Chapter 7

Global Governance Approaches to Addressing Illegal Logging: Uptake and Lessons Learnt

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7.1 Introduction

One of the most challenging tasks facing development agencies, trade ministries, environmental groups, social activists and forest-focused business interests seeking to ameliorate illegal logging and related timber trade is to identify and nurture promising global governance interventions capable of helping improve compliance to governmental policies and laws at national, subnational and local levels. This question is especially acute for developing countries constrained by capacity challenges and "weak states" (Risse, 2011). This chapter seeks to shed light on this task by asking four related questions: How do we



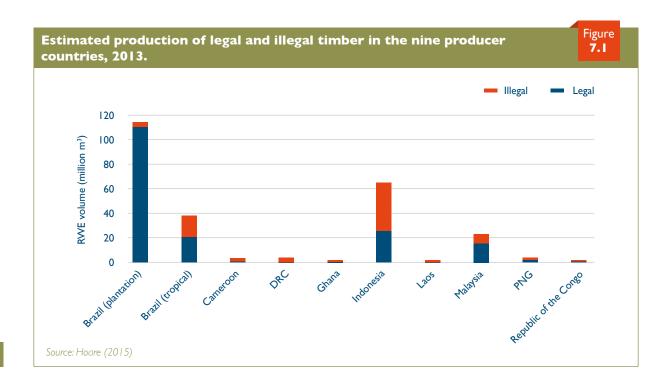
Mahogany wood. Trading mahogany species is restricted by the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES). Photo © iStock: SafakOguz

understand the emergence of illegal logging as a matter of global interest? What are the types of global interventions designed to improve domestic legal compliance? How have individual states responded to these global efforts? What are the prospects for future impacts and evolution?

We proceed in the following steps. Following this introduction, step two reviews how the problem of "illegal logging" emerged on the international agenda. Step three reviews leading policy interventions that resulted from this policy framing. Step four reviews developments in selected countries/regions around the world according to their place on the global forest products supply chain: consumers (United States, Europe and Australia); middle of supply chain manufacturers (China and South Korea) and producers (Russia; Indonesia; Brazil and Peru; Ghana, Cameroon and the Republic of Congo). We conclude by reflecting on key trends that emerge from this review relevant for understanding the conditions through which legality might make a difference in addressing critical challenges.

7.2 The Emergence of "Illegal logging" on the Global Agenda

While illegal logging has long been a domestic issue in many forested countries, the first glimpse of international attention towards illegal logging followed the 1992 United Nations Conference on the Environment and Development (UNCED) (Gulbrandsen and Humphreys, 2006) in which the world's governments could not agree on a binding international legal instrument on forests. Instead, UNCED fostered attention on a non-legally binding statement of "Forest Principles" and Agenda 21 that emphasized national sovereignty and regional cooperation, such as promoting "National Forest Plans" (Humphreys, 2006) and criteria and indicator processes that focused on defining



responsible forest management. The promotion of responsible forest management through market based eco-labelling/forest certification programmes - exemplified by the Forest Stewardship Council (FSC) created in 1993 and the Programme for the Endorsement of Forest Certification (PEFC) - are important for an analysis of illegal logging for two reasons. First, they reinforced the importance of global forest products markets as not only causing pressure on forests, but also as a possible arena in which to promote responsible stewardship. Second, both the FSC and PEFC promote legal compliance as a first step towards achieving broader sustainability in global forest management (Leipold et al., 2016). All these efforts place in context global efforts to target illegal logging and trade which, by the late 1990s and early 2000s, became an increasing concern to the competitiveness of timber interests in North America and Europe following increased flows of tropical forest products to consumers in developed countries (Leipold et al., 2016). This concern was reinforced by environmental groups, highlighted by the Environmental Investigation Agency (EIA), which drew on data from think tanks such as Chatham House to raise the issue of illegal timber in tropical developing countries (Leipold and Winkel, 2016). Figure 7.1 and Chapter 3 of this report provide recent estimates on the extent of illegal logging.

7.3 Global Approaches to Addressing Illegal Logging

As detailed in Chapter 2, following recognition from domestic and international agencies, including the US State Department and the World Bank, that addressing illegal logging required international political action, the 1997

