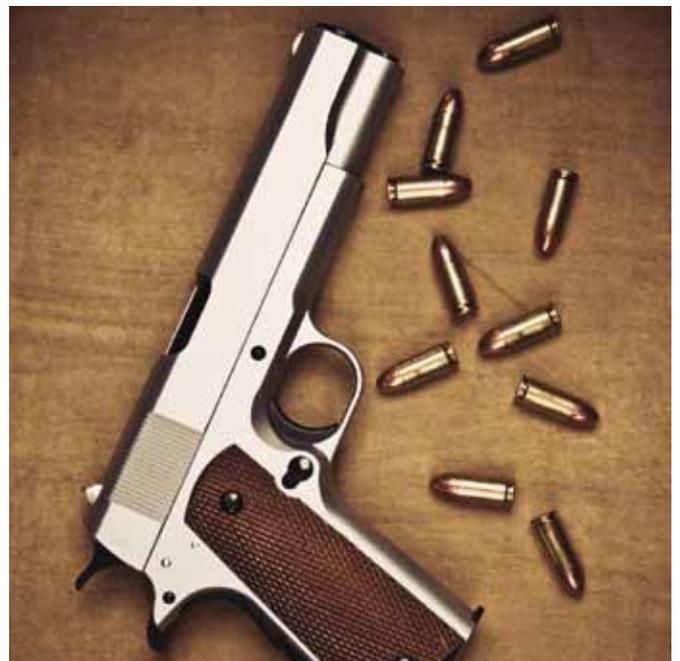




global witness

# FOREST CARBON, CASH & CRIME



**THE RISK OF CRIMINAL ENGAGEMENT IN REDD+**



CONTROLE  
DES  
EAUX ET FORETS

# Summary

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**Alarm bells are ringing. [REDD+] is simply too big to monitor. The potential for criminality is vast and has not been taken into account by the people who set it up... Fraud could include claiming credits for forests that do not exist or were not protected or by land grabs. It starts with bribery or intimidation of officials... if there are indigenous people involved, there's threats and violence against those people.**

Peter Younger, Environment Crimes Specialist, Interpol

Quoted in the Guardian, *UN's forest protection scheme at risk from organised crime, experts warn*, 5 October 2009

Corruption in the forest sector has until now been overwhelmingly linked to logging, both illegal and legal, which in many countries has led to significant depletion of valuable tropical forests. But today incentive mechanisms such as REDD+, intended to compensate governments, communities or other groups in developing countries for reducing forest loss, are beginning to change the face of corruption in the sector.

While corruption and illegality in logging continue to be a significant international problem, the potential for future REDD+ earnings is bringing about new corrupt practices, starting with cases of land grabs. REDD+ is also likely to lead to new forms of corruption not previously seen in the forest sector, such as questionable carbon accounting and manipulation of forest carbon measurements. The recognition of 'carbon' as a commodity to be measured and paid for creates a number of new opportunities for corrupt activities, since forest "carbon" is an intangible asset that is difficult to measure and relies on complex calculations that can be manipulated.

Alongside the familiar risks of criminal activity encountered with such large financial flows – for example fraud, bribery and tax evasion – REDD+ poses some specific risks. These include increased illegal logging, linked to law enforcement capacities being stretched by the need to police additional forest protection efforts, illegal land grabbing, the theft and misappropriation of REDD+ funds, the manipulation of carbon measurements to exaggerate results and increase payments, and poor regulation of carbon markets.

With the right national and international frameworks, plus sufficient funding, REDD+ is an unprecedented opportunity to address climate change, as well as protect

natural forest ecosystems and biodiversity and deliver development benefits, especially for forest communities. Governance is key to the effective implementation and delivery of the intended outcomes of REDD+ - from international to grass roots level. A well-designed governance system is also needed to address the substantial risks of corruption and criminal involvement that are posed by REDD+.

Significant sums of money are involved: the REDD+ mechanism is expected to require an estimated US\$17-33 billion every year, equivalent to up to a quarter of OECD aid flows in 2010,<sup>1</sup> much of which will be pumped into forest-rich developing countries.<sup>2</sup> Some of this money is already being paid out for preparation and pilot activities. For the most part, however, these forest-rich countries suffer from weak regulation and governance. More than 80% of countries currently receiving REDD+ funds fall into the bottom half of countries assessed for Control of Corruption by the World Bank. Past attempts to tackle forest loss in these countries have mostly failed, undermined by policy failures, perverse incentives and corruption. Given the large sums of money involved, there is also a substantial risk that criminal elements, including state actors, will undermine REDD+ and prevent it from achieving its overall objectives.

So far there is also a serious funding gap. Only US\$5 billion has been pledged by rich countries<sup>3</sup> and it is unclear where the rest will come from. Well-designed national REDD+ programmes with proper safeguards and measures to minimise corruption risks will encourage better REDD+ projects and instil confidence in those who provide funding that REDD+ is worth investing in.

LEFT: *This forest guard in Cameroon must police hundreds of thousands of hectares of forest and several well-financed European logging companies, yet he has no vehicle, no radio, and his shoes are several sizes too small. Global Witness 2011*

To address these risks, this paper calls for clear and effective safeguards to ensure transparent financial flows, improvements to governance throughout national REDD+ processes, and for donors to provide financial and technical support to recipient countries to improve governance as preparation for REDD+. Similarly, donors should consider other ways that existing aid programmes can be used to ensure appropriate REDD+

implementation. Immediate and sustained investment in building governance capacity will help ensure that REDD+ funds, once flowing, have a much better chance of reaching where they are needed and achieving genuine results for the climate. Further, law enforcement agencies, both national and international, should be encouraged to contribute their expertise to the design and implementation of REDD+ programmes.

### KEY RECOMMENDATIONS

It is essential that REDD+ countries undertake reforms and capacity building to address their governance challenges and weaknesses, and are supported to do so.

#### REDD+ COUNTRIES SHOULD UNDERTAKE THE FOLLOWING:

1. Incorporate mandatory **auditing of REDD+ financial flows** and transparent and publicly available registries of REDD+ finance and activities into national monitoring systems for REDD+.
2. **Include civil society** in policymaking and oversight of national REDD+ processes, for example through a formal role such as seats within a multi-stakeholder body responsible for the design and implementation of REDD+.
3. Establish broad-based **independent monitoring** capable of assessing performance and verifying governance reform. Importantly, ensure that carbon measurement methodologies and calculations are designed to be difficult to manipulate and easy to verify objectively.
4. **Build capacities at all levels**, including among civil society, within government institutions and in forest law enforcement to ensure all stakeholders can engage effectively in REDD+ design and implementation. For law enforcement agencies this includes improving international coordination, with neighbouring and regional countries as well as with timber importing countries.
5. Undertake **law reform**, with the law enforcement and regulatory community engaged in the design of national REDD+ programmes to avoid loopholes, prevent unanticipated illegal activity, and ensure REDD+ is practical and enforceable.
6. Establish independent **conflict resolution mechanisms** that are available at national and international level to hear complaints and address conflicts that arise between governments, communities and other stakeholders.

#### TO SUPPORT THESE MEASURES, THE DONOR COMMUNITY SHOULD:

1. Provide adequate **financial and technical support** to REDD+ countries to build law enforcement capacities and improve governance, making use of benchmarks to enable monitoring of improvements.
2. **Promote reforms in law enforcement and governance**, and consider other ways that existing aid and funding programmes can be used to ensure appropriate REDD+ implementation.
3. **Address their own role in encouraging corruption and illegal behaviour**, including eliminating the import of illegally sourced timber and prosecuting their own citizens who offer bribes to government officials abroad.

# Forests & Climate Change

For the first time in history, forests are near the top of the global political agenda. This unprecedented interest comes from a widespread understanding that protecting existing forests, and indeed regenerating lost or degraded forests, are essential to combat climate change.

Forests have a dual significance for climate change: they act as the planet's green lungs by absorbing carbon dioxide (CO<sub>2</sub>) out of the atmosphere and they store that carbon both above ground and in the soil. This carbon is stored in the biomass for as long as the forest remains standing. When forests are destroyed or degraded, they release large amounts of this carbon back into the atmosphere as carbon dioxide. Forest loss contributes as much as 12-15% of annual greenhouse gas emissions, more than the entire global transportation sector.<sup>4</sup> When forest and peat-land degradation are included, emissions from deforestation and forest degradation are estimated to contribute up to 20% of total global emissions.<sup>5</sup> It will be practically impossible to prevent irreversible climate change without protecting the remaining forests from further deforestation or degradation.

