



# Consumer Goods and Deforestation:

**An Analysis of the Extent and Nature of Illegality in  
Forest Conversion for Agriculture and Timber Plantations**

## EXECUTIVE SUMMARY



With support from





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**Lead author: Sam Lawson**

With contributions from Art Blundell, Bruce Cabarle,  
Naomi Basik, Michael Jenkins, and Kerstin Canby

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## Dedication

This report is dedicated to Edwin Chota Valera, Leoncio Quincima Meléndez, Jorge Rios Perez, and Francisco Pinedo — four indigenous Ashaninka leaders from Peru assassinated in September 2014 in a suspected revenge killing by illegal loggers — and to the many activists who have lost their lives in the fight against illegal deforestation.

## GLOSSARY

**Agribusiness:** Business expansion in the agriculture and rural sector and its supply chains, mainly carried out on a large scale by the private sector. It may involve various exogenous agents and agro-industrial chains, or other partnerships linked together by contracting structures.

**Agro-commodities:** Commercially produced agricultural commodities, including crops and livestock products.

**Agro-conversion:** Used in this report to refer to conversion of tropical forests for commercial agriculture and timber plantations.

**Commercial agriculture:** This study considers deforestation for commercial agriculture to include both cattle-ranching and monoculture timber plantations, as well as commercially grown crop plantations. This study also includes both small- and large-scale commercial agriculture, but excludes subsistence agriculture since this is non-commercial. For most of the countries examined, the majority of the commercial agriculture displacing forests are medium- to large-scale and industrial. In addition, in a number of countries the products of small-scale commercial agriculture is nevertheless processed, traded, or exported by large corporations.

**Community forestry:** Forest operations where the local community plays a significant role in forest management and land use decision-making. Communities may, depending on national legislation, possess a bundle of rights (usually management, use, or full ownership) to land under community forestry.

**Concession:** A grant of land or property by a government or some other controlling authority to another legal entity (usually a large company) in return for payment, services, or for a particular use, a right to undertake and profit from a specified activity, or a lease for a particular purpose. Sometimes concessions are allocated based upon a permitting and/or a competitive process such as auctions.

**Conversion timber/wood:** Timber generated during the conversion of natural forest areas to non-forest or plantation use, such as the clearance of a forest for commercial agriculture.

**Corruption:** The abuse of entrusted power for private gain.

**Degraded land/forest:** Land that has experienced long-term loss of ecosystem productivity, caused by disturbances from which it will have difficulty recovering.

**Environmental Impact Assessment:** Formal process used to predict the environmental consequences of a plan, policy, program, or project, and develop a time-bound plan with specific objectives to mitigate these consequences.

**Fraud:** The act of intentionally deceiving someone in order to gain an unfair or illegal advantage (financial, political, or otherwise). Countries usually consider such offenses to be criminal or a violation of civil law.

**Illegal:** This report considers forest conversion to be illegal when it takes place in contravention of the written laws, policies, and regulations in the concerned country. This does not include breaches of international law or customary law unless those are reflected in national statutory or case law. In attempting to quantify illegality, this report considers deforestation and associated commodities as being associated with the illegality regardless of whether illegalities concerned have been identified or prosecuted by the relevant government authorities or have since been formally forgiven. This definition encompasses two general categories: illegalities in licensing and illegalities in forest clearance.

**Land grabs:** Large-scale land acquisitions that are one or more of the following: in violation of human rights, particularly the equal rights of women; not based on Free, Prior and Informed Consent (FPIC) of the affected land users; not based on a thorough assessment, or in disregard of, social, economic, and environmental impacts; not based on transparent contracts that specify clear and binding commitments about activities, employment, and benefit sharing, and; not based on effective democratic planning, independent oversight, and meaningful participation (as defined by Taylor 2012).

**Legal reserve:** Brazil's requirement of property owners to keep a certain percentage of their land in forest cover or its native vegetation, historically in the Amazon 80 percent and in the cerrado 35 percent.

