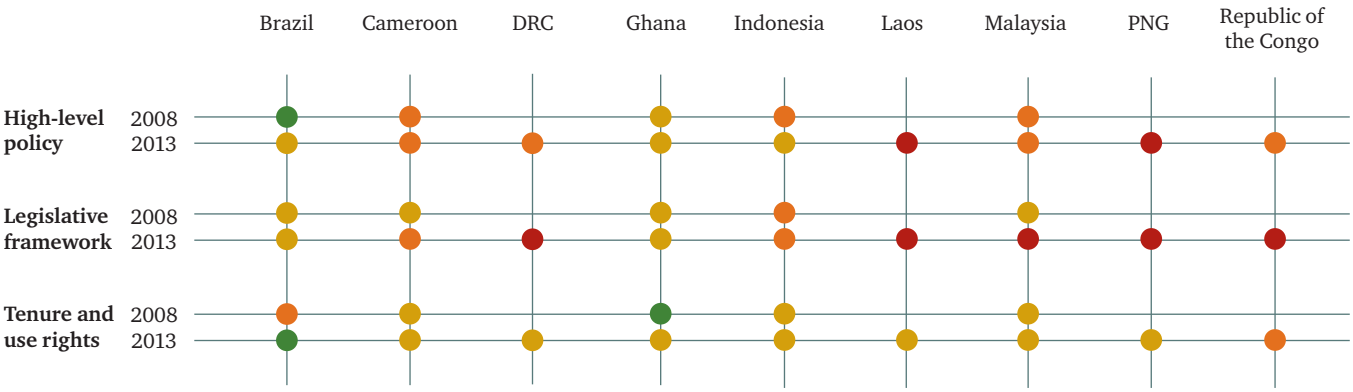
Contradictions between laws are common, in particular between those that govern different sectors. In Laos, the forestry and land laws are contradictory: while the former stipulates that all forests belong to the state, the latter allows for ownership by communities or other entities with permanent title. In Cameroon, there are discrepancies between the laws on forests, mining and land, as well as a lack of coordination between the government agencies responsible for those sectors. This has resulted in multiple rights being granted to the same land, thereby raising questions about the legality of many of the permits issued.[50]

Poorly implemented decentralization processes have exacerbated this situation. There are often differences in interpretation and implementation between central and regional governments, as is the case in Brazil, Indonesia and Malaysia. In Brazil, certain provisions of the forestry law are implemented at the state level. Interpretation varies, and the federal government's ability to promote a uniform approach is limited; as a result, the system for tracking timber across the country is incoherent. The politicized nature of decentralization means that overcoming such challenges can be difficult. In Indonesia, responsibility for allocating forest-use rights lies at the district level and is part of the system of political patronage.[51]

Inequitable laws and policies are to be found in many countries. As noted in Chapter 3, the legal framework for small producers is often heavily bureaucratic or complex, while in some countries, policies are not supportive of this part of the sector or may, in fact, actively discourage it. There is also limited recognition of the rights and interests of indigenous communities and other forest-dependent communities in many countries; moreover, where such rights and interests are recognized officially, they are frequently not realized in practice.[52] Consequently, disputes between local communities and logging companies are widespread in all of the producer countries assessed.

These problems are well known; and many of the countries have implemented review processes and reforms of their legal and policy frameworks. In some cases, such actions have been taken as part of the overall bid to tackle illegal logging; where there have been ongoing reform efforts,

Figure 25: Policy scores for legal framework (as % of maximum score)*



*Shading reflects the score for the relevant policy area as a percentage of the possible maximum: **red** = 25 per cent and below; **orange** = >25–50 per cent; **yellow** = >50–75 per cent; and **green** = above 75 per cent. Laos, the DRC, the Republic of the Congo and PNG were not assessed in 2008.

[50] Centre pour l'Environnement et le Développement (CED) (2013a), 'Les défis de la mise en oeuvre de l'APV au Cameroun – Note de Politique', at http://loggingoff.info/fr/document/les-d%C3%A9fis-de-la-mise-en-oeuvre-de-l%E2%80%99apv-au-cameroun-note-de-politique; and Schwartz, B. et al. (2012), 'Tendances émergentes dans les conflits liés à l'utilisation des terres au Cameroun. Chevauchements des permis des ressources naturelles et menaces sur les aires protégées et les investissements directs étrangers', a paper published by WWF.

[51] Burgess, R. et al. (2011), 'The political economy of deforestation in the tropics', NBER (National Bureau of Economic Research) Working Paper 17417, at http://www.nber.org/papers/w17417.

[52] See also Rights and Resources Initiative (RRI) (2015), *Looking for Leadership. New Inspiration and Momentum Amidst Crises* (Annual Review 2014–2015).

the anti-illegal logging 'agenda' has been able to build on and shape those efforts (for example, in Cameroon and the Republic of the Congo).

The voluntary partnership agreement (VPA) negotiations in many countries have made an important contribution in this area: the process of negotiating legality definitions has helped to establish clearer legal frameworks, identify priority reform areas and increase multi-stakeholder engagement.[53] For example, in Ghana and the Republic of the Congo, the VPA negotiations enabled broad consultation on priority areas for reform and helped to drive progress with legal reform. Among the legislation identified as necessary for the implementation of the Congo's agreement was a law on indigenous peoples' rights.[54] Such a law had, in fact, already been drafted, but the VPA provided further impetus for it to be passed (in 2011). However, the Congo's experience shows that good intentions are not always translated into new or better laws. For example, despite advances, the legal reform process in the country has been slow overall: the implementing decrees for the law on indigenous peoples' rights have yet to be passed, the review of the Forest Code is still ongoing, and none of the regulations listed in the VPA annex (including those on worker safety and environmental impact assessment and monitoring) has yet been developed.

Meanwhile, a number of countries have improved recognition of tenure and use rights, although the large number of land claims and overlapping rights mean that it will take many years to establish more equitable systems. In the case of Indonesia, the Constitutional Court ruled in 2013 that the state had misappropriated the customary lands of indigenous peoples by classifying them as state forest;[55] the government now faces the monumental task of registering those rights and resolving the widespread cases of conflicting land claims.[56] In Brazil, the rights of communities and indigenous peoples have good recognition in law, but there remain large areas of land that have not been legally allocated and tenure disputes are widespread. Under Brazil's new Forest Code (approved in 2012), registration of rural properties will become mandatory; this will be a huge undertaking, but the experience of Pará state suggests that large-scale land registration is possible if the process is well designed and sufficiently resourced. More than 60,000 properties were registered in Pará over four years. This task was achieved through a combination of strict enforcement and incentives for compliance, including allowing landowners to sell their agricultural produce.[57]

In conclusion, most of the gains to date in improving legal and policy frameworks have been in procedural rather than substantive rights.[58] But they have not been insignificant: the establishment of more open and more participatory consultation and decision-making processes lays the foundation for robust and credible reform, while the existence of a legal framework facilitates lobbying for action. However, the stalling of reform processes in a number of countries shows that these achievements are not sufficient in themselves. Drawing up clear timetables can enable donors to monitor progress, and making support conditional on progress provides further leverage. Such timetables can also enable scrutiny and pressure from civil society, although they need to be strong and capable enough to hold a government to account (for further discussion, see below).[59]

Corruption

Little progress has been made in tackling corruption, considered one of the main impediments to further progress in reducing illegal logging in many of the countries assessed. Corruption in the forest sector ranges from relatively low-level activities, such as paying enforcement officials to allow illegal timber through checkpoints, to more serious offences, including paying bribes to high-ranking officials for the allocation of logging rights. With regard to the latter, many cases have been reported: in Indonesia, for example, the allocation of logging rights has been linked to political graft,[60] while the entrenched nature of corruption in the Malaysian state of Sarawak has been documented too.[61]

In Cameroon, corruption has been highlighted as a major factor undermining the effectiveness of the country's system of timber tracking, and some officials are reported to be

[53] This is also documented in Bollen, A. and Ozinga, S. (2013), *Improving Forest Governance. A Comparison of FLEGT VPAs and Their Impact*. Brussels: Fern; and Duffield, L. and Richards, M. (2014), *Lessons Learned from Civil Society Efforts to Promote Community (Forest) Resource Rights and other Rights in Voluntary Partnership Agreements*. Washington, DC: Forest Trends.
[54] Annex IX of the VPA between the EU and the Republic of the Congo.
[55] The ruling is available at http://www.aman.or.id/en/2013/06/06/the-constitutional-court-decision-on-the-forestry-law/.
[56] See http://news.mongabay.com/2014/0904-lbell-forest-ownership-verification.html.
[57] Whateley, M. and Campanili, M. (2013), *Green Municipalities Program: Lessons learned and challenges for 2013/2014*. Belém: Green Municipalities Program and the Government of Pará State. See also http://insideclimatenews.org/covering-ground/20140611/prosecutor-takes-beef-industry-put-brakes-deforestation-amazon.
[58] Duffield and Richards (2014).
[59] Hobley, M. and Buchy, M. (2011), 'FLEGT and Poverty Alleviation: The Role of VPAs', unpublished report prepared for EFI.
[60] Burgess et al. (2011).
[61] Straumann, L. (2014), *Money Logging. On the Trail of the Asian Timber Mafia.* Basel: Bergil Books.

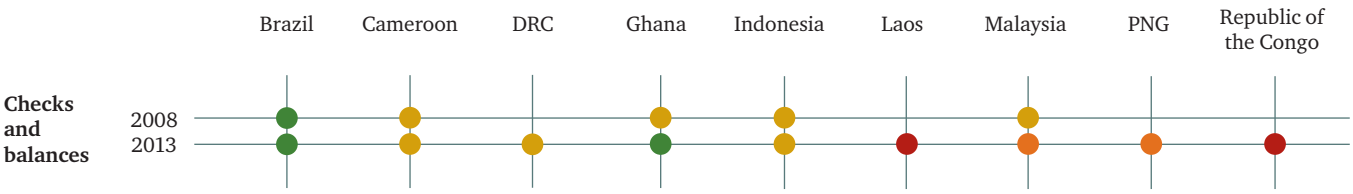
engaged in the laundering of illegal timber.[62] The case of Cameroon also illustrates how low-level corruption can have a major impact: in 2010 unofficial payments linked with the chainsaw milling sector amounted to an estimated €6 million, compared with an annual budget for Forest Ministry salaries of €8.4 million.[63]

While many countries have legislation and organizations aimed at limiting opportunities for corruption, the effectiveness of those instruments is often hampered by a lack of political will at the highest level. In Papua New Guinea (PNG), for example, the widespread nature of corruption has been reported on a number of occasions, but the anti-corruption legislation in place has rarely been enforced.[64] In Malaysia, the anti-corruption commission has been active in targeting corruption in the forest sector; and there has been a particular focus on Sarawak since the state's new chief minister announced a crackdown on illegal logging in early 2014.[65] However, the impact of the commission's work has been limited in part by its narrow mandate: it is able to investigate only, and cannot pursue prosecutions.

Multidisciplinary and independent agencies or task forces can be effective at tackling corruption, both because of their ability to conduct various types of investigation and because they enable officials to operate outside systems of corruption that may be entrenched within other institutions.[66] Indonesia has made concerted efforts in this area through the activities of its Anti-Corruption Commission (KPK) and the Financial Transaction Reports and Analysis Centre, which has been targeting financial crime in the forest sector. Owing to their autonomy and broad mandate, which includes the ability to instigate prosecutions, both of these agencies have been able to conduct wide-ranging investigations and secure high-profile convictions.[67] It has been estimated that through its enforcement work, the KPK recovered US$100 million of state assets during the period 2004–11.[68] But despite its impact, there have been a number of attempts to reduce its powers and undermine its work. Recent police investigations into KPK officials are seen as just such an attempt.[69] This illustrates the need for continued political support for the work of such agencies.

Civil society plays a crucial role, too, in helping tackle corruption. In some countries, an independent monitor has been established – that is, an organization with a formal government mandate to monitor the forest sector. Cameroon, the DRC and the Republic of the Congo have all recently deployed independent monitors. Their experiences suggest that such organizations play an important role in improving enforcement, shedding light on illegal practices and thereby helping limit opportunities for corruption (see below). A number of countries have included specific reference to an independent monitor in their VPAs: those

Figure 26: Policy scores for checks and balances (as % of maximum score)*



*Shading reflects the score for the relevant policy area as a percentage of the possible maximum: **red** = 25 per cent and below; **orange** = >25–50 per cent; **yellow** = >50–75 per cent; and **green** = above 75 per cent. Laos, the DRC, the Republic of the Congo and PNG were not assessed in 2008.

[62] AGRECO-CEW (2012), 'Rapport de mission No. 41/OI/AGRECO-CEW: Axes routiers', at http://www.oicameroun.org/ and http://oicameroun.org/index.php?option=com_content&view=article&id=114:rapports-de-missions&catid=41:missions-dexperts&Itemid=39.
[63] Cerutti, P. et al. (2013), 'Cameroon's Hidden Harvest: Commercial Chainsaw Logging, Corruption, and Livelihoods', *Society and Natural Resources*, 26, pp. 539–53.
[64] Lawson, S. (2014c), *Illegal logging in Papua New Guinea*. London: Chatham House.
[65] See, for example, http://www.thestar.com.my/News/Nation/2014/10/26/MACC-steps-up-raids-against-Sarawak-illegal-loggers/ and http://www.themalaysianinsider.com/malaysia/article/sarawak-warns-timber-companies-over-illegal-logging-as-macc-probes-industry
[66] Goncalves, M. P. et al. (2012), *Justice for Forests. Improving Criminal Justice Efforts to Combat Illegal Logging*. Washington, DC: World Bank.
[67] Control Risks (2013), *Anti-corruption in Indonesia*. London: Control Risks.
[68] Goncalves et al. (2012).
[69] See, for example, http://thejakartaglobe.beritasatu.com/news/police-relent-assault-indonesias-antigraft-body/.

of both the Republic of the Congo and Cameroon identify a role for independent monitoring within their legality verification systems and specify this as a priority area for financial support.[70]

Monitoring by civil society can also be undertaken without a formal mandate. Many countries have well-respected civil-society organizations that monitor the forest sector – this is particularly the case in Brazil, Ghana and Indonesia. The advantage of operating independently is that organizations have more freedom to decide on which activities to undertake. Furthermore, informal monitoring may be more appropriate in some circumstances – not least since formal independent monitoring can be effective only if it has support from the government.[71] However, there are potential constraints: for example, it may be difficult for organizations to obtain the necessary information if they lack a formal mandate. Furthermore, their impact will be limited if there are no functional institutions to which corrupt activities can be reported, or mechanisms through which action against those involved in such activities can be taken.

In Indonesia, a slightly different approach has been pursued. The country's VPA recognizes the role of civil society in monitoring the country's timber legality verification system. There is no formal mandate for how civil society should fulfil this role, but a clear framework has been established for complaints to be submitted and addressed. While the organizations active in this area have reported difficulties in obtaining information from the government, they have been able to highlight weaknesses in the functioning of the legality system.[72]

Because corruption is multifaceted and often entrenched, time and a variety of approaches will be needed to overcome it. The evidence suggests that the establishment of an independent and multidisciplinary agency or task force can be an effective means of tackling corruption. Civil society has an important role to play, too; but in order to be able to do so, it must have access to long-term financial support. Moreover, an institutional framework which allows for the reporting of suspicious activities and for action to be taken on such reports must be in place.

International trade data and cooperation

The availability and quality of data on the international trade of wood-based products vary significantly between countries and sources. This is apparent from the frequent discrepancies in international trade data provided by different countries (which, in some cases, may be due to fraud and misreporting)[73] as well as from variations in the data published by different sources within one country. For example, in the cases of Cameroon, Indonesia and Malaysia, there are considerable variations in the data published by the government and industry associations.[74]

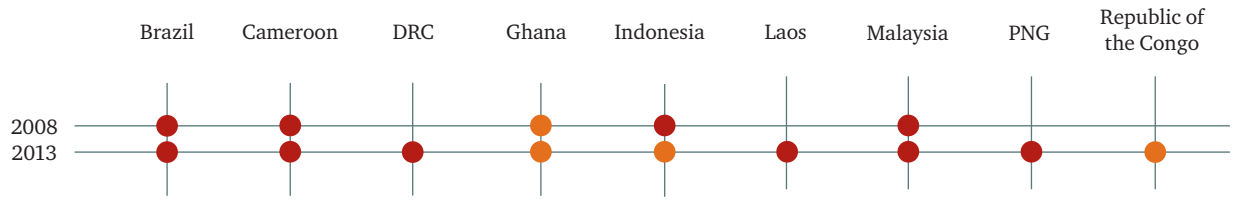
Strengthening systems for data collection and reporting and enabling cross-checking of information are important steps in helping to detect and clamp down on illegal trade. They are priorities not only for countries that have legislation prohibiting the trade in illegal timber, but also for those wishing to export to such markets – the former must be able to determine the legality of their own imports and/or distinguish them from domestically produced timber. This is an important issue in Vietnam's VPA negotiations because its forest-sector trade is dominated by the export of products manufactured from imported raw materials. Indonesia, for its part, has introduced legislation requiring imports to have proof of legality, while China has been exploring voluntary systems for the private sector (see Chapter 6).

