

**AN ANALYSIS OF THE LEVEL
OF COMPLIANCE OF POLICIES
AND INITIATIVES IN BRAZIL,
COLOMBIA, ECUADOR AND
PERU WITH THE TIMBER
IMPORT REQUIREMENTS
OF THE EU AND OTHER
IMPORTANT DESTINATIONS**

**EDITED BY
CHEN HIN KEONG
A TRAFFIC REPORT**



TRAFFIC
the wildlife trade monitoring network

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An Analysis of the Level of Compliance of Policies and Initiatives in Brazil,
Colombia, Ecuador and Peru with the Timber Import Requirements of the
EU and other important destinations

Chen Hin Keong (Editor)



Supporting the implementation of the EU FLEGT Action Plan in South America - Catalysing initiatives to control and verify the origin of timber in trade and support related improvements in forest governance

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For more information on the project, visit: www.flegt.info

List of Acronyms

AIMEX	Association of Timber Exporters and Industries of the State of Pará (Brazil)
CADAMADEIRA	Registry of Timber Traders of the state of Sao Paulo (Brazil)
CAR	Rural Environmental Land Register (Cadastro Ambiental Rural) (Brazil)
CAR	Regional Environmental Authorities (Colombia)
CARDER	Corporacion Autonoma Regional de Riseralda (Colombia)
CICCIA	Inter-ministerial Commission on Combating Crimes and Environmental Violations (Brazil)
CIPEM	Center of Industries of Producers and Exporters of Timber of the State of Mato Grosso (Brazil)
CITES	Convention on International Trade in Endangered Species
CNI	National Confederation of Industries (Brazil)
CONAFLO	National Forestry Commission (Brazil)
CONAMA	National Council for the Environment (Brazil)
DEGRAD	Mapeamento da Degradação Florestal na Amazônia Brasileira (Brazil)
DETER	Detecção de Desmatamento em Tempo Real (Brazil)
DOF	Document of Forest Origin (Brazil)
EU	European Union
EUTR	EU Timber Regulation
FAO	Food and Agriculture Organization of the United Nations
FGME	Forest Governance Model of Ecuador
FLEGT	Forest Law Enforcement, Governance and Trade (an EU programme)
FNABF	National Forum of Forest-Based Activities (Brazil)
FSB	Brazilian Forest Service
FSC	Forest Stewardship Council
FTA	Free Trade Agreement
GAD	Decentralized Autonomous Governments (Ecuador)
GFTN	Global Forest Trade Network
GIS	Global Information System
IBAMA	Brazilian Institute of Environment and Renewable Natural Resources (Brazil)
ICMBio	Chico Mendes Institute of Conservation and Biodiversity (Brazil)
IMAZON	Institute of Man and Environment in the Amazon (Brazil)
ITTO	The International Tropical Timber Organisation
LAS	Legality assurance system
MAE	Ministry of Environment (Ecuador)
NGO	Non-Governmental Organisation
OSINFOR	Supervisory Body for Forest Resources and Wildlife (Peru)
PIMLC	Intersectorial Pact for Legal Timber in Colombia
PMV	Green Municipality Program (Brazil)
PNDF	National Plan of Forestry Development (Colombia)
PNF	National Forest program (Brazil)

PNPCT	National Policy for the Sustainable Development of Traditional Peoples and Communities (Brazil)
PPCDAM	Plan for Prevention and Control of Deforestation in the Amazon (Brazil)
PRODES	Monitoramento da Floresta Amazônica Brasileira por Satélite (Brazil)
REDD	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
SAF	Forest Administration System (Ecuador)
SENAE	Ecuador Customs Authority
SERFOR	National Forest and Wildlife Authority (Peru)
SISFLORA	System of Commercialisation and Transport of Forest Products (Brazil)
SISNAMA	National Environmental System (Brazil)
SMA	Legal Timber Programme (Department of Environment, Para State (Brazil)
SNIFFS	National Forestry and Wildlife Information System (Peru)
SRI	Ecuador Tax Authority
SUNL	National Unique Online Safe-Conduct (Colombia)
UNIFLORESTA	Association of the Forest Supply Chain of the Amazon (Brazil)
US	United States
VPA	Voluntary partnership agreement (a trade agreement between the EU and a timber producing country under the EU FLEGT Action Plan)

Executive Summary

The EU Timber Regulations, the United States' Lacey Act and the Australian Illegal Logging Prohibition Act constitute a new direction for international law governing timber trade. They in effect criminalize the “demand side” of illegality, and in the case of the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan explicitly aim to prevent the import of illegal timber into the EU, improve the supply of legal timber and increase demand for timber from responsibly managed forests. Illegal logging is an important cause of deforestation although the largest driver of tropical forest loss is the expansion - often illegally - of agriculture.

The objective of this study is to carry out an analysis of the level of compliance of policies and initiatives in Brazil, Colombia, Ecuador and Peru with the timber import requirements of the EU and other important destinations in the region.

This report is primarily based on information contained in reports produced by the EU-funded project “*Supporting the implementation of the EU-FLEGT Action Plan in South America: catalyzing initiatives to control and verify the origin of timber in trade and support related improvements in forest governance*” (DCI-ENV/21.040100/20-656/2011/277-872) (synergies analysis: *Análisis de sinergias entre la aplicación de las leyes, la gobernanza forestal y el comercio forestal e iniciativas afines en Brasil, Colombia, Ecuador y Perú* (Orozco and Bohórquez 2013); scoping studies: *Elementos, dados e fatos para análise da Governança Florestal e situação da produção e comércio de madeira legal no Brasil*. (Fanzeres 2014a) and *Tendencias de la Gobernanza Forestal en Colombia, Ecuador y Perú*; (Orozco *et al.* 2014); Benchmarking studies: *Propuesta Metodológica para la Medición y Evaluación de la Gobernanza Forestal en Brasil, Colombia, Ecuador y Perú*. (Fanzeres 2014b)) and other relevant information and studies related to efforts to enhance the legality of timber in each of the four producer countries. It draws also on information on trends in the forest sector, timber trade, governance and competitiveness in each country in order to provide a background to the efforts to tackle illegal logging.

The data are grouped according to a set of process and outcome indicators formulated by Chatham House in 2010 across three categories namely the existence of policies, their design and level of implementation. These categories are assessed based upon secondary studies outlined in the previous paragraph as well as the presentations and discussions held with key informants who attended the Forum on Governance, Legality Verification Systems and Competitiveness of the Latin American Forest Sector held in Quito from September 30 – October 3, 2015.

There has been undoubted progress in the improvement of forest governance in the four study countries evidenced by new policies and recent initiatives for stakeholder participation. The project found that Brazil has undertaken a number of far-reaching policy reforms over the past decade in order to tackle illegality issues, particularly in the Amazon area. Even so, the project found that Brazil lacks a country-wide forest policy to ensure the conservation and sustainable use of natural resources. Peru and Ecuador have begun to address timber illegality within a wider reform of forest policies. Colombia is beginning to tackle forest governance whilst still in the process of ending the civil conflict

for which it is hoped a final agreement will be reached in 2015. Since 2009, Colombia has embarked on the generation of forest sector information, the establishment of decision making platforms, the process of defining legal timber, the review and design of a surveillance and control system, among other initiatives.

The assessment of policies and measures to tackle illegal logging and timber trade shows that the four governments must still make efforts to progress to a stage where stakeholders have confidence in the policies, systems and implementation, and will need to take more progressive steps to assist buyers to meet the import requirements of the EU and US markets. All the studies conducted by the project noted that their forest sectors are generally challenged by illegality, corruption and fraud.

Although Brazil has undoubtedly achieved the most, there is also a perception that progress has stalled, in part perhaps due to the political election cycle and economic downturn. There are a number of initiatives that are now becoming operational in Colombia, Ecuador and Peru, but in these countries the legal frameworks remain weak. Stakeholder involvement in forest policy debates and decision-making has improved, but from a low starting point. Strong policy statements and rhetoric have masked a susceptibility for intentions to dissipate into thwarted aspirations. Much will depend upon the institutional capacity and integrity of government agencies to effectively coordinate their efforts to deal with illegal logging in spite of their limited staff and operational budgets, and for forest sector stakeholders to seek transparency and synergies with wider partners to support governance reforms and the rule of law.

In all four countries, there are a number of other tasks that can be undertaken to move forward on the illegal logging agenda and to assist buyers of timber and timber products in domestic and international markets such as the EU and US, and to improve the collaboration and synergies with the on-going REDD+ programmes. There is a high level of convergence between FLEGT Action Plan elements and the objectives and actions established in, or in the definition process of, the REDD+ national strategies which together support efforts in improvements in the forestry sector

With the signing of Free Trade Agreements (FTAs), such as in the case of Colombia and Peru that signed such agreements with the EU and the United States respectively, there are articles that are clearly converging with the objective and scope of initiatives for law enforcement and the improvement of forest governance and trade. However, no synergy formally established in this field was identified.

A significant potential for the emergence and formal establishment of synergistic actions was identified from innovative and successful experiences of some countries in the area of the improvement of forest governance. For instance, initiatives have been identified that could be the object of future actions of cooperation and/or transfer, either at a bilateral level or from the region's global scope covering the four countries considered here: i) from Brazil: Document of Forest Origin (DOF); ii) from Colombia: the Intersectorial Pact for Legal Timber; iii) from Ecuador: the Forest Governance Model; and iv) from Peru: Forest Oversight Communities (Veedurías Forestales Comunitarias).

At the regional level, in addition to the themes mentioned above, a subject to explore in terms of establishing potential synergies and exchanging information about ongoing processes or lessons learned is the topic related to the adoption and implementation of responsible purchasing policies of forest products with emphasis on timber commercialisation and legality.

A high potential of synergistic relations aimed at promoting and improving dialogue between the four countries at the regional level was also identified based on a potential cooperation and transfer among these countries from the experiences, progress and achievements in the specific initiatives mentioned above and in others that have been considered in this study.

Recommendations:

Given the level of progress made to date in the four study countries to tackle illegal logging it is difficult for importers of timber sourced from natural and planted forests to demonstrate “due diligence” for the EU market and to avoid placing illegal timber or timber products in the EU, US and Australian markets.

It is (currently) unlikely that any of the four study countries will engage in a FLEGT VPA process. Nonetheless there are a number of critical tasks that can be undertaken to move forward on the legality agenda and to assist buyers of timber and timber products to be compliant in domestic and international markets, and these may be supported by the EU.

A number of country specific recommendations are included in the report. The recommendations range from policy, governance, transparency, legality, and trade challenges, and covers the entire supply chain, with a special focus on inclusive multi-stakeholder consultation, especially with local communities and indigenous peoples, industry and other players in the supply chain. Communications and outreach, research and capacity building also rank high in the recommendations.

Generically, defining legality should be the ‘big issue’ focus. It offers an entry into considering wider legal reforms in forestry and other competing sectors, for example including tenure rights for private farmers, Indigenous peoples and local communities. Defining legality can also be a transformational step, not least in strengthening the rule of law and the criminal justice system. The WWF GFTN-TRAFFIC Common Legality Framework model can lead the way in defining legality in the countries.

Second, engaging with a wider set of stakeholders and the formation of a stakeholder group independent of a government agency may prove successful in building coalitions and trust for change. A mobilization of the public and private sector (including financial institutions) and civil society groups, law enforcement, and the judiciary will be needed to combat illegal logging and related crime. There are also benefits from collaboration and synergies with on-going REDD+ programmes and FTAs.

Third, generating new data and information and improving communication. Legal timber faces unfair competition from illegal timber. There is a need therefore to generate data, and the transparent access

to those data, on the topic of legality in order to improve national debates and discussions on the way forward. The more complex the problem being addressed, the greater is the need for a knowledge-brokering approach. This involves strengthening communications within networks of people and organizations, and facilitating collaborative means to find solutions.

Introduction

The EU Timber Regulation (EUTR) entered into force in March 2013. Under the EUTR, it is an offence to place illegally harvested timber and timber products on the EU market. The EUTR and the Voluntary Partnership Agreements (VPAs) which are negotiated bilaterally with producer countries largely make up the EU's Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan which was launched in 2003. Together with the United States of America's 2008 Amendments to the Lacey Act and Australia's Illegal Logging Prohibition Act (2014) these innovative forms of market-based legislation for verifying timber legality has been introduced into international trade. The premise is that this external change will lever a local change in producer countries (Booth and Unsworth 2014). The new legislations essentially criminalizes the "demand side" of illegality.

Six countries have signed the Voluntary Partnership Agreements (FLEGT VPAs), and negotiations are in progress with a further 9 countries.¹ Other countries that have "expressed an interest" include Bolivia, Cambodia, Ecuador, Guatemala, Madagascar, Paraguay, Sierra Leone and Myanmar. Brazil, Colombia and Peru have signed Free Trade Agreements with the EU both of which include provisions on forest governance.

Objective

The objective of the study is to carry out an analysis of the level of compliance of policies and initiatives in Brazil, Colombia, Ecuador and Peru with the timber import requirements of the EU and other important destinations.

The EU Timber Regulation – and similarly the United States' Lacey Act and the Australian Illegal Logging Prohibition Act – do not have specific import compliance requirements *per se*. The EUTR stipulates that importers exercise the required "due diligence", and the Lacey Act, in addition to the underlying legislation prohibiting the import and trade of illegal harvested and traded timber products in the US market, require an import declaration for scheduled wood products, in both cases to avoid placing illegal timber or timber products in the market. The study objective assesses the extent to which the policies and initiatives of the governments in the four producer study countries ensure the legality of logging and trade, and in so doing facilitate the timber trade between these countries and importing countries, with an emphasis on the ability of traders to meet the due diligence requirements of the EU.

