PUTTING THE BRAKES ON DRIVERS OF FOREST DESTRUCTION: A SHARED RESPONSIBILITY

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ILLEGALLY HARVESTED ROSEWOOD awaits export from Madagascar to China and western markets. Indiscriminate international markets are financing the degradation of Madagascar's unique forests, without producing any meaningful economic or development benefit for the people of Madagascar.

"We reaffirm our intention to promote transparent timber markets and trade in legal and sustainably produced timber."

G-8 DECLARATION FROM L'AQUILA, ITALY, 2009

"Measures that should be adopted to successfully reduce deforestation, a critical component of preventing dangerous levels of climate change, [include addressing] illegal logging and demand-side drivers. Voluntary bilateral timber licensing regimes and legislation in consumer countries, such as the United States' Amendment to the Lacey Act, have been welcome interventions that could be replicated across the major economies. Equally, the demand side drivers of deforestation need to be addressed by promoting sustainable agriculture, improving its productivity and providing support to supplier nations to reform governance, where necessary."

GLOBAL LEGISLATORS FORUM (GLOBE) INTERNATIONAL COMMISSION ON LAND USE AND FORESTS, recommendations to climate negotiators, fall 2009

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WHY MUST CLIMATE NEGOTIATORS ADDRESS THE DRIVERS OF DEFORESTATION AND DEGRADATION?

The consumption needs of developed economies and rapidly expanding developing economies are increasingly driving deforestation. Commercial agriculture is now the primary source of tropical deforestation. In Indonesia and Brazil, the two countries accounting for nearly two-thirds of tropical rainforest loss between 2000 and 2005 making them the 3rd and 4th largest global greenhouse gas emitters, the fastest-growing source of forest loss is export-led commercial agricultural expansion — palm oil, cattle and soybean production being the key commodities.[1] In other areas, cocoa, coffee and rubber production play a role, while mining and growing demand for biofuels cause both direct and indirect forest loss. The global wood products industry is also a significant driver, both directly through destructive logging for wood products and clear-felling for paper pulp, and indirectly by opening up the forest to other uses.

Driving forest loss ... and poor governance: The impact of these activities on tropical forests is compounded by the fact that demand for these commodities comes from international markets that are largely 'no questions asked' — that is, without inquiring about the real origin of the products, since there are few incentives for companies or consumers buying such commodities to distinguish between products due to their environmental or social impacts, or even their most basic legality. Such indiscriminate markets drive a race to the bottom, financing illegal and corrupt practices that undermine governance, rights, and the rule of law.

Governance is a critical issue for the success of a proposed mechanism for reducing emissions from deforestation and degradation (REDD). If properly structured, REDD programs could significantly alter the traditional incentive structure, bringing together the interests of governments, individuals, communities and the private sector to improve protection of forests in a collaborative and equitable manner. However, efforts to halt deforestation have historically proven difficult to enforce, and the monies associated with REDD — even if substantial — will not be enough alone to eliminate competing interests and incentivize better governance and enforcement.

Money alone is not enough: REDD investment alone will not protect forests if there are incoherent policies and massive market forces undermining its purpose. Readiness efforts must also consider how to create an enabling regulatory environment for REDD. In addition to identifying and developing plans to address the diverse domestic drivers on the ground in REDD countries, it will be essential to confront the ramifications of international demand and consumption issues through targeted policies and measures in all countries.

HOW DOES INDISCRIMINATE DEMAND FOR COMMODITIES DRIVE FOREST LOSS?

Unprecedented Growth in Global Consumption: Commercially produced timber, agricultural and livestock commodities are now the number one cause of deforestation and degradation worldwide.[2] Recent research shows a distinct correlation between increased greenhouse gas emissions and increased consumption among wealthier populations in the developed world.[3] As developing countries' middle classes expand, this will only be more the case.

TABLE 1: A COMMODITY EXPORTS SNAPSHOT FROM TWO KEY COUNTRIES

COUNTRY	PRODUCT	YEAR	QUANTITY (TONS)	VALUE ($1,000)	$/TON
INDONESIA	PALM OIL	2000	4,110,027	1,087,278	265
		2007	8,875,419	6,868,639	774
		% change	116%	532%	192%
INDONESIA	FOREST PRODUCTS (Includes all wood, pulp, paper products)	2000	NOT AGGREGABLE*	5,517,412	NOT AGGREGABLE
		2007		6,572,861	
		% change		19%	
	* Data shows 45% increase in pulp & paper production, and 28% decline in timber products including panels.				
BRAZIL	MEAT – CATTLE (Beef & Veal)	2000	118,402	502,905	2,669
		2007	1,281,272	3,479,645	2,716
		% change	982%	592%	2%
BRAZIL	SOY	2000	11,517,260	2,187,879	190
		2007	23,733,776	6,709,381	283
		% change	106%	207%	49%

Data source is FAOStat.

