

# Progress on the New York Declaration on Forests

#### **Technical Annexes**

Goal 10: Strengthen forest governance, transparency and the rule of law, while also empowering communities and recognizing the rights of indigenous peoples, especially those pertaining to their lands and resources

November 2015

www.forestdeclaration.org













An electronic copy of the full report is available at www.forestdeclaration.org.

Climate Focus. 2015. Progress on the New York Declaration on Forests – An Assessment Framework and Initial Report: Technical Annexes. Goal 10: Strengthen forest governance, transparency and the rule of law, while also empowering communities and recognizing the rights of indigenous peoples, especially those pertaining to their lands and resources. Prepared by Climate Focus, in collaboration with Environmental Defense Fund, Forest Trends, Global Alliance for Clean Cookstoves, Global Canopy Program and The Sustainability Consortium.

#### Contents

Description of the Goal and the Indicators	1
Main Concepts and Definitions	3
Key Messages	4
Data Gaps and Limitations	6
Findings	7
Technical Annex	17
Bibliography	26
Endnotes	27

#### Description of the Goal and the Indicators

Goal 10 mandates advances in forest governance, transparency and the rule of law, together with the empowerment of communities and indigenous peoples in relation to their land and resource rights.

Forest governance is an encompassing concept that includes transparency and the rule of law – thus, these elements can be considered to come within the definition of forest governance rather than being considered separate elements. A number of different initiatives have sought to define parameters for measuring forest governance – for example the World Resources Institute's (WRI) Governance of Forests Initiative or the Participatory Governance Assessments undertaken through UN-REDD – and each have tended to take diverging approaches. WRI broadly considers forest governance to cover decision-making processes and the involvement in decision-making of a broad number of actors and interests that affect forest management (WRI 2009).

Community empowerment and the land and forest tenure rights of local communities can also be considered as one of the component elements of forest governance. Land and forest rights, which can be defined broadly to include a variety of rights from access or use rights to full ownership, are a crucial component of empowerment, while other rights such as the right to participation in decision-making also form an important aspect of empowerment. Recognition of these rights can often lead to better governance overall, for example through enabling community law enforcement and through solving disputes through legal processes of rights recognition. At the same time, it is arguable that the recognition of the rights of indigenous peoples and other local communities goes beyond questions of 'good governance', and extends to moral rights to lands that have traditionally been owned and stewarded by such communities.

Given the complex and multi-faceted nature of this goal any attempt to measure it is bound to be imperfect. For the purposes of this assessment we have chosen three sets of indicators for which robust data is available and which cover many of the central elements of forest governance as a whole and specifically address the issue of empowering local communities. They are as follows:

- Forest governance through the strengthening of institutions and policies
- Strengthening of the rule of law
- Land and forest rights of indigenous peoples and local communities

Indicator 1 assesses policies and institutions governing the forest sector. This is an important element of forest governance, given the importance of adequate laws, policies and institutions toachieve good governance. Though it is somewhat limited in only addressing the forest sector, it nonetheless provides a useful indication of the development of relevant policy frameworks. Indicator 2 zones in on the strength of the rule of law in practice, as indicated by levels of illegal logging, illegal imports and killings linked to forest and land issues. The illegal logging and imports data covers the majority of commercial activity that affects forests, including forest clearance for other land uses. The data on killings connects to both forest governance as a whole – since the level of violence is indicative of the strength of the rule of law in the sector – and specifically to tenure rights, since most violence takes place in the context of the defense of such rights. Indicator 3 zones in on land and forest rights of communities, specifically focusing on the recognition of their rights under formal law. While unable to capture what proportion of lands that are claimed by these communities has been formally recognized, the assessment of overall recognition is considered a useful indicator of progress. In addition to these indicators, we undertake a non-quantiative review of international initiatives that promote improvements in forest

governance and land rights, whether through directly funding such improvements or through integrating them within financial cooperation frameworks.

#### **INDICATOR 1**

Improvement of forest governance through the strengthening of institutions and policies

#### **INDICATOR 2**

Extension and strengthening the rule of law, as indicated by illegal logging as a percentage of total logging, the quantity of imports of timber with high risks of illegality, and the number of killings related to land disputes

#### **INDICATOR 3**

Land and forest rights of indigenous people and local communities

#### **Main Concepts and Definitions**

#### Forest governance

'Forest governance' refers to the mechanisms, processes and institutions through which forests are governed. Good forest governance implies, inter alia, respect for the rule of law in forest activities, transparent resource management, participatory rights in decision-making, clear and equitable property rights arrangements and local levels of use and management.

#### Forest sector

The 'forest sector' encompasses economic activities that mostly depend on the production of goods and services from forests.

#### **Key Messages**

### INDICATOR 1: IMPROVEMENT OF FOREST GOVERNANCE THROUGH THE STRENGTHENING OF INSTITUTIONS AND POLICIES

- Many countries have made some progress in strengthening their institutions and policies in the forest sector (Hoare 2015).
- The governance frameworks across five timber producing countries (Brazil, Cameroon, Ghana, Indonesia and Malaysia), measured in policy scores by Chatham House, have, on average, made overall progress between 2008 and 2013, though levels of improvement vary substantially between countries.
- The strength of demand-side policy frameworks governing the timber trade across seven consumer and processor countries (China, France, Japan, the Netherlands, UK, US, Vietnam) increased.

# INDICATOR 2: EXTENSION AND STRENGTHENING THE RULE OF LAW, AS INDICATED BY ILLEGAL LOGGING AS A PERCENTAGE OF TOTAL LOGGING, THE QUANTITY OF IMPORTS OF TIMBER WITH HIGH RISKS OF ILLEGALITY, AND THE NUMBER OF KILLINGS RELATED TO LAND DISPUTES

- According to Chatham House, the level of imports of wood-based products at high risk of
  illegality has remained relatively constant after experiencing a decrease in years prior to 2008
  (Hoare 2015). For Chatham House this mirrors the slow pace of governance reforms, the growth
  of informal small-scale production in many tropical countries and the substantial increase in
  forest conversion, much of which is illegal.
- Overall, the proportion of (likely) illegal imports remained relatively stable between 2000 and 2013. However, trends are not encouraging. There is more notable change in absolute numbers, with levels of (likely) illegal imports up to 60 million m3 in 2013 from 46 million m3 in 2000.
   The large majority of this increase is accounted for by illegal imports into China and to a lesser extent, India and Vietnam, while (likely) illegal imports into a number of developed countries such as the USA and Japan decreased.
- From 2010 to 2014 a total of 523 persons were recorded as murdered in cases with a clear and documented link to a forest or land issue. Though the numbers vary significantly from year to year, making it difficult to establish a clear upward or downward trend, indicative data shows an overall upward trend and, at the very least, little sign that the problem is being successfully addressed.
- The majority of killings documented were linked to disputes over who holds rights to land or forest and indicative evidence shows that many arise out of indigenous peoples and other local communities seeking to assert or protect their rights.