One challenge is that customs agencies in all the producer countries assessed are constrained by limited resources and capacity. There have been various initiatives aimed at building capacity and improving information systems to ensure optimal use of the limited resources available.

One way to facilitate the monitoring of trade and reduce opportunities for fraud and smuggling is to enable countries to compare export and import documentation. It has been proposed that in order to facilitate the monitoring of trade, customs export declaration forms should be required as supporting documents for the approval of imports, although this has yet to be implemented.[75] Among member states of the Association of Southeast Asian Nations (ASEAN), work is under way to harmonize customs procedures between countries and to improve communications and control over the

[70] See Annex VI (IV) 2 and Annex IX (2) of the VPA between the EU and the Republic of the Congo and Annex IV (V) 4 and Annex X (II) II(i) of the VPA between the EU and Cameroon.
[71] Brack, D. and Léger, C. (2013), *Exploring Credibility Gaps in Voluntary Partnership Agreements. A Review of Independent Monitoring Initiatives and Lessons to Learn*; and Global Witness (2010), 'Principles for Independent Monitoring of REDD (IM-REDD)'.
[72] See, for example, Anti-Forest Mafia Coalition (2014), 'SVLK flawed: An independent evaluation of Indonesia's timber legality certification system', at http://capacity4dev.ec.europa.eu/public-flegt/document/svlk-flawed-independent-evaluation-indonesias-timber-legality-certification-system.
[73] See, for example, the case of the smuggling of logs from Indonesia to China during the period 2000–04, documented in Lawson and MacFaul (2010), p. 111.
[74] In the case of Indonesia, see Forest Trends (2014), Indonesia's Legal Timber Supply Gap and Implications for Expansion of Milling Capacity.
[75] Chen, H. K. (2010), 'Lost in Transit: Export and Import Protocols as Contributors to Discrepancies in International Timber Trade Data', policy brief for the ASEAN Regional Knowledge Network on Forest Law Enforcement and Governance.

Figure 27: Policy scores for international trade data and cooperation (as % of maximum score)*



*Shading reflects the score for the relevant policy area as a percentage of the possible maximum: **red** = 25 per cent and below; **orange** = >25–50 per cent; **yellow** = >50–75 per cent; and **green** = above 75 per cent. Laos, the DRC, the Republic of the Congo and PNG were not assessed in 2008.

regional timber trade. To this end, ASEAN members are working towards establishing a 'single window' system that would allow agencies in each country to coordinate their approval processes and would provide for the exchange of information.[76]

Implementation of the VPAs may result in improvements to the availability of timber trade data. For example, some countries have been integrating their customs system with their forest-sector information system as part of their efforts to ensure the legality of timber exports. In Indonesia, the customs database has been linked with the system for issuing timber legality licences – this is an approach that Cameroon intends to adopt, too. In addition, Indonesia has been exploring the possibility of allowing EU competent authorities for the EU Timber Regulation (EUTR) to access its database of timber licences as a means of facilitating implementation of that regulation.

While these developments are encouraging, significant improvements are still needed both in the quality of data and in data-sharing in order to ensure effective monitoring and control of the timber trade.

Looking more broadly at international cooperation on illegal logging, the VPAs have been the primary route for this for many of the producer countries assessed – Cameroon, Ghana, Indonesia and the Republic of the Congo have all signed agreements with the EU, while the DRC, Laos and Malaysia are in negotiations (see also Chapter 6).

Engagement with the VPAs reflects a commitment on the part of these countries to tackle illegal logging, while it has also helped to galvanize action both within government and among the private sector and civil society. Maintaining political momentum for these processes has proven a challenge however. This is not surprising, because of the complexity of the governance issues and the time needed to adequately address these. Ghana and Indonesia are well advanced with implementation, but progress has been slow in both Cameroon and the Republic of the Congo. In the DRC, Laos and Malaysia negotiations are proceeding slowly, particularly in the case of Malaysia. Negotiations in this country were launched in 2007, but they have been hampered in part by the fact that responsibility for forestry is decentralized to state level, as well as by a failure to resolve a number of governance issues. For example, a major obstacle has been a failure to address the concerns of civil-society actors who consider that the rights of indigenous communities have not been adequately taken into account in the negotiations.

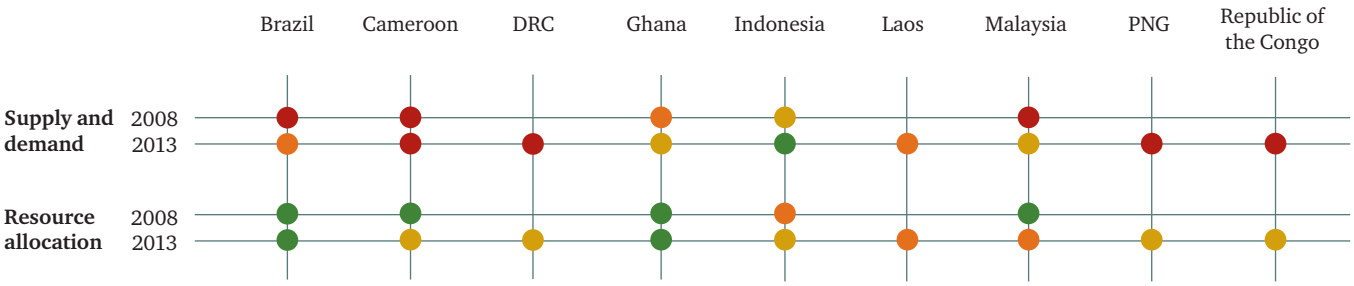
Although the negotiation and implementation of the VPAs has been much slower than had been anticipated by all those engaged in them, they have proved valuable at strengthening international cooperation on illegal logging – both between the producer countries and the EU, and between the producer countries themselves, which increasingly have been sharing their expertise and knowledge in this area. (Further details on progress in negotiating and implementing the VPAs is provided throughout this chapter.)

Allocation of logging rights

In many of the countries assessed, the legal requirements for allocating logging rights are well designed, at least with respect to large-scale concessions. But all too often, implementation is weak. For example, PNG and the Republic of the Congo have requirements for competitive

[76] EFI (2014), 'ASEAN timber trade, customs and timber legality', scoping study for the EU FLEGT Facility and EFI.

Figure 28: Policy scores for resource allocation (as % of maximum score)*



*Shading reflects the score for the relevant policy area as a percentage of the possible maximum: **red** = 25 per cent and below; **orange** = >25–50 per cent; **yellow** = >50–75 per cent; and **green** = above 75 per cent. Laos, the DRC, the Republic of the Congo and PNG were not assessed in 2008.

tendering processes. In addition, PNG requires the consent of customary landowners, and the Congo requires consultation with affected communities. However, these requirements are rarely met in practice. Furthermore, in some countries (Laos, Malaysia and the Congo), high-ranking officials are allowed by law to make discretionary decisions related to resource allocation, which seriously undermines the effectiveness of forest-sector legislation.

In a number of countries, changes have been made to the requirements for allocating logging concessions. As a result, those countries face the challenge of how to deal with logging titles issued under the old system. One solution is to convert the old titles into new ones, but this process can be contentious. For example, following the introduction of a new Forest Code in the DRC in 2002, a concession review process was launched that resulted in nearly two-thirds of existing logging titles being revoked (and the remainder being converted into concessions); however, the review process was limited in scope and opaque, raising questions about its objectiveness.[77] In Ghana, a lack of clarity over the conversion process (which began in 2003) resulted in a dispute between industry and the government about whether old titles are subject to certain timber fees; that dispute has yet to be resolved.

Another challenge has been that the introduction of more rigorous systems for allocating rights for certain permits has prompted some companies to switch to other permits. For example, this was the case in PNG: the introduction of stronger oversight of permits for large-scale logging in parallel with the relaxation of the approval process for forest-clearance permits led to a surge in the number of licences for agricultural projects on forest lands (the so-called Special Agricultural Business Leases), many of which were found to have been illegally allocated (see Box 2). Similarly, in several countries, the number of permits allocated for extracting timber from development projects or for logging of small land areas has grown significantly, in part because such permits are subject to less rigorous approval processes than are others. The abuse of those permits has been documented in Cameroon, the DRC and Ghana, among other countries.[78]

Reform of regulations on the allocation of logging rights is still required in many countries to help ensure fair and transparent decision-making. In all countries, though, more effective enforcement of existing legislation would, in itself, significantly improve allocation practices.

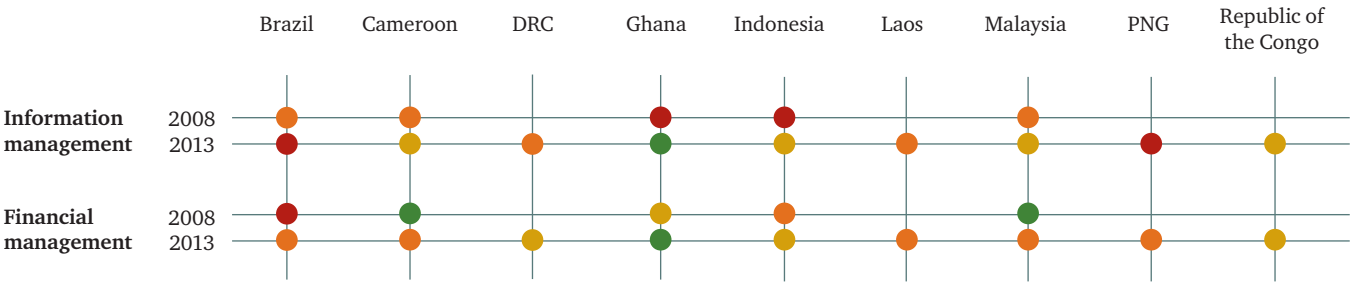
Information management

The management of information on the forest sector refers to the systems for documenting and monitoring forest management and timber supply chains. Such systems include forest inventories, remote-sensing imagery, harvest permits and licences, forest management plans, transport documents, processing licences and records, and tax and revenue data. Information management is an important component of good forest governance, enabling sound decision-making and robust monitoring of practices. While the situation in many of the countries assessed is improving, there remain significant deficiencies.

None of the countries assessed has established robust information management systems encompassing all data required to enable its government to effectively manage the

[77] Greenpeace (2008), 'Logging sector briefing for the DRC: DRC logging review: The carving up of the Congo continues'.
[78] Global Witness, (2013a).

Figure 29: Policy scores for information management (as % of maximum score)*



*Shading reflects the score for the relevant policy area as a percentage of the possible maximum: **red** = 25 per cent and below; **orange** = >25–50 per cent; **yellow** = >50–75 per cent; and **green** = above 75 per cent. Laos, the DRC, the Republic of the Congo and PNG were not assessed in 2008.

forest sector and monitor revenues. Good practice in certain areas is evident in some countries. For example, a system is in place in Ghana to compile harvest data and generate invoices, which enables the monitoring of revenues due and collected. The financial management system in Malaysia is well designed and implemented, too: before a logging licence is issued, the potential licensees deposit funds with the state forestry department that are offset against future royalties, while harvests and the payment of royalties and fees are registered in a computerized system. However, the systems in place in most countries are hampered by a lack of human and financial resources, as well as by inadequate computer facilities and poorly functioning systems. For example, in the Republic of the Congo, a significant amount of information on the sector is held at the provincial level and is not passed on to the central government. This is partly because of the lack of both computerized systems and computers, although a lack of willingness to share information is another major factor.

Implementation of the VPAs has helped improve information management in many countries. For example, a database established in Indonesia to record licences issued under the country's legality verification system is linked to both the trade and customs databases. In Cameroon, the existing information system for the sector is being developed to include information on permits, timber inventories, harvesting, processing, transport, exports and taxes. However, discussions with the finance ministry on how tax information could be integrated into that system have yet to get under way. Indeed, cooperation between the finance and forestry ministries has been very poor to date, which is a major reason why a joint ministerial programme to monitor forest revenues was unsuccessful.

The Cameroonian example highlights the fact that weak information management is not just a technical issue. Initiatives to improve information management systems have often failed because of a lack of support from within government to implement them – for example, agencies often do not want to share information for fear that such exchanges will undermine their influence or reveal corrupt practices. To develop solutions that are likely to be implemented and supported, technical aspects needs to be considered in parallel with analyses of existing vested interests and incentive structures.

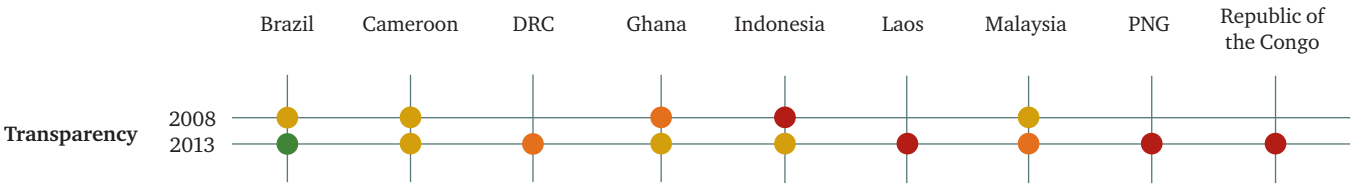
Transparency of information

Transparency – which is understood here to mean the availability of forest-sector information to the public – plays an important role in facilitating the monitoring of the sector. Information that could be expected to be made available includes the texts of relevant policies and laws, procedures for allocating logging rights, the results of environmental and social impact assessments, logging permits and the location of the land for which they have been issued, annual quotas, the holders of logging rights and their responsibilities, forest revenues and their use, and data on enforcement.

There are two aspects of transparency: the existence of legal provisions that make transparency a requirement, and the level of transparency actually implemented. With regard to both these aspects, there are significant shortcomings in many of the countries studied; and despite some progress, improvements are needed in all cases.

All the countries assessed have some kind of legal provisions related to transparency: either freedom-of-information legislation or provisions in forest-sector legislation that stipulate the information that is to be made available. However, there is considerable variation in the scope and comprehensiveness of those provisions. For example, PNG

Figure 30: Policy scores for transparency (as % of maximum score)*



*Shading reflects the score for the relevant policy area as a percentage of the possible maximum: **red** = 25 per cent and below; **orange** = >25–50 per cent; **yellow** = >50–75 per cent; and **green** = above 75 per cent. Laos, the DRC, the Republic of the Congo and PNG were not assessed in 2008.

legislation requires a public register to be maintained that includes details of logging and processing licences but does not require transparency of data on harvesting, processing, trade or enforcement. In the DRC, the right of the public to access information in general is recognized in the country's constitution; however, the implementation of that provision is very weak because it has not been written into the relevant laws and regulations. Furthermore, a decree was passed in 2011 requiring publication of all contracts related to natural resources, while the forestry legislation requires only tenders for new logging concessions to be published.

Even when provisions are in place, they are often not implemented in many countries. This not only reflects limited capacities to collect or compile the relevant information; it also reflects a lack of willingness to do so.[79] For example, despite the existence of a freedom-of-information law in Indonesia, civil society has reported frequent difficulties in obtaining information from the authorities.[80]

There is a lack of transparency surrounding the details of logging contracts and revenues in many countries. Of those assessed, most have signed up to the Extractive Industries Transparency Initiative (EITI). But none of the countries reports on its forest sector (unlike Liberia, Tanzania and Zambia, among others) or agricultural sector (which Liberia reports on).[81] Reporting could help drive more openness in those sectors as well as in land-use planning decisions.[82]

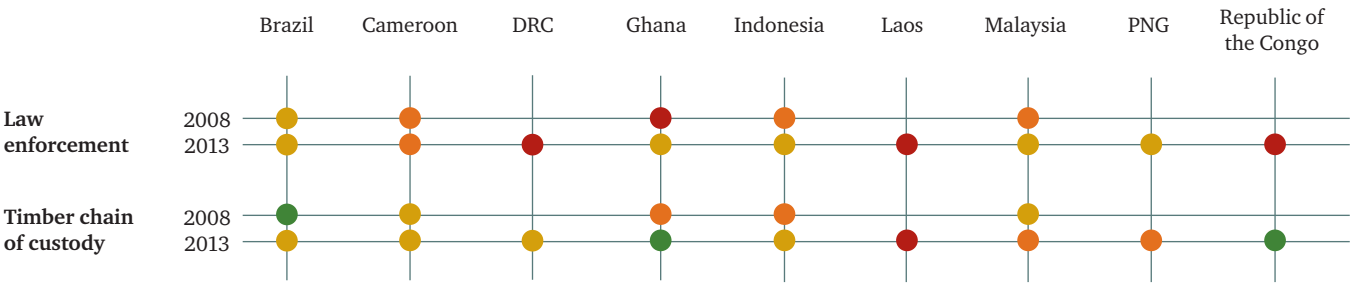
A widespread challenge is the lack of public information on enforcement – that is, data on illegal logging cases, prosecutions pursued and sanctions imposed. Transparency in this area not only facilitates monitoring but also serves as a deterrent to non-compliance with the law. Furthermore, it helps the implementation of due diligence by those seeking suppliers of timber for import into 'sensitive' markets.