TABLE 2: INTERNATIONAL COMMODITY MARKET FLOWS.*

Four top commodities associated with tropical deforestation and degradation. These values do not include secondary products such as furniture, paper in published materials, or food products made with soy, beef or palm oil, which increase the value of trade flows several times over.

Commodity	Annual Global Imports (2007)
TIMBER, PULP & PAPER	US $82,397,598,000
SOYBEANS + CAKE OF SOYBEANS	US $44,407,816,000
CATTLE MEAT	US $19,569,672,000
PALM OIL	US $19,269,159,000

*Data sources for Table 2: Timber, ITTO 2007 imports to producer and consumer countries (includes logs, sawnwood, veneer, plywood); pulp & paper, FAO ForeSTAT 2007 imports to all countries (includes newsprint, paper and pulp); Soy, cattle and palm oil, FAOStat 2007 data imports all countries.

Indiscriminate markets that undermine good governance and good practices: Very few policies exist that create incentives for buyers — whether importers, retailers or end consumers — to seek information about the legality or sustainability of the forest and agricultural products they buy. Price is the only real factor in determining demand at a global level, creating a race to the cheapest production techniques. The enormous financial streams that flow from "no questions asked" timber and agricultural markets intersect with corruption and capacity limitations in producer countries to create a situation where illegality, lack of law enforcement, and impunity are the norm. This toxic blend stifles good forest governance creating a vicious cycle that fosters conditions conducive to additional deforestation and degradation. A few examples exist to stem this cycle of rampant deforestation, particularly in the wood products industry, and the results of these initiatives have begun to demonstrate how the right regulatory signals can guide market demand towards better practices (See section: Forest Governance and REDD).

Perverse or poorly designed policies: It's not only lack of regulation that leads to forest loss; it's also poorly designed regulations. The clearest example is the biofuel mandates that both the EU and the US, among other nations, have adopted in recent years. The EU policy mandates that member states have 6% crop-based biofuels in their transport fuel mix by 2020. The US's Renewable Fuel Standard similarly mandates a five-fold increase in biofuel consumption (to 36 billion gallons by 2022) . Neither accounts for "secondary (or indirect) land-use change", the displacement of activity that occurs when crops formerly used for food production are now directed toward fuels, and new land must be cleared for the food crop.[4] Moreover, Kyoto Protocol accounting treats all bioenergy as carbon neutral, regardless of whether its source was newly cleared forests or peatlands.[5] The unintended consequence of these policies for tropical forests is becoming clear in places like Papua, Indonesia, where heavy investment in oil palm plantations increasingly appears to be driven by international demand for biofuels. This is a rapidly growing industry, ironically bolstered by incentives in climate change mitigation policies.

The combination of indiscriminate international demand and poorly coordinated policies is demonstrated by an example from Vietnam. Recently published research demonstrates that the convergence of a domestic ban on logging with explosive growth in the export-oriented furniture industry led to 49 million cubic meters' worth of displacement of wood extraction throughout the Southeast Asian region between 1987 and 2006 — an amount of deforestation and degradation equivalent to approximately 39% of Vietnam's internal forest regrowth, and 48% of the material being brought into the country from Cambodia, Laos, Indonesia and other neighbors was estimated to be illegal.[6]

TABLE 3: DEFORESTATION AND ILLEGAL LOGGING RATES IN KEY TROPICAL COUNTRIES

Tropical Forest Countries with High Estimated Rates of Deforestation Emissions	% of Global Deforestation Emissions*	Receiving FCPF Funds?	Illegal Logging in Natural Forests Estimates	
			Over 50%	20-50%**
BRAZIL	25%		•	•
INDONESIA	23%		•	
NIGERIA	6%	•	•	
CONGO DR	4%	•	•	
BURMA	3%		•	
ZAMBIA	3%		•	
CAMEROON	3%	•	•	
PHILIPPINES	2%		•	•
VENEZUELA	2%		D.N.A.	
BOLIVIA	2%	•	•	
GHANA	2%	•	•	
TANZANIA	2%		•	
ECUADOR	2%		•	
PAPUA NEW GUINEA	2%	•	•	•
HONDURAS	2%		•	•
VIETNAM	<2%	•		•
PERU	<2%	•	•	•
MEXICO	<2%	•		•
GABON	<2%	•	•	
NICARAGUA	<2%	•	•	

* Source = Nicholas Institute 2008 (courtesy of NRDC)
** Both columns marked where differing estimates exist. Data compiled from various sources available upon request.