### INDICATOR 3: LAND AND FOREST RIGHTS OF INDIGENOUS PEOPLE AND LOCAL COMMUNITIES

• The share of the proportion of total forests over which indigenous people and local communities (IPLCs) have recognized rights increased 38% over the period 2002-2013. The vast majority of forest lands with rights recognized for IPLCs are in low and middle income countries, where such rights exist over 30.1% of forest land. While this share has increased from 21.2% in 2002, the rate of recognition has slowed dramatically since 2008, with 2008-2013 seeing recognition of less than half the area recognized in 2002-2008.

#### **Data Gaps and Limitations**

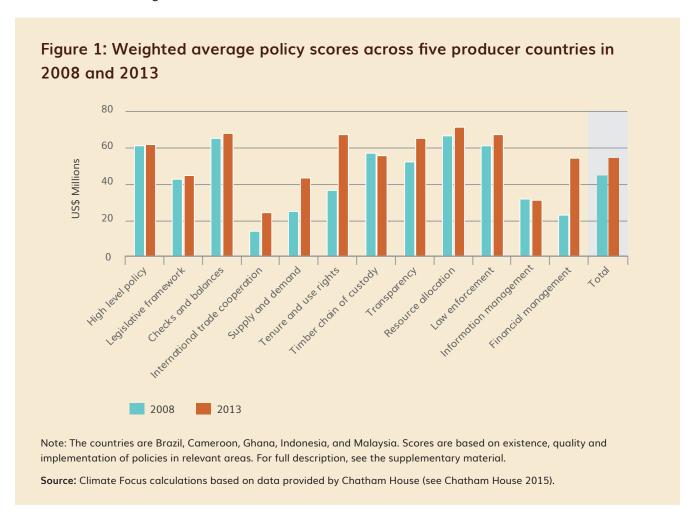
- The assessments of forest sector policy frameworks include relatively few countries and so only provide a partial picture of global progress. Expanding this to more countries would enable a more complete assessment to be undertaken.
- The data on illegal logging and illegal imports similarly only includes a limited number of countries.
- The research on killings related to land and forest rights has a number of gaps:
  - ° The research currently only extends to killings and does not yet cover other violent crime linked to land and forest rights.
  - ° There is limited research on the extent to which killings are investigated and charges are brought and convictions obtained, which limits the ability to understand the level of response to this problem.
  - There is as yet only limited systematic research into the underlying causes of killings. Global Witness has undertaken an in-depth study into Honduras (Global Witness 2015) and has undertaken a number of case studies in other countries (Global Witness 2014; Global Witness 2015). Understanding in-depth the direct (e.g. insecure land tenure combined with land grabbing) and indirect (e.g. poor law enforcement; general prevalence of violent crime in the country) causes underlying these killings would enable better understanding of the actions that are required to address this problem.
- There remains little research on the extent of forest land over which ownership is contested by IPLCs or which they occupy in practice. Understanding this better would help to put the data on recognition of land and forest rights in context and enable a better assessment of how much more needs to be done.
- The data on tenure regimes recognizing the rights of IPLCs currently only cover 27 countries and at
  one point in time. Including more countries and mapping progress over time would provide a better
  measure of the current situation and what more needs to be done.

#### **Findings**

### Indicator 1: Improvement of forest governance through the strengthening of institutions and policies

Subindicator 1.1: Change in policy scores of producer countries in key areas of governance of the forest sector - overall (aggregate) policy scores and score for specific areas

Figure 1 shows the progress in legal and policy frameworks across the 12 policy components in Brazil, Cameroon, Ghana, Indonesia and Malaysia between 2008 and 2013. Total policy scores have been weighted according to shares of wood product production of the producing countries considered. Overall, there has been notable progress in this period, with the average score across all aspects of policy frameworks increasing from 41% to 50%.



Average scores have also increased across all policy areas, with particular progress achieved in policies to ensure greater matching of (legal) supply and demand, and to strengthen tenure and use rights and financial management regimes. Substantial gains have also been made in increasing transparency, while efforts toward international trade cooperation, while still quite nascent, have also seen notable

improvement, in large part through the development of systems under FLEGT Voluntary Partnership Agreements. In other areas progress has been relatively limited, and in several countries policy frameworks in several areas have weakened over time. Together with international cooperation mechanisms, information systems related to forest enforcement and management remain areas where much improvement is needed.

# Subindicator 1.2: Change in policy scores of processor and consumer countries in key areas of governance of the timber trade - overall (aggregate) policy scores and score for specific areas

Figure 2 shows the change in the strength of policy frameworks to address illegal imports in seven consumer and processor countries studied between 2008 and 2013. Overall some progress has been made, with the weighted average across the seven countries increasing from 39% to 48% in this period. The most notable gain was made in legislative frameworks, which reflects a number of new and enhanced laws on timber legality across a number of developed countries and in Vietnam. In contrast, in China and Japan legislation to address illegal imports remains largely absent. Other policy areas in demand-side countries generally showed incremental improvement. However, international engagement remains a particular area of weakness, though this average is also reduced substantially by the absence of international engagement measures on the part of China and Vietnam, with end consumer countries scoring somewhat higher.

Figure 2: Weighted average policy scores across five producer countries in 2008 and 2013 80 60 Average global score 40 20 0 High-level Legislative International **Public** Total policy enforcement framework engagement procurement policy 2008 2013

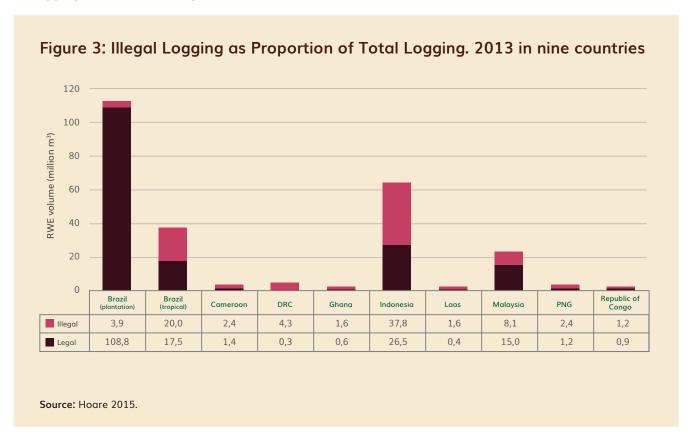
Note: The countries are China, France, Japan, the Netherlands, United Kingdom, United States, and Vietnam. Scores are based on existence, quality and implementation of policies in relevant areas. For full description, see the supplementary material.

Source: Climate Focus calculations based on data provided by Chatham House (see Chatham House 2015).