Methodology

The study is primarily based on information contained in reports produced by the EU-funded project "*Supporting the implementation of the EU-FLEGT Action Plan in South America: catalyzing initiatives to control*

¹ The six countries that have signed a VPA with the EU are: Cameroon, Central African Republic, Ghana, Indonesia, Liberia, and the Republic of the Congo; nine more countries are in negotiations with the EU: Côte d'Ivoire, Democratic Republic of the Congo, Gabon, Guyana, Honduras, Laos, Malaysia, Thailand, and Vietnam.

and verify the origin of timber in trade and support related improvements in forest governance” (DCI-ENV/21.040100/20-656/2011/277-872) (synergies analysis: *Análisis de sinergias entre la aplicación de las leyes, la gobernanza forestal y el comercio forestal e iniciativas afines en Brasil, Colombia, Ecuador y Perú* (Orozco and Bohórquez 2013); scoping studies: *Elementos, dados e fatos para análise da Governança Florestal e situação da produção e comércio de madeira legal no Brasil*. (Fanzeres 2014a) and *Tendencias de la Gobernanza Forestal en Colombia, Ecuador y Perú*; (Orozco *et al.* 2014); Benchmarking studies: *Propuesta Metodológica para la Medición y Evaluación de la Gobernanza Forestal en Brasil, Colombia, Ecuador y Perú*. (Fanzeres 2014b)) and other relevant information and studies related to efforts to enhance the legality of timber in each of the four producer countries. It draws also on information on trends in the forest sector, timber trade, governance and competitiveness in each country in order to provide a background to the efforts to tackle illegal logging.

The report applied this information using the indicators developed by Chatham House on “... a set of standardized indicators of the response to illegal logging and associated trade, with the hope of allowing progress to be measured consistently over time and comparably between countries.” (Lawson and MacFaul, 2010). The emphasis in this study is to assess the extent to which producer country governments have engaged in reform processes and implemented policies, laws and regulations in order to tackle the problem of illegal logging and associated timber trade. The Chatham House indicators seek to measure policy indicators on three levels, namely: whether the policy exists or not, how well the measure is designed, and the progress in its implementation. The 20 indicators/verifiers are organized in 12 broad themes. The report relies heavily on the benchmarking scoring and other project reports. This report also relied on the Chatham House study for Brazil. The other countries in this study did not do a Chatham House indicators study.

In addition, discussions were also held with participants attending the **Forum on Governance, Legality Verification Systems and Competitiveness of the Latin American Forest Sector**, held in Quito, Ecuador from the 30th September – 3rd October 2014. In particular views and perceptions were sought from participants from the public, private sector, and civil society organizations in the four study countries as well as participants from other countries in the region and timber importing countries.

Indicator Analysis

This section summarises the salient features of the FLEGT Action Plan, in particular for the EUTR and VPA, and the US Lacey Act. It also briefly considers a range of trends that might be expected to affect the response of the four study countries and the degree to which they have an opportunity and the ability to improve forest governance and respond positively to illegal logging.

The EUTR aims to tackle the trade in illegally harvested timber and timber products through three key obligations:²

1. It prohibits the placing on the EU market for the first time of illegally harvested timber and products derived from such timber;
2. It requires EU traders ('Operators') who place timber products on the EU market for the first time to exercise 'due diligence';
3. Once on the market, it requires traders to keep records of their immediate suppliers and customers.

An Operator must be able to supply information on product and supplier, the country where the timber was harvested and information on compliance with applicable forestry legislation in the country of harvest. Moreover, the importer is required to have a risk assessment procedure to evaluate the information (this would include indicators such as the prevalence of illegal harvesting, armed conflict, the length and complexity of supply chains). The risk assessment asks (a) is there evidence to show that there is negligible risk that the timber was illegally harvested from the forest of origin? And (b) is there evidence to show that there is sufficient control throughout the supply chain to ensure that the timber really is from the forest of origin identified? Furthermore, the importer is also required to have risk mitigation procedures in place in order to minimize the risks of dealing in illegal timber, which may include providing additional information and documentation, and using a third-party verification company.

The Regulation entered into force on 3 March 2013. Preceding the EUTR, as part of the FLEGT Action Plan process, the EU has established bilateral Voluntary Partnership Agreements (VPAs) with selected developing countries to guarantee that wood exported to the EU is legal. The EUTR supports the VPA by preventing the illegally harvested timber from being processed in a third country prior to the import into the EU. In addition, the VPA supports partner countries in improving their own regulation and forest governance procedures. The intended outcomes of VPAs are: improved forest governance; improved access to markets within the EU for timber from Partner Countries; increased revenues collected by Partner Country governments; increased access to support and development for Partner Country governments; implementation of more effective enforcement tools in Partner Countries; and improved foundations for sustainable forest management.

The Lacey Act combats trafficking in "illegal" wildlife, fish, and plants. The 2008 Farm Bill (the Food, Conservation, and Energy Act of 2008), effective May 2008, amended the Lacey Act by expanding its

² See: http://ec.europa.eu/environment/forests/timber_regulation.htm, <http://www.illegal-logging.info/>, http://www.aphis.usda.gov/wps/portal/aphis/ourfocus/planthealth/sa_import/sa_lacey_act

protection to a broader range of plants and plant products. The amendment became the world’s first ban on the trade of illegally sourced wood products. The Lacey Act also makes it unlawful to import certain scheduled wood products without an import declaration. The law has three components:

1. a ban on the trade in the United States of illegally sourced wood products (whether they come from within the United States or any other country);
2. a requirement to submit import declarations on certain wood products which include information on country of origin, species, volume, and value; and
3. penalties for violating the law. The stiffest penalties are reserved for those who knowingly traded in illegal products. For those who unknowingly violate the Act, penalties depend on whether the company or individual did everything they could to attempt to buy legal products – in other words, whether they exercised “due care.”

The Lacey Act therefore requires importers to avoid buying illegally sourced timber. However, it is left to buyers to determine how best to conduct due care and avoid placing illegal timber in the US market, in accordance with buyers’ own risk profile and level of comfort with its suppliers.

In effect for both the EUTR and Lacey Act legality is determined by national legislation in producer countries.

The characteristics of the forest sector in the four countries

The importance of tropical forests and tropical forest ecosystems has long been recognized. However, deforestation and forest land degradation have continued at an almost unabated rate in the Amazon region and during the past decade (Table 1). Illegal logging and the associated trade in illegally sourced timber products are an important cause of deforestation although the largest driver of tropical forest loss is expansion - often illegally - of agriculture (Lawson 2014).

Table 1: Change in forest cover between 2000 and 2012 (%)

Country	2000-2012
Bolivia	-4.6
Brazil	-4.8
Chile	1.7
Colombia	-2.4
Ecuador	-2.2
Mexico	-3.2
Peru	-1.8

Source: Hansen *et al.* (2013)

The conservation of the remaining tropical forests in the Amazon and other forest types are priorities in those countries in order to maintain their key ecosystems services and the subsistence and incomes that they generate for local livelihoods. The increase in national incomes and urbanization are the drivers of higher food and commodity production and the expansion of the agricultural frontier. Both forest conservation and the intensification of agriculture are dependent upon the establishment and protection of secure tenure rights and effective institutions (Stevens et al. 2014).

The forest sector itself is very small in terms of employment and value addition, and the significance of timber trade is also quite small. Annex 1 provides a snapshot of timber production, consumption and trade for logs, sawn wood, veneer and plywood in 1995 and 2011. The data may at best be indicative (for example, underestimating informal forest activities), however, it shows the predominant domestic consumption of timber and the small volume of timber traded (ITTO 2013; FAO 2010). Southern American countries enjoy a limited participation (only 5%) in world timber and wood product markets (half of which is contributed by Brazil, and most of this amount is supplied by plantations) (Oliver 2013).

For Brazilian exports of native wood, analysis of the period 2006–2012 shows the existence of trade operations with 160 countries. It is noteworthy that in both 2006 and 2012 the main buyer of Brazilian wood was the United States (47.78% and 34.38% of the total traded value). Within this period, France and Belgium alternated positions as the second largest destination of Brazilian native wood exports. Belgium, however, decreased its purchases by 13.65% (traded value) between 2006 and 2012. Nevertheless, of all European countries listed among the top destinations of Brazilian native wood, only Germany increased its share of purchases (20.33% of traded value). At the other extreme, Spain reduced its purchases by 86.75% (traded value) during the time period and ceased to be among the main destinations of Brazilian wood. Exports to China also fell significantly, by 74.68% (traded value), falling from third place in 2006 to seventh in 2012. Between 2006 and 2012, Argentina and Mexico became the top destinations for Brazilian native wood exports (MDIC 2013).

Although 54.4% of Brazilian territory is covered by forests (456 million hectares are native of which 325.5 million hectares are located in the Amazon; another 7.2 million hectares consisting of tree plantations are mostly located in the southern states), there is currently limited co-ordination and coherence in the government's actions towards the forestry sector. The most adverse consequence of this situation is not only the lack of advancement of forestry in the Amazon and Brazil, but a setback of forest schedule on a global scenario of rising interest in the role of forests.

The studies for Colombia found that although Colombia has the highest species diversity of any country worldwide, much of which is represented in their natural forests that cover more than half of its land area, the loss and degradation of heritage forestry is one of the main problems that characterize forest management. To this situation are added other issues such as poor and disjointed institutions and the low level of productivity and competitiveness of the forest sector. In this context, it should be noted that about half of the country's natural forests are located in territories of indigenous, afro-

descendant and low income communities. Many of these areas are characterized by poverty, lack of government, illegal armed incursion and violence.

Timber produced in Ecuador, according to reports from the Ministry of Environment of Ecuador (MAE), for the period 2007-2010 (MAE and ITTO, 2010 and 2011) is close to an average of three million cubic meters per year, of which approx. 60% derives from forest plantations, 26% from agroforestry systems and pioneer formations, while the remaining 14% is extracted from natural forests. It is estimated that the country consumes about 5 million cubic meters of wood per year. Therefore, between 40% and 50% of the timber that is circulating and is commercialized comes from unregistered sources. The areas with the greatest deforestation are concentrated in the provinces of Sucumbios and Orellana in the Amazon; in the province of Zamora, located on the eastern slope of the Andes; and in the province of Esmeraldas located in the northern coast.

The volume of timber exported to the EU, according to information from the Central Bank of Ecuador³ (Orozco *et al.* 2014), is very low (1.3%) and does not exceed 11% of the total export value in the period 2010-2012. While exports of forest products from Ecuador to the EU are currently relatively low, it has increased by 41% between 2010 and 2012. In this scenario, the FLEGT initiative could stimulate the country to improve their governance and to increase the controls of illegal forest products and thus to meet the specific requirements of importing countries in Europe.

Timber exports contribute to less than 1% of Peru's exports (of USD 35 billion), which reached USD 167.7 million in 2010 (Orozco *et al.* 2014). The main destinations were Mexico (39%), the United States (25%) and China (23%), only 6% were exported to the European Union. However, Peruvian entrepreneurs are interested in entering the European timber market, as it is greater in size to the market of the United States or China and has greater demand for higher added value timber products.

Colombia, Ecuador and Peru trade principally in regional markets. In the four study countries a competitive forest industry has not emerged, and in part because of the level of infrastructure and trade networks are insufficiently developed to create low costs, and so competitive markets, for timber.

Competitiveness

The performance of the forest sector in terms of value addition and employment, and the unequal development of the four study countries in terms of growth rates and income distribution, is reflected in the competitiveness of their economies and firms. In the World Economic Forum's Global Competitiveness Index (2014) Brazil ranks 57th (of 148 countries), Colombia 66th and Peru 65th (there are no data for Ecuador). *Figure 1* shows the scoring of selected Latin American countries, and shows that the competitiveness of Brazil, Colombia and Peru have shown some slight recent improvement.

³ Source: www.bce.fin.ec 1 April, 2013. Quoted in Orozco *et al.* 2014

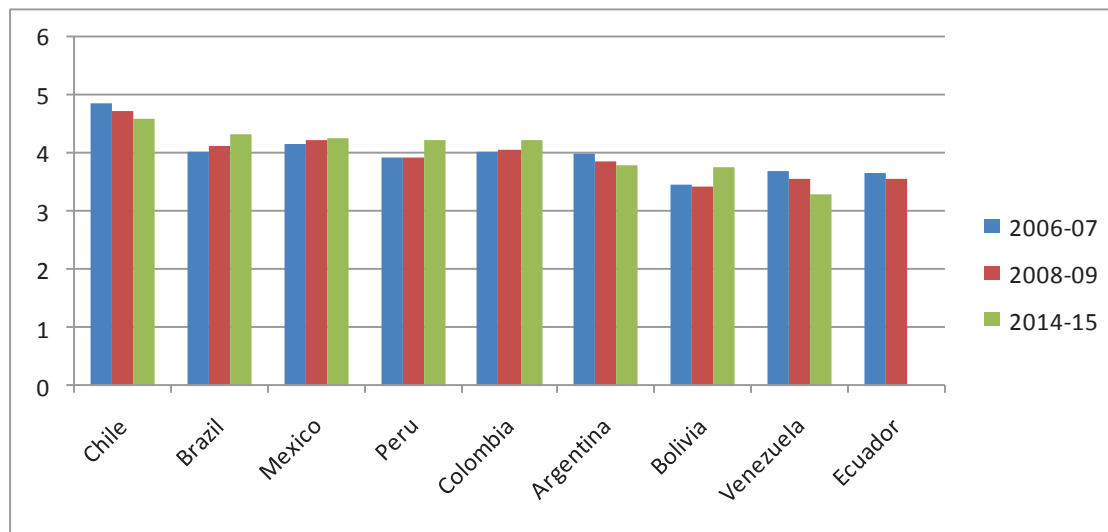


Figure 1: Global Competitiveness Index Scores

Source: The Global Competitiveness Index. World Economic Forum (2014). Note: Index, 1-7 (best).