CASE STUDY #1

PLANTATION DEVELOPMENT IN INDONESIA'S PAPUA PROVINCES: CONVERSION FOR THE CLIMATE?[7]

Papua's forests form the third largest remaining tropical forest wilderness in the world, after the Amazon and Congo Basin. As such, Papua's forests are of global significance. Yet these unique forests are under siege from the rampant spread of plantations.

Since Bali, REDD negotiations have moved slowly forward while plans for plantation expansion in Indonesia have expanded rapidly. Up to five million hectares of land have been targeted for conversion to grow crops like oil palm, with the projected global demand for biofuels driving much of this conversion. This plantation boom in Papua is being promoted by the Indonesian government as a means of bringing development to Papua, and as a means of helping to curb climate change through increased use of biofuels. Neither of these claims stand up to close scrutiny.

Evidence shows that the negotiations between indigenous land owners and plantation companies are unequal and exploitative. Promised benefits, such as schooling, electricity and houses are seldom delivered. Compensation payments for land and timber are meager. Children as young as four are required to sign contracts so that the firm can ensure it ties the land up for decades. It is the well-connected conglomerates and overseas investors who stand to capture the financial benefits of the massive plantation expansion, and not the Papuans.

In addition, the notion that the planned increase in palm oil production for biofuels will somehow assist efforts to tackle climate change is also illusory. Felling Papua's forests on the planned scale will cause far greater GHG emissions than any potential biofuel benefits.

Recent research shows how converting forests into oil palm plantations for biofuel actually worsens climate change. A pilot study in Sumatra and Kalimantan looked at the emissions from land clearing and oil palm cultivation and processing, compared with potential climate benefits of the biofuel produced. Oil palm was found to store less than 40 tons biomass on average over a 25 year lifespan. Logged-over forests stored 70–200 tons of carbon per hectare. Untouched forests contain even more, sometimes in excess of 400 tons per hectare. The report showed that clearing even logged-over forest for oil palm results in a clear carbon debt — more GHG emissions are produced than avoided.

In fact, palm oil-based biodiesel produced on cleared Indonesian rainforest would take 86 years to offset the negative carbon balance, and that produced on cleared Indonesian peatlands would take 423 years.[8] Yet "95 percent of the increased production of palm oil in Malaysia and Indonesia is driven by the growing demand for biodiesel," and "two-thirds of the current expansion of palm oil cultivation in Indonesia is based on the conversion of rainforests."[9]

The government of Indonesia deserves credit for taking decisive action to tackle illegal logging over the last few years. However, its policy on plantations now poses a threat to Papua's forests and climate change mitigation efforts that may be a greater threat still.

This case study is, unfortunately, not unique to Indonesia. Similar examples can be found in other countries around the globe.

SOURCE: EIA's new report, "Up for Grabs: Deforestation and Exploitation in Papua's Plantations Boom", available at www.eia-international.org

CASE STUDY #2

COMBATING ILLEGAL LOGGING AT A GLOBAL LEVEL: A PRIORITY FOR REDD

In the past decade, efforts to combat illegal logging became a policy priority as the global community woke up to the true extent of the associated ecological, economic and social impacts. The World Bank estimates that illegal logging costs developing nations close to $15 billion annually in lost assets and revenues. This amount is over eight times that spent on sustainable management of the world's forests[10] — and does not factor in the social conflict, human rights abuses and economic dislocation in developed country forest sectors caused by illegal trade.

Most of the developing countries vying to receive REDD payments have been estimated to have illegal logging rates over 50% in the past decade (see table 3). Illegal logging damages forests through the direct removal of forest cover, as well as triggering a chain of land use change — infrastructure development, subsequent settlements, fires, conversion. Perhaps most importantly, illegal logging and associated timber trade are serious indicators of a failure in the forest governance regime of a given country. If a government cannot prevent illegal cutting of trees, then can it possibly be a source of reliable, verifiable or permanent emission reductions?

> "Expecting or asking one country to combat illegal logging while at the same time receiving or importing illegal logs of course does not support efforts to combat these forest crimes."
>
> MOHAMED PRAKOSA, INDONESIA'S FORMER MINISTER OF FORESTRY

Illegal logging is a prime example of how "no questions asked" markets undermine good governance and promote forest destruction. Around 10% of wood products on the global market are estimated to be at high-risk for illegality.[11] This vast market, in addition to reducing carbon stocks, undervalues timber and therefore standing forests.