# Indicator 2: Extension and strengthening the rule of law, as indicated by illegal logging as a percentage of total logging, the quantity of imports of timber with high risks of illegality, and the number of killings related to land disputes

#### Subindicator 2.1: Illegal logging as a percentage of total logging

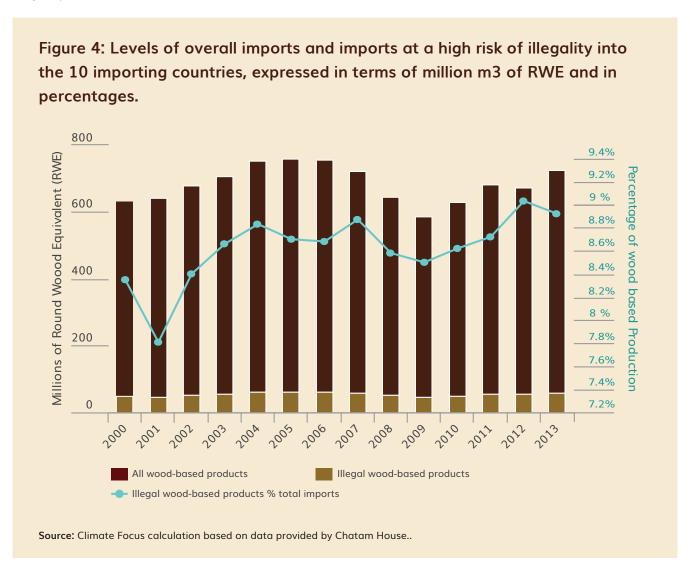
Illegal wood-based products are defined as those that have been harvested, processed, bought, sold or transported in breach of regulations in the country of origin or in a third-party processing country (Hoare 2014). Figure 3 shows the results of the assessment of illegal logging as a proportion of total logging in 2013 across nine timber producing countries. It shows that the countries in question produced over 80 million m3 of illegal timber in 2013, equating to 33% of their total production. The majority of this production was in Indonesia, Brazil and Malaysia. In many countries with smaller levels of production the majority of logging is illegal. Notably, in the Democratic Republic of Congo (DRC) almost all logging is considered illegal.



While it is not possible to directly compare previous figures, a general assessment undertaken by Chatham House (Hoare 2015) indicates that, though levels of illegality had fallen up to the 2008 assessment, since then they have remained relatively constant. According to the authors, this partially reflects the slow pace of governance reforms, but also the growth of informal small-scale production in many tropical countries and the substantial increase in forest conversion, much of which is illegal.

### Subindicator 2.2 Imports of timber with a 'high risk of illegality' as a percentage of total imports

On the consumer and processing side, Figure 4 depicts the change in the proportion of imports of wood-based products with a high risk of illegality for ten countries from 2000 to 2013.<sup>1</sup> The bars show the absolute levels of overall imports and those with a high illegality risk, expressed in millions of m3 of roundwood equivalent (RWE), while the green line maps the proportion of total imports at a high risk of illegality.



Overall, the proportion of (likely) illegal imports has remained relatively stable over time. There is however an upward trend. In absolute numbers there is a more notable change, with levels of (likely) illegal imports up to 60 million m3 in 2013 from 46 million m3 in 2000. The large majority of this increase is accounted for by increases in (likely) illegal imports into China as well as, to a lesser extent, India and Vietnam, while (likely) illegal imports into a number of developed countries such as the USA and Japan have shown notable decreases (Hoare 2014). The United States, the European Union and Australia introduced import bans for illegal timber and timber products in 2008, 2010 and 2012, respectively.

### Subindicator 2.3: Number of deaths annually with a clear, proximate and documented connection to an environment or land issue

Low levels of governance in the land and forest sector is frequently correlated with the occurrence of violence arising out of competition for resources (FAO 2012, Duran et al. 2011). While there has yet to be any comprehensive analysis of the extent of such violence as a whole, research undertaken by Global Witness on extrajudicial killings linked with such disputes indicates substantial and consistent levels of violence in the forest sector. From 2010-2014 a total of 523 persons were recorded as murdered in cases with a clear and documented link to a forest or land issue. The numbers can vary considerably from year to year, making it difficult to establish a clear upward or downward trend. Indicative data from Global Witness in fact suggests that the numbers in 2010-2014 show a marked upward trend from those in 2002-2009, though the data for these earlier years is not detailed enough to make an accurate comparison. In any case, it appears clear that the problem remains acute and that there is no clear sign that it is being successfully addressed.

Table 1: Extrajudicial killings related to land and forest issues 2010-2014.

2010	2011	2012	2013	2014	Total Result
80	119	128	83	113	523

Source: Global Witness 2014.

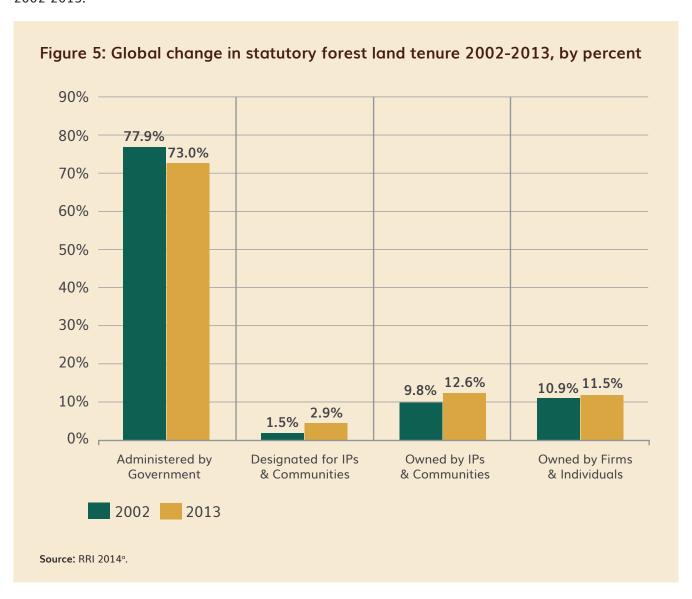
The majority of the killings documented are linked to local communities taking steps to oppose land-grabbing and unfair land ownership, large-scale mining operations, deforestation, illegal logging and hydroelectric projects (Global Witness 2014). A small number are also directly related to conservation, such as killings of park rangers by poachers. The large majority of murders took place in Latin America (80%), with significant numbers also documented in Asia (17%). The low level of documented killings in Africa may be due to the limited monitoring and documentation of the problem there due to low capacities and resources, while the prohibition of human rights monitoring in certain Asian countries may have also led to under-reporting (Global Witness 2014). While the identities of the victims have not been systematically categorized, the evidence indicates that a large number and potentially a majority are local communities defending their land and forest rights. In a substantial number of cases the victim was identified as an indigenous person, and this is also thought to be underreported.

The disputes in the context of which the killings take place are in many cases a result of governance failures, such as opaque land allocation processes and the absence of strong land rights of local communities, making it easy for rights over their land to be allocated to competing land users. On the other side of the coin, the continued prevalence of such killings over a long period of time may indicate weak rule of law in forest areas, and in particular insufficient investigation and prosecution of perpetrators.