According to the World Bank’s *Doing Business 2014* (Brazil is ranked 116th (World Bank 2014) out of 189 countries), Colombia 43rd, Ecuador 135th and Peru 42nd. Brazil and Ecuador’s relatively low rankings mean that their regulatory environment is not particularly conducive to business operation.

The World Bank’s *Enterprise Surveys* (World Bank 2013) aim to capture the experiences and perceptions of firms (in the private non-agricultural sector). The 2010 survey reports for Colombia, Ecuador and Peru show that 32.8% of Colombian firms surveyed, 2.3% of firms in Ecuador and 26.3% of firms Peru expected to give gifts to secure a government contract; 32.7% of firms in Colombia 18.8% of firms in Ecuador and 3.4 % of firms Peru believing the court system is fair, impartial and uncorrupted, and 20.8%, 9.7% and 14.2% in Colombia, Ecuador and Peru respectively, possess an internationally recognized quality certification.

Production and marketing of native timber in Brazil faces strong unfair competition from illegal logging. It is estimated that illegal timber can reach the final consumer at a production cost of 50% less. Illegal timber has no embedded costs of land acquisition, either from a private property or as a concession within public areas, and illegal logging operations typically employ an informal workforce or make use of slave labour. Illegal operations also evade applicable taxes.

In Brazil, legal timber production also suffers many disincentives. The tax burden for most timber companies in the Amazon is approximately 31%. Companies dedicated to final sales of timber in the largest consumer state—São Paulo—pay taxes 50% higher than similar businesses in other States of Brazil. This situation creates incentives for the commercialization of other products that compete with

native timber. These other products, such as iron and PVC substitutes, can sometimes be very harmful to the environment. And these disincentives create opportunities for illegality in the forestry sector.

Governance

The World Governance Indicators measure six dimensions of governance, namely: Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. Trends in these dimensions are for the four study countries over the period 1996-2013. In relative terms Brazil performs better than the other study countries. Colombia followed by Peru has the most dispersed values. The low scores for rule of law and lack of improvement in the effectiveness of government over the period are of concern in regard to reform processes in the forest sector.

The overall scores for the four study countries in the Rule of Law Index are shown in Table 2 (and the full tables of scores in Annex 2).

Table 2: Rule of Law Index

Country	Brazil	Colombia	Ecuador	Peru
Overall Score	0.54	0.49	0.45	0.49
Constraints on Government Powers	0.63	0.55	0.40	0.60
Absence of Corruption	0.50	0.43	0.47	0.36
Open Government	0.50	0.49	0.40	0.44
Fundamental Rights	0.66	0.55	0.54	0.66
Order and Security	0.66	0.58	0.57	0.63
Regulatory Enforcement	0.53	0.50	0.48	0.46
Civil Justice	0.51	0.49	0.41	0.39
Criminal Justice	0.37	0.35	0.33	0.28

Source: World Justice Report, Rule of Law Index, 2014.

Note: 1 signifies the highest score and 0 signifies the lowest score.

Again these are at best modest scores. Peru scores particularly poorly for corruption, and Ecuador and Peru score badly for civil justice, and all the countries score badly for criminal justice.

The competitiveness and governance indices described above are a mixed bag. The four study countries are doing at best modestly well and remarkably poorly at the same time. None of them is showing any sign of sustained improvement, and none of the results are propitious for the task of tackling forest governance reforms and illegal logging (Gonclaves et al. 2012).

The studies for Colombia assessed that the status of forest governance and on aspects related to governance in general that affect the entire country's forest management should be considered: deficient and disjointed institutional forestry management; loss and degradation of forests; low

productivity and competitiveness of the forest sector; weak financial capacity; and the limited development of science, technology and innovation.

The scoping study found that during the last five years, the Ecuadorian government has made great efforts in developing policies and strategies to improve forest governance. These efforts include different types of incentives to curb deforestation, greater control over the harvest and the transport of forest products, better communication of forest legislation and funding to conserve natural forests, to promote the reforestation and recovery of degraded areas, reforestation for commercial purposes, and resources for research and training. Despite all these efforts, illegal harvesting, transport and trade of timber continue, especially in the border areas with Colombia and Peru.

In Ecuador, the forest monitoring and control system is based on the Forest Administration System (SAF), whose implementation represents a huge step in the management of forests. This tool has enabled the MAE to have a real knowledge of forestry operations legally executed at the national level and in some cases it has been the basis for immediate corrective action. All stakeholders from the forest supply chain described above converge in the SAF.

The MAE is the national entity that authorizes the harvest of forest ecosystems by issuing harvesting licenses, after the submission of plans, most of which are produced by a forest manager who has been endorsed by the MAE. This forest manager must comply with the administrative and technical procedures explained in the legislation related to forest harvesting. The regulations were established in 2004 with an extractive vision, which is one of the factors causing the deterioration and degradation of the country's forest resources. Therefore, a reform of the forestry legal framework is imperative.

The main causes underlying the adoption of illegal practices in the timber harvesting and trade are: excessive paperwork in order to obtain forest harvesting licenses; acts of corruption and bribery by some government officials in the MAE technical and forest controls offices, and by some police officers who work at both fixed and mobile control posts; predominance of timber intermediaries who set the rules in the supply chain (they prefer to buy illegal timber to increase their profit margin); economic difficulties for small producers to meet the payment for the right to harvest ("pago por pie de monte"); excessive payments to forest managers to issue the harvesting licenses; and poor control by the government regarding illegal forest operations or practices.

The Ecuadorian supply chain consists of direct and indirect stakeholders. The direct stakeholders are the forest and plantation owners (indigenous communities, settlers, timber firms); intermediaries or timber traders; the people executing harvesting programmes; chainsaw sellers buying timber; owners of sawmills; timber warehouse owners; plywood and fibre tablets companies; pallet factories; balsa processors; export groups; carpentries and the MAE. Indirect stakeholders are those that provide services and consist of: forest managers; technical officials from the MAE, the tax authorities, the customs authorities, chainsaw operators and transporters. The dominant actor of this whole supply chain is the intermediary who can be the execution authority, a representative of the owner or the

executant or the transporter. This actor is the one who dominates the whole process and encourages illegal acts and corruption.

Ecuador has been implementing actions that have enabled the country to improve its forest governance during the last six years, based on the “Plan of Good Living” (“Plan del Buen Vivir”). The Ecuadorian forest governance model has five lines of action: forestry incentives; availability and access to forestry information; forest control; forest development; and research, training and dissemination. Relevant examples of good forest governance include economic incentives for the conservation of natural forest, through to the Socio-Bosque Program (payment in exchange for conservation of natural forest); free technical support to facilitate small forest producers in obtaining harvesting licenses; the use of remote sensing technology to measure changes in forest cover over time; and new economic and tax incentives for reforestation associated with commercial activities. Despite these efforts, problems still occur in the control of harvesting and the commercialization of forest products from illegal origins, especially those products originating from native forests. According to statistics, volumes of illegally harvested timber are still high in the country.

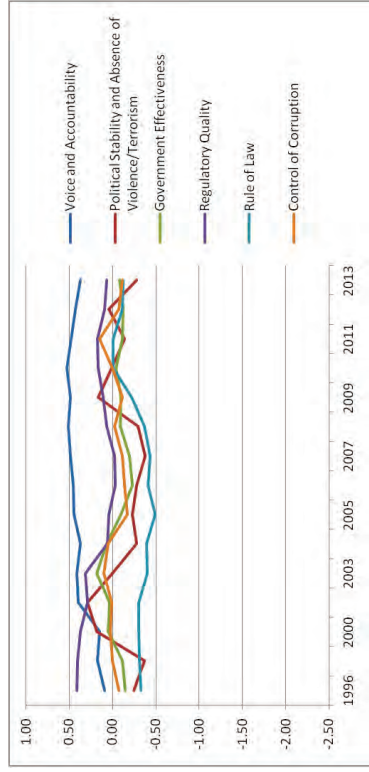
The scoping study for Peru documented the efforts to improve its management, which is reflected in the institutional reform underway, and construction of more efficient and effective forestry information and control systems. The State has also established improved governance through community forestry oversight committees and the creation of the regional environmental authority in San Martin, both of which examples can be replicated in other regions in Peru.

Table 3: 2011 Employment and Gross value added in the forest sector

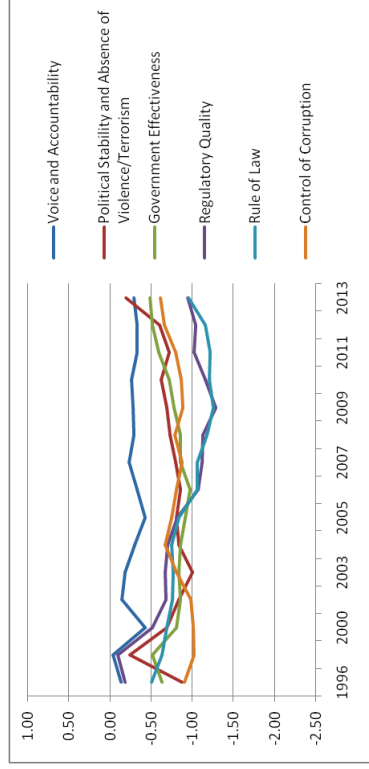
	Employment				Gross Value added				
	Roundwood production (1000)	Wood processing (1000)	Pulp and paper (1000)	Total for the forest sector (1000)	Roundwood production (US\$m)	Wood processing (US\$m)	Pulp and paper (US\$m)	Total for the forest sector (US\$m)	% contribution to GDP
Brazil	133	434	205	773	7,036	5,802	9,676	22,513	1.1
Colombia	24	7	18	48	542	186	1,098	1,826	0.6
Ecuador	13	6	7	26	856	563	322	1,741	2.3
Peru	37	14	10	61	212	192	912	1,316	0.8
Bolivia	3	4	2	9	218	145	69	431	2.2
Chile	42	27	16	85	1,500	2,057	4,039	7,596	3.3
Total South America	295	564	309	1,168	11,355	9,926	19,119	40,400	1.1

Source: FAO (2014). State of the World's Forests. (Annex 2: Contribution of the formal forest sector to employment and GDP, 2011).

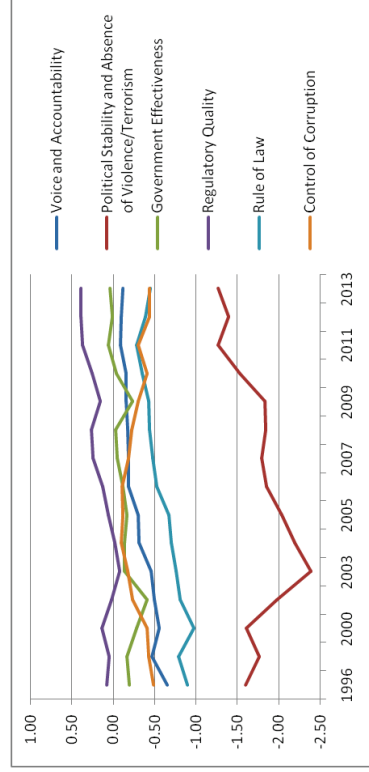
Brazil



Ecuador



Colombia



Peru

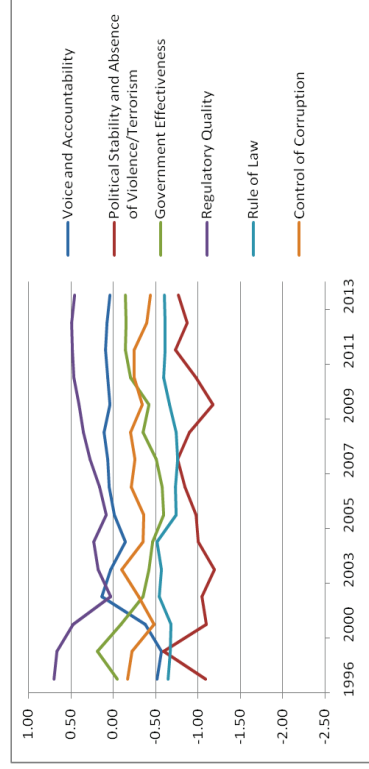


Figure 2: Estimate of governance performance

Source: Worldwide Governance Indicators, 1996-2013, World Bank (2014).

Note: Estimate of governance range from approximately -2.5 (weak) to 2.5 (strong) governance performance.

Table 4: Doing business

	Ease of Doing Business Rank	Starting a Business	Dealing with Construction Permits	Getting Electricity	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Resolving Insolvency
Chile	34	22	101	43	55	55	34	38	40	64	102
Peru	42	63	117	79	22	28	16	73	55	105	110
Colombia ^a	43	79	24	101	53	73	6	104	94	155	25
Uruguay	88	43	154	23	167	73	98	146	90	105	51
Paraguay	109	113	71	50	71	86	68	125	154	102	152
Brazil	116	123	130	14	107	109	80	159	124	121	135
Argentina ^a	126	164	181	80	138	73	98	153	129	57	97
Ecuador	135	176	64	138	91	86	138	91	122	99	143
Bolivia	162	180	136	128	144	130	138	185	126	131	67

Source: World Bank: *Doing Business 2014: Understanding Regulations for Small and Medium-Size Enterprises*.

Note: Ease of doing business ranks economies from 1 to 189, with first place being the best.

Assessment of policies and measures to tackle illegal timber

This section summarizes the assessment of the design and effectiveness of government policies, regulations and programmes to combat illegal timber in the four study countries in the light of the current analysis conducted by the other studies of the project and the summaries in the previous section. The data is grouped according to the set of process and outcome indicators formulated by Chatham House in 2010 across three categories namely the existence of policies, their design and level of implementation. These categories are assessed based upon secondary studies (see methodology, specifically on information provided in the TRAFFIC scoping studies, benchmarking studies, and synergies analysis⁴) and other relevant information and studies related to efforts to enhance the legality of timber in each of the four producer countries, as well as the presentations and discussions held with key informants who attended the Forum on Governance, Legality Verification Systems and Competitiveness of the Latin American Forest Sector.