In addition, forests are a reservoir of biodiversity, providing habitat for more than two-thirds of the world's terrestrial species<sup>6</sup> as well as providing livelihoods for many forest-dependent communities. A billion people live in or depend

on forests for their fuel, food and medicines; the poorer the people, the greater their dependency. Over 90 percent of those who live below the dollar a day poverty line depend fully or in part on forest products for their livelihoods.<sup>7</sup>

## What is REDD+?

In December 2010 the United Nations Climate Change Conference meeting in Cancun, Mexico, agreed to establish an international mechanism referred to as "REDD+" (Reducing Emissions from Deforestation and forest Degradation in developing countries).<sup>8</sup>

The REDD+ mechanism is intended to provide compensation to governments, communities, companies or individuals in developing countries if they take action to reduce emissions from forest loss below an established reference level. Its aim is to provide financial incentives that make forests worth more standing than harvested or converted to other land uses. The details are still to be worked out, although it is anticipated that the legal norms and guidelines applicable to REDD+ will be developed in the years ahead. This development will take place through work on the ground, supported by parallel processes under the World Bank's Forest Carbon



*Systemic corruption has depleted large areas of the world's tropical forests. REDD+ programmes must reverse this trend by fixing enormous governance problems if they are to protect what remains, such as this area in Cambodia.*

Partnership Facility and the United Nations Collaborative Programme on REDD+, and will be subsequently codified into international law through further decisions under the United Nations Framework Convention on Climate Change.

It is anticipated that significant amounts of finance (estimated at between US\$17-33 billion per year) may be transferred under this REDD+ mechanism to forest-rich developing countries.<sup>9</sup> Neither the source of long-term financing of REDD+ nor the mechanisms by which it will be disbursed have been laid out, but they are expected to entail a combination of donor finance through public funds and private finance. In the short term, fast track finance for preparatory activities and pilot projects (estimated at US\$5 billion) is already starting to flow. Various options to leverage private finance are being explored, including generating forest-related credits to trade on the carbon markets.

The role of the carbon markets to finance REDD+, however, is controversial. Proponents consider them the only practical means of providing the scale of finance needed for REDD+ to succeed. Opponents, meanwhile, consider that they involve risks that undermine climate mitigation while providing a means for developed countries to escape responsibility for reducing their own domestic emissions.

### **With the right national and international frameworks, REDD+ is an unprecedented opportunity**

REDD+ funds could be used to implement policies to control the drivers of deforestation and degradation and to compensate governments and forest

## **SYSTEMATIC CORRUPTION IN THE FOREST SECTOR**

Many factors make the forest sector particularly vulnerable to corruption and illegality: tropical forests are often situated in developing countries with weak governance or systemic corruption, they cover remote and often huge areas, making them hard to monitor, and land tenure can be unclear and insecure, increasing the opportunities for land grabbing. The worst cases of corruption in the forest sector are seen when high-level corruption is present in the state structure itself, with elites and officials siphoning off natural resource revenue.

### **Cambodia**

In the aftermath of Cambodia's civil war both the Khmer Rouge and the Phnom Penh government used logging to fund military campaigns. The war ended in 1998, but the destruction of Cambodia's forests through illegal logging and associated corruption continues. Global Witness' 15 years of investigations in Cambodia have exposed how revenue generated from logging was, after the fall of the Khmer Rouge, the primary driver for a corrupt elite that generates much of its wealth via the seizure of public assets. This corruption has severely depleted Cambodia's forests, to the point that the elites have now diversified their natural resource exploitation to land, fisheries, oil, gas and minerals. With natural resource wealth in private hands, Cambodia remains one of the world's poorest countries, heavily dependent on foreign aid.<sup>12</sup>

Corruption remains widespread and endemic within the country's forest sector. In one investigation in 2007, Global Witness found that Cambodia's army, military police, police and Forest Administration were all heavily involved in corruption and illegal logging, including one army brigade responsible for the transport of illegal timber throughout the country and out to Vietnam. Global Witness found that members of Cambodia's most powerful logging syndicate, led by relatives of Prime Minister Hun Sen and other senior officials, were implicated in:

- large-scale illegal logging in the Prey Long Forest, the largest lowland evergreen forest in mainland Southeast Asia, yielding US\$13 million annually;
- use of fraudulent transportation permits that may have cost the Cambodian treasury over a million dollars in lost tax revenues;
- the export to China of millions of dollars-worth of plywood on which no taxes appear to have been paid; and,
- the apparent abduction and detention of the managing director of a logging company, plus a reported attempt to kill two community forest activists who protested against the felling of resin trees.

communities for foregoing income available from logging or converting forests to other uses. With the right international decisions, sufficient financial and technical support, competent governance and safeguards, and the right national structures for implementation and monitoring, this system could meet its ambitious aims: to protect natural forest ecosystems and biodiversity, address climate change, support environmental integrity, protect the legal and political rights of indigenous peoples and forest-dependent communities and, importantly, provide appropriate development opportunities.

The reality on the ground in REDD+ countries, however, does little to inspire confidence. The international donor community has already spent tens of billions of US dollars over the last 20 years in an attempt to reduce deforestation and harness forests for economic growth in developing countries.<sup>10</sup> But despite these efforts,

FAO estimates that 130,000 km<sup>2</sup> of the world's forests are converted or lost every year, mainly as a result of clearing tropical forests.<sup>11</sup> These past attempts to tackle forest loss in developing countries have failed mostly due to demand for goods that require forest destruction (cleared land, timber, agricultural products, minerals and oil) overriding policies intended to protect forest areas, as well as policy failures, weak governance and perverse incentives that provide opportunities for criminal exploitation and corruption. Systemic corruption and illegality are widespread in the forest sector, as Global Witness has uncovered over the last 15 years in countries such as Cambodia (see below). REDD+ represents the best chance yet to reverse this trend, but only if countries have an effective governance structure in place, with proper safeguards to track the money and ensure REDD+ is properly implemented on the ground and law enforcement agencies engaged to address and minimise the risk of criminal involvement in REDD+.

## Indonesia

Enormous levels of corruption have been documented in Indonesia, home to some of the world's most valuable tropical forests. An audit in 1999 showed that the Indonesian Reforestation Fund was missing US\$5.2 billion in public funds, approximately half of which had disappeared after entering the Ministry of Forestry's accounts.<sup>13</sup>

Between 1994 and 1998 the Ministry disbursed US\$600 million from the Reforestation Fund to finance non-forestry projects linked to political elites. It is likely that some of the Reforestation Fund money went into funding the Indonesian delegation to the 1997 South East Asian Games (US\$15 million), to the state aircraft company headed by President Soeharto associate (and later President) B. J. Habibie (US\$190 million), and to PT Gatari Hutama Air Service, owned by President Soeharto's youngest son, to finance a helicopter charter service for the Ministry of Forestry and refurbishment of the company's helicopters (US\$10 million).

When the Ministry of Forestry's funds were spent on legitimate forestry activities, corruption clearly played a part in their distribution: the 1999 audit found that the Ministry distributed a significant portion of its funds and forest conversion licences to companies with close political ties, allowing a few well-connected actors to capture sizeable forest rents.

## Papua New Guinea

The Barnett inquiry, a two year government-appointed commission of inquiry into the operations of logging companies in Papua New Guinea, found in 1989 that not a single company investigated was satisfactorily fulfilling the conditions of its operation. All but one of the logging companies examined during the inquiry used measures including transfer pricing, species misidentification, under measurement and third country invoicing to achieve unfairly low prices for Papua New Guinea logs.<sup>14</sup>

The inquiry concluded that the Papua New Guinea forestry industry was riddled with corruption, with widespread bribery of politicians at both national and provincial levels. An interim report during the inquiry stated:

*It would be fair to say, of some of the companies, that they are now roaming the countryside with the self-assurance of robber barons; bribing politicians and leaders, creating social disharmony and ignoring laws in order to gain access to, rip out, and export the last remnants of the province's valuable timber.*<sup>15</sup>

The country was said to lose half its potential national income through unmonitored logging exports.<sup>16</sup>

# Where is REDD+ vulnerable to criminal exploitation?

There are many potential opportunities for corrupt government officials and criminals to engage in REDD+. Poor regulation and oversight within the forest sector provides the legal loopholes that allow criminal activity (such as illegal logging, fraud and corruption) to continue in developing countries. Unless strong laws are enacted, supported by effective law enforcement, there is a substantial risk that criminal elements will undermine REDD+ and prevent it from achieving its overall objectives. In Papua New Guinea reports have already emerged of fraudulent million-dollar deals in forest carbon credits linked to REDD+ even before the mechanism is fully established (see page 10).

Many of the types of potential criminal or illegal activities will already be familiar, including

- Fraud;
- Falsification and forgery of documents;
- Corruption;
- Bribing officials;
- Money laundering; and,
- Tax evasion.

Each of these activities will have particular characteristics in the REDD+ context. This briefing

**From a criminal perspective, environmental crime is often seen to be a high profit, but low risk crime. This low risk status can be the result of inadequate detection due to a lack of environmental law enforcement expertise and resources, a weak legal framework in combating this type of crime, or ineffective deterrence of potential criminals due to weak penalties for those convicted.**

*Interpol Environmental Crime Programme: Strategic Plan 2011-2013, p. 5*

paper examines the following ways in which illegal activities such as those listed above may manifest themselves in various areas of the forest sector:

- (i) Illegal logging;
- (ii) Illegal land grabs;
- (iii) Ownership of and trading in “carbon rights”;
- (iv) Poor regulation of a carbon market for REDD+;
- (v) Theft and misappropriation of REDD+ funds; and,
- (vi) Manipulating the measurements for the amount of carbon stored in forests.