### Indicator 3: Land and forest rights of indigenous people and local communities

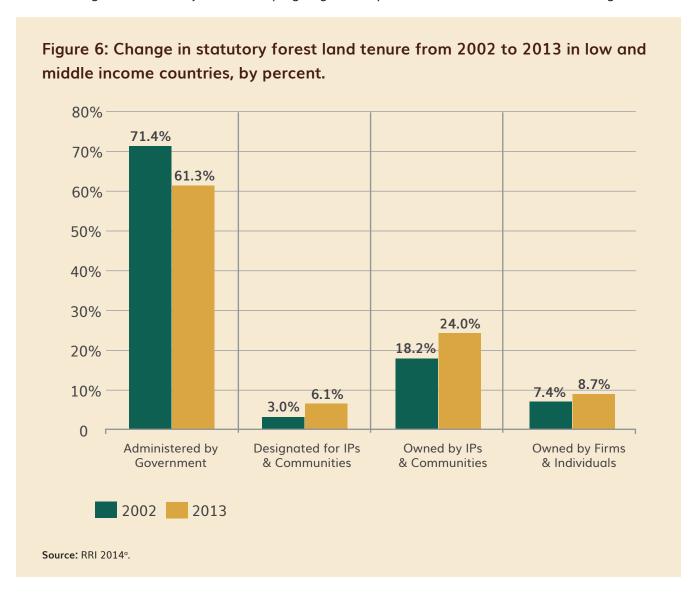
### Subindicator 3.1: Percentage of land area that is (i) owned by and (ii) designated for Indigenous Peoples and Local Communities (IPLCs)

Figure 5 below compares the percentage of land area falling under the respective ownership categories identified by the Rights and Resources Initiative (RRI 2014°) in 40 countries for which data is available for both 2002 and 2013. It shows that, while the proportion of total of forests over which IPLCs have recognized rights remains relatively small at 15.51%, the share has increased by 38% over the period 2002-2013.



The vast majority of forests over which IPLCs have rights are in low and middle income countries. When focusing only on this group a substantially different picture therefore emerges, with IPLCs having rights over 30.1% of land. In the high-income countries assessed, in contrast, only 2% of land is owned by or

designated for IPLCs. Low and middle income countries also accounted for almost all the change in recognition of rights between 2002 and 2013, with the bulk of change occurring in Latin America. Much of this change was driven by active campaigning on the part of IPLCs to achieve formal recognition.



Subindicator 3.2: Number of tenure regimes (i) recognizing ownership of forest by Indigenous People and Local Communities (IPLCs) and (ii) providing for the designation of forest for IPLCs

The data on low and middle income countries also, however, shows a significant slowdown in the rate of recognition of the rights of IPLCs in these countries since 2008, as shown by Figure 7.

Figure 7: Change in area of statutory community tenure in low and middle income countries (LMIC) and REDD+ countries.<sup>2</sup>

	Designated fo Peoples and loc	or Indigenous cal communities	Owned by Indigenous Peoples and local communities						
	2002-2008	2008-2013	2002-2008	2008-2013					
LMICs	+26.8	+19.7	+66.8	+11.2					
of which									
REDD+ Countries	+19.3	+16.7	+50.3	+9.3					
Non-REDD+ Countries	+7.5	+3.0	+16.5	+1.9					

Source: RRI 2014a.

The central limitation of the data on the level of recognition of rights is that it does not tell us how much forest land over which IPLCs have no formal rights is actually contested by them. At present, there is no comprehensive data available on this question that is considered robust enough to be used for this assessment. Initial attempts have been made to compile rough estimates of land that was traditionally communally owned, most notably in Wily (2011), where it is claimed that over 65% of global land area can be considered to be traditionally commonly owned, with this figure being relatively evenly spread across all continents and regions. Wily also assesses that some 20% of this area is designated as protected areas, typically owned by the state. While it is unclear if these figures present a reliable assessment of the situation, indicative case studies undertaken by RRI indicate that there remain large forest areas still contested by IPLCs in many countries (RRI 2014a, RRI 2015). A further limitation is that it does not take into account areas over which IPLCs have management rights in practice that, while not formally recognized under a specific legal process, are subject to protection under common or constitutional law (Wily 2011).

In terms of legal regimes providing for the recognition of IPLC rights, in the 27 countries assessed by RRI, a total of 53 legal regimes were identified that provided rights falling under the categories of (i) ownership rights; and (ii) recognized rights that fall short of ownership (designation rights), while a further eight regimes were identified that provided some form of recognition of IPLC rights falling short of these categories, and therefore being categorized as "government administered." At least one national regime exists in 23 of the countries assessed, while Nigeria and Malaysia, where land and forest rights are regulated at subnational level, have subnational regimes. Kenya and Zambia, the two countries where no such regimes were identified, do have regimes that grant lesser rights.

Of these 53 regimes, 19 (36%) recognize a full enough set of rights to be regarded as 'ownership' under the definition above. The majority of these regimes are found in Latin America. Thirty four regimes (64%) recognize a set of rights that can be considered as 'designation'.

### Support for strengthening forest governance and the recognition of land rights

Addressing forest governance and tenure often requires significant financial resources. Since the lowest levels of forest governance often exist in lower income countries international financing will frequently be necessary to ensure progress in governance strengthening. As such, assessing international public finance for forest governance and tenure provides a useful, though partial, measure of efforts to address the issue.

At present there is no centralized accounting of the levels of finance that are dedicated to forest governance and tenure. The OECD DAC database – the main database tracking international Official Development Assistance (ODA) flows – does not distinguish projects with governance components and the only international database specifically tracking programs on forest governance – the Land Governance Program Map of the Global Donor Working Group on Land – is mostly comprised of programs with multiple components. Accurately assessing levels of international public finance for forest governance and tenure is therefore not possible. For this reason we decided not to develop a separate indicator on this topic, but instead to present some evidence that helps to provide an indication of trends on this topic.

A sample of evidence suggests a substantial increase in the level of donor programs focusing on forest governance and tenure since 2002. In that year, the World Bank Group – the largest multilateral source of finance for forests globally (Independent Evaluation Group 2013) – incorporated forest governance into its investment strategy and policy dialogue with borrower countries (World Bank, 2002) and has been relatively successful in integrating forest governance issues across its portfolio (Independent Evaluation Group 2013). At the same time the European Union also began scaling up its forest governance activities, adopting the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan and dedicating a budget of USD 900 million between 2002-2010. The International Tropical Timber Association (ITTO) later launched the USD 6.7 million forest law enforcement and trade program (TFLET) in 2007. USAID, meanwhile, has active programs worth USD 400 million addressing land tenure in tropical countries, many of which have substantial forest tenure components.

The emerging importance of REDD+ finance has also seen enhanced attention being paid to governance and tenure issues. According to one estimate of REDD+ finance in seven countries, over 70% of non-results based donor initiatives at least partially supported stakeholder engagement and consultations (Canby et al. 2014). A substantial portion of finance dedicated to funding national Readiness Preparation Programs – including USD 360 million under the Readiness Fund of the Forest Carbon Partnership Facility (FCPF) and substantial co-financing from the UN-REDD Program and other donors – has been channeled towards governance, typically 16-20% of national readiness budgets.

The World Bank's Forest Investment Program (FIP), meanwhile, has established a USD 50 million Dedicated Grant Mechanism for Indigenous Peoples and Local Communities to support their participation in the FIP, while an International Land and Forest Tenure Facility established by the Rights and Resources Initiative in 2015 aims at a rolling budget of USD 20-50 million/year for the next five years to provide financing for land rights, and so far has raised initial capital of USD 15 million. In addition, 2015 saw the launch of LandMark, an interactive global platform that provides maps and other critical information on lands that are collectively held and used by indigenous peoples and local communities, helping to increase the visibility of customary tenure arrangements, and thus protect land rights. The

LandMark platform is an initiative of the World Resources Institute and the Rights and Resources Initiative, launched on behalf of a consortium of civil society, indigenous and community organizations<sup>3</sup>.