It is important to underline that the indicator questions and their assessments are specifically related to illegal harvest and timber trade. In some instances countries cannot be assessed on an indicator: often this is due to a lack of available information (although this is in itself a revealing factor). Also it can be noted that for a number of indicators the assessment for the existence of a policy and its design is higher than that for its implementation. In many instances policy reform initiatives have only recently been introduced; in others this reflects the separation of policy making from implementation across forest agencies (sometimes at both national and sub national levels). However, it does raise the issue of whether if a policy is poorly implemented is this also due to a poor design?

Timber illegality policy assessment

Brazil has undertaken a number of far-reaching policy reforms over the past decade in order to get to grip with illegality issues not least in the Amazon area. Even so, the project found that Brazil lacks a country-wide forest policy to ensure the conservation and sustainable use of natural resources. Peru and Ecuador have begun to address timber illegality within a wider reform of forest policies. Colombia is beginning to tackle forest governance whilst still in the process of ending the civil conflict for which it is hoped a final agreement will be reached in 2015, ending one of the longest periods of violence in any country in the 20th and 21st centuries.

The project found that forest illegality in Colombia can be classified as high or relatively high. Causes that generate this illegality are multiple and political factors often converge: institutional-legal-administrative, technical, socio-cultural and economic, all of which form a highly complex context, and are hard to address and resolve from only the forest sector. Activities associated with natural forest production chain is not currently sustainable. Verification of the actual origin of the wood is very precarious. In general, the existing forest governance framework in the country is not the most appropriate to address and resolve the challenges of sustainable forest management.

⁴ See: Fanzeres (2014), Orozco et al (2014), Orozco y Bohórquez (2014), and TRAFFIC (2014).

For all the four countries, in spite of progress in recent years of laws, policies and regulations much remains to be done across the range of indicators. Increasing transparency should allow for more evidence to be collected that illegal logging has been significantly reduced through government action. Corruption and a lack of transparency remain entrenched as shown in the previous section. In Peru and Ecuador the perceived unwillingness to cede to - or to give positive support to - greater community rights continues to be an impediment to the implementation of policy reforms.

Illegal timber not only affects the potential gains from international trade but also undermines efforts to encourage sustainable forestry, investment in wood processing and job creation. Rising urbanization is a factor in the increased domestic demand for timber.

High-level policy arrangements

All four countries assess quite well against the indicator for high-level policies on illegal logging. However, only Brazil has undertaken a comprehensive study of illegal timber (the 2004 Action Plan for the Prevention and Control of Deforestation in the Amazon). Like Brazil, Ecuador and Peru have taken a top-down approach in the establishment of high-level coordination processes. Ecuador has the Forest Governance Model since 2011, and Peru, the National Program of Forest Conservation for Climate Change Mitigation since 2010. In all four countries forestry is the responsibility of relatively low-ranked ministries of environment.

In Brazil, the scoping study found that the Green Municipalities Program (PMV) has antecedents in an initiative of the Federal Public Prosecutor's Office of Para State to create mechanisms to regulate the supply of livestock to reduce the incidences of illegal deforestation in the Amazon. The PMV is based on pacts and agreements between local entrepreneurs and the public administration (municipality and State levels), with the participation of civil society, to permit the establishment and strengthening of economic activities not associated with illegal deforestation. The driving force for joining the PMV is federal legislation that limits access to credit and markets to those involved in illegal deforestation.

The Inter-sectoral Pact for Legal Timber in Colombia and the Sustainable Tropical Timber Roundtable in Brazil are voluntary associations of stakeholders bringing together timber consumers and suppliers. The openings for wider stakeholder participation in policy determination are potentially positive. All four countries are engaged with the REDD+ programmes which address drivers of deforestation including illegal logging, and which require participatory processes including community and indigenous peoples' groups. Moreover Colombia and Peru 's Free Trade Agreements with the United States contain binding obligations relating to indigenous peoples' participation in consultative policy discussions.

The implementation in Colombia of supranational initiatives such as: 1) "Supporting the implementation of the EU FLEGT Action Plan in South America: catalysing initiatives to control and verify the origin of timber in trade and support related improvements in forest governance"; and 2) "Advancing towards a global trade in legal and sustainable timber through the EU FLEGT Action

Plan” are positive policy initiatives. The aim is to create a favourable environment and increase capacity to reduce illegal logging, with a particular focus on trade in Brazil, Colombia, Ecuador and Peru with the EU. These initiatives also aim to encourage the civil society and the private sector to commit to improving the governance of forest resources and establish the key conditions for Voluntary Partnerships Agreements. Colombia has also begun the implementation of the Project “Positioning of the Forest Governance in Colombia”, implemented by CARDER and 10 other regional environmental authorities (CAR).

The open question is whether momentum and political interest can be built and sustained, and translated into first an inclusive policy framework for addressing illegal logging and trade in illegal timber (which requires a high level of commitment between government ministries and agencies in particular in the oil, mining and agricultural sectors), and second, the political resolve to implement the necessary reforms. The benchmarking and synergies studies of the project show that much more needs to be done in this area of policy integration and coordination.

Legislative framework and government structures

There is a high degree of incoherence and ambiguity in forest legislation in all of the countries, and in particular in Ecuador and Peru, where there is inadequate protection of the rights of indigenous communities. For example in Peru the government has granted oil and mining companies’ access to indigenous lands in the areas of Morona, Pastaza, Cenepa and Santiago. There is often a mismatch between forestry and other sectoral laws (in particular tenure laws), and in the application of laws and regulations at national and sub national levels (for example in Brazil the application of the law between federal and state levels), and low enforcement capacity.

Checks and balances are particularly weak in Colombia, Ecuador and Peru. There is little information on their effectiveness. Brazilian Forest Service (SFB) is under the oversight of an ombudsman; in Colombia or Ecuador there is also formal oversight over the forest sector but no information is available on the degree to which it is exercised. In Peru the Supervisory Body for Forest Resources and Wildlife (OSINFOR) is an independent oversight entity attached to Presidency of the Council of Ministers.

In Brazil, the legal framework for the licensing of timber processing units is flawed and counterproductive in terms of sustainable use of forest resources. Most logs (61%) processed in the Amazon are bought by sawmills from third parties and not directly harvested by them in the forest. Sawmills mark the starting point in the timber processing trade chain that ends as final consumer products.

Similarly where there are formal public rights to challenge forest decisions there is no evidence to indicate when these rights have been applied or the outcomes. In all four countries public accounting and prosecution services have their respective formal mandates. However, there is little information for example on whether penalties for forest agency staff for corruption have been applied (and whether these are related to illegal logging), or on the number of cases prosecuted and fines collected

for illegal logging or dealing in illegal timber. The non-payment of forest fees or customs duties may be included in a definition of Illegal timber: Brazil, Colombia, Ecuador and Peru do formally mandate their customs services to verify timber exports. In Brazil the customs service is mandated to check exports of wood-based products at ports and airports to ensure that they are accompanied with the necessary legal documentation. This is more recent in Peru: the Forests and Wildlife Law (2011) states that SERFOR will regulate all forest products intended for export (Urrunaga *et al.* 2012)⁵. But it seems that in all the study countries the ability to monitor shipments is limited by a lack of capacity. The *Cost of Doing Business* records that the time (business days) to export goods is as follows: Brazil (13), Colombia (14), Ecuador (20), and Peru (12).

Legislation and regulations on illegally sourced imported timber

The four study countries are all signatories to CITES. CITES listed timber species requires export permits to be issued by the Management Authorities of the countries. In the four countries it is not necessarily the same authority which has the mandate on forestry. However, there is no specific legislation concerning the imports of non-CITES listed timber imports, which could be significant given cross-border trading and re-export (Oliver, 2013). In Peru OSINFOR has the responsibility to monitor trade but there is no information on how it deals with timber imports or tracking the processing and sale of imports.

There is a lack of a regional agreement concerning timber trade between the major countries bordering the Amazon (Brazil, Colombia, Ecuador, Peru plus Bolivia and Venezuela).

International trade cooperation

There appears to be a slowly growing awareness by governments of the changing international trade norms which emphasis legality and sustainability throughout value chains, and the increasing consumer pressure on major trading companies to demonstrate due diligence.

With regard to the illegal timber trade Colombia and Peru have entered into free trade agreements (FTA) with the US (Peru in 2007, Colombia in 2012) which address forest-related illegalities and governance issues for CITES listed timber species. The Colombia-EU and Peru-EU FTA also include articles on trade in forest products. Brazil, Colombia and Ecuador are engaged in the development of National REDD+ Strategy, and Peru's REDD+ Readiness Preparation Proposal (R-PP) is in progress (2013). REDD+ processes emphasize participation, information and accountability, which are key elements in efforts to strengthen legal timber reform processes.⁶ All these countries REDD strategies focuses in the country but with links to international cooperation to help strengthen the process in the countries. Brazil and Peru have signed agreements with Norway. In 2008, Brazil signed an agreement with Norway to receive payments during a 5-year period for bringing greenhouse gas

⁵ Previously, the Environmental Investigation Agency (EIA) identified more than 100 shipments containing illegally logged CITES species that were exported to the US between January 2008 and May 2010.

⁶ UE REDD Center, Nota informativa (2014). Vínculos entre FLEGT y REDD.

emissions from deforestation below a 10-year average (1996–2005). This was renewed in 2013. A forest partnership between Peru and Norway was launched in 2014.

Policies on demand and supply

Studies and analysis in all four countries reveal a wide and consistent imbalance in the supply and demand of timber. This is notably one of the indicators for which the assessments of all the countries studied are very poor. Illegality and the size of the domestic markets are key factors.

Insofar as regulations for the licensing of sawmills and other timber processing plants do not specify the need to demonstrate the available supply of timber in the locality of the plants or their (legal) sources of timber (timber concession, approved forest management plan, legal forest clearance) or the markets for their products, then those policies and regulations are in need of reform. All the countries have or are developing chain-of-custody information systems. But unless the source of timber especially back to stump is linked to sawmills/processing plants, and to the point-of-sale, then the laundering of illegal timber will continue, and the institutional capacity by the state or independent monitors will be circumscribed.

In Brazil, the scoping study highlighted the Legal Timber Programme of the Department of Environment (SMA) of the State of Sao Paulo, which is a pioneering initiative to improve forest governance at the State level. All traders and major users of the wood in the State of Sao Paulo should be enrolled in a voluntary database (CADMADEIRA); to link this database with information from the DOF federal system; and to establish a condition for participation in public tenders, compliance with this State registration scheme.

Forest regulation can work against the interests of the small-holders and community groups forcing them into illegality. Even where their resource rights are recognized, the transaction costs of compliance can be prohibitive. Also other forms of illegal logging need to be countered, such as overharvesting by timber rights holders and the illegal issuance of timber rights. The more complex the forest management and regulatory framework in the forestry sector, the higher is the risk of corruption, fraud and bribery.

Tenure and use rights

The issue of tenure and use rights has proved to be an almost intractable stumbling block; however, there are signs of recent policy improvements in each of the four study countries. To a large extent the poor assessments in Colombia, Ecuador and Peru reflect the lack of record of implementation.

In Brazil the *Terra Legal Amazônia* program and the Rural Environmental Register (Cadastro Ambiental Rural, CAR) are the two most promising initiatives. The Terra Legal Amazônia programme was introduced in 2009 in order to resolve private and public land use (covering more than 20 million hectares) and land disputes. The CAR obliges all rural landowners to register and record their current land use and land cover, but the implementation of registration and data processing has been slow. The main objective of the National Policy for the Sustainable Development of Traditional Peoples

and Communities (PNPCT) is to promote sustainable development for traditional peoples and communities with an emphasis on recognition and the strengthening and guaranteeing of their rights. Traditional communities (i.e., rubber tappers, river dwellers, etc.) have vested land rights; indigenous lands are vested with communities (the government retaining formal ownership, but the community has the right to exclude others). Indigenous people can use the land for their own benefit but only some non-timber forest products can be sold. The official mapping and registration process of indigenous lands has, however, proved slow.

In Colombia the property rights of indigenous and afro-colombian peoples are established in the Constitution (and about half of forest lands are held by these communities (TRAFFIC 2014 b)). The zoning and mapping of the lands is however incomplete and there is much uncertainty on the ground due to the civil conflict.

The 2008 Constitution in Ecuador also recognizes the traditional rights of indigenous communities, and these are supported by legal provisions on the condition that they guarantee the sustainable management and conservation of these forests on their lands. In addition the innovative Socio Bosque programme grants indigenous communities 20-year agreements for forest conservation for which they receive annual incentive payments from the government.

The new Peruvian forest and wildlife law (2011) recognizes the concept of indigenous peoples' forests and respects their traditional knowledge of forest and wildlife use and management. However, the technical regulations are pending, and to date in practice these are not secure.⁷ There is scant information available on GIS implementation or conflict resolution mechanisms.

Timber chain of custody, transport and tracking

Timber-tracking measures are still generally quite weak in the study countries although innovations are being introduced, and Ecuador and Peru have been able to take advantage of the lessons learnt from the systems that were implemented earlier in Brazil. In Colombia there is understandably not a timber tracking system in place, but a National Forest Prevention, Monitoring, Control and Surveillance Strategy is in preparation. In all the countries the degree to which illegal timber is being identified remains unclear, and the effectiveness of performance of timber-tracking measures is unclear in the absence of independent monitoring of forest agencies either by government, or third-parties.

In Brazil the document of forest origin (DOF) system was introduced in 2006, a user registry is managed by IBAMA and the system provides information on logging and transport authorizations

⁷ Global Witness (2014) report that the Peruvian government has yet to deal with indigenous peoples' claims to 20-million hectares of forest

that is publicly on the internet. The States can use other timber tracking approaches (for example SISFLORA is used in Pará and Mato Grosso States), but they should be compatible with DOF. Increasingly enforcement efforts have been supported through the use of satellite images. The system has however been hacked which enabled illegally harvested timber to be officially documented, ground enforcement has not been adequate, and to date confidence studies on DOF have not yet been undertaken.