**Plantation timber/wood:** Timber that is established by planting and/or artificially seeding, as opposed to that originating from natural/primary forests. For the purposes of this report, this refers to timber/wood harvested for commercial purposes.

**Timber products:** All solid wood products, including processed products such as furniture; this definition excludes pulp and paper. Often referred to as "primary tropical timber products," or originating from natural (non-plantation) forests in the tropics.

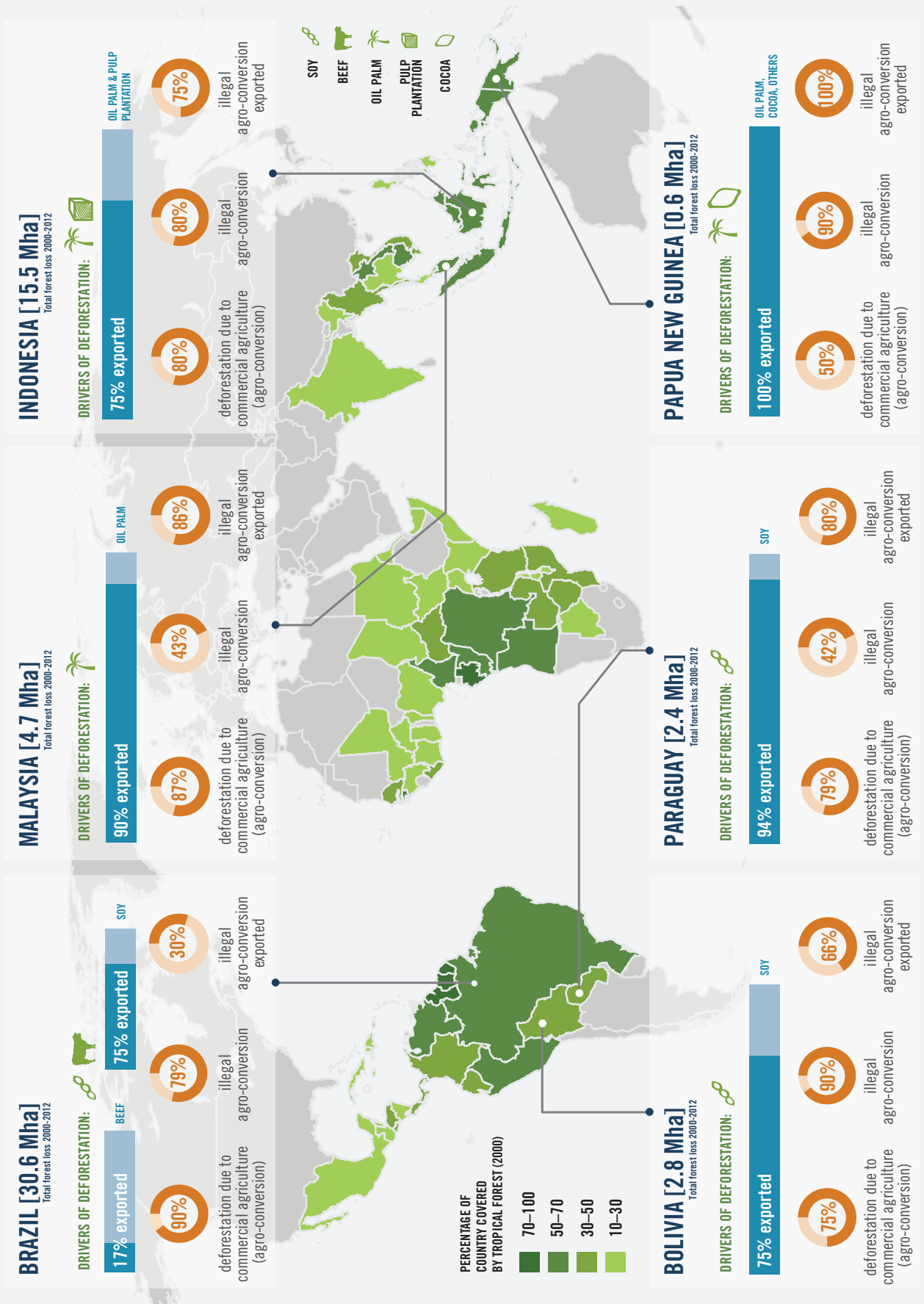
**Tropical deforestation:** The conversion of forests to other land uses that results in the loss of tree cover to below 51 percent. This includes the loss of natural forests from countries either entirely within the tropics or in which the majority of its deforestation takes place in the tropics, often to produce agricultural commodities.