In addition to the increasing provision of finance for forest governance and tenure, it has become increasingly common for international donors to take governance and tenure considerations into account in their financing decisions, often requiring certain standards to be met or actions to be taken as (hard or soft) conditions for financing.

For instance, the German development agency Gesellschaft für internationale Zusammenarbeit (GIZ) has been employing principles on land tenure and land use planning since 1997, which form the basis of policy dialogue with host countries, and touch upon issues such as reconciliation of conflicts, land reforms, taxation etc. The World Bank's Operational Policy 4.10 on Indigenous Peoples, adopted in 2005, requires procedures for the participation of indigenous peoples in projects that affect them and provides for the recognition of their customary rights in projects that may affect those rights.

In the context of REDD+, the 2010 Cancun Safeguards (UNFCCC 2010) require that promotion of transparent and effective national forest governance structures as well as respect for the rights of indigenous peoples and local communities.

The World Bank PROFOR program elaborated a compendium of best practice cases on governance (benefit-sharing, community forest management, REDD+ arrangements) as recommendations for recipient countries (PROFOR 2012), while the International Tropical Timber Organisation (ITTO) adopted Voluntary Guidelines for the Sustainable Management of Natural Tropical Forests in 2014 to guide recipients in addressing, inter alia, governance issues relating to sustainable forest management.

Despite these upward trends, indicative evidence shows that financing for governance and tenure issues remains below the levels needed. The analysis under indicators 1-3 above shows that there remain substantial improvements to be achieved in governance frameworks. In addition, the Rights and Resources Initiative assesses that there remains a significant funding gap for financing recognition of tenure rights, though it was not possible to quantify precisely how large this gap is (RRI 2014b).

#### **Technical Annex**

#### Selection of Indicators

### Indicator 1: Improvement of forest governance through the strengthening of institutions and policies

#### Subindicator 1.2: Change in policy scores of producer countries in key areas of governance of the forest sector

This indicator assesses the change in levels of forest governance in timber producing countries over time through assessing the changes in the strength of their legal and policy frameworks governing illegal logging, both in terms of design and implementation:

- · High-level policy
- Legislative framework
- Checks and balances
- International trade cooperation
- Supply and demand
- Tenure and use rights

- Timber chain of custody
- Transparency
- Resource allocation
- Law enforcement
- Information management
- Financial management

This indicator covers the full ambit of relevant policy areas in the forest sector in each country, thereby providing a useful indicator of the state of forest governance. However, it is limited by the exclusion of policy frameworks outside the forest sector that nonetheless have effects important effects on the deforestation and degradation, such as in energy, mining or agriculture sectors.

### Subindicator: 1.2: Change in policy scores of processor and consumer countries in key areas of governance of the timber trade

This indicator follows the same approach as the previous indicator, but focuses on countries that are predominantly processors or consumers of wood products or, in other words, countries that are net importers of wood products. The chief difference here is the policy issues that are focused on, since the regulation of the legality of imports requires a substantially different set of policy tools than the regulation of illegal logging itself. Most of these differences are apparent in the specific questions that are assessed under each broad policy component, with these components themselves partially resembling those assessed in poorer countries:

- High-level policy
- Legislative framework
- Law enforcement

- International engagement
- Public procurement policy

In each case the scoring approach described above for subindicator 1.1 has been applied.

Given the importance of policy frameworks in demand-side countries in regulating the market and thereby reducing demand for illegal products, this indicator provides an important complement to the assessment of policy frameworks in producer countries. The same limitation nonetheless applies, in that it only covers regulation of forest products and not other products associated with deforestation.

#### Indicator 2: Extension and strengthening the rule of law, as indicated by illegal logging as a percentage of total logging, the quantity of imports of timber with high risks of illegality, and the number of killings related to land disputes

#### Subindicator 2.1: Illegal logging as a percentage of total logging

This indicator assesses the levels of illegal logging as a proportion of total timber production in the countries assessed. Illegal logging is defined for this purpose to include all illegal practices related to the harvesting, processing and trading of timber. This definition assesses legality all through the supply chain and includes, for example, logging that exceeds permitted quotas as well as logging without any license. The definition also includes logging that takes place through illegal clearance of forests for other land uses ("forest conversion"), as well as the harvesting of timber from illegally established plantations. Currently data is only available for 2013, and thus this indicator does not measure progress over time. Chatham House did conduct a similar assessment in 2008 (Lawson and McFaul, 2010); however, this assessment relied on a different methodology, and as such it is not possible to compare the two figures.

#### Subindicator 2.2: Imports of timber with a 'high risk of illegality' as a percentage of total imports

This indicator maps the change over time in the proportion of imports of wood products that are considered to be at a high risk of having been illegally harvested, processed, bought, sold or transported.

#### Subindicator 2.3: Number of deaths annually with a clear, proximate and documented connection to an environment or land issue

This indicator measures the change in the number of violent deaths each year regarding which a clear, proximate and documented link to the defense of a forest or land rights issue can be established. The focus is on intentional killings of persons in the context of their defense of their land or forest rights.

Indicative evidence shows that a large proportion of forest and rights of indigenous peoples and other local communities remain unrecognized or otherwise vulnerable. This frequently leads to local people needing to defend their rights against intrusion, usurpation or conflicting claims, which puts them at risk of violence by those who seek to take those rights. Unfortunately, the defense of land and forest rights all too often leads to violence, and so the level of deaths of forest and land right defenders is a useful indictor both of the levels of land and forest disputes and of the absence of governance in the forest sector.

#### Indicator 3: Land and forest rights of indigenous people and local communities

The effective recognition of the rights of indigenous peoples requires, firstly, having a legal framework in place that recognizes those rights in principle and provides a framework for the recognition of specific rights and, secondly, the actual recognition in practice of rights. Reflecting these two essential requirements, to measure this aspect of Goal 10 we assess both the existence of legal frameworks recognizing these rights (see Figure 5) and their recognition in practice. For both indicators we look beyond indigenous peoples' rights and include the broader category of indigenous peoples and local communities (IPLCs). This is partially because the RRI data, as well as other key data sources such as the FAO data,<sup>4</sup> do not distinguish between indigenous peoples and other local communities, but also due to the lack of agreed international definitions of the term "indigenous peoples" and the difficulty in some regions, especially in Africa, of distinguishing the two groups.

# Subindicator 2.1: Percentage of land area that is (1) owned by and (2) designated for IPLCs This indicator assesses the percentage of total forest land area over which indigenous peoples and local communities (IPLCs) have (1) ownership rights and (2) other recognized rights falling short of ownership ("designation").

Following the definitions developed by Forest Trends and RRI, the change over time in the proportion of forest area "owned by" and "designated for" IPLCs is considered an appropriate measure of the recognition of the rights of indigenous peoples pertaining to their land and resources. These two categories provide a useful way of distinguishing areas over which IPLCs have some significant but limited control and those over which they have substantial control, though it should be noted that the specifics of how much control and rights IPLCs have varies in each case.