votal events	Table 7.1
Year	Event
1995–1997	Intergovernmental Panel and Forum on Forests refers to illegal logging in its proposals for action
1997	G8 summit agrees to an Action Plan on Forests which includes a commitment to eliminate illegal loggi
1998–2000	G8 summits in Birmingham and Okinawa issues statements committing members to address illegal logging
eptember 2001	Bali Ministerial Meeting: a Forest Law Enforcement and Governance (FLEG) initiative in Asia is launche
2002	Indonesia signs joint statements or memoranda of understanding with the UK, Norway, Japan, Republic of Korea and China
July 2003	The President's Initiative Against Illegal Logging is launched, committing the US to assist countries in the Congo and Amazon Basins, Central America and South-East Asia to combat illegal logging
October 2003	Yaoundé, Cameroon: 39 countries committed to a Ministerial Declaration and Actions targeted at conbatting illegal logging, associated illegal trade, and corruption in the forest sector at the Africa Forest La Enforcement and Governance (AFLEG) conference
July 2003	The EU's Action Plan is officially released emphasizing increased support for governance and enforcement in wood-producing countries, as well as mechanisms for voluntary actions to control trade in ille wood products. Trading activities are added to the EU's FLEG programme, renamed FLEGT
November 2005	Europe and North Asia Ministerial Conference on FLEG in St. Petersburg
2008	US Lacey Act is amended to include plants and plant products such as timber
2009	Ghana is the first country to sign a Voluntary Partnership Agreement (VPA) with the EU (later followed by the Republic of Congo, Cameroon, Central African Republic, Indonesia and Liberia)
2010	The European Union's Timber Regulation is passed
2012	Australian Illegal Logging Prohibition Act passed
March 2013	The EUTimber Regulation enters into force
November 2016	Indonesia becomes first country in the world to issue FLEGT licences verifying legal timber products

and 1998 G8 "Action Plan on Forests" included formal commitments from the world's largest global economic powers to promote the rule of law in the forest sector (Humphreys, 2006). For example, illegally-sourced timber was estimated to cost, on average, 16 percent less than legal wood, and thus was distorting international timber markets and undercutting the competitiveness of legally-operating forest industries (World Bank, 2005).²

These plans paved the way for the first of three ministerial meetings on Forest Law Enforcement and Governance (FLEG): Bali, 2001 (focused on Southeast Asia); Yaoundé in 2003 (focused on Africa) and St. Petersburg in 2005 (focused on Europe and North Asia). Each of these three meetings, which involved a broad range of stakeholders including government ministries, aid agencies, business, NGOs and social groups, produced a comprehensive set of plans and commitments to remove illegal timber from global supply chains.

Arguably the most comprehensive approach following the Bali Action Plan was the emergence of the EU's Forest Law Enforcement, Governance and Trade programme (FLEGT), which focused on reducing illegal timber through bilateral Voluntary Partnership Agreements (VPAs) between the EU and tropical timber exporting countries. Through VPAs, partner states assume responsibility for enforcement by assuring the legal source and production of wood and by granting a licence to each consignment verified as legal before it is exported to the EU. The EU assists the partner in developing their timber tracking and licensing systems, and in strengthening their governance capacity. In return, producers and traders can place timber on the European market without any further proof of legality (European Timber Regulation, 2010). The VPAs are specifically constructed to be consistent with WTO rules, which allow for non-tariff barriers when both consuming and producing countries agree to such restrictions (Brown et al., 2008). In addition to EU VPA efforts, a second key catalyst, originating first in the United States, but then spreading to the EU, Japan and Australia, focuses more specifically on amending domestic legislation to "weed out" illegal timber imports (Cashore and Stone, 2014). A third demand-side measure is the role of national governments in adopting "legally-sourced" public procurement policies. These efforts have been led by many European countries, but also have expanded to China, Japan, Mexico and New Zealand (Brack, 2014).

7.4 Country/Regional Cases

The story of domestic responses over the last 15 years has been highly dynamic. Policies in key consuming

countries/regions encouraging legality compliance of timber imports – especially the United States and the EU – have significantly shifted from minimal or non-existent efforts to accelerating support. There has also been more cautious, but incremental, support from "middle of the supply chain" countries, such as China and South Korea. Though highly divergent, targeted producer countries have also shown increasing interest in drawing on incentives of "legality verification" of wood products to help foster "bottom up" incentives to improve domestic governance challenges. We now turn to discuss select examples of these changes over time, which we draw on to discuss lessons learnt and potential for future uptake.

7.4.1 Consumer Countries/Regions: the US and EU

Initially, the US approach emphasized responsibilities of consumers to help tropical producers by providing capacity to assist developing country governments in enforcing their own laws and policies (Cashore and Stone, 2014). However, the US broadened its framing towards "demand side" policies following the American Forest & Paper Association's findings that illegal wood was causing billions of dollars of losses to the US forest products sector (Seneca Creek Associates and Wood Resources International, 2004), and recognition by some environmental groups that a focus on reducing illegal imports, rather than simply higher standard certification programmes, might have more immediate impacts on the ground in tropical countries. A subsequent coalition of environmental and US timber producer interests successfully lobbied for the US Congress to amend, and expand, the US Lacey Act in 2008 to forbid the importation not only of illegal animal products, but also of plants (i.e. illegal timber). While the statutes leave discretion to suppliers and purchasers about just how to ensure they are not importing illegal timber, a consensus is emerging that one beneficial way to meet these requirements is to track legally-harvested products along global supply chains (Cashore and Stone, 2012).