**Tropical timber:** Unless specifically noted, all references to tropical timber in this report refer only to timber of tropical wood species harvested from natural forests. Tropical wood species grown on plantations are not included.

**Voluntary partnership agreement (VPA):** A legally binding trade agreement between the European Union (EU) and a timber-producing country outside the EU, which is entered into voluntarily. The purpose of a VPA is to ensure that timber and timber products exported to the EU come from legal sources. These agreements also help timber-exporting countries stop illegal logging by improving regulation and governance of the forest sector.

## SUMMARY

Extent of Illegal Deforestation for Commercial Agriculture in Key Countries





# EXECUTIVE SUMMARY

## Background

Tropical forests continue to disappear at an alarming rate despite growing international recognition of their crucial role in mitigating climate change. Their loss generates nearly 50 percent more greenhouse gases than the global transportation sector (IPCC 2014). Yet the rate of forest loss is accelerating (Hansen et al. 2013). In this report we examine one central question: what is driving this loss?

Recent studies suggest that at least half of global deforestation in the last decade has been for commercial agriculture to meet the rapidly surging global demand for food, fuel, and fiber. This is likely an underestimate, given the increasing area of forestlands being converted for agricultural commodities—mainly beef, soy, and palm oil—as well as tropical timber, pulp and paper, and plantation wood. The growth of commercial agriculture is cited as an important driver of deforestation by nearly every tropical country in official national strategies to reduce emissions from deforestation and forest degradation (REDD+).

Much of this conversion is taking place in the context of complex, contradictory, and poorly implemented regulations governing forested areas. This confusing regulatory environment makes “legal deforestation” difficult for both large and small forest enterprises to achieve, while enterprises that blatantly break the law often do so with impunity and may even be rewarded after the fact with acts of amnesty or retroactive changes in the law.

This report presents the first-ever assessment of the extent of illegal deforestation and forest conversion for the production of commercial, export-driven agriculture. This study is significant in adding new data to the global dialogue on tropical deforestation and trade in forest-risk commodities because it:

- introduces the concept of “illegal forest conversion” and the subsequent illegality of associated commodities produced on this converted land;
- uses best available data to quantify illegally sourced commodities in global trade, and concludes that a significant portion of global trade in relevant commodities is sourced from illegal forest conversion;
- describes what is illegal and introduces concerns not reflected in current international initiatives designed to reduce deforestation or to make commodity supply chains sustainable;
- argues that unless effective forest governance (including legality as a key indicator of governance) is established, broader efforts by governments, companies, and donors to tackle tropical deforestation and associated trade will continue to face tremendous challenges. Current initiatives need to better understand and capture the legal requirements linked to forest conversion and resulting commodities if they are to be effective in reducing tropical deforestation.