The VPAs have resulted in some marked improvements in transparency.[83] Those agreements stipulate the forestry information that is to be made available by the government and mechanisms to implement this. Consequently, in both Ghana and Cameroon a range of information on forest legislation and the allocation of logging rights has been made available on the respective government websites. In Indonesia, the provision of forest statistics has improved, and there have been efforts to make information accessible to rural people through the establishment of forest information centres at the district and provincial levels. Those efforts remain works in progress, however; and in all countries that have signed a VPA, there remains much to be done to implement all the provisions on transparency included in the agreements. For example, much of the information being provided by governments is neither up to date nor complete. Moreover, in many cases the focus is on providing information on websites, which, though a useful service, cannot easily be accessed by the vast majority of rural stakeholders in these countries. Most important, a culture of transparency is far from being adopted in many countries: many government agencies provide the bare minimum of information or do not respond to requests for information.

This last shortcoming reflects in part a tendency of many transparency initiatives to focus too much on what data should be made available rather than on the institutional challenges needed to achieve transparency – namely,

[79] See also the results of the Global Witness project 'Making the Forest Sector Transparent', at http://www.foresttransparency.info.
[80] JPIK (2014), 'Access to data and information is the key to the successful [sic] of timber trade agreement between Indonesia – European Union', press release, at http://fwi.or.id/wp-content/uploads/2014/01/JPIK-Final-Press-Release-30-September-2013_English-Version.pdf; and Human Rights Watch (2013), *The Dark Side of Green Growth: Human Rights Impacts of Weak Governance in Indonesia's Forestry Sector.*
[81] In Liberia, operators below a certain tax threshold have been excluded from the requirement to report in order to avoid placing an undue burden on small businesses.
[82] Of the countries assessed, those that have signed up to EITI are Cameroon, the DRC, Ghana, Indonesia, PNG and the Republic of the Congo (see https://eiti.org/countries).
[83] Duffield and Richards (2014); and Kalenga, M.-A. (2015), *Seeing the Forests through the Trees: VPA-led Transparency in Five African Countries*. Moreton-in-Marsh: Fern.

Figure 31: Policy scores for enforcement and assuring legality (as % of maximum score)*



*Shading reflects the score for the relevant policy area as a percentage of the possible maximum: **red** = 25 per cent and below; **orange** = >25–50 per cent; **yellow** = >50–75 per cent; and **green** = above 75 per cent. Laos, the DRC, the Republic of the Congo and PNG were not assessed in 2008.

ensuring sufficient human and technical capacity as well as dealing with any political reasons that may serve as disincentives for more openness. In many countries, civil society is becoming increasingly vocal in demanding that the national government enforces its legal obligations on transparency. While this is helping to drive progress, its impact is constrained by the limited strength and capabilities of civil society as well as the degree to which government can be held accountable.

Enforcement

While most countries have at least some well-designed laws and policies, it is often the case that they are not enforcing them effectively. Enforcement requires, among other things, the provision of adequate resources, the use of best technical practice, good coordination between agencies, the availability of reliable information as well as the provision and application of appropriate sanctions. While there have been improvements in many areas in the producer countries assessed, all continue to face challenges in enforcement, with weaknesses in some or all of the above areas.

A variety of initiatives have been implemented to improve enforcement, albeit with different degrees of success. There has been a particular focus on capacity-building in order to address the very limited resources and capabilities found in most of the countries assessed. In Ghana, training has been provided for public prosecutors working for the Forestry Commission, while a rapid-response team has been expanded and investments made in the use of information-gathering tools.

In Cameroon, training has been provided for ministry staff, prosecutors and customs officials but low salaries and high staff turnover have limited its impact.

At the same time, targeted enforcement strategies have been effective. For example, an enforcement initiative in Indonesia in 2005 helped to clamp down on the smuggling of timber to China via Malaysia, while at more or less the same time a concerted enforcement effort in Brazil helped to reduce illegal deforestation in that country. Both undertakings benefited from political support, which meant that additional resources were provided. Another important factor behind their success was the involvement of various agencies with different areas of expertise. A multidisciplinary approach is particularly useful for tackling complex crimes, such as illegal logging, because they can involve various areas of the law.[84] For example, Brazil's Inter-Ministerial Commission for the Prevention of Environmental Crimes, established in 2008, brought together representatives of the relevant law enforcement agencies with those of government environmental and intelligence agencies.

It is often the case that the judiciary is not given sufficient attention in efforts to improve enforcement.[85] In many of the countries assessed, the number of convictions is low and the sentences handed down not severe enough. In part, this reflects a lack of training for prosecutors and judges, who often have limited understanding of the nature of illegal logging and its implications and thus do not consider it a serious crime.

[84] Goncalves et al. (2012).
[85] Ibid.; and Wells, A. et al. (2006), 'Public Goods and Private Rights: the Illegal Logging Debate and the Rights of the Poor', ODI Forestry Briefing No. 9, February 2006.

Box 4: The reality of forest law enforcement in the Congo Basin

In many countries, enforcement agencies are significantly under-resourced. The situation is particularly worrying in the Congo Basin.

In the DRC, there are very few enforcement officials, and those who are available often have little training and few resources for travel, let alone for the use of computers or remote sensing. In 2013 Orientale province had three enforcement officials to cover more than 400,000 km^2 of forest, while in Equateur province, there were just two such officials covering 340,000 km^2 of forest.[a]

In 2011 the Republic of the Congo had 144 forest agents who were responsible for 36 concessions and more than 200,000 km^2 of forest. Most regional forestry offices had only one car and just a few motorbikes that were often in a bad state of repair and for which the petrol budget was insufficient. By 2012 the overall situation had improved slightly: the number of forest agents had risen to nearly 200 and more vehicles had become available, but those resources remain far from sufficient.[b]

[a] REM (2013), *Final report. Independent monitoring of forest law enforcement and governance (IM-FLEG) in the DRC. December 2010 – April 2013*, http://observation-rdc.info/documents/REM_IMFLEG_2013_report_DRC.pdf.
[b] REM (2012), 'Rapport annuel, 2011. Etat des lieux de l'application et du respect de la loi forestière dans la perspective de la délivrance des premières autorisations FLEGT fin 2012'; and REM (2013b), 'Rapport annuel, 2012. Etat des lieux de l'application et du respect de la loi forestière dans la perspective de la délivrance des premières autorisations en République du Congo' (both reports available at http://rem.org.uk/Reports2.html#6).

Independent monitoring can play an important role in improving enforcement, although, as noted earlier, it is effective only under certain conditions – for example, in the presence of a basic policy and institutional framework, and of a certain degree of government support for the monitor.[86] Independent monitoring has made a positive contribution to enforcement in Cameroon and the Republic of the Congo by shining the spotlight on infractions, thus maintaining pressure on the government to take action. It has also been a valuable means of documenting shifts in the types of illegal practice, helping ensure that enforcement efforts respond to those activities. However, in Cameroon, the powers invested in the most recent independent monitor were limited, restricting the ability of that organization to monitor logging activities. Not only do monitors require sufficient powers and independence from government to enable them to investigate and report all possible infractions; they also need long-term and adequate financial support, which has often not been provided. Some countries have funded monitors partially from national budgets or forest revenues; but donor funding is likely to continue to be required, given the politically sensitive nature of the work.[87]

Clearly, effective enforcement is essential for establishing a legal forest sector. Ensuring cooperation between agencies and the development of a capable judiciary is important in this respect. At the same time, independent monitoring of the sector has a significant role to play. But enforcement needs to be applied in an appropriate manner, and both its effectiveness and impact should be constantly monitored.

Assuring legality

The introduction in the US, the EU and Australia of legislation prohibiting illegal imports has resulted in the growing demand for verification of legality. The implementation of traceability systems has been a key focus in countries negotiating or implementing VPAs, since such systems are necessary to facilitate the issuance of FLEGT licences.

Indonesia has made the most progress in implementing a legality verification system. The Timber Legality Verification System (SVLK), which assesses the extent to which a company is complying with the legality definition negotiated under the VPA and the rigour of its supply chains, became mandatory in 2013 for companies producing plywood, sawnwood, woodchips, veneer and laminated-veneer lumber products; and in 2015 for those producing furniture, woodworking products, and pulp and paper. Ghana is well advanced in developing its legality verification system – piloting was completed in 2013.

The systems being established under the VPAs are ambitious: they aim to verify legal compliance of producers with the national legality definitions and trace products from the start of the supply chain to the point of export and, eventually for some countries, to the point of sale on the domestic market as well. While their comprehensiveness is a strength, it means that their implementation is challenging and resource-intensive. This is apparent from the length of time that it has taken for countries to develop the systems, as well as the difficulties faced in ensuring that the systems are adequately robust.

[86] A set of questions to help decide whether independent monitoring is the most appropriate approach is set out in Brown, D. with Luttrell C. (2004), 'Review of Independent Forest Monitoring', ODI paper on behalf of DFID.
[87] Ibid.; and Brack and Léger (2013).

In Indonesia there are concerns that the SVLK will accept as legal timber that has been produced as follows: under concessions for which harvest rights were allocated through corrupt processes; without local communities having been adequately consulted, as required under law; and from land where there has been illegal forest conversion.[88] These issues are under discussion and solutions are being sought to address some of the issues. For example, to respond to the issue of timber sourced from illegal forest conversion, the SVLK was amended to include additional requirements on environmental impact assessments and checks that permits are in line with the spatial planning system. It remains to be seen whether these steps are adequate, but this case highlights the importance of such systems being adaptive.

At the same time, Indonesia's experience highlights the enormity of the task of certifying the many thousands of small-scale producers and processors. Indeed, it was because of the difficulty of the task in hand that the SVLK was introduced more slowly than planned, despite the significant effort made to provide support and outreach to the small-scale sector.[89] Most recently, the requirements for small-scale processors were simplified to help such companies overcome the challenges they continued to face in becoming certified.[90]

The development of systems to monitor and control the forest sector and the trade in wood-based products is not exclusive to VPA countries. In 2006 Brazil introduced its Document of Forest Origin (DOF) system, which uses a database to track products from the forest to the end of the supply chain in order to provide proof of origin. However, the robustness of this system has been questioned amid evidence of widespread fraud and abuse, which has enabled the laundering of illegal timber.[91]

Experiences with implementing legality verification systems highlight the need for those systems to be closely monitored and audited so that any weaknesses or gaps can be identified. Such systems should be seen as one element of a broader strategy to improve governance rather than as an end in themselves. A narrow focus on verification tends to deal with the symptoms rather than the underlying causes of illegality – for example, the failure to apply for a permit may be due to expensive or inefficient government procedures. Further, it can undermine trust among those subject to control; thus, rather than helping to create incentives for compliance, it can reduce such incentives and increase the need for monitoring and enforcement.[92] This is a particular cause for concern in light of the heavy burden that such an approach puts on producer countries (many of which are already struggling to find sufficient resources with which to manage their forest sectors) and especially small-scale producers. For this reason, a balance needs to be found between enforcement and verification measures on the one hand; and measures that encourage compliance – for example, legal reform as well as outreach and extension services – on the other.[93]

Forest governance: an overview of progress

Significant improvements to governance have been made in many of the countries assessed, and these should provide a solid basis for further reform. However, faster and more far-reaching change is needed.

Based on the EIU's Democracy Index, the World Bank's Ease of Doing Business Index and Transparency International's Corruption Perceptions Index, a comparison of the level of governance in the nine producer countries shows a correlation between those that are more democratic and less corrupt and those that scored best in the Chatham House assessment (see Figure 32). In the latter assessment, the two countries where most progress was seen compared with 2010 – Ghana and Indonesia – are also those with higher rankings in the various governance indices. This indicates the difficulties of bringing about governance improvements in more challenging situations; in countries where such situations prevail, it will take a long time to bring about the reforms needed.

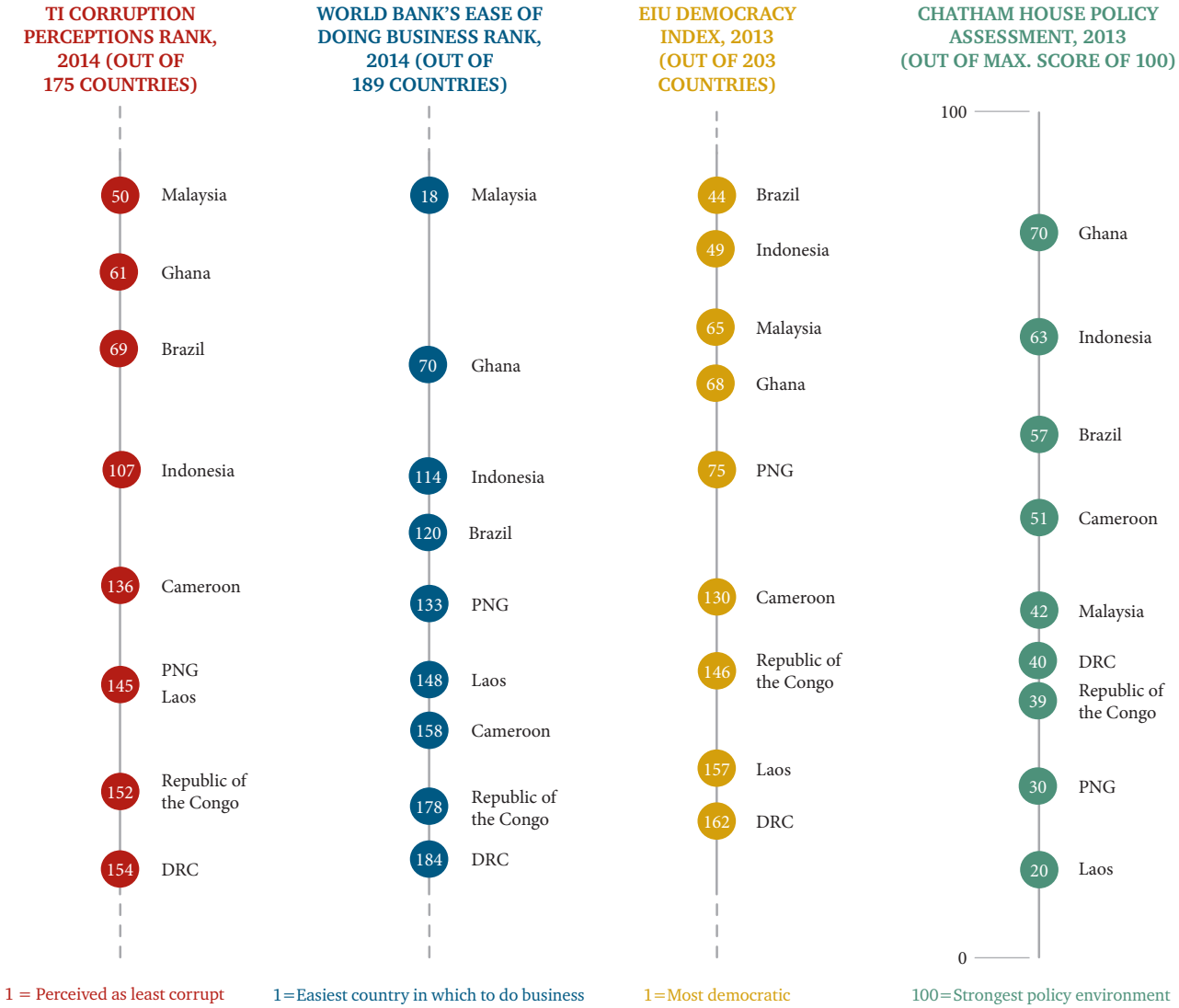
One notable exception is Malaysia, which ranks relatively highly in the governance indices but which scores poorly in the Chatham House policy assessment. This is partly because there are a number of governance issues that are particularly problematic within the forest sector, including weak recognition of customary rights, corruption and lack of transparency in relation to the allocation of resource rights.

[88] Anti-Forest Mafia Coalition (2014), 'SVLK flawed: An independent evaluation of Indonesia's timber legality certification system', at http://capacity4dev.ec.europa.eu/public-flegt/document/svlk-flawed-independent-evaluation-indonesias-timber-legality-certification-system.
[89] Govt [sic] delays SVLK requirement for SMEs', *Jakarta Post*, 2 January 2014, at http://www.thejakartapost.com/news/2014/01/02/govt-delays-svlkrequirement-smes.html.
[90] See http://www.euflegt.efi.int/indonesia-news/-/asset_publisher/FWJBfN3Zu1f6/content/indonesia-issues-revised-tlas-regulations-and-meets-with-eu-to-discuss-next-steps-to-flegt-licensing.
[91] Greenpeace (2014), *The Amazon's Silent Crisis*, at http://www.greenpeace.org.uk/media/reports/amazons-silent-crisis.
[92] McDermott, C. (2012), 'Trust, legitimacy and power in forest certification: A case study of the FSC in British Columbia', *Geoforum*, Vol. 43, pp. 634–44.
[93] McDermott, C. et al. (2015), 'Forest certification and legality initiatives in the Brazilian Amazon', *Forest Policy and Economics*, Vol. 50, pp. 134–42.