In contrast to the United States, the EU approach to addressing illegal logging, as detailed above, emphasized the development of formalized negotiations between producer countries and the EU through VPA agreements. This "negotiated agreement" approach is important as it accounts for much of the responses on the part of developing countries reviewed below. At the same time, it is important to note that following the US Lacey Act modifications that targeted all imports entering the country, similar trade restrictions were taken up by the EU through the "European Union Timber Regulation" (EUTR). Domestic implementation and enforcement of

² In the very early days, the World Bank promoted legality verification through traditional direct financing incentive programmes. For instance, in Cambodia in 1999 pressure from the World Bank resulted in Global Witness acting as independent forest monitor overseeing Royal Government of Cambodia's forests. This relationship deteriorated following a 2001 Global Witness report that pointed to Cambodian public officials as engaging in illegal logging activities. In 2004, the contract ended, and in 2005 Global Witness staff were prevented from entering into the country (Luttrell and Brown, 2006)

the Regulation however, remain the responsibility of each Member State (Schwer and Sotirov, 2014).

In a similar vein, in 2012, the Australian Senate passed the "Illegal Logging Prohibition Act" (ILPA). The legislation aligns with EU and US legislation in prohibiting the placing of illegally-logged timber, or products made from such timber, onto the market. This covers both imported and local Australian timber. Like the EU Timber Regulation, the Act imposes due diligence obligations on importers and traders, which were defined in the 2014 Illegal Logging Prohibition Regulation. The Act is similar to the Lacey Act, and different from the EU Timber Regulation, in not accepting a CITES permit as proof of legality, although such permits may be used to support a due diligence case.

There were, however, notable differences in the types of domestic coalitions that emerged to support these policies. In the EU initially, environmental groups targeted domestic economic operators, traders and retailers by asserting that many of their imported wood products originated from illegal logging crimes in foreign countries. In response, traders and retailers eventually united with environmental groups to support the EUTR as a way to weed out illegal timber (Sotirov, 2014; Sotirov et al., 2015). This coalition also argued that by reducing international imports, the EUTR could also be seen as an important industrial development policy within the EU (Sotirov et al., 2015).

In contrast to the United States, European domestic timber producers, along with exporters from forest-rich EU Member States including Austria, Germany, Finland and Sweden were generally opposed to the EUTR. They feared, just as US producers had feared a decade before, that regulatory changes might result in their own domestic practices becoming a target (Sotirov, 2014). Unlike the US – where producers and NGOs worked out a collective effort to emphasize illegal logging as an external problem that originated abroad – EU producers had yet to be assuaged. In part for these reasons, producers identified technical and practical implementation, as well as WTO rules, in their unsuccessful efforts to reverse the EUTR decision (Leipold et al., 2016; Sotirov, 2014; Sotirov et al., 2015).

Given that individual countries decided whether, and how, to implement the EUTR, it is also important to note divergent uptake/implementation within Member countries (Sotirov et al., 2015). In general, scholars have found weak implementation within poorer Eastern European countries such as Bulgaria and Romania (Gavrilut et al., 2015) as well as in Southern Europe, particularly in Greece, Italy and Spain (Sotirov et al., 2015). Other scholars have found increasing coordination between EUTR implementation and FLEGT VPA processes, owing for example to the creation of the European Commission's EUTR/FLEGT Expert Group, an informal enforcement network convened by EU Member State Competent Authorities, and the Timber Regulation Enforcement Exchange (TREE) network organized by Forest Trends, which brings together environmental



Office furniture made from rosewood (China) Photo © Jianbang Gan

NGOs and law enforcement authorities from the EU, US, Australia and INTERPOL concerned with illegal logging (Overdevest and Zeitlin, 2016).

7.4.2 Middle of Supply Chain Countries³

The first formal approach from China to address legality verification occurred following the G8 Forestry Action Programme, which ended in 2002, (Toyne et al., 2002) and the "Bali Action Plan" on illegal logging. The Chinese State Forestry Administration (SFA), which has responsibility for developing domestic and international forest policy commitments, recognized the need for some type of policy response. First, the SFA declared that illegal logging was not a problem within China, but rather concerned challenges in other countries such as Indonesia. Second, to assuage concerns, the SFA signed a 2002 memorandum of understanding (MoU) with Indonesia designed to reduce illegal exports through information exchanges (Hurd and Simorangklr, 2011). Third, despite evidence to the contrary (Chrystanto, 2004), the SFA also provided assurances that its current systems ensured that tropical imports coming into China were legal. However, the MoU was generally viewed as a "paper exercise" with few observable effects in either country (Tacconi et al., 2004). No formal efforts were made to change internal policies governing legality verification.