The main limitation of this indicator is that it does not speak to the broader context of how much forest area is claimed by IPLCs or has been owned or occupied by them historically or under customary laws.

### Subindicator 2.2: Number of tenure regimes providing for recognition of ownership by or designation of forest for IPLCs

This indicator identifies the number of national legal regimes across relevant countries that assign or provide for the formal recognition of the forest rights of IPLCs. As under the previous indicator, it assesses legal regimes that provide for (i) ownership rights; and (ii) "designation" rights. The definitions of these terms is as provided under the previous indicator and is, once more, based on an analysis of a collection or "bundle" of various specific land and forest rights. Regimes that do not meet either of these definitions, for example regimes under which some access is granted to IPLCs but the government retains extensive control, are not included.

In combination with the previous indicator, this indicator helps to provide a fuller picture of the status of recognition of IPLC rights. Of course, it only speaks to the existence of a framework and not the quality of that framework (e.g. in terms of accessibility) or its implementation in practice, and so by itself only paints a partial picture of rights recognition. It also does not show whether the regimes in the countries provide a process for the recognition of rights of each relevant group of forest-dwelling IPLCs, since many regimes only provide for a specific ethnic group.

#### Methodology

### Indicator 1: Improvement of forest governance through the strengthening of institutions and policies

### Subindicator 1.1: Change in policy scores of producer countries in key areas of governance of illegal logging

For this subindicator the policy scores for each country have been assessed by an in-country expert based on guidelines provided by Chatham House and reviewed by Chatham House researchers and peer reviewers. For each of the relevant policy areas a number of specific questions or sub-areas are identified, under each of which three policy components are assessed:

• Existence of policy – whether a policy is in place, with a score of 0 provided for no policy, a score of 1 for a partial

- Design of policy, with a qualitative score of 0-5 provided;
- Implementation, with a qualitative score of 0-5 provided.

For the purposes of conducting a "global" assessment we have calculated the average change in policy scores across the countries covered between 2008 and 2013, with the policy scores of each country weighted according to their relative share of global production of forest products, calculated according to FAOSTAT data.

The coverage of the assessment, while still relatively limited, is large enough to provide some indication of "global" progress. The five producer countries for which both 2008 and 2013 assessments are available together account for 11% of global wood product production, but have higher than average shares of illegal logging, and the expansion of the 2013 analysis means future assessments will have an even more inclusive scope. At the same time, there is a substantial difference in the share of production between the five countries, and for this reason in calculating the average progress across the five countries we have weighted the scores by each country's relative share of forest production, in order to obtain a better picture of whether progress is occurring in the places it has most impact.

It is further worth noting that, while Chatham House provided detailed standardized guidance to country experts on how every aspect of every policy was to be assessed, written justification to support the scores was provided in most cases and multiple rounds of review and clarification were undertaken, Chatham House itself recognizes that some level of subjectivity is inevitable in the assessment of scores, particularly for design and implementation.

### Subindicator 1.2: Change in policy scores of processor and consumer countries in key areas of governance of illegal timber imports and exports

The methodology used by Chatham House for calculating the policy scores of processor and consumer countries is essentially the same as that used for producer countries, i.e. assessment by in-country experts and peer review, with the same scoring system used. To conduct a "global" assessment, we have again calculated a weighted average, with the weights based on the countries' relative share of global imports of forest products, calculated according to FAOSTAT data.

As with the policy assessments of producer countries, the assessments of consumer and processor countries are the most comprehensive assessments of legal and policy frameworks governing legality of timber imports currently available. Compared to the overall assessment of producer countries they also cover a larger share of total global imports – the seven countries for which both 2008 and 2013 data is available account for 41% of global wood product imports, and the expansion of the analysis in 2013 means that future assessments will be even more comprehensive. At the same time, similar limitations highlighted for producer countries apply, in particular the inherent subjectivity in judging the strength of country policy frameworks.

Indicator 2: Extension and strengthening the rule of law, as indicated by illegal logging as a percentage of total logging, the quantity of imports of timber with high risks of illegality, and the number of killings related to land disputes

#### Subindicator 2.1: Illegal logging as a percentage of total logging

For this subindicator the reference year is 2013 as this is the first year that comprehensive data is available. The data on illegal logging has been collected using a combination of methodologies, with

the specific analysis for each country being adapted depending on information available. For countries from which robust national data could be obtained, wood-balance analysis was undertaken, i.e. the legal supply of timber (based on official records of harvest and imports) was compared with official records of domestic consumption and exports and the gap between supply and consumption was measured. This analysis was complemented by expert perception surveys, independent verification and third party analyses. Where multiple figures or analyses were available, a "best guess" estimate was made based on all the information available. Together, these methods are considered a robust approach to measuring what is a complex and difficult activity to measure.

At the same time, it is important to recognize a number of limitations. Firstly, a wood balance analysis cannot account for smuggling or illegalities related to legally sanctioned harvesting (for example, the failure to pay taxes). Furthermore, data – particularly on domestic consumption – is unreliable or lacking in many countries. While the wood balance analysis has therefore been complemented by other forms of analysis, it was often necessary to rely on estimates and "best guesses", particularly where data varied between sources.

### Subindicator 2.2: Imports of timber with a "high risk of illegality" as a percentage of total imports

For this subindicator the reference period is 2000-2013. The assessment of whether imports are at a high risk of illegality is, in the first place, based on the source of the import and the type of wood product in question, with Chatham House having undertaking estimates of illegality across specific trade flows from the principle countries from which imports originate in each case (Hoare, 2014). Secondly, this estimate was adjusted based on the extent to which the importing country has measures in place for ensuring the legality of imports of wood products.

As stated above, the assessment of the risk of illegality in wood product imports undertaken by Chatham House is the most comprehensive and methodologically robust such assessment undertaken to-date. Moreover, the analysis also takes into account flows into consumer countries from key third party processing countries such as China, based on a complex analysis which examines these countries' own imports, their own domestic production, and how the proportion of these has changed over time (Lawson and Mc Faul 2010). Despite this rigorousness, a relatively substantial margin of error is to be expected, given that the analysis is based on numerous assumptions concerning the overall levels of illegality in given trade flows and not on any specific assessments of legality of a given unit of wood product imports.

### Subindicator 2.3: Number of deaths annually with a clear, proximate and documented connection to an environment or land issue

The methodology employed by Global Witness to collect data on numbers of killings related to forest and land rights issues is based, in the first place, on broad and "opportunistic" surveys of reported incidents with a potential link to forest and land rights, including third party reports on killings of human rights defenders. Secondly, UN websites were examined, notably the Office of the United Nations High Commissioner for Human Rights (OHCHR), the Special Procedures of the UN Human Rights Council to the governments in question and documentation provided by stakeholders in the UN Human Rights Council's Universal Periodic Review of Human Rights (UPR) sessions. In addition, specialized resources such as human rights search engine HuriSearch and data sources of international and national human rights organizations were searched.

