



Anti-corruption policies in the forest sector and REDD+

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- The design of anti-corruption policies should take into account whether a country has bad, fair or good governance conditions.
- Anti-corruption policies limited to the forest sector are unlikely to work in countries with high corruption levels, which require systemic institutional changes.
- REDD+ is likely to be affected by corruption, but REDD+ monitoring, verification and reporting mechanisms can also contribute to reducing corruption.

Introduction

Corruption is widespread in most countries that are expected to become eligible for reducing emissions from deforestation and degradation (REDD+) schemes. There are, therefore, concerns that unless corruption is controlled, it would be difficult for countries to implement REDD+ in an effective, efficient and equitable manner. How can the impacts of corruption on forests and on REDD+ be controlled?

Corruption and illegal forest activities (IFAs) are both governance problems. IFAs (commonly referred to as ‘illegal logging’) are a broader set of illegal activities than corruption, which is often listed as one of the illegal activities in the forest sector.¹ Several works have extensively considered the various policies that could be implemented to control IFAs (Tacconi *et al.* 2003; Colchester *et al.* 2006; Tacconi *et al.* 2007c), but they have paid relatively little attention to specific anti-corruption policies. The latter are, therefore, the focus of this chapter.

There are several international conventions on corruption, but there is no single definition of the term (Larmour 2007). The definition *misuse of public office for personal gain* is widely accepted, but it excludes the private sector and NGOs. Due to space limitations, in this paper we mostly focus on the bribery of public officials. As regards the value of the sums exchanged, corruption may involve large sums (*grand corruption*), or relatively small amounts (*petty corruption*). Transparency International distinguishes between corruption *against the rule* and *according to the rule*. Against the rule corruption involves receiving bribes to perform functions against the law, or to refrain from performing actions established by the law.

This chapter presents an indicative listing of the possible impacts of corruption on forests and REDD+, and a preliminary identification of anti-corruption policies. Research on the impacts of corruption on the forest sector is in its infancy. We therefore lack information on the amount of greenhouse gas emissions (GHG) from deforestation and forest degradation attributable to corruption. The impacts of corruption may be positive or negative, depending on how a landowner or forest enterprise reacts to the demand for a bribe (e.g., by over-harvesting to recoup the additional costs or by restraining from such investment). This information is needed to provide firm recommendations on anti-corruption policies and their prioritisation in a country.

Corruption in the forest sector and in REDD+

The impact of corruption on deforestation may start with the design and implementation of land use plans. Land use plans classify forests for various uses, such as conservation, production and conversion to other uses. The land use allocation process should take account of ecological criteria to identify areas that are significant for conserving biodiversity (i.e., allocation to conservation class) or where soils are not suitable for conversion to other uses (i.e., allocation to production forest). Damania *et al.* (2003) show that corruption weakens

¹ See Tacconi (2007a) for a definition of IFAs. Governance is a broader concept that refers to how government and non-government actors coordinate their needs and interests, how decisions are made, who is responsible for them, how they wield power, and how they are held accountable (e.g., UNDP *et al.* 2003). The World Bank’s six indicators of governance are: 1) voice and accountability; 2) political instability and violence; 3) government effectiveness; 4) regulatory burden; 5) rule of law; and 6) control of corruption (Kaufmann *et al.* 2006).

environmental regulation under certain circumstances. This suggests that corruption could lead to deforestation by undermining the land use allocation process and the enforcement of land use plans. Overlaps between production and conservation uses have been documented (e.g., Wells *et al.* 1999), but there is a lack of knowledge as to whether this was due to corrupt behaviour or other causes – for example, poor coordination of activities between government officials. If land is put to unsuitable use as a result of corruption, then corruption is a cause of the emissions associated with the change of land use. However, corruption is not a cause of deforestation when it affects the allocation of, for example, agricultural concessions (to one company instead of another) in areas that have been allocated to conversion through due process. Grand corruption is likely to influence land use planning because decisions are made at high levels of government and large sums of money (or political support) are required to manipulate the people involved. Petty corruption is likely to occur when local officials allow illegal encroachment on forest areas.

Corruption can result in forest degradation in a number of ways. First, logging operators bribe forestry officials to allow them to harvest timber without a legal permit (Smith *et al.* 2003a). This also makes legal logging less competitive. Second, bribes may be paid to officials to allow the transport of illegally logged timber (Southgate *et al.* 2000). While this type of corruption takes place after the degradation of the forest, it contributes to degradation because if loggers could not transport the logs they would not harvest them. Third, logging operators bribe local officials to obtain logging permits that are not recognised by the forestry regulatory framework (Casson and Obidzinski 2007) or that are really for other purposes (REM 2006). Fourth, logging concessionaires pay bribes so that over-harvesting on their concessions, or harvesting outside the boundaries of their concessions are not monitored (Barnett 1990; Friends of the Earth 2009). Fifth, bribes contribute to degradation by increasing logging costs, thus leading loggers to over-harvest their concessions to recoup the costs of bribes (Richards *et al.* 2003).