## Illegal logging

For countries to implement REDD+ effectively it is vital that they have the capacity to monitor and manage their forest resources. The existence of illegal logging in many REDD+ countries is representative of the weak forest governance in those countries and the difficulties they will have in implementing REDD+.

Illegal logging risks undermining REDD+ and preventing it from achieving its overall objective of protecting forests. However, there are considerable challenges in tackling illegal logging, not least because it often takes place in forests that are remote and difficult to monitor. Further, unclear forestry laws can lead to uncertainty and provide legal loopholes that allow illegal and unsustainable logging to continue. Addressing illegal logging requires, therefore, a multi-pronged approach, clarifying and reforming forest laws; building capacity of law enforcement agencies; and improving monitoring, regulation and oversight of the forest sector.

Given the clandestine nature of illegal logging, exact figures are difficult to estimate and may vary. However, the following data suggests the problem is extensive and significant:

- According to Interpol's National Central Bureau in Rome, estimates of between 20 and 50% of all timber products worldwide are thought to be of illegal origin.<sup>17</sup>

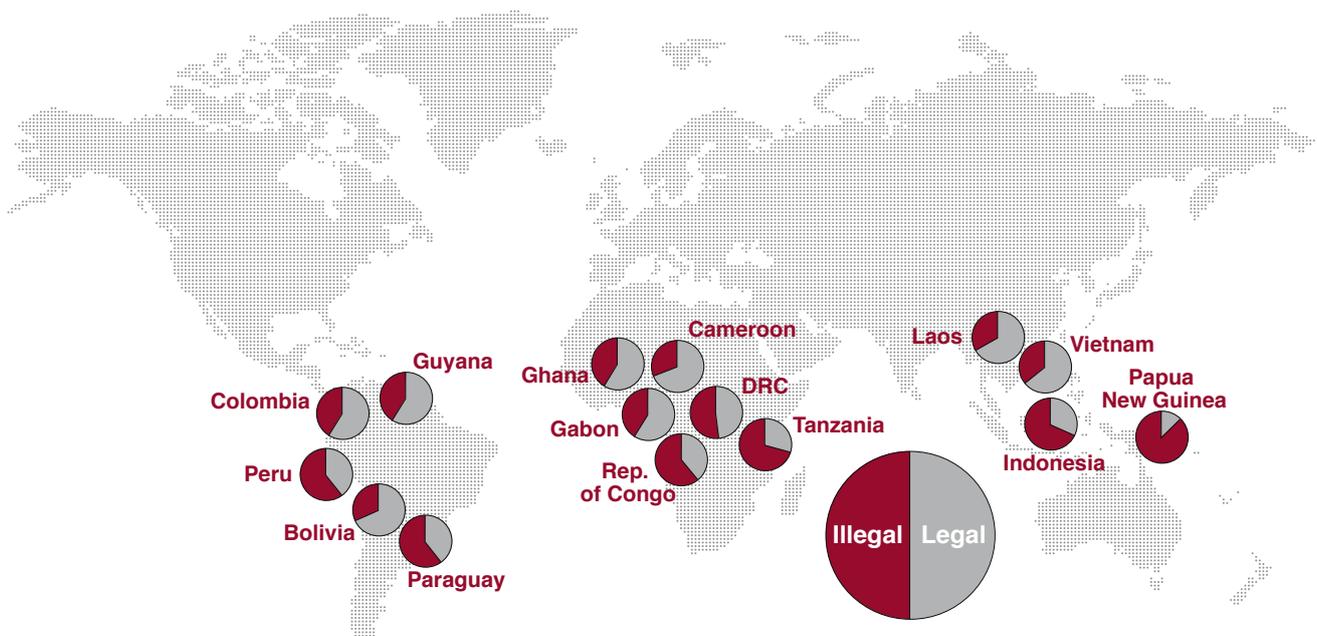
- Recent research for Chatham House suggests that up to 72% of all timber harvested in the Brazilian Amazon is from illegal logging. In Bolivia and Peru the figure is over 60% and in Malaysia 25%.<sup>18</sup>
- The World Bank estimates the economic loss to developing countries from illegal trade in timber at more than US\$10 billion per year, and losses due to tax evasion and evaded royalties on legally sanctioned logging at approximately US\$5 billion per year.<sup>19</sup>

For REDD+ to work properly, it is vital that forested countries address any illegal logging going on within their borders. Proper implementation of REDD+ must also necessarily involve stricter regulation of the logging industry to both improve existing logging practices and limit the overall amount and scale of logging taking place in natural forests. Increased regulation, however, puts a correspondingly increased burden on forest law enforcement agencies to enforce those rules. If sufficient resources are not invested in law enforcement, leaving forestry officials over-stretched, it is anticipated we will see an increasing amount of illegal logging, particularly amongst those logging operations that are already operating on the margins of the law.

At the other end of the supply chain, timber importing countries have an obligation to improve their own law enforcement to better detect and stop illegal timber imports and ensure their law enforcement agencies work with counterparts in timber producing countries to tackle the international trade in illegal timber. This may include the development and transfer of new technologies to track timber from its source and can be supported by other efforts to reduce timber demand such as the US Lacey Act, which places criminal liability on the importers of illegally sourced timber.

Another such effort is the European Commission's Forest Law Enforcement, Governance and Trade (FLEGT) initiative, set up in 2003.<sup>20</sup> FLEGT is aimed at ensuring that only legally harvested timber is imported into the European Union from participating timber producing countries.<sup>21</sup> Voluntary Partnership Agreements signed between the EU and a timber producing country commit each party in their bilateral trade to require timber and wood products to be legally verified. This includes obligations on both parties to strengthen governance and law enforcement, and support from the EU to timber-producing countries to do so. Key to the FLEGT initiative is the recognition that tackling poor forest governance

## ESTIMATED PROPORTION OF ILLEGAL AND LEGAL TIMBER EXPORTS FROM 15 REDD+ COUNTRIES IN 2007 (WORLD BANK)



Source: based on estimates from <http://www.globaltimber.org.uk/IllegalTimberPercentages.doc> except Colombia (World Bank estimate)

**The significant proportion of illegal timber exports from many of the targeted REDD+ countries is an indicator of weak forest governance in those countries, and risks seriously undermining their governments' efforts to protect their forests.**

requires donors not only to support developing countries to improve their own policies and practice but also to tackle the drivers of poor governance that stem from their own countries – in this case laws and enforcement to prevent the import of illegally sourced timber.

REDD+ donor and recipient countries should build on FLEGT and other existing efforts to address governance and corruption risks in the forest sector, in particular those risks that will be created by REDD+ itself as detailed in this paper. Although REDD+ has a much broader remit than illegal logging and the trade in illegally sourced timber, FLEGT nevertheless represents an important first step in international cooperation. It is important, therefore, that actions supported through FLEGT be coordinated with the governance reforms also needed to implement REDD+.

### Illegal land grabs

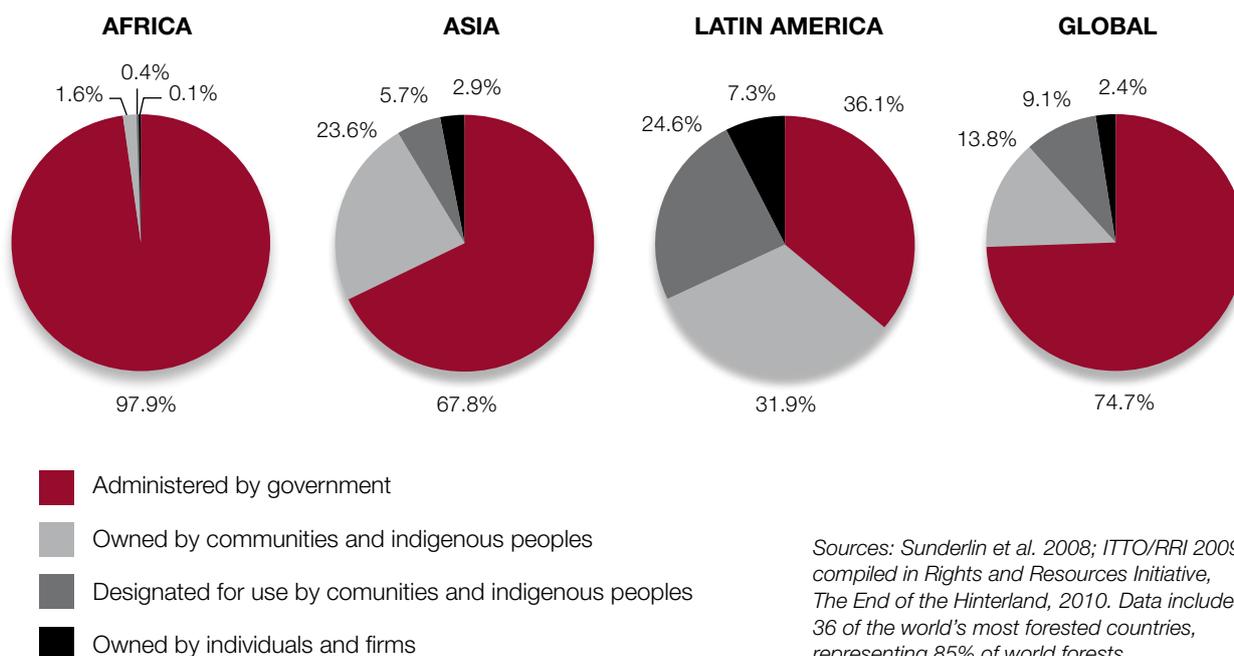
Billions of dollars are expected to flow into REDD+ countries to protect their forests, with a significant proportion of that money expected to be paid to those who own the forests and manage them to reduce forest carbon loss or enhance forest carbon stocks.