Beginning in 2008, China changed course by formalizing a nation-wide approach to legality verification. The hallmark of this effort was the development of the Chinese Timber Legality Verification System, formally launched in December 2009. This system, implementation of which would continue throughout 2010, draws on China's extensive permitting systems to establish chain of custody for all legally verified forest products within the Chinese forestry sector (Sun and

Canby, 2010). China also moved to strengthen the original Sino-Indonesian agreement by initiating more MoUs/agreements with other forestry product consuming markets including the US, EU, Australia and Japan with more formalized commitments and actionable items, such as enhancing communication around legal compliance challenges (Hurd, 2011). They also created mechanisms to follow up on MoU implementation, such as the US-China annual bilateral forum on combatting illegal logging and associated trade, and the EU-China annual Bilateral Coordination Mechanism on Forest law enforcement and governance (Chen et al., 2013). The SFA also undertook proactive efforts to assist Chinese operators, including issuing guidelines for domestic forest operations about how to meet legal requirements in foreign countries where they manage and utilize the forest; and providing training to Chinese forestry business to better understand, and comply with, the US Lacey Act and the EUTR (Chen, 2016).

International organizations like the World Wide Fund for Nature (WWF) and Greenpeace's China office also assisted by developing voluntary guidance tools focusing on how export-orientated companies might meet international legality verification demands by improving Chain of Custody (CoC) management. Currently the government has drafted a full-fledged Chinese Timber Legality Verification programme (CTLV), which was followed by an industry association pilot study. The development of CTLV is continuing. Cashore and Stone (2014) argue that China's more proactive approach is owing, in part, to the Lacey Act and EUTR amendments, which created stronger market signals, as well as assurances that China's existing approach to the sustainable management of forests would be reinforced, rather than challenged.

Other "middle of the supply chain" countries have also followed suit. For example, South Korea has, through its 2013 Act on the Sustainable Use of Timber, focused on reducing both domestic and foreign sources of illegal timber (although the legislation has yet to come into force). The Korean government has also announced that it will introduce voluntary "due diligence" among timber traders and manufacturers by 2017.

7.4.3 Producer Countries

Uptake in producer countries can be distinguished in two ways: those involved in VPA processes with the EU; and those who have responded to other global influences reviewed above (and in Chapter 2), as well as to their own domestic market pressures. We turn to review select cases of each.

VPA-supported countries

As of September 2016, Ghana, Cameroon, Republic of the Congo, Central African Republic, Liberia and Indonesia have all signed VPAs and are in the process of developing or implementing internal systems. Several other countries are in the negotiation or pre-negotiation (informing) phase, including Myanmar/Burma and Bolivia (EU FLEGT Facility, 2016).

Cameroon

Cameroon signed and ratified its VPA with the EU in 2010 that included a number of goals including: ensuring that all timber is legally sourced, transported and exported; promoting good forest governance, and improving capacity of stakeholders to engage in forest policy and practice through resource and technology transfers. The government and its technical and financial partners are now placing efforts on developing a "timber legality assurance system" (TLAS).

Some scholars argue that aside from stakeholder negotiations, there is thus far little discernible influence of the VPA process on the ground in the Cameroonian forest sector, largely owing to limited national commitment (Dkamela et al., 2014). Dkamela et al. (2014) explain that "internationally driven national forest policy processes tend to encounter massive implementation challenges" simply due to the fact that they stem from global priorities that may not reflect national policy agendas. For example, Cameroon's overarching policy objective is economic development given that it is a low-income country with high poverty rates. The national development strategy (Vision 2035) pays little attention to environmental sustainability, focusing rather on agro-industrial expansion, investments in infrastructure and manufacturing. Nonetheless, scholars have reported that the impacts of the VPA process on other policy domains (e.g. REDD+, mining and land tenure) appear to be more significant than its direct impact on illegal forest practices in Cameroon (Tegegne et al., 2014). For example, there is evidence that the VPA advanced collaboration between Cameroon's lead forest agency, MINFOF (Ministère des Forêts et de la Faune) and local NGOs to reduce corruption within the forest administration, and helped foster national implementation of the international climate financing mechanism, REDD+, as well as domestic land use planning processes (Wodschow et al., 2016). There is also evidence that the VPA-initiated deliberations are helping Cameroonian deliberations about how to address key United Nations Sustainable Development Goals including reducing poverty and ameliorating global climate change (Wodschow et al., 2016).

Indonesia4

Following international pressures noted above, Indonesia first formally addressed illegal logging in 2002 when it initiated the *Badan Revitalisasi Industri Kayu* (BRIK, Indonesian Institute for the Revitalization of the Timber Industry), which was charged with monitoring and verifying of legal timber and issuing certificates of legality (*Ekspor Terdaftar Produk Industri Kehutanan* or ETPIK) to exportorientated forest companies. However, this approach was criticized as being unable to initiate meaningful changes (Tacconi et al., 2008) owing to uneven standards (Brown and Stolle, 2009) and the relative ease through which black market certificates could be produced (Colchester, 2006).