## Key Findings

While existing studies estimated that at least half of global deforestation in the past decade was for commercial agriculture, the proportion for tropical deforestation is higher. This report finds that **nearly three-quarters (71 percent)<sup>1</sup> of all tropical deforestation between 2000 and 2012 was caused by commercial agriculture. In addition, almost half (49 percent) of total tropical deforestation between 2000 and 2012 was due to illegal conversion for commercial agriculture. Nearly one-quarter (24 percent) was the direct result of illegal agro-conversion for export markets.** Nearly half (49 percent) of all agricultural commodity products produced on illegally deforested lands were destined for export markets. Nearly three-quarters (70 percent) of all soy in international trade, one-third (32 percent) of the beef, and all of the palm oil, originate in tropical forested countries. Consumer demand in overseas markets resulted in the illegal clearance of more than 200,000 square kilometers of tropical forest during the first 12 years of the new millennium: an average of five football fields every minute. In addition:

- In terms of climate change, the emissions caused by illegal conversion of tropical forest for large-scale commercial agriculture during 2000-2012 was an average of 1.47 gigatonnes of CO<sub>2</sub> per year—the equivalent of one-quarter of the annual fossil fuel-based emissions of the EU** (Global Carbon Project 2012). Of this, 0.72 gigatonnes was associated with commodity exports. If the international trade in agro-commodities from illegal deforestation were a country, it would be the sixth largest contributor to climate change in the world.
- In terms of trade, the value of agro-commodities (beef, leather, soy, palm oil, tropical timber, pulp and paper, and plantation wood products) produced on land illegally converted from tropical forests is estimated at \$61 billion per year.** The EU, China, India, Russia, and the US are among the largest buyers of these commodities, and their consumer demand could also be leveraged as a force for positive change given the right mix of policy, trade, and investment incentives.
- Brazil and Indonesia together account for 75 percent of the global area of tropical forest estimated to have been illegally converted for commercial agriculture during 2000-2012.** In Brazil, where cattle and soy have been the main drivers, at least 90 percent of Amazon deforestation for agriculture is illegal. In Indonesia, at least 80 percent of deforestation for commercial agriculture and timber plantations is illegal. While domestic consumption is growing as both economies expand, a considerable percentage of agricultural commodities is bound for export markets. Brazil exports most of its leather and soy and almost a fifth of its beef. Indonesia exports around 75 percent of both its palm oil and plantation timber (mostly as pulp and paper).
- Regional differences can be noted, but widespread and high-level corruption with the issuance of licenses for converting forests for commercial agriculture is common across the countries studied.** Illegalities in operations are also widespread. These include the failure to maintain mandated areas of forest reserves, the illegal use of fire to clear forests, the clearance of forest outside legal concession boundaries, lack of consultation based upon the principle of Free, Prior and Informed Consent (FPIC), unfair compensation to Indigenous Peoples and other local communities in concession areas, and disregard of regulations meant to minimize negative impacts of conversion on local people and the environment. In Southeast Asia, many licenses for millions of hectares of forests slated for conversion

<sup>1</sup> The figures cited in this Executive Summary are the mid-point results of sensitivity analyses conducted on data obtained for this report, given the varying levels of uncertainty of the data available for the variables surveyed. See Section 2.2.3 for a detailed description of the sensitivity analyses and Chapter 3 for the full results, including the ranges produced from the sensitivity analyses.

in the Mekong Basin and Papua New Guinea (PNG) were illegally issued. In PNG, a Parliamentary Inquiry found that 90 percent of the agro-conversion licenses issued in recent years were obtained by corrupt or fraudulent means. In Malaysia, recent court judgments suggest that many palm oil licenses may have been issued illegally in contravention of indigenous land rights. Similar concerns have been raised about rubber plantations in Cambodia.

- **Even in tropical forest countries where export-driven commercial agriculture has not been a major driver of deforestation, the situation is rapidly changing, and the same illegalities seen elsewhere are being repeated.** For example, government inspections have found two out of the three largest and newest oil palm plantations under development in the Congo Basin to be operating illegally. Coupled with projections of massive increases in global commodity demand, this analysis suggests that the importance of export-driven commercial agro-conversion is likely to increase even further in the very near future. While countries like Brazil and Indonesia have been battling illegal agro-conversion for many years, the problem is expanding to new countries and regions of the world. Many of these countries lack robust governance capacity or the legal and regulatory frameworks necessary to ensure conversion is carried out legally so that the remaining forests are protected. In almost all of these new cases, the majority of commodity production is bound for export markets.