The differences between countries raise the question of how engagement can be encouraged or supported in different contexts and what types of intervention are most appropriate. With regard to the VPAs, these are based on the premise that trade and market access are important incentives for change. That premise has been valuable in launching discussions with countries about their forest sectors and in bringing a range of stakeholders to the table. However, many other factors are involved, as is apparent from the lack of correlation between the importance of the EU market for a country and progress with its VPA negotiations and implementation, as noted earlier in the case of Ghana. Similarly, Indonesia maintained momentum in the negotiation and implementation of its VPA, despite its declining exports to 'sensitive' markets. In its case, maintaining market share in the EU has continued to be a driver for action. Another important factor has been high-level political commitment to improving law enforcement and tackling corruption in the sector, as well the goal of reducing greenhouse gas emissions from the sector.

Clearly, incentives for reform will vary from country to country and from stakeholder to stakeholder, and will change over time. Other factors may include the wish to enhance a country's international reputation, raise the profile of the forest sector domestically, and increase access to donor funding. At the same time, there are incentives to maintain the status quo, such as increased trade opportunities with 'non-sensitive' markets and political or economic motives that favour existing

Figure 32: Producer-country governance indices



practices. Consequently, in-depth politico-economic analyses are essential to identify and prioritize the most appropriate interventions.[94] The findings from the nine producer countries indicate that while such analyses have been carried out, there remains a tendency among those seeking to implement reform to focus on the technical aspects of reform and not to pay sufficient attention to understanding why stakeholders opt either to support change or to maintain the status quo.

It is also evident from this assessment that strengthening the capacity of both civil society and government agencies is important. An effective civil society is needed to monitor activities and hold the government to account, while government, for its part, needs to be able to respond to the concerns of civil society in an appropriate manner. Such support is required in all areas of governance – legal reform and law enforcement, anti-corruption efforts, information management and transparency.

[94] Grindle, M. S. (2011), 'Good Enough Governance Revisited', *Development Policy Review,* 29 (S1), pp. 199–221; and Carothers, T. and De Gramont, D. (2013), *Development Aid Confronts Politics: The Almost Revolution*. Washington, DC: Carnegie Endowment for International Peace.

6. Reducing the Market for Illegal Timber: Which Approaches Have Been Working?

Key points

- Legislation on illegal imports has had a positive impact on business practice, although enforcement challenges remain. That impact can be seen in the growth in forest legality verification and certification, as well as in chain-of-custody (CoC) certification. Public procurement policies and private-sector action have played a role in bringing about change in this area.
- In a number of the countries assessed, voluntary partnership agreements (VPAs) have proved effective in improving forest governance in areas such as clarifying legal frameworks, increasing engagement with civil society and identifying priority areas for reform. China is exploring the possibility of establishing bilateral agreements with producer countries.
- A number of free trade and cooperation agreements include provisions on forestry and/or illegal logging. The impact of such accords needs to be monitored. At the same time, stricter safeguards are required to mitigate any negative effects such agreements might have on forests.
- An increasing number of companies are going beyond existing regulatory approaches with the aim of ensuring the sustainability of their supply chains.
- The forthcoming UN Sustainable Development Goals (SDGs) could spur action to improve forest governance in more countries. At the same time, a new climate change agreement will provide important funding channels.
- Enforcement of legislation on forestry and land use can make a contribution to sustainability. However, this depends both on the degree to which enforcement is codified in the relevant legislation and on the degree to which sustainability principles are weighted against economic priorities in land-use decisions.

A wide range of interventions have been developed by processing and consumer countries in a bid to reduce the market for illegal timber. These so-called 'demand side' measures complement the initiatives under way in producer countries outlined in the previous chapter and, indeed, build on them. They have been grouped into the following four categories:

- Legislation to prohibit imports of illegal timber;
- Measures to promote a market for legal timber;
- International cooperation aimed at strengthening governance and enforcement; and
- Private-sector action.

The findings of the Chatham House policy assessment paint a mixed picture across the 10 processing and consumer countries covered. The three European countries (France, the Netherlands and the UK) and the US have the most far-reaching measures in place. Elsewhere, government responses have been less strong; in some cases they focus on voluntary approaches (as in China and Japan), while in other countries (India and South Korea) little attention has yet been paid to the issue.

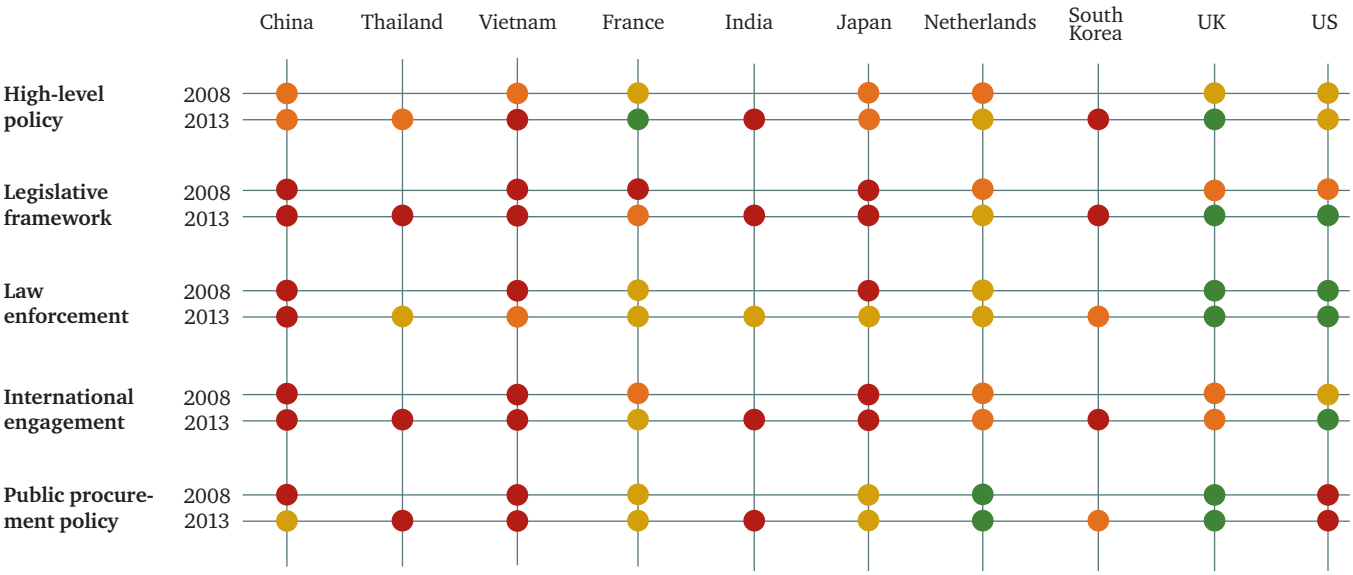
Prohibiting the trade in illegal timber

The EU and the US have both introduced legislation prohibiting the import of illegal timber. The US was the first to do so when, in 2008, it amended the Lacey Act. The EU Timber Regulation (EUTR) was introduced in 2010 and entered into force in 2013. For its part, Australia introduced the Illegal Logging Prohibition Act (ILPA), which entered into force in 2012; under that act, due diligence requirements became applicable from 2014.[95]

In both the EU and the US, enforcement has presented various challenges. The allocation of resources to enable enforcement of legislation has been slow. In the US, additional funding for implementation of the Lacey Act was not allocated until 2012 – four years after the amendments to the act had entered into force. This was problematic because

[95] Because Australia was not included in the Chatham House assessment, the legislation is not considered in detail here.

Figure 33: Summary of policy scores for the processing and consumer countries (as % of maximum)*



*Shading reflects the score for the relevant policy area as a percentage of the possible maximum: **red** = 25 per cent and below; **orange** = >25–50 per cent; **yellow** = >50–75 per cent; and **green** = above 75 per cent. Thailand, India and South Korea were not assessed in 2008.

processing the declaration forms that importers are required to submit created a significant administrative burden: in 2013 it was reported that about 40,000 forms were being filed every month, many of which had been submitted on paper rather than electronically.[96]

Under the EUTR, member states are responsible for designating a competent authority, ensuring it is sufficiently resourced and setting out the sanctions regime. Of the three EU countries included in the Chatham House assessment, France has made the slowest progress with implementation: it did not pass the necessary legislation until 18 months after the regulation had entered into force (that is, in October 2014) and designated the body responsible for enforcement only in early 2015. Both the UK and the Netherlands established their competent authorities and sanctions regimes in 2013, thereby enabling enforcement of the regulation to get under way. While the UK's authority has the most manpower, the enforcement effort in each of the three countries has been constrained by a lack of resources.

Looking across all the EU member states, there is an even more mixed picture. In July 2014 the European Commission reported that eight countries had not fully implemented the EUTR.[97] Meanwhile, WWF carried out a more detailed assessment between April and July 2014. That study awarded only the UK and Finland the maximum score for implementation (see Box 5).

In both the EU and the US, there has been a steep learning curve as to what is required of industry. Under the EUTR, implementation of a due diligence system is obligatory for those placing timber on the market for the first time. The US legislation has no explicit requirement for due diligence, but the demonstration of adequate due care can be used as part of the defence in cases of infringement. No guidance as to what adequate due care entails has been given in the US;[98] and the European Commission, for its part, has offered only limited guidance with respect to due diligence requirements. While this has created some uncertainty in the industrial sector, the advantage is that it avoids a 'tick box' approach being adopted, as companies are required to think more about what due diligence or due care entails and how they can develop systems appropriate for their particular supply chains.

There have been very few prosecutions under the legislation as

[96] APHIS (2013), 'Report to Congress (Senate Committee on Agriculture, Nutrition, and Forestry, Senate Committee on Environment and Public Works, House Committee on Agriculture, and House Committee on Natural Resources) With Respect To Implementation of the 2008 Amendments to the Lacey Act'.
[97] The eight countries are Greece, Hungary, Latvia, Luxembourg, Malta, Poland, Romania and Spain. The European Commission table on the state of EUTR implementation, based on an official request by the Commission for information, is available at: http://ec.europa.eu/environment/forests/timber_regulation.htm.
[98] However, under the agreement reached in the prosecution of the Gibson Guitar Corporation in 2012, the steps that the company needed to take to improve its due care standards were set out, thereby providing some broad guidance for companies. See Appendix B of the Criminal Enforcement Agreement on the US Fish & Wildlife Service website, at http://www.fws.gov/home/feature/2012/USvGibsonGuitarAgreement.pdf.

Box 5: WWF's EU Government Barometer 2014: Levels of EUTR implementation[a]

WWF's EU Government Barometer assessed three aspects of EUTR implementation: whether governments have put in place a legal framework for implementation of the regulation; the level of resources allocated to and actions undertaken for enforcement; and the degree of cooperation both between government agencies and between countries. For each of these three aspects, countries were given a score of 0 (for non-implementation), 1 (part-implementation) or 2 (full implementation); hence six was the maximum score. The country scores were as follows:

6 – Finland, the UK

5 – Denmark, Lithuania

4 – Belgium, Estonia, Germany, Portugal, Slovenia

3 – Austria, Croatia, Cyprus, Czech Republic, Netherlands

2 – Bulgaria, Greece, Latvia, Luxembourg, Sweden

1 – France, Ireland, Italy, Malta, Poland, Romania, Slovakia

0 – Hungary, Spain

[a] The WWF's EU Government Barometer on Illegal Logging and Trade – 2014 is available at http://barometer.wwf.org.uk/what_we_do/government_barometer/

of April 2015 – only three in the US and none in the European countries.[99] In part, this reflects the difficulties of compiling sufficient evidence to secure convictions for importing illegal products. In the case of the EUTR, it also reflects the approach adopted by the competent authorities to date – namely, working with industry to promote understanding and compliance rather than opting for heavy-handed enforcement (a strategy that has resulted partly from decisions on the most effective use of limited resources).

One of the strengths of the EUTR is that, as noted above, there is an explicit requirement for operators to undertake due diligence. This provides additional opportunities for enforcement agencies to undertake investigations and will provide an easier route for pursuing prosecutions, as establishing non-compliance with this requirement should be more straightforward than determining the illegality of imports.[100]

As of April 2015, there have been no reports of sanctions having been imposed for breach of this requirement, although that situation could soon change. Recent communications from some of the European competent authorities indicate that prosecutions are likely to be sought for companies that have failed to conduct sufficient due diligence.[101]

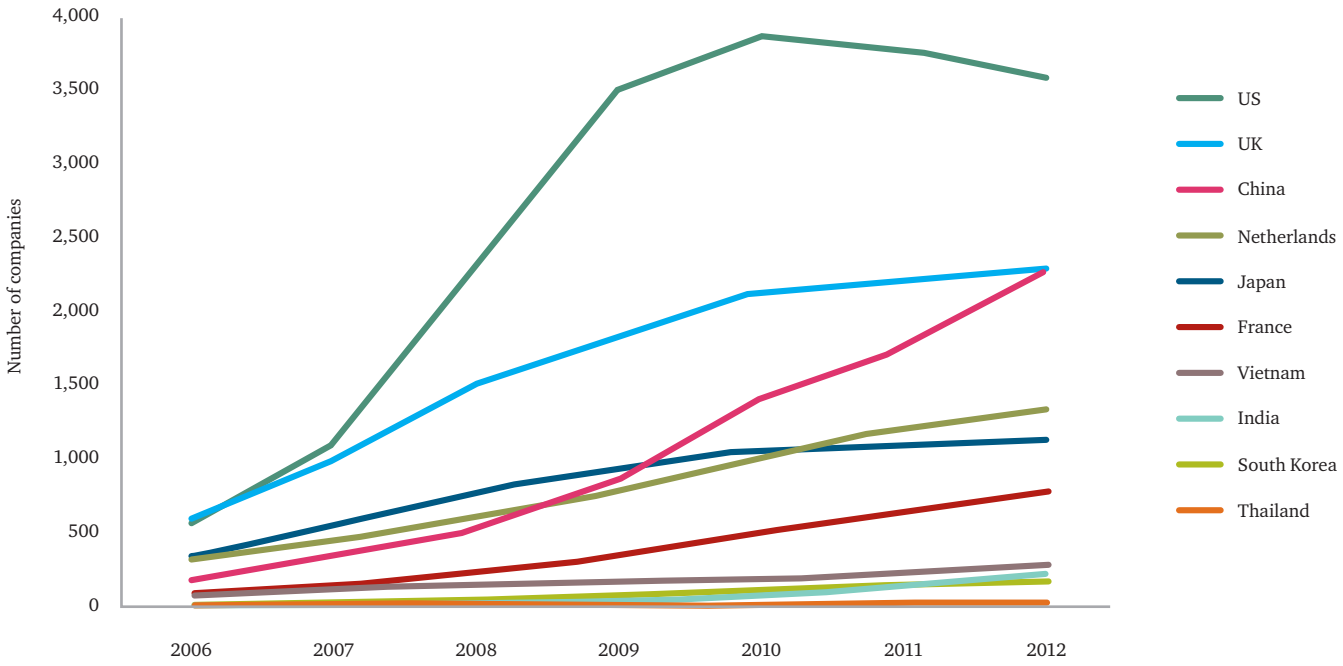
The crucial question is what impact the legislation has had – both on changing practices within industry and on reducing imports of illegal timber into EU member states. With regard to industry, there are some indications of changes in practice: the number of companies in both processing and consumer countries adopting CoC certification has increased significantly (see Figure 34).[102] At the same time, legality verification and certification levels have grown in producer countries.

The extent to which these trends have been driven by the EUTR and the Lacey Act rather than other factors – such as other government policies (notably on public procurement), private-sector action and consumer demand for sustainable timber – is difficult to determine. Anecdotal evidence suggests that the EUTR and Lacey Act have had an impact. For example, industry representatives report that they have been reviewing their practices and working to improve supply chain controls in response to the legislation.[103] At the same time, supply into Europe is becoming more concentrated: rather than buying direct from overseas, European companies are purchasing from large-scale importers in Europe – a trend that is thought to be driven in part by the EUTR.[104]

Establishing the impact of legislation on trade flows is even more difficult because of the many factors that affect them, including changes in economic growth rates, exchange rates, market demand and amendments to numerous policies or laws that affect trade generally. For example,

[99] This is true of all EU member states, not just the three countries assessed.
[100] Under the Lacey Act, companies can be sanctioned for failure to fulfil the declaration requirement; sanctions include a fine or seizure of the imported goods. However, this sanction option has not been used to date.
[101] See, for example, Pillet, N. and Sawyer, M. (2015), *EUTR: Plywood imported from China*, report published by the National Measurement Office (the UK's competent authority).
[102] The one exception to this is the US. This is partly due to the existence of competing certification schemes (figure 23 only showing data for the FSC scheme), as well as an increase in companies applying for group certification
[103] See, for example, 'EUTR – rising to challenges, realising opportunities', *ETTF News*, Winter 2014/15, pp. 11–12. Cited in 'Kingfisher Net Positive Review 2013/14' (available at http://www.kingfisher.com/netpositive/index.asp?pageid=158). For a summary of the Olam Group's response to the EUTR, see http://olamgroup.com/products-services/industrial-raw-materials/wood/eu-timber-regulation/.
[104] ITTO (2015), *Tropical Timber Market Report*, 19(2), 16–31 January 2015, p. 19 ('Report from Europe').