Forests, and in particular the carbon they store, have become valuable commodities. Consequently it can be anticipated that there will be many competing interests fighting over ownership of that resource.

The most widely held (although not universal) view is that the owner of the forested land will also own the carbon stored in the forest's biomass. In this case, securing land tenure is the entry point to access the potential revenue streams that may follow the implementation of REDD+. Criminals looking to exploit REDD+ can, therefore, be expected to make fraudulent or illegal land grabs to secure forested land. Unless land tenure is addressed urgently, REDD+ will be particularly vulnerable to this form of exploitation, since in many REDD+ countries land tenure is unclear and often subject to dispute. Further, land title documents are often poorly maintained or not registered accurately.

As shown in the diagram below, some three-quarters of forested land globally is classified as public land and administered by government. This means it is controlled by relatively few politicians and civil servants, who given their position may wield power to allocate that land in return for bribes.

## FOREST LAND TENURE BY REGION, 2008



Sources: Sunderlin et al. 2008; ITTO/RRI 2009, compiled in Rights and Resources Initiative, *The End of the Hinterland*, 2010. Data includes 36 of the world's most forested countries, representing 85% of world forests.

**Land tenure in many forested areas is still unresolved and remains classified as simply “administered by government”. Failure to clarify tenure over this land increases the risks of illegal land grabs or fraudulent claims to land ownership.**

Forest dependent people are particularly vulnerable to corrupt officials or fraudsters claiming ownership over such forest and theft of REDD+ money otherwise intended for social development. In many parts of the developing world, “traditional ownership” of land by the people who live in or around the forest is based on their historical occupation (often since time immemorial). This form of land title may not be recognised under the country’s domestic legal system, making these people particularly vulnerable to competing land claims or illegal land grabs. Further, even where traditional ownership is recognised under the law, many indigenous peoples and forest dwelling communities may nevertheless have little experience in formally claiming or registering legal title to their land. This makes their land ownership unclear and provides opportunity for fraudulent claims to that land, using forged documents or bribery of government officials. It is estimated that in 2008 most of the two billion persons acknowledged as customary land occupants around the world were not recognised as owners of that land under national law.<sup>22</sup>

### Ownership of and trading in “carbon rights”

To add an extra layer of complexity to REDD+, it is anticipated that in some forest rich countries their legal systems will attempt to distinguish between ownership of land and ownership of the carbon in the forest. In such a scenario it would be possible for one person (or group of people) to own the forest land, while someone else owns (and can trade in) the forest carbon. Separating carbon rights from land ownership, however, carries with it a number of significant risks. Forest carbon becomes a commodity that can be traded, even though that commodity is intangible and nothing more than a “legal fiction”, which is poorly understood by many sellers, traders and buyers alike.

Fraud in the trade of forest carbon can be easy to conceal, and difficult to monitor and control. The land may be owned by one person, the carbon by another, and a third person may have an agreement to enter the land to manage the forest. Add in a number of sub-contractors and transfer some of these legal rights (and their associated profits) off-shore and the situation can get quite complex, making it very difficult to detect forgery or fraud. The intangible nature of carbon rights means there is no physical indication that someone (other than the land occupier) holds the carbon interest, beyond a piece of paper or record in a government register.

This raises the following risks:

- (i) It would be difficult to prevent the owner of the carbon rights from selling the same carbon over and over to multiple parties – a practice known as “double-counting”. Double-counting can be easier to get away with when carbon credits are sold through several foreign exchanges with different regulations and lax standards of monitoring or cross-checking between exchanges.
- (ii) If someone were to fraudulently claim ownership of the carbon rights in a particular forest, it is unlikely locally-based law enforcement officers or

## FOREST CARBON DEALS IN LIBERIA

Following an investigation by Global Witness into a potential deal relating to a proposed carbon concession in Liberia, officers from the City of London Police’s Overseas Anti-Corruption Unit (OACU) arrested the CEO of a UK company in June 2010.

Global Witness had been examining the proposed deal for over a year prior to this. In 2007, the company approached the Government of Liberia to negotiate the allocation of a 400,000 hectare forest carbon concession - a fifth of Liberia’s rainforest in order to sell carbon credits to clients who want to offset their own carbon emissions. Global Witness raised serious concerns about the deal with the company, including their relative inexperience and the lack of consultation, effective safeguards or monitoring mechanisms.

Investigations into this case in Liberia have resulted in several dismissals of government officials and a renewed commitment to tackling corruption from President Ellen Jonson Sirleaf.

The CEO of the company was released on police bail and has not yet been charged with any offence.

Without specific measures to limit corruption, Liberia will struggle to implement its REDD+ preparation programme, for which it has already been allocated nearly US\$10 million from international donors.

the land owners would necessarily detect such fraud, since unless they are regularly monitoring the government carbon registry (assuming one even exists) they are unlikely even to be aware that ownership in the carbon has changed hands.

- (iii) Local forest communities with high rates of illiteracy, or who are otherwise vulnerable, may be easily manipulated to give up their carbon rights for substantially less than their true value. The concept of ownership of the carbon (as separate from ownership of the forest) is an arbitrary “legal fiction” that is unlikely to be understood or valued properly by those local communities.

Fraud of these types will become attractive to criminals as levels of REDD+ finance offered by international banks and donors increase. Such fraud is also facilitated by government corruption that allows fraudsters to register forged documents concerning carbon ownership.

Further, if the carbon sequestering potential of a forest can be sold or traded independently of the land itself, this raises questions of whether the owner of the carbon has the right to force the landowner to manage the forest in a certain way. Without safeguards and clarity regarding land ownership and carbon rights, REDD+ may result in forest communities and

indigenous peoples being evicted or disenfranchised by big business interests, with unwelcome social consequences.

### **Have fraudulent claims to forest carbon, fuelled by promises of REDD+ funds, already begun?**

Millions of dollars are already flowing for REDD+ preparation and pilot projects, part of the US\$5 billion of “fast-start finance” already pledged by donor countries. In light of this money and in anticipation of greater sums in the future, there are already a number of reports of persons engaging in fraudulent trading in forest carbon. One unnamed Interpol member country is currently investigating a number of transactions in which people have purchased forests with boundaries that either do not exist or are poorly marked.<sup>23</sup> According to Interpol reports there is evidence that documents have been forged and bribes paid to facilitate the process. The forest is sold on to other companies and its carbon then traded. Authorities estimate the value of the fraud at US\$80 million.<sup>24</sup>

These sorts of cases rely on forged documents, using forest areas that are remote, with often unclear records as to ownership. As the value of carbon increases in the new global climate change market, this sort of fraudulent activity is expected to rise.

## **REPORTS OF CORRUPTION AND “CARBON COWBOYS” IN PAPUA NEW GUINEA**

In 2009 several media and NGO reports alleged that Papua New Guinea’s Office of Climate Change was making million-dollar deals by claiming ownership of forest carbon and trading it with foreign companies, without having any legal right to do so.<sup>25</sup>

Documents obtained by The Economist suggest that in 2008 the Office of Climate Change (OCC) issued REDD+ credits for one million tonnes of carbon, supposedly under the proposed REDD+ mechanism. In a statement from the prime minister’s office it was confirmed that “the OCC has no legal mandate to issue any forest carbon credits, other than afforestation and reforestation through the Clean Development Mechanism, nor is there currently any REDD asset in existence due to a lack of a regulatory framework for forest carbon in Papua New Guinea”.<sup>26</sup>

In July 2009 various reports suggested that the head of Papua New Guinea’s Office of Climate Change had been suspended amid allegations of improper deals involving carbon credits,<sup>27</sup> although this has not been confirmed by the OCC and it remains unclear who the current head of the office is.<sup>28</sup>

Throughout 2009 there were also a number of reports of “carbon cowboys” operating in Papua New Guinea, accused of manipulating local forest owners to surrender their carbon rights. These reports included accounts of villagers being threatened at gunpoint to hand over the carbon rights in their forests.<sup>29</sup>

## Poor regulation of a carbon market for REDD+

Although funding for REDD+ is likely to come from many different sources, one option that receives a lot of attention is to link REDD+ to carbon markets. The use of carbon markets would add a significant extra layer of governance risk. The complexity of carbon trading systems makes them more difficult to regulate, and therefore easier to manipulate and game. It is estimated that in 2009 up to 90% of volumes traded in certain countries on the European carbon market were due to fraudulent activities, made easier due to poor legal regulation and the lack of any tangible asset behind the traded credits (see below). Of particular concern is that the current regulatory regimes in many REDD+ countries are weak, making any potential forest carbon market established in those countries particularly vulnerable to exploitation by organised crime, including tax fraud and money laundering.