Log loader in Indonesia. Photo © Agung Prasetyo for CIFOR

In 2003, the Indonesian government appeared, on paper, to step up its efforts by completing a draft TLAS, formally known by its Indonesian name, Sistem Verifikasi Legalitas Kayu (SVLK). However, four years later, drafting was still not complete, leading many non-governmental organizations and international agencies to question Indonesia's resolve to follow through on its commitments. Yet by late 2007, draft legislation was submitted by the Indonesian negotiators to the Ministry of Forests for approval, and, in 2009 the SVLK was signed into law. In a departure from previous efforts that were criticized as limited, independent third parties were charged with auditing compliance with Indonesian law (Luttrell et al., 2011). In addition, civil society is empowered to provide independent monitoring and to submit objections. In sum, the case of Indonesia displays a progression from no support in 1999, to weak support in 2001, to formal and legislated commitments in 2009, followed by increasing support since this time. This ongoing support was matched by increasing roles for stakeholder groups to participate in standard development processes. Civil society representatives were successful in championing good forest governance, transparency and accountability, as well as supporting third party auditing and independent monitor-

The EU-Indonesian VPA was formally agreed in 2011, signed in 2013 and ratified by the EU parliament in April 2014 (Yulisman, 2014), coming into force in May, 2014. Timber exports to the EU rose by 11.8 percent in the first quarter immediately following ratification (Suherjoko, 2014).

At the same time, given that much of Indonesia's timber harvest is for domestic consumption, which is harvested by local chainsaw operators who contribute directly to the local economy, there has been growing recognition that much attention must be placed on domestic uptake if SVLK is to play a meaningful role in reducing illegal logging. Currently, legal timber is exported to more economically advantageous markets, such as processors in

Java or provincial capitals, which means that little timber is left for local consumption. Hence Obidzinski et al. (2014) argue that additional supporting mechanisms such as certification subsidies or incentives, capacity building and anti-corruption measures will be needed if SVLK is to be effectively implemented.

In part for these reasons, extensive revisions and improvements to the SVLK and its governance arrangements were undertaken following the joint Indonesia-EU Action Plan for the implementation of the VPA, which preceded the decision to start issuing formal licences by end of 2016. These revisions included subsidized group certification for small producers, extensive capacity building and training (for public officials, third-party auditors and private businesses), more rigorous accreditation procedures for auditors, stronger complaints and enforcement procedures, enhanced support for independent monitoring, and increased requirements for public information disclosure about the SVLK verification process (Overdevest and Zeitlin, 2016).

Republic of Congo

In May 2010, the Republic of Congo became the first Central African country to sign a VPA with the EU following two years of negotiations. However, six years later, efforts are still focused on developing a Timber Legality Assurance System (TLAS) with which to label exports for the EU market. Several explanations for this slow rate of change have been posited including: conflicts over forest use - especially concerning forest conversion and conservation; elite capture/corruption; decreasing importance of the EU timber market; and government emphasis on promoting commercial agriculture and mining over forestry (Tegegne et al., 2014; Tegegne et al., 2016).

Despite these bottlenecks, practitioners and scholars such as Tegegne et al (2014) argue that the VPA process in Congo has had important indirect effects, including the increasing involvement of the private sector and civil society in national working groups charged with forest governance related issues in general, and revision of forest, land tenure and mining laws in particular. As a result, local communities and indigenous peoples' participation in management plans is now an official right. In addition, independent civil society observation – first established under the VPA process - has now become an important catalyst to enhance transparency in forestry policy circles. Likewise, and following these efforts, the Congo government now makes public a range of previously private documents including management plans and allocations of timber concessions (available through an online website since 2015).

Similarly, as in Cameroon and the Central African Republic, the Congo VPA process has influenced other policy domains, such as REDD+ initiatives. For example, independent monitoring of REDD+, which is under development by national stakeholders, draws on work of the Independent Monitoring of Forest Law Enforcement and Governance Trade (IM FLEGT).

Ghana

Ghana experiences high levels of illegal logging; conservatively estimated at three to four times the legally permitted annual allowable cut (Hansen et al., 2012). The market is divided into a formal sector with harvesting rights issued by the government and an informal sector (chainsaw operators) without such rights. The formal sector produces primarily for overseas export markets while the chainsaw operators produce for the domestic market and for neighbouring countries (Marfo, 2010). In volume terms, approximately 70 percent of the total timber harvest can be attributed to chainsaw operators (Hansen et al., 2012). Ghana, was the first country to sign a VPA with the EU in November 2009, with the aim to secure access to the EU market (Overdevest and Zeitlin, 2016). The VPA, negotiated with broad stakeholder participation (Beeko and Arts, 2010), consists of a legality definition, a TLAS and a commitment for a comprehensive legal and policy reform programme to address more fundamental forest governance challenges.