Consumer countries have begun to implement a variety of policies in recent years to combat the role their markets play in supporting illegal logging. The US passed its powerful Lacey Act amendments in 2008, the European Union is advancing 'due diligence' legislation, and the Australian government is currently considering a law in the same vein.

These critical demand-side policies currently form a patchwork that that is susceptible to 'leakage' of illegal product. Inconsistencies between markets means that illegally sourced wood can be redirected to other countries that lack prohibitions. In order to truly support law enforcement and strong governance in forest countries, we need a global commitment to prohibit import or export of illegally sourced wood products in all countries. The REDD framework is an appropriate place for this commitment to be codified.

WHAT ARE THE OBSTACLES TO REDUCING FOREST LOSS FROM COMMODITY DRIVERS?

While some of the dynamics that drive deforestation must be resolved at a national level, others are inherently international in scope. Without consumer countries' commitment to take actions that will reduce demand, help increase land-use efficiency and productivity, and send market signals, there is little hope of tackling forest destruction in a coherent way.

Poor coordination among sectors within countries: In too many countries, decisions about allocating lands or permits for different types of activities are made in a vacuum without coordination among different Ministries. Thus while the Ministry of the Environment makes plans about forest protection in an area, the Ministry of Forestry grants another 30-year industrial logging concession, the Ministry of Energy issues mining contracts all around it and the Ministry of Agriculture approves new forest clearance permits for the same land. Inter-sectoral coordination will be a fundamental challenge and opportunity for getting REDD right.

Barriers to investment in more efficient and sustainable forestry, agriculture or ranching: For example, ranchers in the Brazilian Amazon could maintain their herd's productivity and health on one-third the amount of land, if they had access to the capital to invest in moderate intensification practices (including grass seed, fences and personnel), and technical assistance to implement these new methods.[12]

Weak law enforcement, high corruption and lack of transparency: Without a legal and judicial system that can be trusted, or even basic transparency, there is little hope of holding corrupt officials, businessmen or anyone else accountable for forest loss. All too often, law enforcement efforts target the lowest end of the chain, leaving those who truly profit from illegal logging or clearing and associated trade free to operate.

Lack of engagement of indigenous communities: Indigenous peoples and local communities are the immediate victims of deforestation, and have the greatest interest in monitoring and reporting attacks on the forest. Not engaging them is not only a breach of international treaties and often national laws, but is also a waste of resources.

Lack of signals from international markets or governments: As mentioned above, the comparative lack of markets with environmental or social standards of any sort creates incentives for companies to look the other way and orient supply chains towards sourcing the cheapest possible raw materials.

Lack of traceability systems that would allow markets and consumers to differentiate "no-deforestation" or "sustainable" products: If it is impossible to tell the difference between a "good" and a "bad" batch of beef, palm oil or soya, it is impossible to create differentiated markets that reward proactive companies or communities and punish bad actors.

FOREST GOVERNANCE AND REDD: TACKLING DRIVERS FROM THE DEMAND SIDE

Demand-side policy infrastructure and expertise has developed over the past decade, particularly for wood products, and climate policy makers would be remiss not to draw lessons from this work. Recent statements by the G-8 and the GLOBE Legislators Forum have both declared demand-side measures as a critical component of combating global deforestation and degradation.

Laws to Support Legal Trade: The adoption and ongoing implementation of powerful new demand-side laws and accompanying governance initiatives to combat illegal logging — are examples of the complementary types of policy support that UNFCCC Parties will need to provide to countries seeking to achieve REDD.

- ***The Lacey Act:*** In May 2008, the U.S. became the first country in the world to pass a prohibition on import, export or trade in illegally sourced timber and wood products. This landmark statute is sending shock waves through the global timber industry. The law completely rewrites companies' equation of risk and benefit for asking questions about how wood fiber is sourced. It applies to any and all sectors with wood products: supply chains like pulp and paper, furniture, plywood and building materials.
- ***EU Forest Law Enforcement Governance and Trade regulation:*** Since FLEGT's passage in 2003, the European Union has been a leader on demand-side policy initiatives. The E.U. is currently moving towards legislation that would prohibit illegal imports and mandate due diligence practices by all importers of timber and certain wood products.

Bilateral Agreements and MOUs: The E.U. is negotiating Voluntary Partnership Agreements (VPAs) with a number of important tropical timber producers in Africa and Asia. These bilateral Agreements establish a scheme of monitoring and export licensing designed to ensure export of legal timber. The EU, the US and China have all signed Memoranda of Understanding with key source countries like Indonesia to coordinate efforts to combat illegal logging. The US-Peru Free Trade Agreement is the first example of a bilateral trade agreement that directly addresses illegal timber trade and provides support for its reduction.