Since carbon markets are expected to generate significant funding for REDD+, the risk of organised criminal involvement is amplified. Carbon markets are also a cross border issue, making law enforcement efforts outside their own domestic legal jurisdiction more complicated and difficult. Carbon credits may be generated in one country, sold to persons in other countries and moved through several carbon exchanges before reaching the hands of the final owner. The owners of the forest land, the carbon traders and brokers, and companies that own and sell the carbon credits may be based in different countries. In addition, profits accruing from REDD+ activities may be invested in tax havens or re-circulated into other (legal or illegal) enterprises.

The more countries involved, the harder it is to trace the original forest generating the carbon credits, and the easier it is to take advantage of any legal loopholes or inconsistent regulatory frameworks that are created by the lack of harmonization between different national legislation. Further, any inconsistency between the

## CAROUSEL FRAUD IN THE EUROPEAN UNION EMISSIONS TRADING SCHEME

Carousel fraud is the theft of value added tax (VAT) by organised criminal gangs who import goods from a jurisdiction that is VAT-free (such as between member states of the European Union) and then sell those goods charging the sale price plus VAT. The goods and the VAT may pass through a number of companies and jurisdictions, with each acting as a “buffer” to blur the link between the final VAT that is owed to the relevant government authority and the original importer, who then vanishes without paying the tax. This form of tax fraud has been widely used by criminals for mobile phones or computer chips, as these are of high value but small and easily shipped across borders. With carbon, however, such fraud is even easier as no goods have to be physically moved across jurisdictions.

In 2009 authorities began to observe high volumes of trade on France’s BlueNext carbon exchange. Subsequent investigations revealed the existence of carousel fraud relating to value-added tax on trades of European Union carbon dioxide allowances. The European police agency, Europol, subsequently found evidence of huge volumes of fraud in the EU Emissions Trading Scheme (EU ETS), amounting to a loss of around 5 billion euros for several national tax revenues over just 18 months. It was estimated that in some countries up to 90% of the whole market volume was caused by fraudulent activities.<sup>30</sup>

This experience showed that an emissions trading scheme is particularly vulnerable to exploitation by criminals committing carousel fraud when the market is poorly regulated. While EU-wide legislation could have removed such loopholes, there was no agreement on the best approach. France has exempted carbon permits from VAT, while the UK government has applied a zero VAT rate to carbon credits. The Netherlands has introduced rules requiring the carbon permit buyer rather than the seller to pay the tax, while Spain is still considering what to do.

The risk of loopholes and exploitation will increase if the European Union considers linking its emissions trading system with other markets, making permits from those different markets “fungible” (exchangeable) on the EU ETS. This will make it harder for European regulators to close loopholes for fraudsters when faced with large volumes of permits exchanged between multiple emissions trading systems, each subject to different legal jurisdictions. Trade in forest carbon credits provides a further market that is potentially susceptible to this and other types of fraud, since the regulatory regimes in many REDD+ countries are weak, making it difficult to track individual forest carbon credits (and any associated taxes) from the forest right through until those credits are “retired”.

licensing rules for carbon traders or between the regulations across different jurisdictions is likely to see businesses migrate to the jurisdiction with the least stringent regulations (similar to “tax” or “corporate” havens that impose minimal legal or regulatory requirements on the business).

### Theft and misappropriation of REDD+ funds

**Investors should be looking very carefully at the financial governance conditions in the countries where they will be investing their funds. ...[M]any countries with tropical forests have long track records of mismanaging public financial resources, particularly in the forestry sector.**

Christopher Barr

*Lead author of CIFOR report, Financial governance and Indonesia's Reforestation Fund during the Soeharto and post-Soeharto periods, 1989-2009: a political economic analysis of lessons for REDD+, quoted in Jakarta Globe, 12 January 2010*

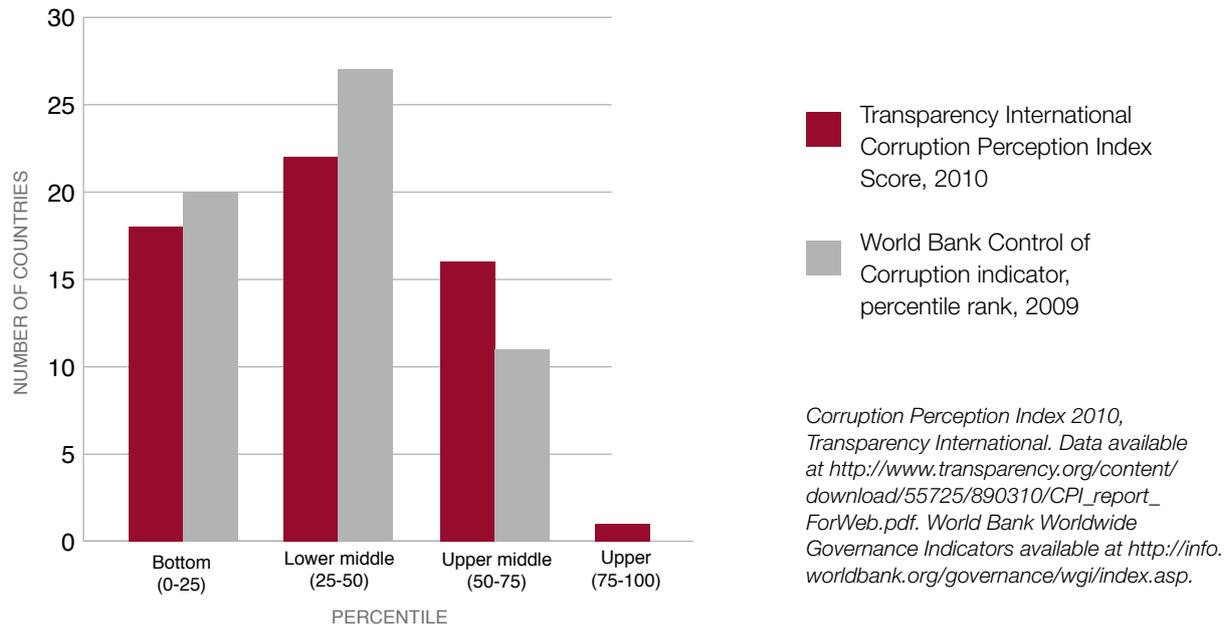
Significant funds are expected to flow into countries once the REDD+ mechanism has been implemented. Many REDD+ countries, however, suffer from weak governance, including endemic corruption and ineffective law enforcement, which has led to widespread illegality in the forest sector. Poor record keeping and lack of transparency over financial flows increase the risk of misappropriation of REDD+ funds or the diversion of such funds to other projects according to the government's own political agenda.

When measured against internationally accepted corruption and governance indicators, REDD+ countries often rank amongst the worst. Over 80 percent of countries currently receiving REDD+ funds through the Forest Carbon Partnership Facility, UN-REDD or bilateral deals fall into the bottom half of countries assessed for control of corruption by the World Bank.<sup>31</sup> Only Costa Rica reaches the top 25% of all countries ranked by Transparency International's Corruption Perception Index, and no REDD+ country finds itself in the top quartile for the World Bank's control of corruption indicator. Consequently the risks of inequitable distribution, elite capture, misappropriation of funds, bribery and carbon crime are high. At the same time, weak governance will provide new opportunities for criminal activities, including theft and misappropriation of REDD+ funds and eventually the involvement of organised crime.



Law enforcement authorities such as these in Cameroon's Eastern Province will need significant capacity building and extra resources to deal with the new and more complex forms of illegality expected to be brought about by REDD+.

## GOVERNANCE INDICATORS FOR 59 REDD+ RECIPIENT COUNTRIES



The 59 countries selected are those currently receiving REDD+ funding through the Forest Carbon Partnership Facility, the UN-REDD programme, the Forest Investment Program and/or bilateral REDD+ deals as reported to the Voluntary REDD+ Database of the REDD+ Partnership. (See <http://reddplusdatabase.org/>)

### The destinations for REDD+ finance are often countries with particularly weak governance and high corruption risks.

Poor law enforcement and the levels of illegality in the timber industry indicate that many of these countries will be unprepared to deal with the challenges such crimes will present.

Unless mechanisms are established to ensure these financial flows are transparent and subject to independent oversight and audit, there is a significant risk that funds may be misallocated or siphoned off as “commissions” or bribes, with consequent impacts on the effectiveness of REDD+ funding and very little reaching the local communities who should rightly be recognised as the owners of the forest.