Implementation of the VPA has proven more difficult than envisaged, and FLEGT export licensing, initially envisaged after two years, is now expected to be initiated in 2017. However, the VPA implementation has provided an effective platform for NGOs, civil society groups and private businesses to bring forward challenges in relation to illegal logging and forest governance issues through the VPA joint implementation committee known as the "Joint Monitoring and Review Mechanism". It has also played an important role in enhancing accountability, learning and problem solving (Overdevest and Zeitlin, 2016). Examples of important steps forward include operationalization of the TLAS, streamlining the implementation of Social Responsibility Agreements that entitles local communities to benefits and services from the timber concession holders equal to five percent of the stumpage fee payment, a public procurement policy for timber, attempts to provide chainsaw operators with legal means (permits) for production, and new procedures to reduce the administrative allocation of timber rights (Overdevest and Zeitlin, 2016). The long-term success of the VPA, some scholars argue, will hinge on its ability to address and find workable solutions for these root causes of illegality in the domestic market, including by enhancing the financial incentives for rural dwellers to engage actively in tree management (Hansen et al., 2015; Lesniewska and McDermott, 2014; Oduro et al., 2014).

Non-VPA countries

A second category of countries are those that have yet to engage in any VPA process but, owing to either previous international influences and/or domestic events, are starting to initiate some type of legality compliance system, often with the support of civil society and business organizations. We focus on three illustrations: Brazil, Peru and Russia, each of which reveals the ways in which global pressures and incentives play mediating roles in shaping domestic deliberations over legality verification.

Brazil

Illegal logging in Brazil is now recognized as a serious and persisting issue. Some estimates indicate that during the period 2000-2012, between 68 and 90 percent of forest clearing in Brazil was illegal (Lawson et al., 2014). However, the case of Brazil is distinct from the other cases in this review because the vast majority of Brazil's forest products are destined for domestic markets, rendering direct market incentives from the Lacey Act and EUTR less important.⁵

Still, international influences are certainly felt in a number of ways. International norms, including "biodiversity loss", "deforestation" and now "illegality", have been influential in shaping domestic discourses and problem definitions. Certainly as an important producer, processor and consumer of wood-based products, Brazil's efforts to slow down deforestation in the Amazon during the last decade, have been the subject of strong international scrutiny. In addition, and as a result, international aid agencies and non-governmental organizations have worked with, and provided resources to, the government, NGOs and business organizations in an effort to help improve uptake of, and influence, domestic efforts designed to reduce illegal activity affecting forests.

Several laws are relevant for those seeking to curb illegal logging. The Forest Code establishes the minimum parameters for conservation of forests within private landholdings, including Areas of Permanent Protection (APP) and Legal Reserves (RL). An Environmental Crimes Law sets criminal and administrative sanctions for behaviour and activities that harm the environment, including crimes against the flora - such as the destruction or damage of APP or RL. The legal framework is also composed of the National Conservation Area System (SNUC) - which establishes protected areas with specific restrictions and conditions on land use - and the Public Forest Management Law, which regulates the exploitation of public forests. Applicable legislation includes timber tracking and control systems at national and state levels, requiring timber transportation to be accompanied by documents of origin and corresponding cargo invoices. Logging must be carried out in accordance with a government-approved forest management plans or through an authorization by the environmental authority to eliminate native vegetation or to convert the forest to other land uses, while observing the limits and conditions established by law.

Therefore, illegal logging takes place in Brazil when there is violation of laws on forest use and conservation, breaches of requirements related to the production, processing, transportation and commercialization of timber, and/or lack of proper approval, or when logging is not in accordance with the obtained permit. Cases of illegal logging may also be linked with unclear tenure rights and land access. Timber may be illegal when sourced from public areas or protected areas, often posing threats to wildlife, indigenous peoples and traditional communities.

More broadly, illegal logging can be associated with fraudulent land titles, counterfeit permits, tax evasion and corruption. Illegal timber exploitation and deforestation can be closely interconnected, with timber often being a by-product of forest clearing for other land uses such as agriculture and ranching. Fearnside has found that illegal logging also increases the risk of forest fires in the Amazon (Fearnside, 2005).

In order to promote legal compliance, Brazil has pledged internationally to eliminate illegal deforestation by 2030. Brazil's domestic law enforcement efforts have sought to curb illegal deforestation and improve legal forest management, including the 2003 "Action Plan for the Prevention and Control of Deforestation in the Legal Amazon", the creation of forest concessions for timber production in federal forests in 2006, satellite forest monitoring and real time detection of deforestation in the Amazon, established as part of the revisions to the Forest Code, and new regulations that simplify environmental licensing in settlements to facilitate legal logging in 2013 (Romero et al., 2015; Wellesley, 2014). However, the myriad of strict regulations and complex bureaucracy have also made legality difficult to achieve for many local and small-scale producers (McDermott et al.,2015).