Figure 34: Number of companies with FSC CoC certification in processing and consumer countries, 2006–12



Source: FSC.

there has been a decline in imports of tropical hardwood products into the EU, but this trend has been observed since around 2008 and has not altered significantly since the EUTR entered into force: indeed, the decline has been attributed primarily to the economic downturn in Europe in 2008–09 and increased competition for such products from other markets.[105] And while it has been suggested that imports of furniture from China fell in 2013 as a result of the EUTR – as businesses turned to lower-risk sources or to alternative materials – the shift has been marginal.[106]

With regard to the impact of the EUTR on illegal imports, the trade data analysis for France, the Netherlands and the UK indicate that the volume of high-risk products imported into these three countries increased between 2000 and 2007 (from 3.2 million m^3 to 3.7 million m^3) before declining by almost two-thirds in volume by 2013 (to 1.4 million m^3). The economic downturn that resulted from the global financial crisis accounted for a significant part of the reduction in illegal imports after 2007. However, the proportion of illegal imports fell during this period – from 2.5 per cent of total wood-based product imports in 2007 to 1 per cent in 2013 – suggesting that other factors contributed. Indeed, the EUTR is likely to have played a role from 2010 (the year in which the regulation was introduced), as companies began to prepare for its implementation (it would be expected that this impact would have increased after 2013, when the regulation came into force, but data for 2014 have yet to be analysed).

In the case of the US, the estimated volume of imports at high risk of illegality is estimated to have increased until 2006 and then declined until 2009; thereafter it remained at about the same level. The trade data analysis is not detailed enough to attribute causality, but recent research indicates that the Lacey Act has had an impact on trade flows: prices have increased and volumes of timber imports from some tropical countries have fallen.[107]

In conclusion, the available evidence suggests that the EU and US legislation is changing practices within the private sector. However, the impact to date of this legislation has been limited, partly owing to capacity

[105] Ibid. 18(3), 1–15 February 2014.
[106] Oliver, R. (2014), 'Is EUTR putting brakes on complex supply chain imports?' *ETTF News*, Winter 2013/14.106 Tropical Timber Market Report 19(2), 16–31 January 2015, p. 19 ('Report from Europe').
[107] Prestemon, J. P. (2014), 'The impacts of the Lacey Act Amendment of 2008 on U.S. hardwood lumber and hardwood plywood imports', *Forest Policy and Economics*, 50 (31–44) at http://dx.doi.org/10.1016/j.forpol.2014.10.002.

constraints in enforcement agencies. In particular, this has been a challenge in the EU, where implementation of the regulation has been very slow in some member states. Unless there is stronger and, in the case of the EUTR, more uniform enforcement, this legislation will not be seen as a serious threat to business as usual – either by the private sector or by the governments of exporting countries.

Another challenge as regards the impact of this legislation is that an increasingly small proportion of global timber production will be covered by it. Therefore, the legislation is unlikely to be sufficient to change practices on a broad scale. This issue can be addressed only if the other major consumer markets decide to follow suit with similar legislation. In this context, it is encouraging that the governments of both China and Japan have expressed interest in doing so.

Promoting a market for legal timber

As part of their strategies to reduce the trade in illegal timber, governments in the consumer countries assessed have been trying to promote markets for legal timber. Those efforts involve public procurement policies in some cases, and measures to encourage private-sector action in others.

Public procurement policies

Of the countries included in this assessment, China, France, Japan, the Netherlands and the UK all have public procurement policies on timber; India and South Korea do not. France, the Netherlands and the UK all require the purchase of both legal and sustainable timber. Both the Netherlands and the UK have established criteria for defining 'legal' and 'sustainable', and have set up advisory bodies that provide support and guidance to procurement officers and determine whether certification schemes and other evidence of legality and/or sustainability meet the criteria. In the case of the UK, FLEGT-licensed products are accepted as both legal and sustainable – that approach was taken in order to encourage the development and implementation of the VPAs.[108] The Netherlands adopted a different approach – it accepts FLEGT-licensed timber as legal but not sustainable. France's procurement policy requires legal and sustainable timber, too, but it has not established detailed criteria.

Japan's procurement policy stipulates the purchase of timber that has been verified as legal under the country's legality verification system (known as the 'goho'-wood system), while sustainable timber is preferred but not required. However, the requirements for determining if timber is legal are very weak: a range of documents can be accepted as proof of legality, and there are no provisions for risk assessment or third-party monitoring.[109] China's policy requires sourcing of sustainable timber but provides no clear guidelines for establishing sustainability. Moreover, it covers only a small range of products (furniture, copy paper, cupboards, doors, toys and panels); in the other countries assessed, the range is much wider.[110]

There has been limited monitoring of the various procurement systems, but the available evidence indicates low levels of implementation. In the UK, fewer than one-third of central government departments reported in 2012–13 that their paper purchases were in full compliance with the procurement policy.[111] Meanwhile, a survey in Japan in 2013 suggested that one-quarter of government agencies subject to the procurement policy were failing to check the legality of their timber supplies.[112]

Promoting private-sector action

A number of the consumer countries assessed have been trying to boost demand for legal timber by encouraging private-sector action. The approach has included promoting voluntary measures and introducing legislation aimed at increasing transparency.

The Dutch government has been trying to increase demand for sustainable timber both within the Netherlands and across Europe. In 2011 it established the Sustainable Trade Initiative (IDH), which aims to change markets in order to achieve sustainable production and consumption worldwide.[113] In 2013 it helped to launch the European Sustainable Tropical Timber Coalition, which has the goal of increasing demand for timber from sustainably managed and legally harvested tropical forests.[114]

[108] See https://www.gov.uk/timber-procurement-policy-tpp-prove-legality-and-sustainablity.
[109] For more details, see Momii, M. (2014), *Trade in Illegal Timber: The Response in Japan*. London: Chatham House.
[110] Wellesley (2014a).
[111] DEFRA (2013), *Greening Government Commitments Annual Report*, 2012–13. Cited in WWF (2015), *Implementation of the UK's Timber Procurement Policy. Analysis of WWF survey responses.*
[112] Global Environmental Forum and Friends of the Earth Japan (2013), 'Summary of the survey results regarding the legality verification of wood products', at https://www.fairwood.jp/news/pr_ev/2014/gohosei_question_result201405.pdf (in Japanese).
[113] See http://www.idhsustainabletrade.com.
[114] See http://www.europeansttc.com.

In Japan, the government has been encouraging action by the private sector by promoting its 'goho'-wood system; this voluntary system encourages the sourcing of legally verified wood-based products. Increasing numbers of companies are registered as 'goho'-wood suppliers, but the impact in terms of volume of legal products is not known. Furthermore, as noted above, the legality verification system is not sufficiently robust to be able to ensure legality.

The Chinese government has been pursuing a number of approaches aimed at improving practice in its private sector. Among other things, it has explored options for the development of a timber legality verification system; as a result, the Chinese Association-guided Timber Verification Scheme (CATVS) was developed. Under this voluntary scheme, industry associations would develop a responsible-purchasing policy and due diligence guidelines to enable members to verify their supply chains as legal. Member companies found to be compliant with their association's responsible-purchasing policy would be authorized to use a responsible-purchasing logo and certificate.

China has also developed a series of guidelines aimed at promoting best practice for companies operating overseas, including on sustainable forest management and (in draft form only) trade and investment in forest products. In addition, 'green' credit guidelines have been drawn up for banks.[115] However, the level of compliance with all these guidelines is thought to be low, in part because of their voluntary nature and low levels of awareness.

In the EU, a number of measures have recently been introduced to increase transparency among businesses. These include requirements for non-financial reporting and for the disclosure of payments by companies operating in the extractive sectors. In 2013 legislation was passed that requires oil, gas, mining and logging companies[116] registered in the EU or listed on EU stock exchanges to disclose all payments to governments above €100,000.[117] In the same year, the EU adopted a directive on non-financial reporting that requires large companies to report on their policies, risks and impacts in relation to environmental and social issues. Meanwhile, reporting on climate risk is becoming more widespread; for example, it is now a requirement for listed companies in the US. Although these measures are relatively recent and have had only a limited impact to date, they provide another means through which to improve transparency. However, a challenge for companies is how to measure environmental impact along their entire supply chains, including developing practical methodologies that can also determine the impact of their operations on forests.

Evidence of impacts of procurement and private-sector interventions

Analysis is complicated by the difficulty of disentangling the impacts of public procurement policies, other government interventions aimed at promoting a market for legal timber, and various factors such as consumer demand and private-sector action.

In both the UK and the Netherlands, there has been rapid growth in the volume of certified timber sold in some segments of the market. For example, the market share of certified timber and panel products in the Netherlands rose from 13 per cent in 2005 to 68 per cent in 2011,[118] while in the UK their share rose from 55 per cent to 88 per cent.[119] In both countries, government procurement policies are thought to have played an important role in these increases. In the Netherlands, in particular, the government has been actively promoting sustainable timber, the private sector is very engaged, and there is a high level of public awareness of environmental issues.

The few analyses undertaken suggest that procurement policy can be useful in shifting markets towards legal or sustainable products – and in the EU, timber procurement policies also helped to lay the groundwork for the development of the EUTR.[120] However, in many countries, such policies have not been well designed or implemented: a limited range of products or public bodies are covered, guidelines are unclear, and monitoring is frequently not required. Consequently, their impact has been limited.

The impact of transparency legislation in changing practice in the private sector is unclear, in part because many of the laws and policies are quite recent. With respect to requirements for corporate reporting, there is some evidence that these can help change business practices; however, they have had only a small impact because of the design of the legislation – some of which is voluntary, is

[115] Brack, D. (2014), *Chinese Overseas Investment in Forestry and Industries with High Impact on Forests: Official Guidelines and Credit Policies for Chinese Enterprises Operating and Investing Abroad.* Washington, DC: Forest Trends; and Wellesley (2014a).
[116] Only large companies are within the scope of the legislation. These are defined as companies that meet at least two of the three following criteria: turnover of at least €40 million, total assets of at least €20 million and 250 or more employees.
[117] See EU Transparency Directive 2013/50/EU, at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013L0050; and EU Accounting Directive 2013/34/EU, at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32013L0034.
[118] Probos (2013), 'Market share of sustainably produced timber doubled in three years: Government target exceeded', Bosberichten.
[119] UK Timber Trade Federation (2013), The Responsible Purchasing Policy – Annual Report.
[120] Brack, D. (2014), *Promoting Legal and Sustainable Timber: Using Public Procurement Policy*. London: Chatham House.

limited in scope or lacks clear guidance on how to comply. As a result, the level of reporting remains low and the quality of reporting is often poor.[121]

International cooperation

The consumer countries included in this assessment have been supporting producer countries in efforts to reduce the trade in illegal timber. They are doing so through the provision of aid and/or the establishment of trade agreements and cooperation partnerships.

Japan, the US, the EU and the individual EU member states all provide significant aid and development funding to the forest sectors of producer countries, as does, to a lesser extent, South Korea. Both the US and the EU have focused on illegal logging. USAID has been supporting satellite monitoring of the Congo Basin forests as well as improved law enforcement both in that region and elsewhere, including Brazil, Colombia and Peru. It has also provided extensive support for legality verification and certification schemes in the Asia-Pacific region with the aim of improving forest management.[122]

Support for producer countries has been a central element of the European strategy for tackling illegal logging. For its part, the EU FLEGT Action Plan not only aims to promote a market for legal timber but also seeks to support efforts to produce legal timber in producer countries. In the case of VPA partner countries, such support has been closely linked with the implementation of those agreements: within the multi-stakeholder processes established for VPA negotiation and implementation, priorities for technical and financial support are identified. This approach has two strengths: first, these discussions have taken place as part of the multi-stakeholder processes established under the VPAs, which has helped ensure that various perspectives from within the partner country are taken into account in deciding on priorities; and second, the FLEGT umbrella has helped improve coordination between European donors.

Trade agreements related to illegal logging include the European VPAs as well as some free trade and cooperation accords. As highlighted earlier, the VPAs have improved forest governance in partner countries, most notably by increasing participation in policy-making and promoting robust legal reform processes.[123] Key to this has been the emphasis placed on the need for multi-stakeholder engagement, in both the negotiation and implementation stages of the agreements.

China, meanwhile, has been exploring the possibility of establishing bilateral agreements with producer countries as part of its efforts to establish a national timber legality verification system. Such accords would establish timber legality definitions with which all timber imports into China from those countries would have to comply. Gabon and Indonesia have both been identified as potential partners for such agreements, although at the time of writing formal negotiations are not yet under way.

A growing number of free trade and cooperation agreements have chapters on sustainable development and the environment, some of which include provisions on forestry or illegal logging. Such provisions include commitments to enforce multilateral environmental agreements, promote the sustainable management of forests, and improve forest law enforcement and governance.[124] Some also identify priorities for support and cooperation on such issues.[125] The most detailed provisions on illegal logging are those in the US–Peru Trade Promotion Agreement, which entered into force in 2009: its 'Annex on Forest Sector Governance' aims to strengthen enforcement and stakeholder participation in Peru's forest sector.

The extent to which these agreements have helped partner countries tackle illegal logging is unclear, as there have been very few analyses of the impact of their environmental provisions. Evidence suggests that if institutional mechanisms and the necessary resources are in place for implementing activities, cooperation provisions can lead to improved environmental legislation and/or higher levels of enforcement.[126] For example, the US–Peru agreement has resulted in increased support to the Peruvian forest agencies and helped to establish better links between enforcement agencies in the two countries.[127] However, the potential for stronger or more wide-reaching provisions on illegal

[121] Hoare, A. (2013), *Due Diligence Requirements and Company Reporting. Policy Options to Promote Responsible Sourcing.* London: Chatham House.
[122] For details, see the website of the Responsible Asia Forestry and Trade (RAFT) Initiative, at http://www.responsibleasia.org/about-us.html.
[123] Bollen and Ozinga (2013).
[124] For example, the EU–Peru and Colombia Trade Agreement, at http://trade.ec.europa.eu/doclib/press/index.cfm?id=691; and the EU–Central America Association Agreement, at http://trade.ec.europa.eu/doclib/press/index.cfm?id=689.
[125] For example, the EU–Central America Association Agreement identifies possible areas for cooperation, including promoting policy dialogue and the exchange of best environmental practices, experiences and capacity-building; transferring and using sustainable technology and know-how; taking environmental considerations into account in other policy areas, including land-use management; and strengthening environmental management, monitoring and control systems (see http://trade.ec.europa.eu/doclib/press/index.cfm?id=689).
[126] George, C. (2011), 'Regional Trade Agreements and the Environment: Monitoring Implementation and Assessing Impacts: Report on the OECD Workshop', OECD Trade and Environment Working Papers, 2011/02, OECD Publishing.
[127] See 'US and EU Policy Options for Trade in Agricultural Commodities: Building on the Expertise of the Forest Sector', Chatham House Energy, Environment and Resources meeting summary, September 2013, at http://www.illegal-logging.info/content/us-and-eu-policy-options-trade-agricultural-commodities-buildingexpertise-forest-sector.

logging is limited because of influential trade lobbies – for example, to date no sanctions have been applied for non-compliance with the environmental provisions of the free trade agreement between the US and Peru.

There is a risk that such agreements will put more pressure on forests – owing to increased activity in agriculture or mining, for example – and thereby indirectly lead to an increase in illegal logging. Some agreements specify the need to assess land-use change as part of an environmental impact assessment – such is the case of the EU–Mercosur free trade agreement. But the requirements are not well defined, which raises questions about the rigour of such assessments.[128]

In addition to trade agreements, many countries have concluded agreements or memorandums of understanding (MoUs) aimed at improving cooperation on efforts to combat illegal logging. For example, Vietnam has signed MoUs with Laos and Cambodia; Japan with China, Indonesia and Malaysia; and China with Australia, the EU, Indonesia, the US and Japan. Most have resulted in little positive action but have at times offered useful forums for dialogue. For example, China's agreements with the US and the EU have both yielded regular discussions between the respective partner countries (through the Bilateral Forum on Combating Illegal Logging and Associated Trade and the EU Bilateral Coordination Mechanism, respectively). These discussions have helped improve understanding between parties and led to some joint actions – for example, the establishment of business-to-business dialogues.

In conclusion, cooperation between countries has proved valuable in reinforcing national efforts, facilitating the sharing of experiences and avoiding duplication of effort. Some free trade and cooperation agreements have made a contribution in this area, but their impact is likely to be limited, not least because forestry and environmental issues are not their main focus. At the same time, the VPAs have brought significant governance improvements; a key factor has been the emphasis those agreements place on establishing multi-stakeholder processes for their negotiation and implementation.