Corruption can also affect deforestation and degradation indirectly. First, corruption can have an effect by directing agricultural subsidies. Subsidies influence land use and decrease the efficiency with which land is used (Bulte *et al.* 2007). Bulte and colleagues show that large-scale farmers make political contributions and give outright bribes to politicians in exchange for subsidies. These farmers deliberately use land inefficiently so that it attracts subsidies. The empirical evidence from Latin America shows that governments perceived to be more corrupt increased subsidies to large farmers. These subsidies reduced agricultural productivity which, the authors argue, resulted in higher rates of deforestation. Second, corruption is thought to have negative impacts on long-term economic development, because it limits private investment (Mauro

1995).² In this scenario, corruption protects forests by limiting investment in agricultural land (Gupta and Siebert 2004), at least in the short term, but it could also slow down forest transition, which eventually might stabilise and increase forest cover.

Several reports and papers have highlighted cases of corruption in the forest sector (e.g., Contreras-Hermosilla 2000; Le Billon 2000; Smith *et al.* 2003a). However, there is considerable lack of knowledge about the actual extent of deforestation and forest degradation that might be directly or indirectly attributed to corruption. For instance, a statistically significant correlation between perceived corruption and the management of natural forest was not found for Africa (Smith *et al.* 2003b). However, a global, multi-country econometric study found that a 1% reduction in perceived corruption may be associated with a lower deforestation rate of between 0.17 and 0.30% (Barbier *et al.* 2005). The problems associated with corruption data, including whether corruption is perceived or experienced (Treisman 2007), and cross-country analyses of deforestation (Scricciu 2007) imply that studies, such as those noted above, will need to be assessed for their sensitivity to the data, specific model and regression methods used, as well as assumption of causality. In relation to degradation, the apparent large extent of illegal logging in some countries is often taken as an indication of the impact of corruption (e.g., Kolstad and Søreide 2009). While the connection is possible, it has been shown that in some countries the supposedly high rates of illegal commercial logging are either: 1) not supported by the evidence – such as in Cameroon (Cerutti and Tacconi 2008); or 2) are due to government policies that support the industrial use of forests, such as in Indonesia (Tacconi 2007b).

Corruption will affect the implementation of REDD+. *Grand corruption* could lead to a weakening of support for REDD+ at the national level, or to the official promotion of fraudulent REDD+ schemes (e.g., Grindneff 2009). To weaken support for REDD+, large agricultural or timber conglomerates, with an interest in continuing in their current activities, could bribe national politicians and high-level bureaucrats to undermine the establishment of a national REDD+ mechanism. The same conglomerates could bribe sub-national government politicians and bureaucrats to induce local governments to opt out of implementing REDD+ in their area (if this is allowed by the national-level REDD+ architecture), or to weaken local REDD+ policies. *Petty corruption* could affect verification and reporting mechanisms, if project implementation activities are part of the REDD+ architecture. Project implementers would have an interest in overstating avoided emissions and in understating problems with the permanence of the carbon stocks for which they had received credits. Corruption could also affect the administration of the revenues generated

2 Whether and how corruption reduces investment and growth is still debated in the literature (Rock and Bonnett 2004; Méndez and Sepúlveda 2006).

by the sale of REDD+ credits, in the same way that corruption affected the administration of the Reforestation Fund in Indonesia (Box 13.1). *Grand corruption* could be involved if large sums were secretly given to politicians and top senior bureaucrats. *Petty corruption* could lead to a leakage of funds for environmental service schemes aimed at benefiting local communities. If this form of corruption is widespread, it could result in significant misallocation of funds and undermine the effectiveness of the schemes they are designed to support.

Anti-corruption policies

Two significant areas of uncertainty affect the design of anti-corruption policies. First, there is an ongoing debate (Sachs 2005; Kaufmann *et al.* 2006) about whether policies directed at improving governance should be prioritised to stimulate economic development, or whether development should be supported regardless of governance because the latter improves with development. Second, the inflection point of the forest transition curve is uncertain as regards both the extent of forest cover remaining and the level of economic development at which it would occur (Culas 2007). Australia, for example, has a very low corruption index, but deforestation has continued even at an advanced stage of development (FAO 2006). Controlling corruption does not necessarily lead to lower deforestation rates, but can rather be seen as a way to make REDD+ policies more effective, efficient and equitable.

The first step in developing anti-corruption policies is to assess whether, and to what extent, corruption causes deforestation and forest degradation. This step is necessary because the presence of corruption does not necessarily imply that REDD+ will be unsuccessful. Efforts to reduce carbon emissions have already generated a 'carbon conservation industry' that seeks to profit from generating REDD+ credits. The profit motive driving the carbon conservation industry is no different from that of other industries that have managed to develop and prosper in business environments which involve corruption, such as palm oil and soya production.