In order to curb illegal logging specifically, the Brazilian government has taken a number of measures, ranging from command-and-control instruments to enforcement mechanisms to ensure compliance, such as the "Document of Forest Origin" (*Documento de Origem Florestal*, or DOF), a timber-tracking system created in 2006. The DOF is a federal, mandatory permit that controls the transport and storage of native forest products. It follows the product from origin to destination, and contains information about the product's source. Although some states have devised their own tracking systems, they will eventually be linked to the federal DOF system. One of the benefits of this instrument is that environmental agencies will be able to concentrate enforcement efforts on states and cities where timber trade is highest.

Federal and state legislation have been initiated to help create conditions through which legality verification might be promoted, while procurement policies for construction and public services are now requiring evidence of "proof of origin". However, there is no fully functioning state or national policy requirement to verify legality along supply chains, and there is little communication with the US and EU about their import requirements. Some environmental groups point to changes in the Forest Law in 2012 that seemed to make legality compliance easier by reducing the rigour of legal requirements.

Peru⁶

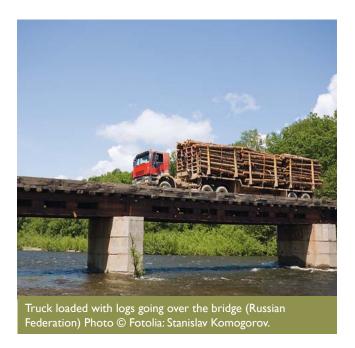
In Peru, the problem of illegal logging was formally addressed as far back as 2002, when the national government established the "Multi-sectoral Commission to Combat Illegal Logging" as a way to help enforce

adherence to forestry laws and policies (Cornejo-Arana, 2007). In addition, the US Lacey Act amendments to weed out imports of illegal timber took on additional importance in Peru given the 2006 United States-Peru Trade Promotion Agreement (PTPA), which entered into force in February 2009 (de Jong and Humphreys, 2016). In particular, the PTPA includes an Annex on forest sector governance that was developed in response to concerns in the US that trade liberalization between the two countries would result in illegal exploitation of people and natural resources in the Peruvian Amazon. The Annex requires Peru to verify that all wood being exported to the US comes from legal origins (del Gatto et al., 2009) and, importantly, contains actual on-theground commitments towards improving environmental and social resources stewardship. Proponents heralded the agreement as a new way to foster a "ratcheting up" of domestic practices in the global era (Jinnah, 2011), while maintaining a pro-growth development agenda. While the mechanisms set up for this verification give the US the option to participate in audits, the burden of auditing is largely placed on Peru (del Gatto et al., 2009). For these reasons, and following changes to the 2011 Forest Law, the Ministry of Natural Resources has committed additional resources to combatting illegal timber trade (El Comercio, 2015a).

Initially, some of the provisions within the trade agreement appeared to backfire, as it was used by elements of the Peruvian government to accelerate its development agenda, for example through the granting of concessions to industrial users, especially in the mining sector. Resistance from many private actors in the forest sector ensued, including public protests and even temporary occupations of government offices (El Comercio, 2015b). There are also ongoing concerns that the emphasis on legality may undermine rather than support local communities because, while many Amazonian forest communities engage in timber extraction, the legal hurdles for doing so (including bureaucratic planning processes and unclear land rights) are so difficult that their practices could be deemed outside of existing legal procedures (Pacheco et al., 2016). Meanwhile illegal logging in Peru has not declined significantly. Between 2009 and 2012, a total of 66 percent of the timber was extracted without following planning regulations (Mejia et al., 2015).

Russia

In the last twenty five years Russia's forest policy has undergone a number of reforms, including significant support for non-state market-driven forest certification (Sotirov and Mashkina, 2010). The global emphasis on illegal logging has coincided with significant domestic interest in Russia to address specific non-compliance challenges, especially loss of revenue from taxes and customs duties. Failure to capture these revenues explains, in part, a



five-fold increase in losses from the forest sector over 10 years culminating to more than half a billion USD in 2014 (Federal State Statistics Service, 2015).

Researchers have found that a range of factors explain persistent illegality in the forest sector including high levels of corruption, lack of environmental concerns and frequent changes in the legislation, which make it difficult to support meaningful legal compliance. Proactive cooperation among the federal and regional authorities to address these issues is also hampered by federal legislation that protects businesses from being controlled by regional authorities (Vershinina, 2014). As a result, regional legislation only affects small-scale local enterprises, leaving the larger holdings essentially unregulated. There is also a growing recognition that better enforcement of existing laws and policies is needed if meaningful management reforms are to be realized (Sotirov and Mashkina, 2010; Vershinina, 2014).