In summary, the evidence presented in this report indicates that the phenomenon of illegal forest clearing for commercial agriculture and associated exports has continued at an alarming rate since at least the start of the 21<sup>st</sup> century. Indeed, this problem is worse than previously thought—and is likely occurring to a greater extent than the conservative estimates in this analysis show. While rising global incomes and demand for agricultural products will continue, we are currently responding with a flawed development model. It is increasingly clear that much of the forest land conversion for large-scale agricultural projects is in violation of some of the producer countries' most basic laws and regulations and incurring high social and environmental costs.

These illegalities will become more pronounced as producer countries encourage agricultural investments as a way to catalyze growth. Deforestation will increase in regions such as the Congo Basin where little commercial agriculture previously existed, unless we ensure that forestland converted for production is acquired legally and sustainably. Faced with the scale, breadth, and diversity of these illegalities, and the weak governance underlying them, it would be easy to despair of ever tackling these issues and to focus on other actions to address deforestation. This would be a mistake, as it is unlikely that those other actions will work in isolation and because these illegalities are not insurmountable.

## Recommendations

### The private sector

#### **Companies producing or trading relevant commodities should:**

- comply with all national laws when developing new commercial agricultural and timber plantation projects in forested countries and when purchasing products;
- refrain from engaging in such projects in countries where it is not possible to ensure legality;
- purchase and trade only commodities that are legally produced and traceable back to their source;
- verify that relevant policies such as zero deforestation commitments are properly implemented via independent third-party monitoring and by publishing relevant information;
- improve existing certification schemes to ensure that these more effectively preclude commodities from illegal conversion;
- conduct comprehensive assessments of past illegalities by existing concessions (i.e., that examine the processes by which licenses were issued and that use archived satellite imagery to examine whether clearance began in advance of permitting);
- promote and support actions by producer country governments to tackle the problem (see recommendations for producer countries), including the resolution of legal uncertainties, conflicting regulations, and unclear tenure;
- promote actions by consumer-country governments to tackle the problem, including through demand-side regulation; and
- adopt policies that extend beyond national laws, such as avoiding embedded deforestation entirely and requiring the Free, Prior and Informed Consent (FPIC) of Indigenous Peoples and other local communities (as per established international standards).

#### **Banks, investors, and financial service providers should:**

- ensure that financing is only provided to relevant companies, shipments, and projects where legality can be demonstrated.

#### **Certification bodies and associated roundtables should:**

- develop or strengthen standards and assessment, monitoring, and compliance mechanisms to ensure that they can meaningfully guarantee that no certified products are associated with any of the types of illegalities described in this report;
- strengthen monitoring and enforcement of standards, including through independent monitoring, transparency of information, and appropriate procedures for handling third-party complaints. These mechanisms should have the capacity to conduct a clear assessment of members' compliance with national laws; and
- lobby for regulatory action by consumer country governments to ensure that only legally produced products can be imported or sold, thereby creating a level playing field on which companies can compete on broader issues of sustainability.