Procurement policies: Twelve countries now have some sort of public procurement policies regarding timber at the central government level (Belgium, Denmark, France, Germany, Netherlands, UK, China, Japan, Mexico, Norway, New Zealand, Switzerland). These policies range in scope and details but generally require legal and/or sustainable products. A recent ITTO study estimated that 25-45% of medium term demand for tropical timber in major import markets could be influenced by these policies.[13]

Voluntary Efforts: Non-government standards for certifying sustainable forest management, such as the Forest Stewardship Council (FSC), have become an important tool for buyers interested in identifying well-managed forests. In the agricultural sector, which lags behind timber in the development of demand-side policies and environmental standards, multi-stakeholder roundtables that define 'best practices', such as the Roundtable on Sustainable Palm Oil, are proliferating.

These types of measures, especially if adopted more broadly, can be essential tools for REDD implementation:

- They incentivize business actors throughout the wood products supply chain to support good governance, clarification and clear implementation of forest sector laws;
- They provide a legal framework by which information from on-the-ground monitoring and documentation can hold governments or private actors accountable, thereby supporting broader engagement by indigenous peoples, local communities, and civil society in governance issues of direct relevance to REDD; and
- They directly address a major driver of deforestation and forest degradation that is likely to cause extensive international activity leakage if a REDD mechanism is developed without such controls in place, thereby increasing the credibility of forest-carbon emission reductions.

HOW SHOULD REDD READINESS EFFORTS ADDRESS DRIVERS?

It is critical to support and amplify actions to address drivers immediately. The intent of pre-2012 funding mechanisms is to create an enabling environment for efforts to reduce emissions from deforestation and degradation in a permanent way, and to achieve these reduced emissions in as cost effective and broad-based a manner as possible. This interim period serves as a great opportunity for "readiness" among all countries, not only developing countries with REDD aspirations.

There are two elements that must be components of REDD readiness in order to avoid undercutting REDD actions: *identification of drivers and a plan to address them, and curbing the international markets' demand for commodities that drive deforestation*. In fact, The Informal Working Group on Interim Finance for REDD states in its October discussion draft that "developed and developing countries need to work together to address all significant causes of REDD+, by for example taking measures to tackle the trade of ilegally logged timber and developing supportive markets for legal and sustainable forest products". Such actions, once undertaken by all parties, will also help to guard against international leakage. Otherwise the REDD readiness programs funded by donor countries are at great risk of being undercut by demand-side actions and consumption practices in some of those very same countries.

HOW CAN THE PRIVATE SECTOR HELP?

Many people are looking to the market to attract the scale of funding necessary for REDD effectiveness. Private sector investments in carbon will be accompanied by increased scrutiny of forest governance and law enforcement in order to ensure that these investments are credible and retain their value by continuing to sequester carbon.

Why not bring the same power of the private sector to bear on legal and sustainable sourcing of products in the existing international commodities market?

The scale of international trade in forest and agricultural products is enormous. FAO and ITTO data puts global exports for timber, pulp and paper at $82.4 billion/year, palm oil at $19.3 billion and soy at $44.4 billion —and this doesn't even include value-added secondary manufactured products such as furniture or food products.[14] Such figures serve as a powerful reminder of the entrenched market forces driving deforestation and degradation, but also demonstrate a significant private sector presence that is becoming increasingly concerned about the legality and sustainability of their business practices.

HOW CAN THESE FACTORS BE ADDRESSED IN A UNFCCC REDD AGREEMENT?

If REDD policy is created in a vacuum, and remains limited to considerations within the forest sector, and only within REDD countries themselves, then even the most perfectly constructed mechanism will be undermined by diverse economic and social drivers, including international commodity markets' demand for wood, agriculture and energy products.

Parties must commit to policies and measures designed to support legal and sustainable practices in the forestry and agricultural sectors. Such actions are both necessary and additional to capacity building, technology transfer and direct finance. They are a part of REDD "readiness", which should not be thought of as simply interim financing for developing country actions.

As a basic first step, all Parties must commit to ensuring that their markets and policies are not inadvertently or deliberately encouraging activities, such as illegal logging, that undermine other nations' efforts to promote strong rule of law and forest governance, reduce state revenues or contribute to international displacement of deforestation.

All countries are part of driving forest loss, and all countries must be Party to reducing it.

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