The Brazilian approach has been emulated by Ecuador and Peru. Ecuador is introducing the Forest Administration System (SAF), a new chain of custody approach but this is still not fully operational (and the chain-of-custody does not extend back to the stump); and similarly in Peru the National Forestry and Wildlife Information System (SNIFFS) is just being introduced and consequently the effectiveness of its design is unknown.

Brazil currently lacks an independent government body or third party to monitor the systems in place (although the NGO IMAZON performs some cross-checking of data in Pará and Mato Grosso states). However in Ecuador private foresters are contracted as forest regents (following the Costa Rican model) and in Peru the innovative Forest Oversight Communities (Veeduría Forestal Comunitaria) have been established.

Transparency

Colombia, Ecuador and Peru have a poor record on transparency, while Brazil assesses quite well. Openness and public information systems go hand-in-hand; constitutional and legal requirements for transparency are common, for example in Brazil and Peru however the extent of the publication and dissemination of forest data is generally inadequate in all four study countries.

In Brazil the Public Forest Management Law requires information to be published on concessions on public land as a matter of course. The dates and results of resource allocation processes are published on the internet. Regulations, also stipulate open access to concession contracts, forest inventories and forest management plans, which are published annually by the SFB. However, forest concessions amounts to a small part of the sector's activities. SISFLORA provides summarized reports for Pará and Mato Grosso, and in the case of Pará for both private areas and public forest concession.

In Colombia the Intersectorial Pact for Legal Timber is working towards the improvement of the forest control and monitoring systems, as well as transparency across the sector. This is partly due to the fact that stakeholders that are part of the forestry supply chain are numerous, dispersed and heterogeneous. In parallel also, the various stakeholders in the supply chain are unstructured. Likewise, in Ecuador the new Forest Governance Model and SAF suggests greater transparency but this has yet to be achieved. In Peru regulations on Transparency, Access to Public Environmental Information and Citizen Participation and Consultation in Environmental Issues were enacted in 2009: an Annual Transparency Report for the Peruvian Forest Sector has also started.

It is a prerequisite for there to be open, transparent and freely accessible forest information management if progress is to be made to detect and prevent illicit forest operations and the supply and processing of illegal timber, and conversely assist in the verification of legal timber.

Resource allocation procedures

Brazil has made the most effort with regard to this indicator for public lands. It has a pre-qualification process for the allocation of forest resources; the award process is formally open and competitive; informed consent is required, and concessions include commitments to develop forest-based livelihood opportunities for affected local communities. Because these factors tend to be combined it is not surprising that Colombia, Ecuador and Peru are assessed poorly. In Ecuador and Peru prior consent is a constitutional requirement, and in Peru concessions have been amended to bolster community benefits. However, as before, there is no record on implementation to date.

Institutional & operational factors in law enforcement

Enforcement is typically thwarted by inadequate systems operating on the ground, and a lack of sanctions and penalties in the courts. A lack of institutional capacity and resources in this regard is noted in all four study countries. For example, in Brazil both federal and state authorities are weak and IBAMA has only 1,500 enforcement agents across the country in its entirety; the SAF in Ecuador has 350 agents dedicated to enforcement tasks.

The disclosure of public information on enforcement is not always required by law (Brazil) or is poorly fulfilled for the forest sector (for example, Ecuador's Law on Transparency and Access to Public Information).

In Colombia, the scoping study found that verification of the real origin of timber is very poor or weak due to deficiencies affecting the harvesting control system from the forest. There are operational and institutional weaknesses, inadequate financial resources, limited participation of local communities in control, impact of external factors such as violence in the areas of forestry, and the lack of monitoring of the activities of management of natural forests.

Progress is being made in the use of innovative tools and approaches to identify illegal activities. Brazil has pioneered the use of satellite information-based systems. Three are currently in use: PRODES, to estimate annual rates of deforestation; DEGRAD, to identify areas of forest degradation; and DETER, a monitoring system designed to facilitate the detection of deforestation on a monthly basis.

Information and data management

All four study countries have or are currently putting in place information management systems. Colombia is the least advanced, but nonetheless is attempting to replace its document-based system with the National Unique Online Safe-Conduct system. The Brazilian CAR is perhaps the most advanced: it aims to combine data on permits, forest inventories, forest management plans, DOF transport permits, and remote sensing information. It would still require data and links to timber

processing, and payment of forest fees and other tax obligations in order to be a more complete chain-of-custody system. In Ecuador the Forest Administration System (SAF) is in the process of linking with the tax and customs authorities respectively to complete the chain of custody system but the system does not link the timber back to stump. In Peru SNIFFS Control Model is not yet fully operative at either the national or regional levels. Institutional capacity in terms of staff and operational budgets remain an issue in all four countries.

Financial management

All four countries are assessed poorly for this indicator. In part this is due to weaknesses in the countries' fiscal regimes, and in part reflecting the ambiguities in sectoral legislation, and a lack of clarity in responsibility with regard to different actors along the supply chain in the forest sector. This results in inconsistent monitoring and reporting of forest fee revenues, and difficulties for processing companies to demonstrate compliance. In Brazil, Ecuador and Peru linking the information systems with taxation registration is in progress. The plantation subsector operates under clearer regulatory basis (to some extent due to the subsidies that it receives).

The project found that for Colombia the current forestry tax system is outdated and is not applied uniformly and consistently in all regions. Besides the income received by state agencies, tax revenue is, in many cases, not fully used in accordance with its established purpose. There are various forms of fraud, whose magnitude is difficult to determine.

Analysis of the results

The assessment of policies and measures to tackle illegal logging and timber trade shows that the four governments still have some ways to go to progress to a stage where stakeholders have confidence in the policies, systems and implementation, and will need to take more progressive steps to assist buyers to meet the import requirements of the EU and US markets. All the studies conducted by the project noted that their forest sectors are generally challenged by illegality, corruption and fraud.

Although Brazil has undoubtedly achieved the most, there is also a perception that progress has stalled, in part perhaps due to the political election cycle and economic downturn. There are a number of initiatives that are now becoming operational in Colombia, Ecuador and Peru, but in these countries the legal frameworks remain weak. Stakeholder involvement in forest policy debates and decision-making has improved, but from a low starting point. Strong policy statements and rhetoric have masked a susceptibility for intentions to dissipate into thwarted aspirations. Much will depend upon the institutional capacity and integrity of government agencies to effectively coordinate their efforts to deal with illegal logging in spite of their limited staff and operational budgets, and for forest sector stakeholders to seek transparency and synergies with wider partners to support governance reforms and the rule of law.

There are however points of interest and lessons from the experiences of the countries that have been preparing VPAs which can provide insight and advice for the four countries; any wood or wood

product which carries a FLEGT licence (or a CITES permit) is considered to be compliant with the EUTR. Otherwise the EU importers will have to conduct their own due diligence to meet the obligations for legal timber. An analysis of the results of progress to date in the four countries is made therefore with regard to four key topics in the efforts to improve legal timber through the VPA and the due diligence process of the EUTR, namely:

- Defining legality
- Legality assurance system (LAS)
- Determining verification measures
- Improving transparency (Bollen and Ozinga 2013)

Defining legality

The four focus countries have not attempted a full examination of their existing legal framework, and not just for the forestry sector. Therefore there is no existing sub-set of legal framework for harvest and legal timber trade. The full suite of laws governing the forestry sector is expected to be implemented although the EUTR and VPA focus on a sub-set of laws for legality verification purposes. None of the countries have attempted to establish a stakeholder forum that is representative or comprehensive to define the legality for the forestry sector. In Brazil the Sustainable Tropical Timber Roundtable and Ecuador's Forest Governance Model primarily include the timber industry interests; the Intersectoral Pact for Legal Timber in Colombia is perhaps the most inclusive. The national stakeholders have yet to review the full range of national and international laws pertaining to forests, trade, finance, conservation, social, environment, labour, citizen's rights, and freedom of information. In addition, the most immediate law reforms needed to meet the EUTR and VPA requirements are likely to concern the establishment or redesign of systems for governance, traceability, verification and enforcement in the forest sector. Longer term goals might include clarifying tenure rights, and those land-use issues that affect forestry, for example agriculture and mining. Tenure rights clarification includes attempts to protect customary rights, strengthen indigenous peoples' rights, local communities and small farmers' rights to participate in forest management and conservation, and secure timber harvesting rights at a reasonable cost.

WWF Global Forest and Trade Network (GFTN) and TRAFFIC, has developed a common legality framework⁸ to support countries in their efforts to improve governance of their forest resources and prevent illegal logging and timber trade through encouraging compliance with laws related to the forest sector at both national and international levels.

The common legality framework encompasses the legal requirements covering the entire supply chain, including forestry operations and corresponding processing and timber trade relating to timber origin, production, transportation, processing and trade and legislation safeguarding agreed upon

⁸ See the reports in <http://gftn.panda.org/resources/tools/?202483/Framework-for-Assessing-Legality-of-Forestry-Operations-Timber-Processing-and-Trade>

environmental, conservation and social standards. This includes national laws, rules, regulations and administrative circulars, including contractual obligations that cover these areas. Legislation and regulations outside these areas are not included in the framework.

The common framework is composed of a set of principles, each supported by one or more criteria. When developed for use within a national context the criteria are further supported by nationally appropriate indicators and guidance notes/verifiers—specific to that country—based on the existing legislative base, which are practical, easily implemented on the ground and readily audited. The format of principles, criteria and (national) indicators is a format widely used within forest certification and already accepted by civil society, industry and government.

Legality assurance system

A broad agreement on the definition of legality provides a basis for the design of a legality assurance system (LAS). Some of the key questions that should be addressed include whether the LAS should comprise all exports of specified timber products to all markets including regional markets (the mandatory licensing of all exports), and timber imports as well as domestic markets. Without such coverage, leakages could occur in timber trade within the region and to the international markets. The domestic market is a bigger task given the relative size of the market in each the four countries and the wider range and number of (informal) companies involved compared to more concentrated numbers and larger-scale firms that trade in export markets. Other assurances that might be needed include conservation, environmental, social, as well as processing, trade, taxes and fees legality systems. In Brazil some tentative steps have been made to establish public procurement policies based on legal timber (but the system's weaknesses have led the approach to be described as "false legality" (Adeodato *et. al* 2011). Bolivia is considering using a national certification scheme to enhance the legality of public procurement.

The decentralization of many of the implementation activities to sub-national level, for example in Brazil and Ecuador, has tended to add to incoherence and ambiguity in regulations. The introduction of an independent agency might be a solution in some countries. The confidence in the LAS would need an independent verification process and independent third party audit that has the support of all the stakeholders in the country. However, again, these are issues that need to be debated through an inclusive multi-stakeholder consultation process within each country in order to determine the most appropriate and cost-effective traceability system along any given supply chain.

If the LAS cannot cover all the timber products and have the confidence of the buyers in the EU, the companies themselves may need to conduct their own due diligence system and process including developing their own system to verify legality, thereby increasing the operating cost for the companies.

Determining verification measures

The design and operation of a national traceability system needs to be checked for compliance. Typically in VPAs, the licensing authority is responsible for this task, and an independent auditor

reviews the authorities' performance. An independent third-party monitor verifies how competently the system works. Without a national system, the companies will have to develop their own system to meet the EUTR requirements. All the four study countries have or are installing information management systems; government auditors formally assess forestry authorities rather than specific compliance systems; and there is at best some limited experience with independent third-party monitors (in Brazil IMAZON is doing some interesting work, and the forest regent model in Ecuador could potentially be promising). There seems to have been little work on assessing or monitoring forest livelihoods or benefit-sharing arrangements from the granting of timber harvesting rights and public concessions. Considerable investment in information management systems and operational budgets is still needed in order to monitor timber and fiscal payments across the chain-of-custody and to regulate processing mills, all key elements for assuring timber legality.

Apart from forest and chain-of-custody certification there has been little interest shown by the private sector to establish private legality verification schemes, to demonstrate either “verified legal origin” (which would verify that the timber comes from a producer who has the legal right to harvest), or “verified legally compliant” (which would verify that the supply chain complies with relevant laws and regulations). Private and voluntary certification schemes could assist buyers in exercising due diligence to reduce or eliminate the risk of illegal products entering their supply chains, in particular in terms of information, and risk assessment and risk mitigation procedures.

Improving transparency

All VPAs include a section on information that must be made public. Increased transparency is a prerequisite for improved governance. However, the benchmarking and synergy analysis studies showed that no systematic attempt has been made in the four study countries to debate and identify the information for public disclosure. More reliable data needs to be generated and published: for example evidence on illegal logging from satellite imagery, enforcement reports (field inspections at logging sites, sawmills) and the reconciliation of timber harvesting and transport licences.

This analysis of the results of the assessment of legality indicates a range of weaknesses in the four study countries, and the degree to which support is needed to enable buyers to be compliant with new timber trade regulations, i.e. undertake the required “due diligence”.

The analysis indicates that there is a risk that timber derived from the four study countries could be illegally harvested from its forest of origin, and that there is a low level of traceability throughout the supply chains in these countries. Although there has been progress made by the governments in the four study countries to tackle illegal logging, it is currently problematic for importers to demonstrate “due diligence” and to avoid placing illegal timber or timber products in the import markets for timber sourced from natural forests.