In each case potential leads were further investigated to establish if a proximate link could be established and verification by in-country partners was sought where possible. In all cases only reported instances where sufficient documented evidence of the killing itself and the link to a forest or land issue – including the name of the victim, method of violence and clear and proximate link to the issue in question – was it included in the dataset. This also means that a large number of relevant killings have likely gone unreported due to lack of evidence, in particular in areas with limited reporting capacities or where reporting on human rights violations is restricted.

A further limitation is that, though the 2010-2014 data is more detailed than data for previous years, it is still difficult to categorize which cases are specifically linked to a forest issue or to the land rights of indigenous peoples or other local communities. This has required the adoption of a number of assumptions regarding the link to forest and land issues, or the land rights of indigenous peoples and local communities. Firstly, since disputes over land have not been categorized as involving local communities or not, all such disputes have been included, based on the assumption (supported by the available evidence) that the majority of such disputes involve either indigenous peoples or other local communities. Secondly, disputes over mining and hydroelectric power have been included based on the indicative evidence that the majority of such disputes relate to the conflict between those land uses and either forest protection or land rights of local communities.

The reference period is 2010 to 2014. While data on deaths related to environmental and land issues was collected by Global Witness for 2002-2014, the data for 2002-2009 was not detailed enough to allow for disaggregation of the killings relating to land and forest issues.

#### Indicator 3: Land and forest rights of indigenous people and local communities For both subindicators.

The methodology for subindicator 3.1 involved collecting data on the proportion of forests and forest lands in respective countries over which IPLCs have ownership rights or other "designated" rights, while for subindicator 3.2 the methodology involved assessing national legislation to identify relevant regimes that provide a means for the formal legal recognition of those rights.

For both subindicators the following definitions, used by Forest Trends and the Rights and Resources Initiative (RRI) for the purposes of the research upon which this assessment is based, are used:

- Ownership rights equate to full legal rights to secure their claims to forests, defined as areas where community tenure is unlimited in duration, they have the legal right to exclude outsiders from using their resources, and they are entitled to due process and compensation in the face of potential extinguishment violation by the state of some or all of their rights being extinguished by the state.
- Designated forest refers to forest area over which IPLCs have some rights that are recognized by governments on a conditional basis, equating to some level of "control" exercised through management and/or exclusion rights over forests, but lacking the full legal means to ensure the security of their claims to forests, i.e. the legal rights described above.

For subindicator 3.1 the reference period is 2002 – 2013, as this is the period covered by the first set of comprehensive data collection by the Rights and Resources Initiative. For subindicator 3.2 we use only the reference year of 2013, since this is the first year for which reliable data is available. Has been made available by RRI.

#### Data

### Indicator 1: Improvement of forest governance through the strengthening of institutions and policies

For all subindicators data has been collected by Chatham House.

The data for subindicators 1.1 and 1.2 relies on data from Chatham House used for their 2010 (Lawson and McFaul) and 2014 (Hoare) reports. For subindicator 1.1 Chatham House calculates policy scores across the 12 legal and policy components set out above for both 2008 and 2013 for five timber producing countries: Brazil, Cameroon, Ghana, Indonesia and Malaysia. Together, these countries account for 11% of global production of forest products (FAOSTAT 2015). Data on a further four countries — Democratic Republic of the Congo, Laos, Papua New Guinea and Republic of the Congo — is also available for 2013 but not 2008. For subindicator 1.2 Chatham House calculates policy scores across the five legal and policy components set out above for both 2008 and 2013 for five "consumer" countries (Japan, the USA, the UK, France and the Netherlands) and two "processor" countries (China and Vietnam). Together, these countries account for 41% (FAOSTAT 2015) of global imports of forest products. Data on a further four countries — India, South Kora and Thailand — is also available for 2013 but not 2008.

There have been a number of other initiatives to develop indicators measuring governance of illegal logging, such as the World Resources Institute's Governance of Forests Initiative or the Participatory Governance Assessments undertaken through UN-REDD. However, none of these initiatives have undertaken full country assessments over multiple countries at multiple points in time, and therefore do not allow for comparative analysis. As such, the Chatham House data is considered the most complete and reliable data on policy frameworks governing the forest sector currently available.

## Indicator 2: Extension and strengthening the rule of law, as indicated by illegal logging as a percentage of total logging, the quantity of imports of timber with high risks of illegality, and the number of killings related to land disputes

For subindicator 2.1 the data was provided by Chatham House and was collected for their 2015 assessment on tackling the illegal logging trade (Hoare 2014). Data on levels of illegal logging is available for 2013 for nine timber producing countries: Brazil, Cameroon, Democratic Republic of the Congo, Ghana, Indonesia Laos, Malaysia, Papua New Guinea and the Republic of the Congo. Together these countries account for 13% of global timber production (FAOSTAT 2015), though they are thought to represent a disproportionately high share of illegal production. While there have been several assessments of levels of illegal logging, particularly in specific countries, the Chatham House assessment was the most comprehensive single assessment across multiple countries and using a consistent methodology that could be obtained.

The data for measuring subindicator 2.2 was based on the research undertaken by Chatham House for their flagship 2010 study on forest governance (Lawson and McFaul 2010) and the follow up assessment in 2015 (Hoare 2015). Data is available on imports into ten key importers of wood products, including countries that are predominantly processors and those who are predominantly end consumers of these products. The countries – China, France, India, Japan, the Netherlands, Republic of Korea, Thailand, United Kingdom, United States of America and Vietnam – together accounted for 47% of global

imports of wood based products in 2013 (FAOSTAT 2015). As with the data on illegal logging, this is the most complete data on (likely) illegal imports that is currently available, and the Chatham House's 2010 report is the first attempt to assess illegality in specific trade flows between producer and consumer/processor countries, disaggregated by product type.

The data for measuring sub-indicator 2.3 is provided by Global Witness and based on their 2014 report Deadly Environment (Global Witness 2014) and the 2015 follow up, How Many More (Global Witness 2015). These in turn build on their 2012 report A Hidden Crisis (Global Witness 2012). The data covers all countries and regions. The data set we use includes all cases related to a land rights issue, cases arising from illegal logging and deforestation and those arising from disputes involving mining and extractive industries, hydroelectric power expansion and conservation. We have excluded killings that are related to pollution, fishing and other categories that were deemed to have little or no connection to forest and land issues.

The data from Global Witness is considered to be the most complete assessment of killings related to land and forest issues, and, while it is likely that a considerable number of relevant killings have not been included due to underreporting, the data is considered complete enough to allow a useful measure of the problem. A key limitation of the data, however, is that it only covers to killings and not other forms of violence relating to forest and land issues, including assault and intimidation. The level of this violence is thought to be extensive, and Global Witness is understood to be planning future research in this area.

#### Indicator 3: Land and forest rights of indigenous people and local communities

For subindicator 3.1 and 3.2 we rely on data from the RRI Forest Tenure database, as published in RRI (2014). The database compares information for 2002 and 2013. For subindicator 3.1, the database includes 52 countries overall, with both 2002 and 2013 data available for 40 countries (referred to as "complete cases" The 2002 data is primarily derived from an initial assessment published by Forest Trends (White and Martin 2002), while the 2013 data has been compiled by RRI, building on the Forest Trends analysis. However, this data has been updated and re-assessed where necessary in light of both new information and some minor changes in the methodology used for the 2013 assessment.