### Producer country governments should

- ensure that the legal and regulatory framework governing the licensing and implementation of relevant developments on forestland is clear, consistent, and non-conflicting;
- improve enforcement of relevant laws and regulations by increasing necessary resources, improving inter-agency coordination and information sharing, increasing penalties, making best use of technology (such as satellite images), using anti-corruption and anti-money laundering bodies and laws, and putting in place systems of officially-mandated independent monitoring;
- consider commissioning a full review of the legality of all relevant licenses, to be carried out by an independent body;
- resolve past illegalities in a manner that is practical but which ensures transgressors do not stand to gain and that those affected are properly compensated. Resolve any conflicting land rights claims arising from regulatory conflicts or inconsistencies through clear legal frameworks;
- collate and publish all relevant information (including licenses and permits and associated maps and land use planning and land ownership maps) and make such publication a legal requirement;
- request the assistance of donor and consumer countries, supported by bilateral arrangements such as the EU FLEGT VPAs (see Box 10);
- consider implementing strict and enforceable moratoria on conversion until regulatory arrangements have been clarified, land rights conflicts and past illegalities resolved, and enforcement systems improved;
- draft or revise national REDD+ policies that acknowledge the importance of illegal agro-conversion as a driver of deforestation and outline specific steps to reduce illegalities; and
- ensure that international commitments regarding rights of local communities and Indigenous Peoples are fully reflected in national laws and properly implemented and enforced.

### Consumer country governments should

#### Refocus REDD+ finance and donor assistance:

- provide technical and financial assistance for the necessary actions to be taken by producer countries to eradicate illegal forest clearing and resolve outstanding issues of illegality (see recommendations for producer countries above), including reforms to land tenure regimes to protect the legal rights of forest communities;
- ensure that all donor assistance on forests makes legality and improvements to forest governance a priority and precondition for further assistance;
- advocate for producer country REDD+ policies and programs that directly address legality and forest governance;
- advocate for relevant multilateral institutions such as the World Bank and UNEP to better address this issue in their work with producer countries;
- advocate for REDD+ monitoring, reporting, and verification (MRV) standards in international climate policy fora such as the UNFCCC that will provide oversight to further prevent illegal clearing of natural forests;

- require pension funds, sovereign wealth funds, and other nationally-governed financial instruments to carry out necessary due diligence and refuse to do business with companies found to have a high risk of being associated with illegal forest clearance;
- provide technical and financial support to civil society groups tackling these issues; and
- support further research to better understand the nature and extent of relevant illegalities.

**Create new demand-side measures to curb illegal agro-conversion:**

- ensure that existing demand-side measures on timber (including procurement policies, regulations governing all imports, and bilateral agreements such as VPAs) are revised to ensure that they encompass conversion timber to the maximum possible extent;
- in countries where no such timber-related demand-side measures exist, enact these as a matter of urgency; and
- ensure that these demand-side measures are fully implemented and enforced, with an appropriate proportion of attention and resources being paid to cases related to conversion and sufficiently dissuasive penalties. Implement policies requiring that all government purchases of relevant commodities are proven to have been legally and sustainably sourced and ensure that new or existing procurement policies include standards that are high enough to ensure that products associated with the kinds of illegalities documented in this report are excluded;
- consider passing legislation making it an offense to import or sell agricultural commodities produced on land illegally cleared of forests and/or requiring that importers carry out due diligence in order to minimize the risk of purchasing such products;
- establish bilateral trade agreements with important supplier countries, following the model of the EU's Voluntary Partnership Agreements; and
- ensure that penalties are sufficiently high and monitoring and enforcement sufficiently robust to guarantee compliance with these regulations.





## The Family of Forest Trends Initiatives

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### Ecosystem Marketplace

*A global platform for transparent information on ecosystem service payments and markets*

### Water Initiative

*Protecting watershed services through markets and incentives that complement conventional management*

### Forest Trade & Finance

*Bringing sustainability to trade and financial investments in the global market for forest products*



*Business and Biodiversity Offsets Program, developing, testing and supporting best practice in biodiversity offsets*



*Building capacity for local communities and governments to engage in emerging environmental markets*

### Communities and Markets

*Supporting local communities to make informed decisions regarding their participation in environmental markets, strengthening their territorial rights*



*Using innovative financing to promote the conservation of coastal and marine ecosystem services*

### Public-Private Co-Finance Initiative

*Creating innovative, integrated, and efficient financing to support the transition to low emissions and zero deforestation land use*

*Learn more about our programs at [www.forest-trends.org](http://www.forest-trends.org)*