Private-sector action

In the private sector, there has been a trend towards more transparent supply chains as part of efforts to prevent sourcing of illegal or unsustainable timber. One of the drivers behind this trend is the need to comply with the Lacey Act and the EUTR. However, other factors have played a role: lobbying by NGOs and consumers, companies' increased awareness of the relevance of environmental issues for their business, and the growing number of regulatory requirements on environmental standards and reporting. Consequently, more companies are seeking to make a positive contribution towards sustainable development – both for moral reasons and out of self-interest (to ensure the sustainability of their supply chains and to enhance or protect their reputations).[129]

Such efforts are reflected in the increased use of legality verification and certification schemes, as noted above. Furthermore, a growing number of companies have made public commitments to reduce their environmental impact, including by limiting deforestation in their supply chains; they include the signatories to the New York Declaration on Forests, announced at the UN Climate Summit in September 2014.[130] At the same time, there has been increased interest among companies in assessing and reporting on the risks of deforestation in their supply chains – for example, more firms carry out such reporting under CDP's forests programme (162 in 2014, compared with 100 in 2012).[131]

However, while many companies are working to improve the traceability of their supply chains and reduce their impact on the environment, they remain in the minority. And although their efforts are valuable for testing potential solutions and setting examples, their impact will be limited as long as private-sector actions remain voluntary.

What progress has been made?

All the various approaches to tackling illegal logging can be seen to have had some impact and helped bring about change within the sector. However, disaggregating the impacts of individual interventions is difficult, in part because many elements interact with and reinforce one another. Indeed, this supports the suggestion, mentioned earlier, that a global regime has emerged for combating illegal logging.[132] There is some evidence for this – for example, the FLEGT Action Plan provided further impetus for the US to amend the Lacey Act, which, in turn, helped shape the EU legislation. Furthermore, EUTR and Lacey Act enforcement officials have been exchanging experiences

[128] Hoare, A. (2014), *Europe's Forest Strategy in the Next Decade: Options for the Voluntary Partnership Agreements*. London: Chatham House.
[129] Unilever is a prime example of such a business – see, for example, 'Unilever: In search of the good business', *The Economist*, 9 August 2014, at http://www.economist.com/news/business/21611103-second-time-its-120-year-history-unilever-trying-redefine-what-it-means-be.
[130] See http://www.un.org/climatechange/summit/action-areas/#forests.
[131] See https://www.cdp.net/en-US/Programmes/Pages/forests.aspx.
[132] Overdevest and Zeitlin (2014); and Bernstein, S. and Cashore, B. (2012), 'Complex global governance and domestic policies: Four pathways of influence', *International Affairs*, 88(3).

and exploring opportunities to cooperate (thereby increasing the effectiveness of their work), while private certification schemes have been aligning their systems with the requirements of the EUTR, Lacey Act and Australian legislation.[133] The VPAs, for their part, have been used to initiate or reinforce national discussions and reform processes in partner countries, while stakeholders involved in VPA negotiations in various countries have exchanged experiences.[134] Furthermore, a discussion has been prompted within CITES[135] on its processes for establishing legality (see Box 6).

However, this regime is at best nascent. Much more needs to be done if it is to become a truly global one, able to address the challenges facing the world's forests. Not least, more active engagement by a larger number of countries – in particular, China, Japan, India and South Korea – is required. And further international cooperation will be necessary both between consumer countries and between consumer and producer countries.

Regional forums, such as ASEAN and COMIFAC,[136] should be employed to facilitate coordination between countries and drive progress. Countries might be galvanized into action if the G20 were to take up the issue – as was the case when the G8 did so in 1998. Although the G20 focuses on economic issues, the growing imperative to establish sustainable growth suggests that addressing weak governance of land use and improving legal compliance should be one of its priorities.

Increasing government support for, and interest in, tackling illegal logging will require improving the evidence for and understanding of the issue's relevance for other policy priorities – such as sustainable development and climate change mitigation and adaptation. As highlighted earlier, forests are likely to feature in the forthcoming SDGs. Currently, several draft goals are directly relevant to forest governance and illegal logging, including those on non-financial reporting and procurement, climate change adaptation, sustainable management, corruption and open decision-making.[137] The SDGs could spur action to improve forest governance in more countries, as they will provide a framework that facilitates the monitoring of progress, both by civil society in those countries and by international donors; but well-defined indicators will be needed to achieve this. Such indicators should assess the level of implementation of policies and their impacts, rather than simply registering their existence – for example, the extent of compliance with laws related to land use and forest conversion.

It is likely that the international climate change agreement in late 2015 will provide further opportunities for supporting efforts to reduce deforestation, in particular through REDD+ or 'intended nationally determined contributions'. Priorities in this area should be the establishment of equitable processes to ensure a sound framework for the allocation and management of land.

Box 6: CITES and the EUTR

Timber that has a CITES[a] certificate is considered legal under the EUTR, and so there is no due diligence requirement for such timber. This has prompted concerns that CITES could prove a weak spot for the effective enforcement of the EUTR, owing to both the limited scope of legislation that applies under CITES (which includes only that related to the conservation of fauna and flora) and weak enforcement of the requirements for establishing legality.[b] Options to address these concerns are under discussion within the context of the EUTR and CITES, including providing guidance on the process for establishing the legality of CITES products (legal acquisition findings).

[a] Convention on International Trade in Endangered Species of Wild Fauna and Flora.
[b] Saunders, J. and Reeve, R. (2014), *The EU Timber Regulation and CITES*. London: Chatham House.

[133] For amendments to FSC standards, see https://ic.fsc.org/timber-legality.492.htm; and for revisions to PEFC standards, see http://www.pefc.org/news-a-media/general-sfm-news/1192-pefc-publishes-2013-chain-of-custody-standard-aligned-with-eutr.
[134] See, for example, Penelon, A. (2010), 'Lessons learnt & Progress across Central Africa', at http://www.illegal-logging.info/content/lessons-learnt-progress-across-central-africa-negotiate-vpa%E2%80%99s-enhance-value-forest-laws.
[135] CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments that aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival. The role of CITES is to control the import, export and re-export of species covered by the Convention – all such trade must be authorized through a licensing system. Details are available at www.cites.org.
[136] La Commission des Forêts d'Afrique centrale.
[137] UNGA (2014), Report of the Open Working Group of the General Assembly on Sustainable Development Goals.

Legality as a stepping stone towards sustainable forest management

For many stakeholders, the aim of tackling illegal logging has been to achieve sustainable forest management. Indeed, the FLEGT Action Plan notes that 'the EU's wider objective is to encourage sustainable forest management'.[138] There are two arguments supporting the assumption that legality can lead to sustainability. The first is that achieving sustainability certification is easier in countries that have improved governance and legal compliance, because local companies will have a better starting position and are less likely to be undercut by illegal operators.[139] The second argument is that widespread legal compliance is essential for establishing a sustainable forest sector as it enables governments to implement effective monitoring and planning.

Levels of forest certification

With regard to the first argument, the area of certified forests has grown over the last decade: in the producer countries assessed, the area of forest certified as sustainable under voluntary schemes increased from 6.7 million ha in 2006 to 10.8 million ha in 2012. A similar increase has taken place at the global level: between 2005 and 2010, the area of certified tropical forests increased from 10.5 million ha to 17.7 million ha.[140]

This growth has been linked to increased demand for certified products promoted by policies in consumer countries, in particular public procurement (see above). At the same time, the introduction of the Lacey Act amendments and the EUTR may have spurred some companies supplying the US and EU markets to pursue certification. However, there is little evidence to suggest that improved governance in the producer countries may be encouraging uptake of certification. Rather, the market requirements for legality verification mean that some companies are choosing to opt just for this, as they see no benefits in seeking certification: legal compliance is sufficient to enable them to access the EU and US markets, while certification remains too costly.[141]

The increase in forest area certified under voluntary schemes for sustainability has slowed in recent years, while forest area verified as legal has, in fact, declined (see Figure 35).[142] An important factor has been the development of national legality verification schemes under the VPAs. Indonesia's scheme is already in place and became mandatory for certain companies in January 2013. If figures for this scheme are included in data on the level of certification in the nine producer countries assessed, the picture painted is rather different – namely, there was a big increase in the area of forest certified after the scheme was put in place in 2013. The Indonesian system allows for certification against legality or sustainability standards (the latter is mandatory for concession holders on state land once their first legality certificate has expired). By August 2013, just over 40 per cent (9.3 million ha) of the country's concession area had been certified against the sustainability standard and 7 per cent against the legality standard (1.6 million ha). The area of forest certified under voluntary schemes in 2013 has not been calculated; but on the assumption that it has not changed drastically over the previous year, inclusion of the data from Indonesia nearly doubles the total area of certified forest in the nine producer countries assessed.

These data suggest that implementation of the Indonesian VPA is promoting not just legal compliance but also sustainable management of the country's forests. Implementation of the VPAs in other countries could have a similar impact. For example, in Cameroon and the Republic of the Congo, national legality verification systems will allow for recognition of voluntary certification schemes, which could encourage the adoption of such schemes.

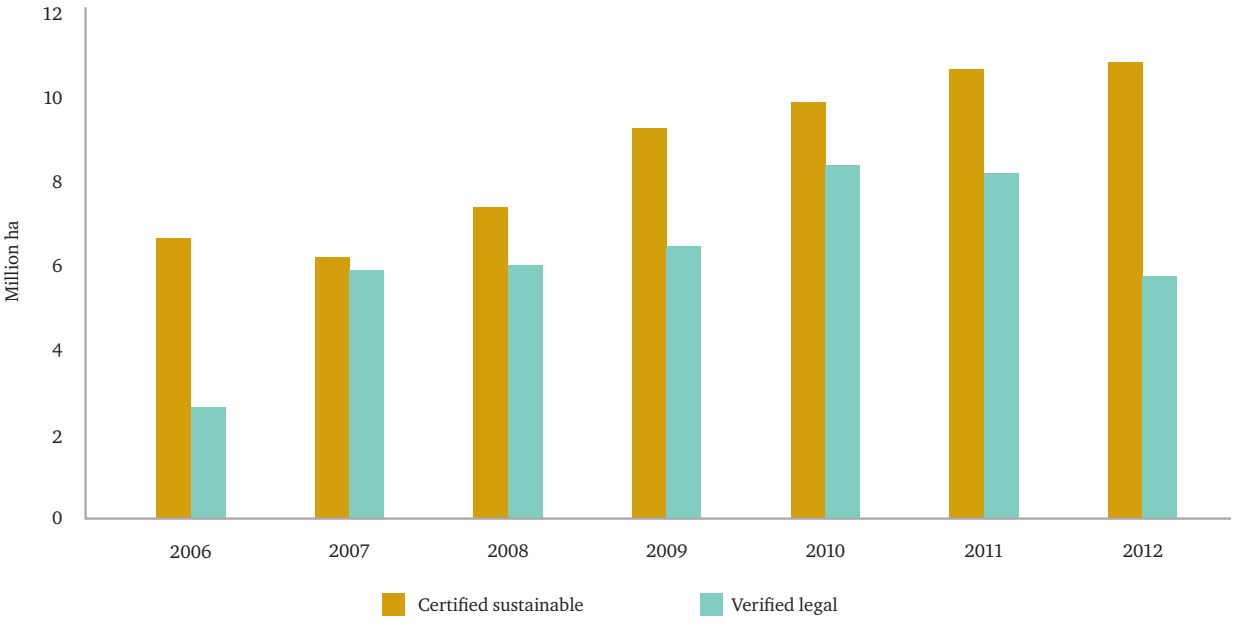
Improved legal compliance

Improving legal compliance may also support sustainability if principles of sustainability are incorporated into the legal framework. Indeed, this may have a much broader impact than promoting certification, since the latter operates only at the level of individual forest management units. However, much will depend on the extent to which sustainability is codified in the legal framework with respect to forest management and land-use planning.

In many countries, forest legislation is based on principles of sustainability; so, in theory, its enforcement should improve forest management. Although these principles are often not translated into well-designed policies, legal compliance can none the less result in improved management practices. For example, while the legal requirements for concessions still allow for the over-

[138] EU FLEGT Action Plan, p. 5.
[139] IDH (2012), 'Mainstreaming Sustainability in Tropical Timber. Legality, sustainability, and the business case for frontrunner collaboration'. IDH Position Paper.
[140] ITTO (2013), *ITTO Strategic Action Plan, 2013–18*, ITTO Policy Development Series, No. 19.
[141] See, for example, Karsenty, A. et al. (2014), 'Potential Causes of the Contraction of the Demand for FSC Certified Tropical Timber in the European Union'. Paris: CIRAD.
[142] In contrast with sustainability certification, legality verification is limited to ensuring compliance with the law. It includes both voluntary schemes and national systems (such as those being elaborated under the VPAs).

Figure 35: Total forest area under voluntary verification or certification schemes for the nine producer countries, 2006–12



Source: FSC Forest Management (FM); FSC Controlled Wood (CW); Malaysian Timber Certification Scheme (MTCS); Indonesian Ecolabeling Institute (LEI); Société Générale de Surveillance (SGS) Verified Legally Compliant (VLC); SGS Verified Legal Origin (VLO); Bureau Veritas (BV) Origine et Légalité des Bois (OLB); Rainforest Alliance (RA) VLC; RA VLO.

harvesting of species in Cameroon, ensuring compliance with those requirements can reduce harvests by about 10 per cent.[143] In Ghana, the level of harvesting has been estimated at between 25 per cent and 200 per cent above the annual allowable cut. Although the allowable cut is above that which is considered sustainable, ensuring legal compliance with this would significantly reduce pressure on the country's timber resources.[144]

The extent to which improved enforcement of land-use legislation improves sustainability depends on the degree to which sustainability is codified in the relevant laws and policies. In particular, it depends on the extent to which land-use decisions need to consider sustainability principles and how these principles are balanced with economic objectives. For example, Cameroon's development strategy until 2020 is based on the expansion of mining and agriculture, which will entail significant forest loss.[145] In Indonesia, plantations are being promoted as part of the country's 'green economy'; but the effectiveness of this policy is questionable unless the planned expansion of plantations is achieved by using degraded forest land and without further conversion of natural forests.

Although compliance with existing legal frameworks for land use cannot in itself guarantee sustainability, it can still make a significant contribution – as in the case of tackling illegal logging. As noted earlier (see Chapter 3), there is growing evidence of widespread illegality in decision-making related to the clearance of forests for timber and pulp plantations, agriculture and other land uses, such as mining and infrastructure developments. Therefore, enforcement of existing legal provisions on land allocation could have a significant impact on reducing deforestation and promoting better land-use management.

Measures to ensure the legality of timber have an important role to play in promoting compliance with laws related to forest conversion. This is particularly the case when timber is one of the main financial incentives for conversion. However, if the commodities produced on the cleared land provide the main incentives for conversion, measures focused on the legality of those commodities will be necessary too.

[143] Cerutti et al. (2011), 'Legal vs. certified timber: preliminary impacts of forest certification in Cameroon'. *Forest Policy and Economics*, 13(3).
[144] Hansen, C. et al. (2012), 'Revisiting illegal logging and the size of the domestic timber market: The case of Ghana', *International Forestry Review* 14(1), pp. 1–11; and Lund, J. et al. (2012), 'The Political Economy of Timber Governance in Ghana', *ETFRN News*; and Hoare (2014a).
[145] IMF (2010), 'Cameroon: Poverty Reduction Strategy Paper', at http://www.econbiz.de/Record/gesp-growthand-employment-strategy-paper-reference-framework-for-government-action-over-the-period-2010-2020-august-2009/10008653115.

An approach based on that of the VPAs has been proposed for agricultural commodities – namely, establishing instruments similar to those agreements as a means of improving legal production and, more broadly, engendering more open and more consultative policy discussions and decision-making. This would be challenging, not least because the economic stakes in most cases are so high that there would likely be strong resistance to any efforts to increase transparency or improve consultation. However, such an approach could be feasible for certain countries and commodities.[146]

The challenges are apparent within the context of REDD+. While REDD+ agencies are ideally placed, in theory, to provide a comprehensive review of the use of forest lands, in reality, they are often hampered by their limited political influence and inability to question the decisions of more powerful ministries, such as those for mining or land-use planning.[147] Overcoming these entrenched interests will prove difficult in any attempt to improve governance and establish more sustainable land use. However, the growing demand for commodities not sourced from recently deforested land could reduce the incentives for both legal and illegal forest conversion. This, in turn, could open up discussions within producer countries of their land-use and development strategies.

Owing to the growing pressure on forest lands and the need to address poverty, governments face difficult decisions about how best to use their forest resources and land – whether for timber concessions or plantations, agriculture, mining, urban development or conservation.[148] Whatever balance a country decides to strike, legal compliance with the land-allocation process is essential for effective land-use governance and a more sustainable development path.