Further to international attention and EU efforts in particular, Russia has initiated several changes with respect to policies and laws surrounding illegal logging. In 2013, the Russian Government approved an 8-year plan "The Development of Forestry, 2013-2020", with the goal of reducing losses from illegal logging and increasing profits from the forest sector (Government of the Russian Federation, 2013). This followed the two plans on "Prevention of illegal logging and timber trade in the Russian Federation, 2011-2014" and "Decriminalization of key industries of the Far Eastern Federal District, 2011-2013" (Federal Forestry Agency, 2013)

In 2012, the Russian Government included timber in the list of strategic goods to be accounted for at the border (Government of the Russian Federation, 2012a; Molodtsova, 2014). In 2013, the Federal Law on "Amendments to the Forest Code of the Russian Federation" and the Russian Federation Code of "Administrative Offences" improved the legal framework for harvested timber by introducing labelling, which coincided with the upgrading of

remote monitoring systems (Vershinina, 2014). In 2014 the Criminal Code was amended to include stricter penalties for large-scale acquisition, storage, transportation and processing of illegal timber to be marketed or sold, including imprisonment for a maximum of seven years and fines exceeding the equivalent of USD 10,000 for serious offences.

In 2015 the efforts to control timber harvesting and trade culminated in the introduction of the "Uniform State Automated Information System" (EGAIS), requiring all legal entities and entrepreneurs, dealing in timber, to submit all information on the volume of harvested timber, labelling and timber transactions into the state electronic database. From 2016, failure to comply with EGAIS entails an administrative fine. The question for practitioners and scholars is to understand better how to draw on these recent policy developments in ways that foster durable and meaningful influence on the ground.

7.5 Conclusions

What lessons can we draw from this overview of global efforts to address illegal logging and domestic responses? First, this is a highly dynamic world, rendering static answers about impacts almost immediately out of date and of little utility to forward-looking policymaking. Second, impacts are quite variable, depending on local, regional and historical contexts, rendering sweeping generalizations difficult. Third, and notwithstanding, we can identify a myriad of international influences that appear to work to tip the scales within domestic settings, rather than determining "on the ground" outcomes (Bernstein and Cashore, 2012). Clear economic signals from US and EU trade import policies do appear to have been catalysts within "middle of the supply chain" countries such as China in developing more formalized responses. At the same time, European Union partnership agreements with developing countries through VPAs expanded beyond market incentives by emphasizing capacity building and empowerment of local communities - a phenomenon consistent with Bernstein and Cashore's (2012) "direct access" pathway. Likewise, even in countries in which domestic markets dominate, international norms surrounding the problem definition of "illegal logging" as well as international organizational influence through building of tracking systems and capacity, illustrate the important role that global efforts to weed out illegal logging can, and do play, in domestic settings. Similarly, efforts to "bandwagon" legal compliance through trade agreements, such as in the US-Peru Free Trade agreement, identify the ways in which international rules can reinforce market incentives.

The Russian case illustrates caution in being overly sanguine: there are simply too many domestic hurdles and incentives that contribute to illegal logging, to assume that global efforts to foster legal logging will be sufficient. Similarly, a key theme from many of the cases from Africa and Indonesia is that while domestic processes have expanded to include local and civil society groups, there remains a concern that owing to domestic approaches to legality and

costs of compliance, large scale firms may be better positioned to promote legality, while undermining local communities – including fears that informal rights might be determined illegal. A range of global actors and negotiators are working to address these concerns as they modify and adapt, agreements and approaches (Nathan et al., 2014).

What we do know is that the extent to which these global efforts to address domestic illegal logging will end up being short lived, or trigger more durable reforms, is in part dependent on how international actors and domestic partners travel two or more synergistic pathways over time. And this effort requires distinguishing the process of building legal compliance along global supply chains – what Cashore and Stone (2014) refer to as the "emergence phase", from the ability to have increased influence at a later time as legal compliance becomes increasingly entrenched in global markets. Certainly it seems likely that as combatting illegal logging is increasingly perceived as a factor of international market competiveness, further policy responses on the national level will emerge.

It seems essential to focus on reducing the costs of compliance through application of organizational and political capacity building among governments and the private sector and to building efficient technologies capable of tracking complex timber markets, in ways that maintain, and reward, domestic coalitions among businesses, NGOs and governmental agencies. This requires a careful dance in which legal compliance identifies important but achievable standards "on the ground" so as to not "knee cap" forest manager support. Once fully embedded to the point that shirking or free riding are not likely, Cashore and Stone theorize that legality verification efforts could be given increasing responsibilities since, any costs would be borne by consumers rather than individual firms.

Research gaps/next steps

Despite the achievements of the transnational campaign against illegal logging, a number of major challenges remain, to date, incompletely addressed. One major research challenge is to assess the effectiveness of various efforts aimed at ensuring that smallholders engaged in the informal economy are not excluded by legality assurance systems aimed at international markets, but are instead supported to move into legal production while enhancing recognition of the rights of indigenous peoples. Another major research gap is to assess whether, and how, transnational policy efforts from combatting illegal logging have helped controlling agricultural conversion, whether formally legal or illegal. Such research will also carry practical lessons, especially since conversion has become the most important source of deforestation in much of the Global South. At the same time a key lesson from this review is that policymakers must be careful not to take research from past impacts as static, but rather extrapolate implications from them for moving forward.

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