It is also conceivable that governance weaknesses could allow powerful elites within REDD+ countries to control or influence the government agencies responsible for selecting and implementing REDD+ projects. In particular, their ability to influence the validation process for REDD+ could allow certain elites to channel REDD+ payments to their own favoured projects over other, perhaps more worthy, projects. In some countries, it is conceivable that political pressure or bribery could be used to persuade the relevant government agencies to approve REDD+ projects that do not exist or are never

actually carried out, or result in REDD+ payments for protecting forest areas that are, in fact, not under any immediate threat.<sup>32</sup>

### Manipulating the measurements for carbon stored in the forest

It is anticipated that the ultimate aim of the REDD+ mechanism will be to pay money for performance. In effect, a country will receive funding depending upon its ability to show it has reduced its deforestation or forest degradation rates below a reference level or a baseline. Overinflating these reference levels or baselines through manipulating the underlying carbon data could therefore result in greater allocation of REDD+ funding. To avoid this, such a payment mechanism requires accurate historical forest data to assess the state of the country's forest, from which a reliable reference level or baseline can be set. In many REDD+ countries, however, lack of resources and capacity and lack of political support has meant reliable historical data simply does not exist. In particular, in many REDD+ countries there is a lack of useful satellite images and poor understanding of vegetation cover type or soil maps. In addition, there

exists dispersed and incomparable information and inconsistency between the types of measurements and the monitoring methods used.<sup>33</sup>

In 2011 Norway had to revise the baseline for its US\$250 million REDD+ bilateral deal with Guyana, set only two years previously, by nearly 40%. This was due to difficulties in obtaining accurate data on annual deforestation rates in the country.<sup>34</sup> Original estimates of 0.1 to 0.4% were proven to be over-inflated after a specially commissioned report put annual deforestation between 1990-2009 at just 0.02%. The original baseline would have allowed Guyana to increase its annual deforestation rate nearly twenty-fold and still remain within the agreed limits for payment.<sup>35</sup>

The REDD+ mechanism also requires countries to measure changes over time in forest cover and forest carbon. Performance-based payments under REDD+ are then expected to be based on changes in forest carbon relative to the reference level or baseline. However, measuring carbon fluxes and changes in forest carbon stocks is difficult to do with any great accuracy. Remote sensing, such as satellite images, provides useful data, but reliable measurements also require field-based data collection, or “ground truthing”, to verify the analysis.<sup>36</sup> For the REDD+ mechanism to work effectively with such performance-based payments, the country must, therefore, have in place effective institutions for the measurement, reporting and verification of its forest carbon stocks.

As things currently stand, however, many REDD+ countries lack that institutional capacity. This undermines their ability to provide reliable measurements of forest carbon. A recent review of forest carbon monitoring capacity among 99 developing countries found:

- The majority of countries had only limited ability to provide complete and accurate estimates of their greenhouse gas emissions and forest loss;
- Less than 20% of those countries had submitted a completed inventory of greenhouse gas emissions; and,
- Only 3 out of the 99 countries had what could be considered “very good” capacity to monitor forest area changes and to provide forest inventories.<sup>37</sup>

It is conceivable that powerful elites within REDD+ countries may take advantage of this weak institutional capacity and manipulate the measurements of forest carbon to influence how much and where payments are allocated.

The carbon benefits of a REDD+ project can be over-estimated in a number of ways. The data can be intentionally manipulated or misreported. More subtly, those doing the measurements can skew their analysis through the selection of methodologies for measuring key variables, the number and selection of sites for collecting field-based data, and the assumptions factored into the calculations.<sup>38</sup>

A lack of reliable historical data and poor institutional capacity to collect accurate data in the future provides ample opportunity for those with vested interests to manipulate forest carbon measurements to their own advantage. Unfortunately, the REDD+ mechanism provides a perverse incentive to do just this, since a baseline using substantially overestimated historical forest data and inaccurate measurements of changes in forest carbon stock could potentially lead to a country being over compensated for emissions reductions greater than those actually achieved.

**Often overlooked is the fact that building capacity for forest monitoring and carbon accounting is not simply a technical process. In many contexts it is also a political challenge for government forest management agencies. Indeed, the disorganised and highly opaque state of forestry statistics in many REDD+ countries is symptomatic of more fundamental problems with how forests are administered. By keeping forest monitoring and reporting activities to a minimum, state forestry bureaucracies can evade accountability for widespread corruption, illegal logging and other governance problems. REDD+ efforts to build capacity for forest carbon monitoring could be undermined by bureaucratic resistance on the part of state forestry institutions.**

Christopher Barr, Director, Woods & Wayside International (former senior scientist at CIFOR)

*Barr, C. Governance risks for REDD+: How weak forest carbon accounting can create opportunities for corruption and fraud, published in Transparency International's Global Corruption Report: Climate Change, 2011.*



Global Witness 2007

*Boosting countries' ability to measure forest carbon reliably will help prevent powerful groups from manipulating measurements to access or increase REDD+ payments.*

To reduce the risks of biased forest carbon measurements, the measurement process must be transparent and easily verifiable, including selecting indicators or types of data that are difficult to manipulate and methodologies that are transparent, clearly defined and easy to objectively verify. Further, independent third party auditors should verify the measurements. From a law enforcement perspective, however, there is of course the risk that those responsible for measuring or verifying deforestation and forest degradation rates may themselves be susceptible to bribes or collusion to manipulate the results. When REDD+ projects include state elites and powerful business interests, auditing agencies or individual staff may be subject to political pressure, or offered bribes to verify carbon measurements that show benefits higher than the project actually achieves.

Therefore, unless the measurement process is easily verifiable, transparent, subject to truly independent oversight and policed by law enforcement, there is a significant risk that persons may submit fraudulent data to claim emissions reductions that do not really exist.

The Kyoto Protocol's Clean Development Mechanism (CDM) has already provided many examples of projects being funded more than they should have been or

where they should not have been funded at all. For example, there are several documented cases where CDM projects have been inappropriately validated by independent auditors.<sup>39</sup> There have been particular difficulties with verifying that a project is "additional", that is, that it would not have taken place without the availability of CDM funds. This is key to ensuring that funds create new projects and do not simply bankroll activities that should be paid for elsewhere. A UN official estimated in 2007 that 15–20 per cent of all CDM offset credits had been issued inappropriately due to inadequate findings of additionality.<sup>40</sup>

In 2008 and 2009 respectively the UN temporarily suspended two independent carbon-accounting organisations – Norwegian company Det Norske Veritas and Swiss firm SGS – because of inadequate oversight of their CDM audits and insufficient training and qualifications of their auditing staff.<sup>41</sup>

Global Witness continues to remain concerned over institutional arrangements under the Kyoto Protocol's CDM mechanism, whereby independent carbon-accounting agencies are employed and paid by the managers of the projects they are assessing, thereby creating a potential conflict of interest. Competition amongst agencies also provides an incentive to give a favourable project assessment to encourage future contracts with the same project manager.

# Recommendations

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To address these governance concerns, it is essential that REDD+ countries undertake reforms and capacity building to address their governance challenges and weaknesses, and are supported in doing so. An initial step would be to undertake a comprehensive and independent assessment of their governance to diagnose their financial and capacity building needs and determine the governance reforms necessary in the particular countries' own context.

**REDD+ RECIPIENT COUNTRIES SHOULD UNDERTAKE THE FOLLOWING:**

## 1. Establish transparent financial mechanisms and auditing tools

Monitoring systems for REDD+ should incorporate mandatory auditing of REDD+ financial flows and transparent and publicly available registries of REDD+ finance and activities. Lessons must be learned and applied from initiatives such as the Extractive Industries Transparency Initiative (EITI).<sup>42</sup> In addition, existing and emerging systems for auditing, such as corruption audits, participatory audits and performance audits, need to be analysed and the lessons learned applied to develop standards and guidelines for REDD+.

## 2. Include civil society in policymaking and oversight

Civil society groups, as representatives of the governed, play an important role in reforming and improving governance. REDD+ will only work if all relevant stakeholders in country are genuinely allowed to participate in the design and implementation of REDD+. To ensure participation, civil society will require a formal role such as seats within a multi-stakeholder REDD+ implementing body. Civil society oversight is also crucial for public accountability. This will necessitate an official role for civil society in the oversight of governance and law enforcement.

## 3. Establish independent monitoring

A strong governance regime also requires broad-based monitoring capable of assessing performance and verifying governance reforms. To build confidence and trust and to guard against vested interests, these monitoring systems should incorporate independent monitoring of REDD+ design and implementation, building on existing Independent Forest Monitoring practice.<sup>43</sup>

This can be achieved through the involvement of multiple institutions, including civil society groups and local government, each with an independent oversight role. For the process to have any legitimacy, civil society and all relevant stakeholders must play an active role in monitoring REDD+.

Further, to reduce the risks of forest carbon measurements being manipulated, the measurement process, methodologies and calculations must be transparent and easily verifiable, including use of indicators or types of data that are difficult to manipulate, clearly defined and easy to verify objectively. This can then be supported by independent third party oversight to verify the measurements and reduce the risk that persons may submit fraudulent data to claim emissions reductions that do not really exist.