[146] Brack, D. with Bailey, R. (2013), *Ending Global Deforestation: Policy Options for Consumer Countries*. London: Chatham House.
[147] Karsenty, A. and Ongolo, S. (2011), 'Can "fragile states" decide to reduce their deforestation? The inappropriate use of the theory of incentives with respect to the REDD mechanism', *Forest Policy and Economics*, 18 (pp. 38–45); and Sills, E. O. et al. (eds) (2014), *REDD+ on the Ground. A Case Book of Subnational Initiatives Across the Globe*. Bogor, Indonesia: CIFOR, http://www.cifor.org/redd-case-book/.
[148] Megevand, C. et al. (2013), *Deforestation Trends in the Congo Basin. Reconciling Economic Growth and Forest Protection*. Washington, DC: World Bank.

7. Conclusions and Recommendations

Conclusions

Progress in tackling illegal logging has slowed since 2010. In spite of reductions in many types of illegal practice, the evidence suggests that the overall level of illegal logging has remained roughly the same in most of the producer countries included in this second Chatham House assessment, while the situation has worsened in several of those countries. Moreover, illegal logging remains widespread in all of the countries. More than 80 million m^3 of timber was illegally produced in 2013 in the nine producer countries assessed, accounting for as much of one-third of their combined total production. This will have released at least 190 million tonnes of carbon dioxide into the atmosphere.[149]

Meanwhile, although almost all of the 10 processing and consumer countries in this assessment have significantly reduced the share of illegal imports in their overall imports since 2000, there has been a shift, and overall growth, in trade to those countries with larger shares of illegal imports, most notably China. As a result, the share of illegal imports for all 10 countries has remained at just under 10 per cent since the turn of the century. Illegal imports were estimated at nearly 60 million m^3 in 2013, with an import value of US$17 billion: having declined during the global recession, illegal imports have since rebounded to nearly the same level as a decade ago.

The policy response

This slowing of progress in relation to illegal logging has occurred despite the passage of ambitious legislation in 'sensitive' markets and significant governance improvements in a number of producer countries.

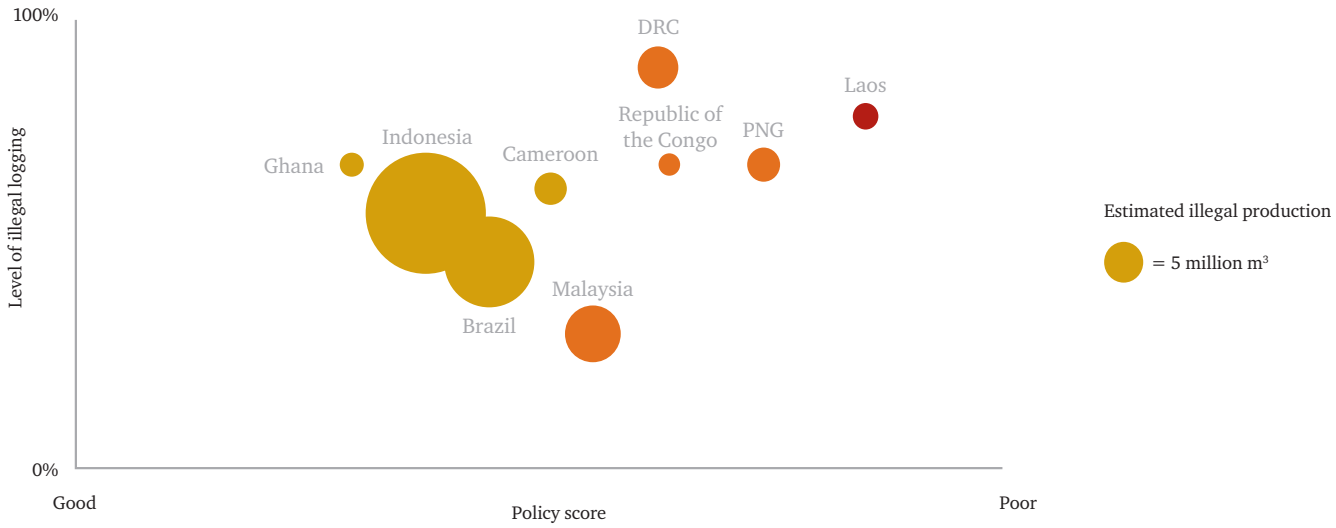
Both the EU and the US have introduced legislation prohibiting illegal imports and, along with other countries, have been pursuing a range of measures to promote markets for legal timber and encourage legal production. There are some indications that these measures have reduced the trade in illegal timber. In particular, legislation on illegal imports and procurement policies have brought about changes in business practices – notably, the establishment of more transparent and legal supply chains. Evidence of further progress may also become apparent in the EU, as tougher enforcement strategies are pursued and with analysis of data from 2014 onwards.

The governance improvements in the producer countries include advances in legal reform, the establishment of more open and participatory decision-making processes, greater transparency and improved capacity within both government and civil society. Ghana and Indonesia have made the most progress since 2010. These two countries have been actively implementing their voluntary partnership agreements (VPAs) with the EU, including the development of national legality assurance systems. Moreover, there has been a landmark ruling in Indonesia that provides for the formal recognition of customary land rights in state forests, while the country has made a concerted effort to target corruption and financial crime in the sector.

If findings from the policy assessment and estimates of levels of illegal logging are compared, it can be seen that there is a correlation between the two (see Figure 36). Countries with a higher policy score, such as Brazil and Indonesia, tend to have lower levels of illegal logging, while those with lower scores, such as the Democratic Republic of the Congo (DRC) and Laos, often have higher levels of illegal logging. However, there are exceptions. Ghana scored quite well in the policy assessment but has a high level of illegal logging owing to the predominance of its informal small-scale sector – a problem for which an adequate solution has yet to be found. Malaysia received a low score for its policy framework on account of a number of unresolved governance issues, including the lack of recognition of customary rights and corruption related to the allocation of resource rights. However, the level of illegal logging is relatively low, since much of the country's timber production comes from long-standing rubber plantations and concessions – particularly in Peninsular Malaysia – that are not significantly affected by those issues. In spite of these exceptions, it is apparent that improving governance remains fundamental to efforts aimed at tackling illegal logging.

[149] This has been calculated using estimated emissions of 70 tonnes of CO_2/ha for low-intensity legal selective logging (timber extracted at $30m^3$/ha). See Putz, F. E. et al., 'Improved Tropical Forest Management for Carbon Retention', *PLoS Biology*, Vol. 6, No. 7, 15. This provides a rough estimate for the emissions from illegal logging, given that these will vary significantly depending on the type of logging and the nature and condition of the forest.

Figure 36: Policy scores and levels of illegal production in the nine producer countries, 2013



*Shading reflects the score for the relevant policy area as a percentage of the possible maximum: **red** = 25 per cent and below; **orange** = >25–50 per cent; **yellow** = >50–75 per cent; and **green** = above 75 per cent.

Source: Chatham House policy assessment, ITTO, UN Contrade and national agencies.

Challenges to progress

There remains significant room for improvement in all the countries assessed: reform processes remain incomplete and fundamental changes have yet to be seen in practice, including those related to transparency. Improvements to governance have slowed in many countries, particularly as they increasingly face more challenging governance problems, including corruption and entrenched systems of informal practices.

Progress in tackling illegal logging has slowed too, largely owing to broader trends in the sector, which have counteracted some of the improvements resulting from governance reforms. Thus, while concession management has improved in many countries, the growth in illegal timber from small-scale production (for example, in Ghana, as noted above) and forest conversion (most notably in Indonesia but in many other countries as well) has cancelled out such gains. Effective policy responses to these issues have yet to be developed in most countries. Furthermore, the issues look set to become more pressing, as economic growth and population growth are likely to add to the demand for resources and competition for land.

Another challenge to the effectiveness of the policy response is the expansion of timber markets in many emerging and developing countries. This means that 'sensitive' markets account for a declining proportion of world trade and that, consequently, their policies are potentially less influential. It is estimated that domestic consumption accounted for at least 40 per cent of the illegal production of the nine producer countries in 2013, while China alone accounted for half of all illegal exports from those countries.

Overall, it is clear that existing measures are not keeping pace with changes in the sector. A more radical transformation is needed if a legal and sustainable forest sector is to be established on a global scale. Such change will require achieving far-reaching governance reforms in producer countries, including measures addressing the small-scale sector and land-use governance. It will also require the active engagement of a broader constituency of consumer countries to exclude illegal products from their markets.

Recommendations

Illegal logging remains widespread and there are still significant governance challenges. Therefore, the efforts of just a few countries will be insufficient to address those issues effectively. The scale and nature of the problems demand a coherent and decisive international response.

As currently proposed, the new Sustainable Development

Goals (SDGs) could galvanize the international community to tackle important supply-side issues such as forest management and governance. They could also provide further impetus for private-sector efforts to establish sustainable supply chains. Furthermore, the forthcoming international climate change agreement – set to be approved in Paris in late 2015 – should provide further support for initiatives aimed at improving land-use governance in producer countries. However success in this area will also require significantly reducing markets for illegal timber.

The EU and US are well placed to provide global leadership on this agenda, building on their successes and disseminating best practice. Working with others, the goal should be to marshal and harmonize the efforts of key producer, processing and consumer countries. For example, bilateral arrangements such as the EU's voluntary partnership agreements (VPAs) could be extended to include a third consumer or processing country such as China. Producer governments could cooperate further to disseminate best practice on tackling illegal logging. With donor support, this could be formalized through a capacity-building and knowledge network.

Looking more broadly, the G20 could provide a forum to help establish a stronger international regime, incorporating supply- and demand-side measures. Its members account for more than 90 per cent of global tropical timber imports and include both 'sensitive' and 'non-sensitive' markets as well as the leading exporters of tropical wood-based products – namely, Indonesia and Brazil. Building on the legacy of the G8's Action Programme on Forests, a G20 commitment to tackle illegal logging could push the issue up the political agenda in countries such as Brazil, China, Japan, Russia and South Korea.

A revitalized global agenda to tackle illegal logging would require action on five fronts:

1. Go deeper

Following early gains, governance reforms in most producer countries have slowed markedly. Getting back on track will require political commitment and a willingness to tackle the more difficult remaining governance issues. Priorities include the following:

Pushing ahead with anti-corruption measures

Anti-corruption agencies or task forces that have sufficient resources and powers to be effective should be established in producer countries.

The role of civil society in anti-corruption efforts needs to be supported and recognized by governments: civil society can either serve as an independent monitor or have a less formal mandate. In either case, it must have adequate freedom to operate, and mechanisms must be in place through which reports of suspicious activity can be submitted and dealt with confidentially.

Stepping up efforts to improve transparency

Existing commitments to improve transparency need to be meaningfully fulfilled in producer countries. This will entail ensuring that accurate information is made available and that systems are in place to respond to requests for information. More effective dissemination strategies are needed too; they should be formulated taking into account the availability of national communication infrastructure.

In addition, producer countries should consider reporting on both their forest and agricultural sectors to the Extractive Industries Transparency Initiative (EITI) in order to promote transparency and improve monitoring of those sectors.

Continuing to focus on enforcement of existing legislation

In producer countries, coordination between agencies should be improved and further training and resources provided, particularly in the judicial sector. However, enforcement needs to be balanced with the need for legal review and reform, on the one hand, and the provision of extension services on the other.

The governments of EU countries and the US should prioritize the enforcement of their respective legislation on the import of illegal wood-based products. With regard to the EU Timber Regulation (EUTR), effective enforcement by all member states will be essential. This will require the allocation of sufficient resources as well as continued efforts to ensure cooperation between enforcement agencies – both within the EU and the US, and at the international level.

Establishing legal and transparent supply chains

The effectiveness and impact of timber-tracking and legality verification systems need to be closely monitored. Those activities should, in turn, be closely coordinated with outreach efforts and linked to enforcement and reform initiatives. At the same time, private-sector actors should continue to develop best practice to improve the legality of their supply chains.

The impact of China's guidelines for forest enterprises should be monitored and mechanisms established to ensure broad compliance. These mechanisms should include linking the guidelines with financial incentives and introducing reporting requirements. The US and China,

along with other countries with national companies that have significant overseas engagement, should follow the example of the EU in introducing legislation requiring logging companies to disclose payments to governments.

Strengthening international cooperation

More should be done to enhance knowledge exchange and the coordination of efforts through international cooperation. Multilateral agreements should be explored – for example, between several producer countries and a 'sensitive market' country.

Donors need to consider both the technical aspects of reform and its political-economic context. Thus, they need to have a good understanding of the incentives for different stakeholders either to support change or to maintain the status quo. Donors should ensure the coherence of their interventions: for example, ensuring that all donor-funded projects have procurement policies requiring legal timber.

Finally, donors should establish clear timetables for progress in order to facilitate monitoring – a strategy that at the same time would enable scrutiny and pressure from civil society. Further support from donors should be made conditional on progress being measured against various milestones.

2. Go wider

The most progressive demand-side approaches remain confined to a small subset of developed consumer countries with a declining share of imports. Comparable efforts must be extended to other developed countries – such as Japan and South Korea – and to emerging processors and consumers such as India and China. At the same time, producer-country governments must tackle the burgeoning consumption of illegal timber at home. Priorities include:

Introducing legislation that prohibits illegal imports

Legislation prohibiting the import or sale of illegal wood-based products should be considered by all major consumer countries. Such laws should require companies to practise credible due diligence. In addition, they should be aligned with existing legislation in the EU, the US and Australia to avoid creating an undue burden for producer countries; and they should recognize FLEGT licences. Effective enforcement mechanisms will need to be in place as well.

Introducing public procurement policies

A rigorous public procurement policy for legal timber should be considered by all consumer countries, potentially as an interim measure before developing legislation that prohibits illegal imports. In countries that already have such policies – for example, China and Japan – the provisions need to be made more rigorous, with a broader product scope and clearer criteria for establishing legality. Moreover, governments should do more to ensure that those policies are adhered to by central and local governments alike, and that effective reporting and monitoring mechanisms are in place.

Strengthening international cooperation

Efforts to strengthen cooperation between countries tackling illegal logging and weak forest governance need to continue. As China considers establishing bilateral agreements with producer countries, it should ensure that such accords build on existing VPA processes, including alignment with the legality definitions developed under the latter agreements. Furthermore, China, the EU and VPA partner countries should consider establishing trilateral agreements to facilitate such alignment.

For its part, the G20 should consider prioritizing the issue of illegal logging in order to galvanize and coordinate action among its members.

Meanwhile, the SDGs provide an opportunity for further policy impetus; it will be necessary to establish well-defined indicators that enable monitoring of the effectiveness and impact of policy measures. Under the new climate agreement, establishing equitable decision-making processes for the allocation and management of land should be a priority for support, to promote widespread legal compliance.

3. Get smaller

Efforts to date have focused on large-scale concessions, but small-scale production should be given much more attention. Priorities include:

Implementing legal reform

In many producer countries, the focus should be on reform of the legal framework for the small-scale forest sector. Such reform should include the establishment of clear and equitable legal frameworks for tenure and use rights, the simplification or clarification of requirements for forest management, and the development of appropriate fiscal regimes.

Increasing capacity-building

Comprehensive and long-term strategies for capacity-building and extension services need to be drawn up, and access to affordable credit and subsidies improved. Technical training is required to enable both producers and processors to meet the requirements for legality verification. Such training should encompass broader competencies such as negotiation, organization-building and strategizing.

Promoting a legal market

Producer countries need to introduce further measures to promote the consumption of legal timber in their domestic markets. More countries should explore the use of procurement policies – both public and private – that require the purchase of legal timber as well as that of small-scale producers.

Where possible, the private sector should work with small-scale producers and processors to help them meet their requirements to verify legality.

Strengthening international cooperation

The potential for VPAs to play a more targeted role in supporting a shift towards small-scale production should be explored. In particular, the EU and its partner countries should consider the possibility of developing agreements aimed specifically at this sector.

4. Get smarter

The pervasive lack of data undermines efforts to monitor logging and draft effective policies. The reporting and accessibility of data should be improved and the opportunities offered by new technologies seized. Priorities include:

Increasing investment in statistical services

Producer countries need to develop statistical services to provide robust data on production, consumption and trade. The G20 could play a key role in galvanizing action and supporting international cooperation in this area.

Monitoring the impact of policies and development assistance

Governments – and particularly donor governments – need to systematically monitor the impact of policies and development assistance on forest governance and levels of illegal logging. Such monitoring should encompass domestic action (for example, public procurement policies) and international initiatives (including VPAs and other bilateral agreements, technical support and aid). Monitoring of forest governance and illegal logging could be implemented at the national level, as part of VPA impact assessments, or at the international level – for example, by the World Bank or the International Tropical Timber Organization.

5. Go further

Increasingly, illegal timber production is the result of the expansion of agriculture, mining and infrastructure. Rather than confine efforts to tackle illegal logging to the forest sector, stakeholders urgently need to develop coherent cross-sector strategies. Priorities include:

Improving law enforcement for land-use planning and management

Producer-country governments should seek to clarify and enforce laws related to land-use planning. Furthermore, they should ensure that mechanisms for tackling illegal logging cover timber from illegal forest conversion – including the legality assurance systems being developed under the VPAs.