Conclusions

This report assess the design and effectiveness of government policies, regulations and programmes to combat illegal timber in Brazil, Colombia, Peru and Ecuador, to meet timber import requirements of the EU. The report uses current analysis conducted by the other studies of the project and other information obtained during the project implementation. The data is grouped according to the set of process and outcome indicators formulated by Chatham House in 2010 across three categories namely the existence of policies, their design and level of implementation. These categories are assessed based upon secondary studies (see methodology, specifically on information provided in the TRAFFIC scoping studies, benchmarking studies, and synergies analysis⁹) and other relevant information and studies related to efforts to enhance the legality of timber in each of the four producer countries, as well as the presentations and discussions held with key informants who attended the Forum on Governance, Legality Verification Systems and Competitiveness of the Latin American Forest Sector.

There has been undoubted progress in the improvement of forest governance in the four study countries which is shown by the new policies and the recent initiatives for stakeholder participation. Brazil has undertaken a number of far-reaching policy reforms over the past decade in order to get to grip with illegality issues not least in the Amazon area. Even so, the project found that Brazil lacks a country-wide forest policy to ensure the conservation and sustainable use of natural resources. Peru and Ecuador have begun to address timber illegality within a wider reform of forest policies. Colombia is beginning to tackle forest governance whilst still in the process of ending the civil conflict for which it is hoped a final agreement will be reached in 2015. Since 2009, Colombia has embarked on the generation of forest sector information, the establishment of decision making platforms, the process of defining legal timber, the review and design of a surveillance and control system, among others.

However the assessment of design and implementation effectiveness of the measures that have been introduced to reduce illegal logging and the trade in illegal timber in domestic and international markets demonstrates that there are few if any quick fixes: reforms in forest sector have been driven by the raised public awareness of corruption and by corollary through the promotion of transparency and accountability in the public sector. Governments have been slow and need much more time to react to the emerging international norm to eliminate illegal timber trade; and there has been a reluctance to change an approach that treats the symptoms of deforestation to one that focuses on its underlying causes, including land and social inequality.

Colombia has been making great strides to improve its forest management in recent years, much of it under intense political challenges. Various public and private actors are making important and significant efforts and actions of various kinds, at the local, national and regional level in order to

⁹ See: Fanzeres (2014), Orozco et al (2014), Orozco y Bohórquez (2014), and TRAFFIC (2014).

improve forest governance and to develop and implement mechanisms and instruments aimed at reducing forest illegality. These include:

- Advances in zoning and environmental management of national forest reserves.
- Progress in the process of elaboration and approval of forest management plans. There are no real incentives for legal trade in timber extracted from natural forest. There is therefore also a lack of incentive for sustainable forest management.
- Improvement of the National Forest Prevention, Monitoring, Control and Surveillance Strategy by structuring, adopting and implementing protocols to monitor and control: 1) Harvest permits and authorizations; 2) transport authorizations of forestry products and by-products; 3) forestry industries or companies. Verification of the real origin of timber is very poor or weak due to deficiencies affecting the harvesting control system from the forest. There are operational and institutional weaknesses, inadequate financial resources, limited participation of local communities in control, impact of external factors such as violence in the areas of forestry, and the lack of monitoring of the activities of management of natural forests.
- The upcoming legal adoption and implementation of the National Unique Online Safe-Conduct (SUNL), which is “the document issued via internet by the environmental authority, which covers the transport in the country of specimens of biological diversity.” Greater efforts are required to structure an Assurance of Forest Legality System, although various processes and actions have been initiated.
- The legal foundation and implementation of the Unique Forestry Venture to centralize procedures and processes, required when exercising commercial forestry activities, in the specific field of commercial reforestation.
- The conclusion of the Intersectorial Pact for Legal Timber in Colombia (PIMLC) and the programme of activities to realise it’s effective implementation as well as the integration of all proposed and ongoing measures, such as the definition of legal timber, and the adoption and implementation of control and monitoring protocols. Political will for these actions should be expressed at a higher level in the Colombian government.

However, the project reports for Colombia finds aspects of deficient and disjointed institutional forestry management; loss and degradation of forests; low productivity and competitiveness of the forest sector; weak financial capacity; and the limited development of science, technology and innovation. Overall, the greatest proportion of issues found was for financial incentives, economic instruments and benefit sharing. In general, the current situation of forest governance in Colombia, in spite of all the laudable progress made under intense political challenges, reveals weaknesses and shortcomings facing the challenges of legal forest management and the aspiration of sustainable in the future. The National Plan of Forestry Development (PNDF), in force since 2000, defined and incorporated the subprogram Management and Use of Natural Forest into the Forest Supply Chain Program. This subprogram provides, among other aspects, the need to develop new management and use systems that facilitate equitable integration of the Departmental Agreements for Legal Timber, with its progress and prospects. This initiative includes: industrial, mining, forestry, livestock,

construction, housing and transportation sectors, as well as various public sector entities related to these fields, as are several ministries and related entities, regional environmental authorities, among others.

Colombia's tax revenue from forestry is also not captured effectively and efficiently. The current forestry tax system is outdated and is not applied uniformly and consistently in all regions. There are various forms of fraud, whose magnitude is difficult to determine.

In addition, Colombia is in the process of establishing operational synergies between some of the actions being carried out in the framework of FLEGT and other national initiatives. This is a clear signal, consistent with the reality of the situation, of the country's precarious status in these aspects. Engagement with stakeholders that are part of the forestry supply chain is also challenging as they are numerous, dispersed and heterogeneous. In parallel, the various Stakeholders in the supply chain are also unstructured.

The stakeholders, especially the indigenous peoples faces a serious challenge in meeting the legal requirements for forest tenure, harvest and trade. Therefore, Colombia has implemented a project¹⁰ to improve the capacity of ethno-territorial organizations to exercise their rights and participate in the definition and implementation of policies to reduce illegal logging, as well as improve territorial protection.

The economic value of exports of timber and timber products from Colombia to the EU is relatively low, compared to other destinations. It should take into account the market opportunities that are opening up due to the conclusion of the Free Trade Agreement (FTA) between Colombia and the EU. The actual provisions regarding trade in forestry products set forth in this Agreement should also be considered.

The Ecuadorian government has made great efforts in developing policies and strategies to improve forest governance. Ecuador is one of the few countries in South America that has a Forest Governance Model. This model clearly involves the population, key stakeholders and institutions to manage forest resources. These efforts include different types of incentives to curb deforestation, greater control over the harvest and the transport of forest products, better communication of forest legislation and funding to conserve natural forests, to promote the reforestation and recovery of degraded areas, reforestation for commercial purposes, and resources for research and training.

Ecuador has been implementing actions that have enabled the country to improve its forest governance during the last six years, based on the "Plan of Good Living" ("Plan del Buen Vivir"). The Ecuadorian forest governance model has five lines of action: forestry incentives; availability and access to forestry information; forest control; forest development; and research, training and dissemination. Ecuador has generated, and continues to generate, information that is enabling the country to develop

¹⁰ Project "Forests and Ethnic Territories in the Chocó-Darién Colombian-Ecuadorian: Territorial Protection, Responsible Management and Commercialisation of Forest Products".

and implement actions aimed at the management of its forests. Relevant examples of good forest governance include economic incentives for the conservation of natural forest, through to the Socio-Bosque Program (payment in exchange for conservation of natural forest); free technical support to facilitate small forest producers in obtaining harvesting licenses; the use of remote sensing technology to measure changes in forest cover over time; and new economic and tax incentives for reforestation associated with commercial activities. Despite all these efforts, illegal harvesting, transport and trade of timber continue, especially in the border areas with Colombia and Peru. And there is still an evident lack of legal instruments for the direct application of these constitutional principles (e.g., rules and regulations).

Despite these efforts, problems still occur in the control of harvesting and the commercialization of forest products from illegal origins, especially those products originating from native forests. According to statistics, volumes of illegally harvested timber are still high in the country.

The possibility for improving forest governance in Ecuador depends, among others on:

- The regulations that regulate forest harvesting in Ecuador have substantial shortcomings. Firstly they do not comply closely with the current legal framework; and secondly major changes are required in the social and technical design of these regulations; e.g. thorough review of the minimum diameter allowed for cuts, harvesting on steep slopes, promoting equitable access to resources, etc.
- Despite significant progress on the issue of prevention of illegal forest activities, through the implementation of the Forest Control System, there is still evidence of shortcomings especially in the detection of crimes. The country does not have an early warning system to help improve efficiency in early detection of illegal activities affecting forest resources.
- Ecuador has made significant progress in recognizing the rights of indigenous peoples. Collective rights related to participation in the use, conservation and management of natural resources benefit communities and contribute to the effective management of forests. Improvements in their organizational capacity is a key strength that has allowed indigenous groups to position themselves in the political scene and gain significant representation.
- Forest research conducted in Ecuador, in general, does not respond to forestry sector needs. Research and development in the forestry sector continues to be: (a) dispersed without proper articulation; (b) outdated and unresponsive to real needs (for example to improve forestry standards); and (c) poor, as there are few institutions that engage in this activity.

The studies for Peru documented the efforts to improve its management, which is reflected in the institutional reform underway, and construction of more efficient and effective forestry information and control systems. The State has also established improved governance through community forestry oversight committees and the creation of the regional environmental authority in San Martín. However, the perception of the actors in the project is that forest governance is currently poor.

During, the last two years, Peru undertook an institutional reform of the forest sector through the creation of the National Forest and Wildlife Authority (SERFOR); regulation of the sector, the approval of the National Forest Policy in 2013; and the implementation of the Forestry and Wildlife Act (2011). The Directorate General of Forestry and Wildlife is currently encouraging the participation and the development of a consultation, aiming to collect input from all sectors.

In Peru there are numerous commercial and governance challenges including: conflicts over land use, including human invasion and changes in land use; illegal logging and trade of timber; and inappropriate extraction of biodiversity (such as hunting and fishing, and plant collection). However, the State is making efforts to improve its management, which is reflected in the institutional reform underway, and construction of more efficient and effective forestry information and control systems.

The search for improved forest governance in Brazil does not occur in a vacuum of social participation and control over government actions. However, it is important to recognize that the reactions and responses of the Brazilian Government have also occurred under the government's own initiative and not only because of internal (i.e. Brazilian civil society) or external (i.e. international treaties and/or actions of individual governments) pressures. Particularly at the subnational level (i.e. State governments) initiatives are being implemented that promote improvements in the forestry sector, such as the Program Madeira Legal (Legal Timber) in the State of São Paulo (the largest consumer of Brazilian native timber) and the Green Municipalities Program in the State of Pará (the largest native timber producer in Brazil). Civil society has also developed initiatives such as the Roundtable on Sustainable Tropical Timber. This roundtable initiative, which is supported by the EU and other institutions, has a very high convergence and a high potential for synergy with various national initiatives.

The FLEGT Action Plan and other international initiatives to promote legality in timber trading might provide incentives for the adoption of best practices in Brazil and other producer countries.

The Brazilian state of forest governance relating to the legal, political, institutional and regulatory frameworks faces a number of challenges:

- The overall level of forest governance has seen little improvement over the past 10 years. Although Brazil has advanced substantially on forest-related legislation and the capacity of enforcement operations, improvements in forest governance have been limited as targeted changes and improvements in the forestry sector have not received the necessary investment.
- Although Brazil has a comprehensive environmental legislation in relation to the forestry sector there are many inconsistencies and bureaucratic hurdles within both federal and state agencies that prevent effective protection and/or promotion of the sustainable use of forest resources. The Environmental Crimes Law (Law no. 9605/1998) provides limited punishment of those who are responsible for the destruction of forests. The collection of fines related to such forest crimes is estimated to be approximately 5% of the total issued during the three year period analyzed by the NGO IMAZON (Barreto et al. 2009).

- Brazil requires an integrated and co-ordinated Forest Policy that supports the country's development strategy. This Forest Policy must go beyond the Ministry of Environment's current operational approach of command and control to be more proactive in finding positive solutions for the forestry sector. There are various programs and initiatives that deal with several important issues in the forestry sector, such as the creation of the National Forest Program at the federal level and the Program Legal Timber (Madeira Legal) at the São Paulo State level. Limited, or in some cases, a lack of co-ordination between different initiatives and, especially, the lack of a common political identity, do not provide the forestry sector with the tools to interact on an equal basis with other sectors, particularly agriculture, mining and hydropower, which compete for physical space in the forests for their implementation.
- One of the major bottlenecks for the promotion of sustainable use and conservation of Brazilian forests is the existing land tenure insecurity in the country, particularly evident in the Amazon. 32.5% of forests in Brazil (148 million hectares) are likely to be under private ownership, although, especially in the Amazon, land titles are not always based upon legal documentation. And while 67.5% (308 million hectares) of forest in Brazil have already been classified as under public ownership there is little evident protection in place, or few efforts to establish and maintain sustainable production of forest products.
- Forest areas under public ownership, as a potential solution to the legality and sustainability of timber production, are still too few. Among the many problems that have delayed the implementation of forest concessions perhaps the most serious is the overlap of mandates between the Serviço Florestal Brasileiro (SFB), Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) and Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio) that, within the Ministry of the Environment, have redundant and conflicting responsibilities towards the authorization, implementation and monitoring of federal forest concessions.
- The expectation that the Rural Environmental Registry (CAR) (Law no. 12.651/2012 and Decree no. 7.830/2012) will finally resolve tenure insecurity in Brazil (mainly in forested areas) still needs to be proven.
- The Brazilian government needs to evolve beyond a command and control strategy. Although the Inter-ministerial Commission on Combating Crimes and Environmental Violations (CICCIA) has provided greater efficiency in the joint operations of the various security agencies, the strategy of command and control is not enough to solve the problems related to deforestation and illegal timber production. To stabilize Amazon deforestation to minimum levels or zero deforestation, IBAMA would have to exercise widespread operations that would require staff capacity and additional budget beyond levels that currently exist. A substantial portion of deforestation is occurring in public areas invaded for illegal logging, or on small farms (including settlements), or are being conducted on small plots within large properties that makes their detection difficult.