## 4. Build capacities of groups needed to ensure effective REDD+ governance

**Civil society** REDD+ countries should undertake appropriate, targeted and sustained capacity building programmes for all stakeholders, particularly directed towards indigenous peoples and forest dependent communities, to ensure they can engage effectively in REDD+ design, implementation and oversight.

**Government institutions** Successful REDD+ programmes will require a concerted effort to strengthen government institutions, including building financial management capacity, capacity to ensure effective forest management, and capacity to measure, report and verify forest carbon.

Corruption within government institutions, including those responsible for implementing and monitoring REDD+, can also be tackled by institutional structures that promote transparency in government decision making and provide government officials with opportunities to receive adequate training and remuneration based on merit.

**Forest law enforcement** Effective forest law enforcement requires capacity building of institutions and personnel to ensure that law enforcement officers are adequately trained and resourced to detect illegal activities.

Part of this capacity building should focus on improving coordination between law enforcement agencies from different countries in the same region to enable cross-border operations to combat illegal logging and trade. Establishing transnational communication channels to share crime data and other information and providing training in different investigative methodologies is crucial to strengthening national law enforcement agencies. Law enforcement agencies in REDD+ countries should also coordinate with counterparts in timber importing countries to increase capacity to tackle illegal logging.

## 5. Undertake a law reform programme

Before REDD+ can succeed, countries must undertake a comprehensive and independent assessment of their current laws, regulations and governance to identify loopholes and determine where legal and policy reforms are necessary, including:

- (a) Implementing legislation that provides the public with the right to access government information on the implementation and funding of REDD+;
- (b) Conducting a review of forestry laws to identify any unclear or unjust laws that are otherwise supporting illegal activity in the timber industry;
- (c) Adopting or reviewing, where necessary, anti-corruption laws; and
- (d) Clarifying land tenure by providing forest dependent communities with legal access and title to forest.

REDD+ countries should engage the enforcement and regulatory community in the design of national programmes for REDD+ implementation to advise on necessary law reforms so as to avoid loopholes, prevent unanticipated illegal trade and ensure REDD+ is practical and enforceable.

## 6. Conflict resolution mechanisms

Independent complaint and conflict resolution mechanisms must be incorporated within the overall REDD+ framework, and must be available both at national and international level to address conflicts that might arise between governments, communities and other stakeholders. These could build on existing national institutions, such as the courts or human rights institutions, as well as international mechanisms such as the World Bank's Inspection Panel or the Aarhus Convention. An independent complaints mechanism is essential to a strong governance regime as it empowers local communities and ensures they are able to assert their rights to access information and hold governments and other actors accountable.

TO SUPPORT THESE MEASURES, **THE DONOR COMMUNITY SHOULD:**

### 1. Provide financial and technical support

Donor countries should provide adequate financial and technical support to recipient countries, over and above existing development aid, to improve governance and build law enforcement capacities. To be most effective, funding programmes should incorporate benchmarks to enable the monitoring of governance improvement. Sustained investment now will help ensure that REDD+ funds, once flowing, have a much better chance of reaching where they are needed and achieving genuine results for the climate.

### 2. Promote reforms in law enforcement and governance

The donor community should consider proactive ways to use its REDD+ support and development assistance to promote the conditions for domestic accountability and transparency over natural resource revenue streams such as REDD+. This may include identifying and using opportunities such as reviews of development aid and direct budget support. Development partners should co-ordinate to link their aid to performance in building the governance standards needed, including establishing specific and time-bound benchmarks agreed in consultation with government and civil society.

### 3. Address their own role in encouraging corruption and illegal behaviour

The donor community needs to acknowledge the impact its own citizens and companies have in REDD+ countries through their investments and timber import patterns. In particular, donor governments should support necessary reforms in their own countries to eliminate the trade of illegally sourced timber and encourage the prosecution of their own citizens who offer bribes or take part in corrupt practices in REDD+ countries.

# Conclusion

Significant sums of money will need to flow to ensure that the economic incentives to deforest are superseded by greater economic gains for keeping forests standing. Given the increasing global pressure on land for food, fuel and fibre, there is an added challenge to ensure that REDD+ rewards are sufficient and realised in order to contain these deforestation threats.

The funding expected to flow through REDD+ cannot, on its own, stop deforestation or prevent forest degradation. Experience has proven that deforestation and forest degradation are often a result of poor forest governance – the processes, policies, and laws by which decisions that impact forests are made. The main drivers of deforestation, such as agricultural expansion, logging, roads and other infrastructure developments, are often symptoms of a larger failure of governance. Many forest-rich countries do not have strong institutions or the processes necessary to value and protect forests or protect the people who live in or around the forests and depend on them.

If governance issues are not addressed adequately, thereby allowing criminals to gain control of REDD+, there is a serious risk that the ultimate losers will be

the communities that rely upon the forest for their livelihoods. Unless their rights and legal title to the forest are recognised and enforced and they are directly rewarded for their forest stewardship, corruption in REDD+ may lead to forest dependent communities becoming disenfranchised or evicted from their land and denied access to the basic goods and services that the forest provides them. Of equal concern is that the exploitation of local communities may lead to conflict and social unrest that would undermine the effectiveness of REDD+.

REDD+ cannot be removed from this broader governance context. Without effective governance, money distributed through REDD+ is unlikely to help combat climate change and could lead to perverse outcomes. The use of carbon markets would contribute further to these governance risks because of the significant funding such markets could generate and the greater regulatory controls that would be needed. In conclusion, any attempt to reduce deforestation or forest degradation through a REDD+ mechanism, if it is to be successful, must promote and support improvements in forest governance as one of its highest priorities.



The vast majority of people around the world who live below the dollar a day poverty line depend to some extent on forests. If done right, REDD+ could be a real opportunity to create jobs and provide livelihoods.

## ENDNOTES:

- 1** Aid flows from the OECD's Development Assistance Committee countries totalled USD 129 billion in 2010, according to the OECD website at [http://www.oecd.org/document/49/0,3746,en\\_2649\\_34447\\_46582641\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/49/0,3746,en_2649_34447_46582641_1_1_1_1,00.html). Accessed 5 September 2011.
- 2** Estimates of the total cost of REDD+ vary, although most are in the tens of billions of dollars. The figure here is taken from the Eliasch Review, which estimates that US\$ 17-33 billion will be required annually to halve deforestation by 2030. See The Eliasch Review, *Climate Change: Financing Global Forests*, UK Stationary Office, 2008.
- 3** Calculation by Global Witness based on money pledged to multilateral REDD+ bodies (UN-REDD, Forest Carbon Partnership Facility, Forest Investment Program, Amazon Fund and Congo Basin Forest Fund) plus bilateral agreements reported to the Voluntary REDD+ Database at <http://reddplusdatabase.org/>. Correct as of 2 September 2011.
- 4** G. R. van der Werf, D. C. Morton, R. S. DeFries, J. G. J. Olivier, P. S. Kasibhatla, R. B. Jackson, G. J. Collatz and J. T. Randerson 'CO2 emissions from forest loss', *Nature Geoscience*, Volume 2, November 2009
- 5** Ibid.
- 6** Secretariat of the Convention on Biological Diversity, *Forest Biodiversity: Earth's Living Treasure*, 2010 <http://www.cbd.int/idb/doc/2011/idb-2011-booklet-en.pdf>.int Accessed 5 September 2011 <http://www.cbd.int/doc/2011/doc/2011/idb-2011-booklet-en.pdf>
- 7** The World Bank, *Recommended Revisions to OP 4.36: Proposals for Discussion*, 2001
- 8** REDD initially referred to two categories of forest activity: 1) reducing emissions from deforestation and 2) reducing emissions from forest degradation. The plus (+) in REDD+ was added when REDD+ was extended to refer to three further categories of activity: conservation, sustainable management of forests and enhancement of forest carbon stocks.
- 9** Political support for REDD+ is already reflected in the number of financial initiatives to provide funding, at least in the short term, to continue REDD+ preparation and implementation programmes. In particular, during the Climate Change conference in Copenhagen in 2009 a number of developed economies – Australia, France, Japan, Norway, the UK and the United States – announced they would assemble \$3.5 billion of REDD+ finance over the period 2010 to 2012. As of September 2011, pledges to REDD+ multilateral bodies and bilateral agreements totalled more than \$5 billion.
- 10** See Anand Madhvani, *An Assessment of Data on ODA Financial Flows in the Forest Sector*, UN Development Programme 1999; Uma Lele et al., *The World Bank Forest Strategy: Striking the Right Balance*, World Bank, 2000
- 11** FAO, *Global Forest Resources Assessment 2010*. Average annual loss of forest for 2000-2010. See <http://www.fao.org/news/story/en/item/40893/icode/>.
- 12** For more detail, see *Cambodia's Family Trees: Illegal logging and the stripping of public assets by Cambodia's elite*, Global Witness, June 2007. Available at [http://www.globalwitness.org/sites/default/files/pdfs/cambodias\\_family\\_trees\\_low\\_res.pdf](http://www.globalwitness.org/sites/default/files/pdfs/cambodias_family_trees_low_res.pdf)
- 13** C. Barr, A. Dermawan, H. Purnomo and H. Komarudin *Financial governance and Indonesia's Reforestation Fund during the Soeharto and post-Soeharto periods, 1989-2009: a political economic analysis of lessons for REDD+*, CIFOR Occasional Paper 52, Center for International Forestry Research 2010.
- 14** Thomas Barnett, *Commission of Inquiry into Aspects of the Forest Industry*, Final Report Vol.1 p.7, Papua New Guinea 1989, as cited in Asia Pacific Action Group, *The Barnett Report: A Summary of the Report of the Commission of Inquiry into Aspects of the Timber Industry in Papua New Guinea*, November 1990; D J. Callister *Illegal Tropical Timber Trade: Asia-Pacific*, A Traffic Network Report 1992, pp83.
- 15** Thomas Barnett, *Commission of Inquiry Interim Report*, No 4 Vol 1, "New Ireland", Papua New Guinea 1989, p.85 cited in as cited in Asia Pacific Action Group, *The Barnett Report: A Summary of the Report of the Commission of Inquiry into Aspects of the Timber Industry in Papua New Guinea*, November 1990
- 16** Asian Timber Magazine, September 1994, cited in Greenpeace, *Overview of Asian Companies*, May 1997. Available at [http://archive.greenpeace.org/comms/97/forest/asian\\_companies\\_papua\\_new\\_guinea.html](http://archive.greenpeace.org/comms/97/forest/asian_companies_papua_new_guinea.html)
- 17** Interpol NCB Rome, *Rome Report on Illegal Timber*, August 2008 as cited in Interpol and The World Bank, *Chainsaw Project: An INTERPOL perspective on law enforcement in illegal logging*, undated, pp.45-46. Available at <http://www.interpol.int/Public/EnvironmentalCrime/Manual/WorldBankChainsawIllegalLoggingReport.pdf>
- 18** Sam Lawson and Larry MacFaul, *Illegal Logging and Related Trade: Indicators of the Global Response*, Chatham House, July 2010. Available at <http://www.chathamhouse.org/publications/papers/view/109398>
- 19** World Bank, *Strengthening Forest Law Enforcement and Governance – Addressing a Systemic Constraint to Sustainable Development*, Environment and Agriculture and Rural Development Departments, August 2006, p.1
- 20** For further information on FLEGT and VPAs see the European Commission's website at <http://ec.europa.eu/environment/forests/flegt.htm>