For subindicator 3.2, the data covers 27 countries, all low and middle-income countries, representing 41 percent of global forest area.<sup>5</sup> It is based on comprehensive legal reviews of country legislation and country expert peer review. A full list of legal frameworks assessed is available in RRI (2014a), Annex 3.

The RRI database of the portion of forest land over which IPLCs have rights is considered by experts to be the most complete collection of data pertaining to the forest area owned by indigenous peoples and local communities. The 52 countries in the database together comprising almost 90% of global forest area (RRI 2014). There are 14 REDD+ countries that are not currently covered by the RRI data, and having this data available for future analyses would enable a more complete analysis to be undertaken.<sup>6</sup> The other principal source collecting such data is the FAO Forest Resources Assessment (FRA). However, the FAO data rely solely on government reporting. In particular, few countries report on the different sub-categories of "private ownership," of which ownership by indigenous peoples is one. The RRI data incorporates and builds upon the FAO data. It complements government-reported data by those of trusted independent sources, and subject to peer review by in-country experts. It is worth keeping in mind, however, that the next FAO FRA is due in September 2015, and may contain more complete information than previous reports. The data on Sub-indicator 3.2 is also considered to be robust and

reliable. Though the analysis itself had been undertaken by an international legal consultant who is not necessarily a specialist in the various legal systems being analyzed, all country data was submitted to at least two relevant country experts for review before being finalized.

It is worth noting that, for sub-indicator 3.2, we have decided to only include the 2013 data as base-line data, despite earlier data from 2002 being referenced in the RRI report. This is because this earlier data (White and Martin 2002), was compiled using methods that are less methodically rigorous than those used in RRI (2014a), including the sole reliance on secondary sources. While therefore useful for anecdotal comparisons, it is not considered sufficiently reliable for this analysis. Further analyses would be needed to track progress on this issue. One further limitation is that the data only includes national regimes while in some countries, most notably Indonesia and Malaysia, subnational states have the prerogative to regulate land and forest rights. Nonetheless, the RRI report does make some reference to subnational regimes where no national regimes exist, even if these are not studied in detail. Finally, this dataset is less complete than that tracking the proportion of IPLC rights, and expanding it to further countries would allow for a more complete picture.

#### Bibliography

Advisory Group on Finance, Collaborative Partnership on Forests. (2012). '2012 Study on Forest Financing'. United Nations Forum on Forests.

Canby, K., G. Silva-Chávez, J. Breitfeller, C. Lanser, M. Norman, and B. Schaap. (2014). Tracking REDD+ Finance 2009-2012—Finance Flows in Seven REDD+ Countries. A REDDX Report. Washington, DC: Forest Trends.

Chatham House. (2015). Illegal logging and related trade: Indicators of the global response. Retrieved from http://indicators.chathamhouse.org/.

Durán, E., Bray, D.B., Velázquez, A., Larrazábal, A. (2011). Multi-Scale Forest Governance, Deforestation, and Violence in Two Regions of Guerrero, Mexico, World Development, Volume 39, Issue 4, April 2011, Pages 611–619.

Lee D., Pistorius T. (2015). The Impacts of International REDD+ Finance. Climate and Land Use Alliance.

FAO. (2012). Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, Rome.

FAOSTA. (2015). http://faostat3.fao.org/download/F/FO/E, FAO Statistics Division, Rome.

Global Witness. (2014). Report, April 15, 2014. Deadly Environment.

Global Witness. (2012). Global Witness Briefing, 19 June 2012, A Hidden Crisis.

Global Witness. (2015). How Many More? 2014's deadly environment: the killing and intimidation of environmental and land activists, with a spotlight on Honduras.

Lawson, S. and Mc Faul, L. (2010). Illegal Logging and Related Trade: Indicators of the Global Response, Chatham House.

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

Hoare, A. (2015). Tackling Illegal Logging and the Related Trade: What Progress and Where Next?, Chatham House.

PROFOR. (2012). Assessing and Monitoring Forest Governance: A user's guide to a diagnostic tool. http://www.profor.info/node/1998;

PROFOR. (2012). Making Benefit Sharing Arrangements Work for Forest-Dependent Communities. http://www.profor.info/node/2010

RRI. (2014a). 'What Future for Reform? Progress and slowdown in forest tenure reform since 2002', Rights and Resources Initiative, March 2014.

RRI. (2014b). 'The International Land and Forest Tenure Facility – Design Document'. Rights and Resources Initiative, April 2014.

RRI .(2015c). 'Who Owns the World's Land? A global baseline of formally recognized indigenous and community land rights'. Rights and Resources Initiative, September 2015.

UNFCCC .(2010). Guidance and safeguards for policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries, Decision 1/CP.16, Appendix 1 FCCC/CP/2010/7/Add.1.

White, A. and Martin, A. (2002). 'Who Owns the World's Forests?', Forest Tenure and Public Forest in Transition. Forest Trends and CIEL, Washington DC.

Wily, L. A. (2011). The tragedy of public lands: The fate of the commons under global commercial pressure. Cirad, International Land Coalition.

World Bank Independent Evaluation Group. (2013). 'Managing Forest Resources for Sustainable Development'. World Bank

World Bank .(2002). 'Sustaining Forests: A World Bank Strategy'.

#### **Endnotes**

- <sup>1</sup>China, France, India, Japan, Netherlands, Republic of Korea, Thailand, United Kingdom, United States of America and Viet Nam.
- <sup>2</sup> The complete countries included in the LMICs include: Angola, Bhutan, Bolivia, Brazil, Cambodia, Cameroon, Central African Republic, China, Colombia, Costa Rica, Democratic Republic of the Congo, Ethiopia, Gabon, Gambia, Guyana, Honduras, India, Indonesia, Kenya, Lao PDR, Mexico, Myanmar, Nepal, Papua New Guinea, Peru, Philippines, Republic of the Congo, Suriname, Tanzania, Thailand, Togo, Vietnam, Zambia. The five non-REDD+ countries (i.e. countries that are not involved in any international REDD+ processes) discussed in Table 1 are: Angola, China, Gambia, India, and Togo. All others listed here are REDD+ countries.
- <sup>3</sup> www.landmark.org.
- <sup>4</sup>The FAO data, for example, define 'community/indigenous' as a single category.
- <sup>5</sup> Bolivia, Brazil, Cameroon, Cambodia, China, Colombia, Republic of the Congo, Democratic Republic of the Congo (DRC), Gabon, Guatemala, Guyana, India, Indonesia, Kenya, Liberia, Malaysia, Mexico, Mozambique, Nepal, Nigeria, Papua New Guinea (PNG), Peru,Tanzania, Thailand, Venezuela, Vietnam; Zambia.
- <sup>6</sup> Burkina Faso, Chile, Cote d'Ivoire, Dominican Republic, El Salvador, Fiji, Ghana, Madagascar, Nicaragua, Pakistan, Panama, Paraguay, Uganda, and Vanuatu

www.forestdeclaration.org