For all four countries, there are a number of other tasks that can be undertaken to move forward on the illegal logging agenda and to assist buyers of timber and timber products in domestic and

international markets such as the EU and USA, and to improve the collaboration and synergies with the on-going REDD+ programmes. There is a high level of convergence between FLEGT Action Plan elements and the objectives and actions established or in the definition process in the REDD+ national strategies which together support efforts in improvements in the forestry sector.

With the signing of the FTAs, in the case of Colombia and Peru that signed such agreements with the EU and the United States respectively, there are articles that are clearly converging with the objective and scope of initiatives for law enforcement and the improvement of forest governance and trade. However, no synergy formally established in this field was identified.

A significant potential for the emergence and formal establishment of synergistic actions was identified from innovative and successful experiences of some countries in the area of the improvement of forest governance. For instance, one can identify some initiatives that could be the object of future actions of cooperation and/or transfer, either at a bilateral level or from the region's global scope covering the four countries considered here: i) from Brazil: Document of Forest Origin (DOF) ii) from Colombia: the Intersectorial Pact for Legal Timber iii) from Ecuador: the Forest Governance Model iv) from Peru: Forest Oversight Communities (*Veedurías Forestales Comunitarias*).

At the regional level, in addition to the themes mentioned above, a subject to explore in terms of establishing potential synergies and exchanging information about ongoing processes or lessons learned is the topic related to the adoption and implementation of responsible purchasing policies of forest products with emphasis on timber commercialisation and legality.

A high potential of synergistic relations aimed at promoting and improving dialogue between the four countries at the regional level was also identified based on a potential cooperation and transfer among these countries from the experiences, progress and achievements in the specific initiatives mentioned above and in others that have been considered in this study.

To give more strength to the potential actions of cooperation and transfer as well as to realise the high potential for the formal establishment of synergistic relations including the promotion and enhancement of dialogue, it is essential that countries conduct beforehand analysis and systematisation of lessons learned from the various initiatives that have been developed or are currently being developed.

Recommendations

The EC-funded project “*Supporting the implementation of the EU-FLEGT Action Plan in South America: catalysing initiatives to control and verify the origin of timber in trade and support related improvements in forest governance*” has done much to ensure that key forest stakeholders groups in Brazil, Colombia, Ecuador and Peru have a clear understanding of the intent and content of the EU FLEGT Action Plan and the opportunities it offers; to foster a clear understanding in key European forest stakeholders on the

complexity of forest governance in South America; to encourage discussion on indicators to measure changes in forest governance.

There are a number of recommendations that the project studies have made. However, the main recommendations for the countries related to legality challenges to meet the import requirements of the EU include:

Brazil

- Prepare and implement a forest policy co-ordinated with other relevant governmental development programmes at both federal and State levels.

Developing a Forest Policy should begin with a review of the National Forest Program (PNF). This review should be conducted at the highest political level i.e. by the Presidency. As demonstrated with the Plan for Prevention and Control of Deforestation in the Amazon (PPCDAM), the Civil Cabinet should monitor and supervise participation of all branches and institutions of government: proposals will otherwise remain on paper only and Ministries will continue to pursue policies not necessarily in line with the sustainable use and conservation of forest resources.

Revision of the PNF is dependent on the composition of the National Forestry Commission (CONAFLOR). This participatory forum for discussion and proposal of strategies related to the forestry sector should be taken to the highest level of government decision making. It should include not only the contributions from civil society and the forestry private sector, but also those from forest specialists and decision makers in all institutions affecting native forest or tree plantation areas in Brazil.

- The PNF should be reviewed also in terms of proposed actions.

Suggestions for possible actions come from the study on “Subsidies and Proposals for the Formulation of a Sustainable Forestry-Industrial Policy for the Amazon” commissioned by the Center of Industries of Producers and Exporters of Timber of the State of Mato Grosso (CIPEM) and the National Forum of Forest-Based Activities (FNABF), in partnership with the National Confederation of Industries (CNI) and made public in June 2013. This event had the support of several entities that represent Amazonian States such as the Association of the Forest Supply Chain of the Amazon (UNIFLORESTA) and the Association of Timber Exporters and Industries of the State of Pará (AIMEX), as well as government actors (i.e. Forest Service) and civil society organizations.

- Effective, efficient and transparent implementation of the new Forest Code (Law 12.651/2012) will strengthen control over the source of forest products.

Via Article 35, the creation of a national control system integrating data on the origin of timber, charcoal and other forest products or by-products from different federal entities has been established. This system should be co-ordinated, supervised and regulated by the appropriate federal agency from the National Environmental System (SISNAMA) and the data made available for public access via the internet. The federal agency co-ordinating the system should provide the necessary computer capabilities and set a deadline for integration of the data and information into the national system. The disclosure of data from the forestry sector by the National Forest Administration Portal should fully comply with the provisions of the National Council for the Environment (CONAMA) Resolution no.379/2006 on the integration, standardization, transparency, disclosure and control of forest products and by-products.

- In addition to promoting access to government procurement, the government should also adopt different taxation mechanisms for timber produced legally and sustainably.

This would greatly enhance the chances of survival of forest businesses that operate within the law, enabling greater profit margins. To ensure those working illegally do not also benefit from this differentiated taxation, the government should establish a system for cross-checking and auditing with the Treasury Department and the Internal Revenue Service and control mechanisms for use by agencies such as the Agents Sanitary Supervision in the States of Pará and Mato Grosso.

- Mechanisms such as the one promoted by the Timber Pact launched within the Sustainable Tropical Timber Roundtable should be adopted to ensure the inclusion of private timber production in all the benefits mentioned above.

The production of legal and sustainable timber will be determined in part by the private sector, which still accounts for most native timber production in Brazil. Those adhering to the Timber Pact should adopt a platform of transparency in transactions between producers and consumers that would guarantee both the origin of products and the veracity of the information on species and volumes produced legally and sustainably. Transparency regarding the real level of demand for forest products (i.e. volume and specifications) should also be assured, as this would allow adjustments in production to avoid waste and also would increase profit margins for both producers and consumers.

Colombia

- Legality has to cover all forest in the country including in those forest with civil unrest. The themes of conservation, sustainable use and harvesting of natural forests should be included specifically in negotiations between the national government and the Revolutionary Armed Forces of Colombia (FARC) guerrillas (or other groups who join the peace talks in the future) or in any subsequent processes that are developed with the participation of civil society in order to endorse agreements.

- Continue and complete the updating process of the forest policy and the PNDF based on a participatory process that can be developed around the National Forestry Roundtable.
- Review relevant legislative and regulatory frameworks; in particular to finalise the updating of regulations on planning, management and harvest of natural forests as well as data and information system sharing that is open, transparent, and freely accessible to all stakeholders.
- Move forward from the design and legal adoption phase of forest management plans to the implementation phase.
- Structure, formalise and launch an agreement on the natural forests supply chain.
- Identify and implement mechanisms to overcome technical and technological delays in forest monitoring, verification and control activities; link with academia for this purpose. Continue the development of comprehensive and coordinated actions aimed at structuring and launching a system to ensure timber legality.
- Achieve greater practical advances in monitoring, activity implementation and the enforcement of commitments taken in the Intersectorial Pact and in departmental agreements on legal timber.
- Strengthen structural and organisational aspects of producers and forest owners as well as the technical capacities of the various stakeholders' in the forestry supply chain.
- Structure, adopt and implement, in the public and the private sectors, protocols for responsible procurement of timber and timber by-products.
- Promote a broader, open and informed discussion among public and private stakeholders related to forestry activities on the relevance of signing a VPA between Colombia and the EU.

Ecuador

- Update the forestry regulations, especially those related to natural forest, trying to make it more efficient, less complicated, and easy to implement for small producers. The higher the degree of complexity of any regulation, the greater the risk of corruption, fraud and bribery.
- The Ecuadorian forest control system would benefit from having a monitoring mechanism that uses a satellite imaging system and other intelligence gathering methods for early detection of forest crimes. This system should coordinate with other existing initiatives such as the verification of

compliance with maintenance contracts Socio Bosque project of the National Forest Assessment, etc.

- Official information relating to forest governance, and the levels of illegal timber in Ecuador should be presented, for which there are estimates, sectoral studies and specific data for project areas of interest. This information, however, is not used at national level, although it could be utilised to fight corruption on the ground and in designing incentives to encourage the use of legal and sustainable timber. Based on the inconsistencies between the regulations of forestry and the Forest Governance Model of Ecuador (FGME), it is a high priority to improve coordination and implementation of a forest information system and forest control system. The forest information system should be open, transparent, and freely accessible to all stakeholders.
- Improved coordination is required between institutions whose mission is to generate knowledge and information such as universities and research institutes, and public policy makers to generate public policies for the management of forest resources. The research currently being conducted does not yet meet the needs of the sector.
- Promote the active participation of indigenous peoples, especially in the provision of information to assess forest governance implementation at the local level.
- Indigenous peoples should actively be integrated into national forest governance processes, for example in the control of legal timber. Experiences from other Latin American countries has shown that indigenous peoples are driving the reduction of illegal timber due to their ownership of the forests which assures the correct harvesting and use of timber and non-timber products.
- Implement an intensive system of dissemination and training of current forest legislation and norms, aimed especially at small forest landholders and owners, including indigenous communities, settlers and also implementers and intermediaries. This will raise the level of awareness among primary timber producers and traders, with the purpose of practicing sustainable harvesting and responsible forestry sales.
- Create a system of incentives that encourages the proper execution of the forest harvesting programmes and plans. These incentives can be focused on owners or implementers. They will consist of the exoneration or reduction in the payment for the right to harvest (“pago por pie de monte”), tax refund, tax exemptions, recognition of merit, etc. This will improve the social acceptance so that legal practices are observed in the harvesting and commercialization of timber.
- Build strategic alliances with the tax authorities (SRI), customs authorities (SENAE) and the Armed Forces (in the border areas) to perform control operations on all stakeholders in the forestry business, especially on intermediaries and in final locations (warehouses and factories) domestically.

- Train all stakeholders in the supply chain on how SAF works. Despite being a user-friendly software, some producers and MAE officials have difficulty in applying it and handling it. Also to integrate SAF modules with direct connection to the SRI and SENAE databases, in others to cross reference the information and to make sure that taxes are paid in the field. However the perception of illegality in this area is high. To implement permanent controls in the industries, warehouses/sawmills, auditing must be conducted with SRI officials and municipalities. This requires timber traceability compliance from companies (chain of custody).
- Strengthen the regulation of the public procurement system, especially directed at the Decentralized Autonomous Governments (GAD), to filter out the use of illegal timber in public works.
- Toughen sanctions that punish the harvesting and commercialization of illegal timber. Financial and criminal penalties are required, especially for those who facilitate and finance illegality so that the penalty does not fall solely on the producer. To create oversight committees to demand and enforce compliance with the judicial system in relation to the provisions laid out in forestry laws.
- Strengthen community organizations and owners of large extensions of natural forests, both through their organizational structures and accounting systems, census, delegations, etc. so that they can implement models of sustainable forest management.
- Continue to provide all stakeholders in the forest sector information on the opportunities offered in the EU FLEGT Action Plan. It is necessary to improve the knowledge of timber regulations in the EU and globally, among relevant stakeholders in Ecuador.

Peru

- Implement an effective system of information, updated and standardized, for the planning and coordinated action of sustainable management of forest resources. The information should also be open, transparent and freely accessible to all stakeholders.
- Generate human and institutional capacities and institutions for forest management and good governance. Inter-agency coordination should be a pre-requisite for cross agency cooperation and capacity building and networking.
- Encourage technological innovations for the sustainable management of forest resources. Such technologies need not necessary be innovative, but cost effective, and readily used in the field. Where feasible, to learn from implementation of technology that has worked in a tropical

environment, and is readily understandable and useable by those tasked with its implementation in the field.

- Support the implementation of incentives aimed at reducing illegality in the areas of tenure, harvest, transportation, processing, production, trade and fees.
- Educate and train indigenous people in forest law enforcement, governance and trade.
- Establish practical synergies between initiatives, including from different ministries and agencies whose objectives aim at improving forest governance, reducing illegality, regulating domestic timber trade and improving compliance with legislation.
- Strengthen and encourage indigenous entities such as Forest Oversight. Such entities can support improved forest governance through their high territorial representation, including within forested areas.
- Design and implement a communications strategy on the scope, benefits and opportunities of good forest governance and legal and responsible trade, incorporating appropriate cultural approaches.

For all the four countries, in addition, three immediate key tasks are also recommended:

1. define timber legality
2. engage with a wider set of stakeholders
3. generate and disseminate information

Defining timber legality

A discussion on the definition of legality is the big issue focus. In terms of governance and trade defining legal timber is the single topic that needs to be addressed. The TRAFFIC studies show that this is a lacuna in Colombia, Ecuador and Peru, and a return to the topic in Brazil would also be beneficial. It offers an entry into considering wider legal reforms in forestry and other competing sectors, including tenure rights for private farmers, Indigenous peoples and local communities. Defining legality can also be a transformational step, not least in strengthening the rule of law and the criminal justice system. The forest sector and the timber industry in the four study countries have underperformed. A fundamental change needed to attract new investment, to boost trade and employment, to create value added as well as increase public revenues. The common legality framework developed by WWF GFTN/TRAFFIC to support countries in their efforts to improve governance of their forest resources and prevent illegal logging and timber trade through encouraging

compliance with laws related to the forest sector at both national and international level would be a useful starting point.¹¹

The promotion of legal timber has synergies with parallel initiatives for commodity supply chains to be both more sustainable and legitimate (Persson, M. *et al.* 2014). There are legal demands and new regulations (such as the EUTR), customer demands for traceability (FSC) and trust or ethical sourcing (fair trade beverages), responsibility to company shareholders, and companies' response to changing markets through the defence of competitive advantage and avoidance of reputational loss (mandatory carbon reporting obligations) (Seuring and Muller 2008). A number of multinational companies are publically committing themselves to "excluding or zero" deforestation from their supply chains, for example, Unilever (consumer goods) and Cargill (food and other commodities).¹² Also the new EU Accounting and Transparency Directives that require all EU oil, gas, mining and logging firms to disclose all payments of EUR 100,000 and above for each individual project that they operate, essentially establishes a global transparency standard in the extractive industry sector.¹³ However, given that about half of illegal deforestation and forest conversion for commercial, export-driven agriculture is driven by demand for commodities including palm oil, beef, soy, and wood products, the scale of the problem remains evident.