**21** European Council Communication, *Forest Law Enforcement, Governance and Trade (FLEGT): Proposal for an EU Action Plan*, COM(2003) 251 final, Brussels 21 May 2003.

**22** Liz Alden Wily, *Whose Land Is It? Commons and Conflict States: Why the Ownership of the Commons Matters in Making and Keeping Peace*, The Rights and Resources Initiative, 2008, pp.3-4

**23** Interpol and The World Bank, *Chainsaw Project: An INTERPOL perspective on law enforcement in illegal logging*, undated, pp.45-46. available at <http://www.interpol.int/Public/EnvironmentalCrime/Manual/WorldBankChainsawIllegalLoggingReport.pdf>

**24** Ibid.

**25** The Economist, "Money grows on trees: Irregular carbon credits cause upheaval in the government of Papua New Guinea", 6 June 2009. Available at <http://www.economist.com/node/13724646>

**26** Eco-Forestry Forum "EFF Calls on Government of PNG, Development Partners and AusAid to Protect PNG from Carbon Scams", undated. [http://www.redd-monitor.org/wordpress/wp-content/uploads/2009/09/EFF\\_PNG\\_REDD\\_advertisement.pdf](http://www.redd-monitor.org/wordpress/wp-content/uploads/2009/09/EFF_PNG_REDD_advertisement.pdf)

**27** See reports by the Australian Broadcasting Corporation and Australian Associated Press, 1 July 2009, at <http://www.abc.net.au/news/stories/2009/07/01/2613841.htm?section=world> and <http://news.smh.com.au/breaking-news-world/png-climate-office-director-suspended-20090701-d4as.html>

**28** Global Witness was unable to ascertain who the current Executive Director of the Office of Climate Change is. The Office's website (<http://climatepng.org/>) does not state who the current Executive Director is, and the phone number for the OCC given on the website is disconnected.

**29** See, for example, REDD+ Monitor, "REDD and violence against indigenous leader in Papua New Guinea", 15 January 2010 <http://www.redd-monitor.org/2010/01/15/redd-and-violence-against-indigenous-leader-in-papua-new-guinea/> and Indigenous Environmental Network, "Indigenous leader kidnapped and forced at gunpoint to surrender carbon rights for REDD in PNG", 14 January 2010 <http://www.indigenousportal.com/Climate-Change/Indigenous-leader-kidnapped-and-forced-at-gunpoint-to-surrender-carbon-rights-for-REDD-in-PNG.html>.

**30** See Europol press release, "Carbon Credit fraud causes more than 5 billion euros damage for European Taxpayer", 9 December 2009. Available at <http://57.67.199.6/index.asp?page=news&news=pr091209.htm>

**31** The 59 countries selected are those currently receiving REDD+ funding through the Forest Carbon Partnership Facility, the UN-REDD programme, the Forest Investment Program and/or bilateral REDD+ deals as reported to the Voluntary REDD+ Database of the REDD+ Partnership. (See <http://reddplusdatabase.org/>).

Corruption Perception Index 2010, Transparency International,

data available at [http://www.transparency.org/content/download/55725/890310/CPI\\_report\\_ForWeb.pdf](http://www.transparency.org/content/download/55725/890310/CPI_report_ForWeb.pdf).

World Bank Worldwide Governance Indicators available at <http://info.worldbank.org/governance/wgi/index.asp>.

**32** For further information, see C. Barr, *Governance risks for REDD+: How weak forest carbon accounting can create opportunities for corruption and fraud* published in Transparency International's *Global Corruption Report: Climate Change*, 2011, p. 329-344

**33** The Terrestrial Carbon Group Project, *Measuring and Monitoring Terrestrial Carbon as part of "REDD+" MRV Systems: The State of the Science and Implications for Policy Makers*, Policy Brief 5, Terrestrial Carbon Group Project and UN-REDD, October 2009

**34** Governments of Norway and Guyana, Joint Concept Note, March 2011. Available at [http://www.regjeringen.no/upload/MD/2011/vedlegg/klima/klima\\_skogprosjektet/Guyana/JointConceptNote\\_31mars2011.pdf](http://www.regjeringen.no/upload/MD/2011/vedlegg/klima/klima_skogprosjektet/Guyana/JointConceptNote_31mars2011.pdf). Accessed 2 September 2011

**35** For further information see: [http://www.regjeringen.no/upload/MD/2011/vedlegg/klima/klima\\_skogprosjektet/GuyanaNorwayQandA\\_310311.pdf](http://www.regjeringen.no/upload/MD/2011/vedlegg/klima/klima_skogprosjektet/GuyanaNorwayQandA_310311.pdf)

**36** C. Barr, *Governance risks for REDD+: How weak forest carbon accounting can create opportunities for corruption and fraud* published in Transparency International's *Global Corruption Report: Climate Change*, 2011, p. 329-344

**37** Martin Herold, *An Assessment of National Forest Monitoring Capabilities in Tropical Non-Annex I Countries: Recommendations for Capacity Building* (GOFC-GOLD Land Cover Project Office, Friedrich Schiller University, Jena, 8 July 2009).

**38** C. Barr, *Governance risks for REDD+: How weak forest carbon accounting can create opportunities for corruption and fraud* published in Transparency International's *Global Corruption Report: Climate Change*, 2011, p. 329-344

**39** Ibid, p. 335

**40** Mark Shapiro, 'Conning the Climate: Inside the Carbon-Trading Shell Game', *Harper's Magazine*, February 2010, p.6

**41** See Det Norske Veritas' press release of 29 November 2008 at [http://www.dnv.com/press\\_area/press\\_releases/2008/dnvtakesactiontoregaincdm accreditation.asp](http://www.dnv.com/press_area/press_releases/2008/dnvtakesactiontoregaincdm accreditation.asp) and SGS statement of 14 September 2009 at <http://www.climatechange.sgs.com/sgs-aims-for-quick-resolution-of-cdm-issues?viewId=5598>.

**42** For further information see <http://eiti.org/>

**43** See Global Witness report on independent monitoring for REDD+, *Building Confidence in REDD*, 2009 at <http://www.global-witness.org/library/building-confidence-redd-monitoring-beyond-carbon> and *A Guide to Independent Forest Monitoring*, 2005 at <http://www.globalwitness.org/library/guide-independent-forest-monitoring>





**global witness**

Global Witness investigates and campaigns to prevent natural resource-related conflict and corruption and associated environmental and human rights abuses.

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Global Witness  
6th Floor, Buchanan House  
30 Holborn  
EC1N 2HS  
United Kingdom

Phone: +44 207 492 5820  
Fax: +44 207 492 5821  
[www.globalwitness.org](http://www.globalwitness.org)