At the same time, consumer-country governments should ensure that their existing means of tackling illegal logging are able to deal effectively with timber from illegal forest conversion – namely, through enforcement of the EUTR and the Lacey Act.

Producer-country governments should implement processes to redress illegalities committed in the past. These processes should include reviewing permits and adopting transparent decision-making to determine what actions should be taken. Such actions could entail renegotiating permits, applying sanctions or granting amnesties.

Producer-country governments should engage with and support companies seeking to source legal (and deforestation-free) commodities by providing them with the information they need to guarantee the legality of their supply chains. Meanwhile, the private sector should lobby the governments of the countries in which they operate to clarify and enforce national legal frameworks.

Establishing sustainable and transparent supply chains

In all countries, legislation related to corporate transparency of the private sector should be strengthened. Within the EU, detailed guidance on the Union's non-financial reporting requirements for companies should be provided; it should include methodologies for corporate reporting on forest impacts.

Strengthening international cooperation

Stronger safeguards for free trade agreements should be put in place, including the establishment of more detailed criteria on land-use change for conducting environmental impact assessments.

To help encourage action on illegal logging, the G20 should call for concerted efforts to ensure the legal production of commodities as part of its overall agenda for sustainable growth.

Annex 1: Chatham House Indicators

The methodology employed for the Chatham House assessments is based on a set of indicators that were adapted slightly for each category of country – producer, processing and consumer.[150] For the first (2010) assessment, data were collected and analysed during the period 2008–09; for the country reports on which this second assessment draws, those processes took place in 2012–14. The indicators cover the four following areas:

1. Media attention

The level of attention paid by domestic and international media to illegal logging and the related trade was assessed using both quantitative and qualitative methods. The number of articles in the international media was measured through a search of online media archives (Factiva, Newsbank and LexisNexis) using the term 'illegal logging' and the relevant country name. A similar approach was adopted with domestic media: the search term 'illegal logging' was entered in English and/or the local language. Online archives were searched where possible, physical archives where no such digital records were available. Country partners were asked to identify newspapers, journals and media outlets considered 'major circulation'. The articles were then categorized according to their main focus: enforcement, private-sector response, government response, impacts or 'other'.

2. Policy framework

For each of the countries in the assessment, an in-country partner was selected by Chatham House to assess the national policy and legal framework for tackling illegal logging and the related trade. In-country partners were provided with guidelines on scoring in order to ensure consistency across countries. The scores were then reviewed by Chatham House researchers and peer reviewers, and amended where necessary.

For producer countries, the questions for the policy assessment were grouped into 12 broad categories: high-level policy; legislative framework; checks and balances; international trade cooperation; policies regulating the demand for timber; tenure and use rights; timber-tracking systems; transparency; allocation and management of rights to harvest; law enforcement; information management; and financial management. In addition, data on enforcement and revenue collection were collected and incorporated into the policy assessment.

For processing and consumer countries, a smaller set of questions was used, covering five broad categories: high-level policy, legislative framework, law enforcement, international engagement and procurement policy. In addition, enforcement data were collected and incorporated into the policy assessment.

3. Expert perceptions

In producer countries, national experts were asked to estimate levels of illegal logging and the related trade, and to evaluate the responses by the government and private sector to the issue. The main part of the survey, which comprised 16 questions, was sent to all respondent groups – government officials, timber-industry representatives, NGOs and 'other' experts. An addendum to the survey was sent to private-sector respondents only, and a separate survey was undertaken among industry associations.

In processing countries, representatives of the private sector were asked about the impact of illegal logging on the industry, their perceptions of the private-sector response to the issue, and their own experience. A separate survey was sent to industry associations to determine their responses to the issue.

4. Third-party certification

Data were gathered on the total area of production forest – excluding plantations – in the producer countries that has been either verified as legal or certified as sustainable. All major voluntary certification schemes were included. Data were based on those provided by each of the schemes, as well as on research by Chatham House. Various reports, including those by NGOs and trade associations, were consulted in order to calculate the total area of active production forest under certification at the end of each year during the period covered (up to 31 December 2012). No areas certified after this date are included in the current assessment.

For the processing and consumer countries, data were collected on the number of companies that have achieved Forest Stewardship Council (FSC) Chain of Custody (CoC) certification. These data were provided by the FSC and analysed by Chatham House.

[150] Details of both the methodology and the development of the indicators can be found in Lawson, S. (2007), *Illegal Logging and Related Trade: Measuring the Global Response*. London: Chatham House; Lawson and MacFaul (2010); Lawson, S. (2014d); and Hoare, A. (2014b).

Analysis of trade data

Trade data were compiled and used to analyse the following:

- Shifts in trade between 'sensitive' and 'non-sensitive' markets;
- Discrepancies between trade data reported by importing and exporting countries; and
- Estimates of illegal imports (for processing and consumer countries only).

For the first two aspects, data were compiled from official national trade statistics, as well as from the UN Comtrade database, and converted to 'roundwood equivalent' (RWE) volume.

The level of imports of wood-based products at high risk of illegality was estimated through a detailed evaluation of product flows (for which the term 'import-source analysis' was coined). The evaluation involved estimating, based on import data, the RWE volume and value of imports (in US dollars) for each year as well as the bilateral flow of each category of wood-based product. Those values were then multiplied by estimates of the proportion that was likely to be illegal. That proportion was itself based on an estimate of the level of illegality likely to be associated with the export of each product category for a given country and year, as well as the extent to which importing countries demonstrate a preference for legal products (for example, by purchasing certified products).[151]

Wood-balance analysis

For the producer countries from which robust national data could be obtained, wood-balance analysis was undertaken. The legal supply of timber (based on official records of harvest and imports) was compared with consumption (based on official records of domestic consumption and exports). The gap between supply and consumption can indicate the existence and extent of unreported – and hence potentially illegal – logging.

There are a number of limitations to such analysis. Most importantly, it cannot account for smuggling or illegalities related to legally sanctioned harvesting (for example, the failure to pay taxes). Furthermore, data – particularly on domestic consumption – are unreliable or lacking in many countries. For this reason, the methodology used varied from country to country depending on the data available, while in many cases no such analysis could be undertaken owing to the lack of relevant data.

[151] For further details of how the estimates were made, see Lawson (2014d) and Hoare (2014b).

Annex 2: Estimates of Illegal Production

Below is an explanation of how the estimates of illegal production in Table 2 (Chapter 3) were calculated.These estimates, which draw on the best available data both from the Chatham House assessments and the reports of other organizations, should be considered indicative only. Furthermore, it should be noted that these estimates are an average for national production; levels of illegality will vary between product types and sources within each country.

Brazil – estimated level of illegal logging (tropical timber): >50%

Wood-balance analysis undertaken for the 2010 Chatham House assessment found that the discrepancy between reported volumes of timber production and consumption in 2008 ranged from 34 per cent to 95 per cent, depending on the data sources used. The level of logging in excess of licensed volumes was considered to lie within that range. Wood-balance analysis using UN Food and Agriculture Organization statistics found that official consumption figures exceeded supplies by 25 per cent in 2012. Moreover, the findings of the expert perceptions surveys undertaken for the Chatham House assessments indicated high levels of illegal logging: the average estimate was 70 per cent of the total harvest in the 2008 survey and 75 per cent in the 2013 survey.

Those findings are backed up by other studies. Analysis of satellite data concluded that 78 per cent and 54 per cent of logging areas in the states of Pará and Mato Grosso, respectively, were unlicensed in 2011–12.[152] Similarly, the laundering of illegal timber through the country's timber-tracking systems has been commonplace.[153] Meanwhile, Forest Trends estimated that between 68 per cent and 90 per cent of forest clearance for commercial agriculture was illegal in 2000–12. Nearly 20 per cent of tropical timber exports over this period were estimated to have come from that source; and 90 per cent of those exports were illegal.[154]

It is difficult to integrate all the various estimates as they refer to different periods, different parts of the country and different types of illegal activity. But on the basis of them, Chatham House estimates that at least 50 per cent of Brazil's tropical timber production is illegal.

Cameroon – estimated level of illegal logging: 65%

In both the 2008 and 2013 Chatham House expert perceptions surveys, the average response to the question about the level of illegal logging was 35 per cent. Wood-balance analysis conducted for 2007 indicated a gap of 22 per cent in legal supply.

Reports by independent monitors and NGOs indicate that while improvements have been made in large-scale concessions over the past decade, there has been less progress in clamping down on illegal practices elsewhere. Abuse of the system of allocating small-scale permits, which are granted for the extraction of timber linked with development projects, is reported to have been commonplace.[155]

Informal chainsaw milling is widespread too. Estimates for 2004–08 indicate that half of national timber production is from informal chainsaw milling that supplies the domestic market.[156] This situation is unlikely to have changed drastically in the years that have followed: exports increased somewhat in 2009–13, but the domestic market is likely to have grown too, owing to economic growth and urbanization over the same period.

Based on the figures cited above, Chatham House estimates that 65 per cent of total timber production is illegal: illegal chainsaw milling for the domestic market accounts for 50 per cent and illegal practices in export supply chains for 15 per cent.

Democratic Republic of the Congo (DRC) – estimated level of illegal logging: >90%

Wood-balance analysis undertaken for the Chatham House assessment indicated that in 2011 nearly 90 per cent of logging was illegal, the vast majority of which was artisanal logging for the domestic market or neighbouring countries. That figure was confirmed by research into chainsaw milling in the DRC; according to that source, illegal logging accounted for 90 per cent of the country's total timber production in 2012.[157]

In the 2013 expert perceptions survey, the average estimate of illegal logging was just over 60 per cent of total

[152] Monteiro, A, et al., (2013), *Forest Management Transparency Report of the State of Pará (2012–2013)*. Belem: Imazon; and Monteiro, A, et al., (2014), *Forest Management Transparency Report of the State of Mato Grosso (2011–2012)*. Belem: Imazon.
[153] Greenpeace (2014)
[154] Lawson (2014a).
[155] Hoare, A. (2015), *Illegal Logging and Related Trade: The Response in Cameroon*. London: Chatham House.
[156] Cerutti and Lescuyer (2011).
[157] Lescuyer et al. (2014).

production. Other studies confirm the widespread nature of illegal logging in the DRC. The independent monitor in place during 2010–13 reported high levels of illegal practice by concessionaires.[158] At the same time, abuse of artisanal logging permits by companies has been a problem.[159]

The above data indicate that more than 90 per cent of the DRC's timber production is illegal.

Ghana – estimated level of illegal logging: 70%

In the 2008 and 2013 expert perceptions surveys, the average response to the question about the level of illegal logging was 60 per cent and 50 per cent, respectively. Wood-balance analysis conducted for 2006 indicated a gap of 65 per cent in legal supply. Consumption by the formal sector dropped below official harvest levels in 2011; however, actual harvest levels are thought to far exceed the permitted volume – estimates range from 25 per cent to 200 per cent.[160]

The majority of this illegal production is for the domestic market, which in 2012 was double the size of the export market in volume terms. Ninety per cent of that market is supplied by informal chainsaw millers. Illegal activities are an issue in export supply chains too. In particular, there have been concerns about the large number of salvage permits issued, since such permits have been used as a means to access rosewood.[161]

Based on the above data, Chatham House estimates that 70 per cent of timber production is illegal: illegal artisanal logging accounts for 60 per cent and illegal practices in the large-scale sector for 10 per cent.

Indonesia – estimated level of illegal logging: 60%

Wood-balance analysis undertaken for the Chatham House assessments indicated a gap in legal supply of 40 per cent in 2005 and 25 per cent in 2012. Another analysis based on 2013 data found a 30 per cent discrepancy.[162]

In the 2008 and 2013 expert perceptions surveys, the average response to the question about the level of illegal logging was 60 per cent and 40 per cent, respectively. Furthermore, the country assessment highlighted weaknesses in the legal framework, poor enforcement and persistent corruption.

Forest Trends estimated that 80 per cent of forest clearance for commercial agriculture was illegal during 2000–12.[163] Sixty per cent of timber-sector products and 30 per cent of paper-sector products were estimated to come from illegal forest conversion. Since those products account for some 25 per cent and 75 per cent of exports, respectively, nearly 40 per cent of exports could be from illegal conversion.

High levels of illegality have been reported in production for the domestic market, which is thought to account for 20 per cent of total timber production.[164] No quantitative estimates are available, but for the purposes of this assessment, at least 50 per cent of production for the domestic market is deemed illegal.

On the basis of the above figures, Chatham House estimates that 60 per cent of total production is illegal: illegal production for the domestic market accounts for 10 per cent, illegal conversion for 30 per cent and other illegal activities for 20 per cent.

Laos – estimated level of illegal logging: 80%

In the 2013 Chatham House expert perceptions survey, the average response to the question about the level of illegal logging was nearly 90 per cent. At the same time, the individual country assessment highlighted the weak legal framework as well as the lack of enforcement and government accountability.

High levels of illegal practice have been reported by other researchers and NGOs.[165] Forest conversion is the predominant source of timber in Laos, where failure to comply with the relevant laws is reportedly widespread.[166]

[158] REM (2013).
[159] Global Witness (2012).
[160] Hansen et al. (2012); Lund et al. (2012); and Hoare, A. (2014a).
[161] Global Witness (2013a).
[162] Forest Trends and Anti-Forest Mafia Coalition (2015), *Indonesia's Legal Timber Supply Gap and Implications for Expansion of Milling Capacity: A Review of The Road Map for the Revitalization of the Forest Industry, Phase 1.* Washington, DC: Forest Trends.
[163] Lawson (2014a).
[164] Cerutti et al. (2014); and Obidzinski et al. (2014).
[165] See, for example, Environmental Investigatons Agency (2011), *Crossroads: The Illicit Timber Trade Between Laos and Vietnam*. London: EIA; Forest Trends (2011) and Global Witness (2013b), *Rubber Barons: How Vietnamese Companies and International Financiers Are Driving a Land-Grabbing Crisis in Cambodia and Laos*. London: Global Witness.
[166] Global Witness (2013b).

Forest Trends estimated that one-quarter of timber exports were from illegal conversion in 2000–12.[167] Meanwhile, a survey of timber-processing facilities found that just one-third of logs were registered and that this volume accounted for just 13 per cent of estimated log consumption.[168]

Based on the above data, Chatham House estimates that 80 per cent of timber production in Laos is illegal.

Malaysia – estimated level of illegal logging: 35%

In the 2008 and 2013 Chatham House expert perceptions surveys, the average response to the question about the level of illegal logging was 25 per cent and 13 per cent, respectively. Wood-balance analyses indicated a gap of just over 20 per cent in legal supply in both 2007 and 2012.

Meanwhile, Forest Trends estimated that 30 per cent of timber exports were from illegal conversion in 2000–12.[169] The level of illegality varies from one part of the country to another: forest certification is widespread in Peninsular Malaysia, and a significant proportion of production comes from long-standing rubber plantations; but in both Sabah and Sarawak, forest governance is weaker. However, weak systems for the allocation and management of rights to harvest remain a problem throughout the country.

Based on the above, Chatham House estimates that 35 per cent of timber production in Malaysia is illegal.

Papua New Guinea – estimated level of illegal logging: 70%

Wood-balance analysis undertaken for this Chatham House assessment suggests that about 15 per cent of production was unlicensed in 2009 – and that most of that timber was for the domestic market. In the expert perceptions survey conducted in 2012, the average perceived extent of illegal logging was 55 per cent. There was considerable variation in the responses to this survey, and other research suggests levels may be higher.

A 2004 review of legal compliance among logging concessions – which accounted for 65 per cent of total production – reported that none of the concessions included in the review met all the necessary legal requirements. Fraudulent pricing of logs remains a problem, too, despite the introduction of monitoring systems for log exports.

More recently, illegal forest clearance for agriculture has become a serious problem. In 2012 some 30 per cent of production was from forest conversion; the bulk of that production is estimated to have been illegal owing to widespread fraud and misconduct in the issuance of licences for conversion (see Box 2 in Chapter 3).

On the basis of the above data, Chatham House estimates that 70 per cent of production is illegal: illegal logging for the domestic market accounts for 15 per cent, illegal conversion for 25 per cent and illegal logging in concessions for 30 per cent.[170]

Republic of the Congo – estimated level of illegal logging: 70%

Wood-balance analysis undertaken for the Chatham House assessment indicated that around 20 per cent of logging was unlicensed over the past decade. Chainsaw logging for the domestic market accounted for the bulk of this. In the 2013 expert perceptions survey, the average response to the question about the level of illegal logging was 40 per cent.

Meanwhile, the independent monitor reported high levels of illegal practices in concessions in 2011.

Based on the above information, Chatham House estimates that 70 per cent of production is illegal: illegal practices in concessions account for 50 per cent and illegal chainsaw logging for 20 per cent.

[167] Lawson (2014a).
[168] Grace, K. et al. (2012), 'Study for understanding timber flows and control in Lao PDR', at http://www.euflegt.efi.int/news/-/asset_publisher/ VoA92AEdZlro/content/study-for-understanding-timber-flows-and-control-in-lao-pdr-published.
[169] Lawson (2014).
[170] Further explanation can be found in Lawson (2014c).

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