Engaging with a wider set of stakeholders

An underlying challenge in all the four countries is the lack of inclusive multi-stakeholder consultation processes. Stakeholder involvement in forest policy, legislation and systems deliberations to date has been characterized by the limited range of stakeholders, drawn primarily from within the sector, under stewardship of a lead ministry. There have been some successes; however, it is recommended that an engagement with a wider set of stakeholders and the formation of a stakeholder group independent of a government agency may prove more successful in building coalitions and trust for change. A stakeholder mapping exercise in each country will identify a more inclusive range of stakeholders including representatives from the agricultural and other sectors that affect land use on forestlands, environmental, civil liberties and rights groups, labour (trades unions), and academia.

This approach is consistent with international standards for public participation, and is a REDD+ requirement as well as a lesson of FLEGT VPA processes. Removing the stakeholder group from a Ministry is advantageous because Ministers' terms of office are rarely long, and many are unable to move beyond crisis management. Ministries need a fully work-out plan which this approach can offer.

¹¹ WWF GFTN and TRAFFIC

¹² Rhett Butler Yale's Environment website:

http://e360.yale.edu/feature/a_conservationist_sees_signs_of_hope_for_the_worlds_rainforests/2822/

¹³ www.illegal-logging.info/topics/eu-timber-regulation

Generating and disseminating information

The lack of good communications and dissemination of information on the forestry sector is a common thread for the four countries. Good communication is central to outcome mapping. The more complex the problem being addressed, the greater is the need for a knowledge-brokering approach. This involves strengthening communications within networks of people and organizations, facilitating collaborative approaches to problem-solving and ensuring a high degree of involvement in debates about change and how it happens. The forest sector can be quite complex, but often there is a lack of critical data and also the transparent and free access to those data by all stakeholders, to make optimal decisions. There is a need to generate data on a range of topics to improve the legal timber debate and discussions on the way forward. Since legal timber tends to face unfair competition from illegal timber, priority areas for analysis are likely to include:

- Mapping the chain of custody and estimating the costs and returns of doing business for timber rights holders (transaction costs, the charges and fees for permits and government services, the time taken for the completion of bureaucratic procedures, from forest to sawmills /processing to market destinations) (Navarro *et al.* 2014). This should be repeated for illegal timber, and could also be carried out for a region or specific locality to compare costs and returns to the production of agricultural commodities. The periodic review of these costs of doing business in the forest sector can guide policy reform discussions.
- Reviewing the costs to and innovate systems for government forest authorities to deliver services along the chain-of-custody, and undertake public expenditure tracking and audits.
- Estimating the costs of independent monitoring by the state and civil society groups, including the costs satellite-based and human intelligence networking systems to monitor illegal logging and illegal timber trade.
- Estimating the costs of developing mobile device apps and other innovative systems that are not technology dependent, not least in areas with low internet penetration (a) to report illegal logging and processing, (b) to track timber consignments from processing plants to markets.¹⁴
- Reviewing forest fiscal policy with regard to forest management and the wood processing industry.

¹⁴ Personal communication: This is being developed currently in Bolivia. Edwin Magariños, Camara de Exportadores de Santa Cruz (CADEX), Bolivia.

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Annex 1: Timber production, trade and consumption

Brazil

		Logs		Sawnwood		Veneer		Plywood	
		All	Tropical	All	Tropical	All	Tropical	All	Tropical
2011									
Production	1000 m3	139,969	30,774	25,210	16,110	550	300	2,225	375
Imports	1000 m3	28	2	120	106	6	5	6	0
Exports	1000 m3	59	24	1,325	487	69	18	1,217	94
Domestic Consumption	1000 m3	139,939	30,752	24,005	15,729	487	287	1,014	281
Import Value	1000 US\$	1,310	907	15,728	12,001	9,095	4,326	2,442	2,900
Export Value	1000 US\$	11,490	9,180	408,696	238,215	36,091	25,932	370,360	40,433

		Logs		Sawnwood		Veneer		Plywood	
		All	Tropical	All	Tropical	All	Tropical	All	Tropical
1995									
Production	1000 m3	84,518	25,000	18,100	13,230	300	270	1,600	930
Imports	1000 m3	17	17	755	751	85	84	1	1
Exports	1000 m3	968	0	1,236	963	118	10	706	606
Domestic Consumption	1000 m3	83,567	25,017	17,619	13,018	267	344	895	325
Import Value	1000 US\$	1,138	1,130	24,903	24,226	9,060	8,420	884	884
Export Value	1000 US\$	58,847	14,151	379,816	293,735	70,207	63,046	259,993	259,993

Colombia

		Logs		Sawnwood		Veneer		Plywood	
		All	Tropical	All	Tropical	All	Tropical	All	Tropical
2011									
Production	1000 m3	3,778	2,549	526	400	4	2	64	64
Imports	1000 m3	0	0	33	0	1	1	57	16
Exports	1000 m3	24	23	11	10	0	0	9	8
Domestic Consumption	1000 m3	3,754	2,526	548	390	4	2	112	71
Import Value	1000 US\$	100	30	9,888	155	4,728	3,052	26,265	7,100
Export Value	1000 US\$	8,477	8,351	6,674	6,478	574	30	5,424	5,023

		Logs		Sawnwood		Veneer		Plywood	
		All	Tropical	All	Tropical	All	Tropical	All	Tropical
1995									
Production	1000 m3	1,095	1,080	602	593	5	5	25	25
Imports	1000 m3	3	0	11	0	2	0	18	1
Exports	1000 m3	2	2	8	7	0	0	4	4
Domestic Consumption	1000 m3	1,096	1,078	605	586	7	5	39	22
Import Value	1000 US\$	219	46	1,851	100	2,762	110	11,214	869
Export Value	1000 US\$	574	574	1,407	1,172	11	9	3,678	3,678

Ecuador

		Logs		Sawnwood		Veneer		Plywood	
		All	Tropical	All	Tropical	All	Tropical	All	Tropical
2011									
Production	1000 m3	2,680	1,745	519	401	243	45	487	338
Imports	1000 m3	0	0	1	0	2	0	8	3
Exports	1000 m3	1,745	140	159	158	2	2	52	51
Domestic Consumption	1000 m3	935	1,605	362	243	243	43	443	289
Import Value	1000 US\$	88	0	569	34	3,247	1,013	4,665	1,672
Export Value	1000 US\$	33,368	33,368	82,146	81,877	7,857	7,851	29,079	28,546

		Logs		Sawnwood		Veneer		Plywood	
		All	Tropical	All	Tropical	All	Tropical	All	Tropical
1995									
Production	1000 m3	4,333	3,300	1,695	1,356	15	15	93	93
Imports	1000 m3	0	0	0	0	0	0	0	0
Exports	1000 m3	2	2	22	22	0	0	20	20
Domestic Consumption	1000 m3	4,331	3,298	1,673	1,334	15	15	73	73
Import Value	1000 US\$	85	2	112	38	109	109	62	62
Export Value	1000 US\$	2,283	2,283	24,365	24,365	6,045	6,045	22,508	22,508

Peru

		Logs		Sawnwood		Veneer		Plywood	
		All	Tropical	All	Tropical	All	Tropical	All	Tropical
2011									
Production	1000 m3	1,504	1,479	712	702	2	2	62	52
Imports	1000 m3	20	0	93	0	1	0	41	1
Exports	1000 m3	2	2	309	302	1	1	31	30
Domestic Consumption	1000 m3	1,522	1,477	496	400	2	1	72	23
Import Value	1000 US\$	2,790	8	25,160	40	1,386	127	10,931	526
Export Value	1000 US\$	1,655	1,613	100,520	97,225	737	709	18,711	18,432

		Logs		Sawnwood		Veneer		Plywood	
		All	Tropical	All	Tropical	All	Tropical	All	Tropical
1995									
Production	1000 m3	1,399	1,397	631	630	3	3	64	64
Imports	1000 m3	4	1	2	1	0	0	0	0
Exports	1000 m3	0	0	16	16	3	3	3	3
Domestic Consumption	1000 m3	1,403	1,398	617	615	0	0	61	61
Import Value	1000 US\$	2,138	44	1,321	874	495	460	103	103
Export Value	1000 US\$	53	42	8,366	8,366	1,833	1,833	1,766	1,766

Source: ITTO (2013). *Annual Review and Assessment of the World Timber Situation 2012*.

Annex 2: Rule of Law

Country	Brazil	Colombia	Ecuador	Peru
Overall Score	0.54	0.49	0.45	0.49
Factor 1: Constraints on Government Powers				
1.1 Government powers are effectively limited by the legislature	0.63	0.55	0.40	0.60
1.2 Government powers are effectively limited by the judiciary	0.72	0.59	0.36	0.63
1.3 Government powers are effectively limited by independent auditing and review	0.62	0.52	0.27	0.45
1.4 Government officials are sanctioned for misconduct	0.49	0.48	0.37	0.62
1.5 Government powers are subject to non-governmental checks	0.40	0.46	0.37	0.42
1.6 Transition of power is subject to the law	0.74	0.59	0.51	0.69
1.6 Transition of power is subject to the law	0.83	0.68	0.50	0.78
Factor 2: Absence of Corruption				
2.1 Government officials in the executive branch do not use public office for private gain	0.50	0.43	0.47	0.36
2.2 Government officials in the judicial branch do not use public office for private gain	0.49	0.50	0.55	0.51
2.3 Government officials in the police and the military do not use public office for private gain	0.64	0.49	0.35	0.35
2.4 Government officials in the legislative branch do not use public office for private gain	0.64	0.56	0.58	0.38
2.4 Government officials in the legislative branch do not use public office for private gain	0.22	0.18	0.38	0.19
Factor 3: Open Government				
3.1. The laws are publicized and accessible	0.50	0.49	0.40	0.44
3.1. The laws are publicized and accessible	0.46	0.42	0.48	0.32
3.2 The laws are stable	0.48	0.45	0.31	0.47
3.3 Right to petition the government and public participation	0.45	0.52	0.47	0.44
3.4 Official information is available on request	0.59	0.57	0.36	0.53
Factor 4: Fundamental Rights				
4.1 Equal treatment and absence of discrimination	0.66	0.55	0.54	0.66
4.2 The right to life and security of the person is effectively guaranteed	0.66	0.54	0.56	0.55
4.3 Due process of law and rights of the accused	0.61	0.54	0.56	0.77
4.4 Freedom of opinion and expression is effectively guaranteed	0.37	0.43	0.42	0.53
4.5 Freedom of belief and religion is effectively guaranteed	0.74	0.59	0.52	0.70
4.6 Freedom from arbitrary interference with privacy is effectively guaranteed	0.81	0.67	0.73	0.78
4.6 Freedom from arbitrary interference with privacy is effectively guaranteed	0.66	0.55	0.42	0.72

Country	Brazil	Colombia	Ecuador	Peru
4.7 Freedom of assembly and association is effectively guaranteed	0.76	0.63	0.59	0.73
4.8 Fundamental labor rights are effectively guaranteed	0.65	0.41	0.54	0.49
Factor 5: Order and Security	0.66	0.58	0.57	0.63
5.1 Crime is effectively controlled	0.58	0.51	0.46	0.54
5.2 Civil conflict is effectively limited	1.00	0.94	1.00	1.00
5.3 People do not resort to violence to redress personal grievances	0.41	0.31	0.26	0.35
Factor 6: Regulatory Enforcement	0.53	0.50	0.48	0.46
6.1 Government regulations are effectively enforced	0.59	0.44	0.50	0.40
6.2 Government regulations are applied and enforced without improper influence	0.70	0.60	0.57	0.51
6.3 Administrative proceedings are conducted without unreasonable delay	0.29	0.33	0.42	0.35
6.4 Due process is respected in administrative proceedings	0.53	0.45	0.43	0.46
6.5 The Government does not expropriate without adequate compensation	0.57	0.68	0.49	0.58
Factor 7: Civil Justice	0.51	0.49	0.41	0.39
7.1 People can access and afford civil justice	0.53	0.53	0.48	0.40
7.2 Civil justice is free of discrimination	0.69	0.59	0.48	0.45
7.3 Civil justice is free of corruption	0.67	0.53	0.37	0.35
7.4 Civil justice is free of improper government influence	0.60	0.55	0.26	0.47
7.5 Civil justice is not subject to unreasonable delays	0.30	0.23	0.27	0.28
7.6. Civil justice is effectively enforced	0.25	0.37	0.33	0.28
7.7 ADR is accessible, impartial, and effective	0.52	0.66	0.67	0.52
Factor 8: Criminal Justice	0.37	0.35	0.33	0.37
8.1 Criminal investigation system is effective	0.22	0.20	0.28	0.29
8.2 Criminal adjudication system is timely and effective	0.32	0.35	0.37	0.21
8.3 Correctional system is effective in reducing criminal behavior	0.15	0.13	0.16	0.25
8.4 Criminal system is impartial	0.28	0.40	0.31	0.48
8.5 Criminal system is free of corruption	0.57	0.45	0.47	0.32
8.6 Criminal system is free of improper government influence	0.67	0.50	0.30	0.54
8.7. Due process of law and rights of the accused	0.37	0.43	0.42	0.53

Source: World Justice Report, Rule of Law Index, 2014 (Note: 1 signifies the highest score and 0 signifies the lowest score; shaded cells less than 0.35 score)

TRAFFIC, the wildlife trade monitoring network, is the leading non-governmental organization working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

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