If corruption is shown to affect the forest sector, the drivers behind corrupt behaviour will have to be assessed to decide how they can be used and controlled to maximise the effectiveness of anti-corruption policies supporting the successful national implementation of REDD+. Corruption is a deliberate, rational action. For corruption to take place, the benefits from giving and receiving bribes need to be higher than the possible costs, such as loss of income and business following conviction. The costs may be less than the benefits if the anticipated benefits from corruption are large (such as significant extra profit for companies and significant extra income for public servants), penalties are low, and/or the likelihood of being discovered and

Box 13.1. Governance of forestry revenues in Indonesia

The Reforestation Fund (*Dana Reboisasi* or DR) is financed by a volume-based levy on timber. The DR is a multi-billion dollar national fund with a mandate to support reforestation and the rehabilitation of degraded land and forests. Its experience is relevant to tropical forest countries which may implement REDD+ through a national forest fund.

Commissioned by the Government, Ernst & Young conducted a financial audit of the DR in 1999. The audit documented systematic financial mismanagement, fraudulent practices by recipients of DR subsidies, and routine diversion of funds for uses that were not consistent with the DR mandate. Losses of US \$5.2 billion in public funds were documented for the 5 financial years between 1993 and 1998, approximately half of which were lost after the revenues entered the Ministry of Forestry's accounts.

Since the fall of the Soeharto regime in 1998, the Government of Indonesia has taken significant steps to improve state management and governance of financial assets. These have improved accountability in DR administration. The incorporation of the DR into the State Treasury has been an important step in the creation of a Single Treasury Account, and has meant that DR receipts and expenditures are now consolidated into the state budget. Similarly, the strengthening of the Supreme Audit Board as the sole external auditor resulted in at least 29 audits related to the DR between 2004 and 2008, all of which are publicly available on the Internet. Anti-corruption initiatives, including the creation of an independent Corruption Eradication Commission and Corruption Court, have resulted in a few high-profile prosecutions of DR-related corruption. In spite of these improvements during the post-Soeharto period, the Ministry of Forestry has been unable to recover approximately US \$65 million of the DR-related debt still outstanding.

Since 2007, the Ministry of Finance has transferred DR funds earmarked for the national government to a new financial intermediary, over which the Ministry of Forestry exercises far-reaching control. This new financial intermediary is the Forest Development Funding Agency Public Service Unit (known by its Indonesian acronym BLU-BPPH). Over the next few years, the BLU-BPPH is expected to allocate some US \$2.2 billion in DR funds to forest enterprises and rural communities for developing commercial plantations. Authorised to manage DR revenues as a 'revolving fund', the BLU-BPPH appears to be designed to leverage potentially substantial amounts of co-financing for investments in Indonesia's forestry sector from private sector banks, and from bilateral and multilateral lenders. However, the BLU-BPPH's bylaws raise potential concerns about how the DR funds (and any additional funds leveraged) will be administered, as they explicitly allow the BLU-BPPH to exercise a high level of 'flexibility' in financial management and to circumvent general administrative practices for public finance.

convicted are low. Attention needs to be given, therefore, to both the benefits and costs for the bribe givers and takers (Becker 1968).

Some of the changes required to control corruption need to take place throughout society and are therefore beyond the scope of REDD+ implementation. These include changes to how political parties are financed, regulating lobbying, judicial reform, the establishment of anti-corruption commissions and freer media (Office of the Co-ordinator for Economic and Environmental Activities no date). Anti-corruption policies need to be tailored to the specific conditions in each individual country (Shah 2006) (Table 13.1). This has two implications. First, it is not possible to prioritise anti-corruption policies and assess how effective they are likely to be, as this will depend on country-specific factors. Second, the most corrupt countries are usually in the initial stages of development and in the initial stage of forest transition, for example, Cambodia, the Democratic Republic of the Congo and Myanmar. In such countries, introducing anti-corruption policies in the forest sector only is likely to have limited success, as exemplified in Cameroon (Box 13.2). This means that policies that can be implemented by the parts of government that are closely associated with REDD+ (considered below) are more likely to be effective in countries with medium to low corruption, such as Indonesia, Mexico and Zambia. Before considering these policies, however, it is useful to note that decentralisation has a direct effect on the forest sector (see Chapter 14). Indirectly, decentralisation can increase the level of corruption (Smith *et al.* 2003a; Fan *et al.* 2009). Decentralisation initiatives will, therefore, need to take into account the implications for corruption and forests.

Table 13.1. Priorities for anti-corruption programmes

Incidence of corruption	Governance quality	Priorities for anti-corruption programmes, based on drivers of corruption
High	Poor	Establish rule of law; strengthen institutions for participation and accountability; limit government interventions to core mandate.
Medium	Fair	Decentralise and reform economic policy; introduce results-oriented management and evaluation; introduce incentives for competitive public service delivery.
Low	Good	Establish explicit anti-corruption programmes, such as anti-corruption agencies; strengthen financial management; raise public and officials awareness; introduce no bribery pledges, fry big fish, etc.

Source: Huther and Shah (2000)

Box 13.2. Improving transparency in the allocation of logging concessions in Cameroon

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In 1994, Cameroon passed a new forest law that introduced public auctions for logging concessions. International donors pushed for an auction system based on transparent financial and technical selection criteria. The new system replaced the old system of discretionary attributions, which encouraged corrupt practices to access timber. Lack of a strong domestic commitment to the new system meant that in 1996 and 1997 the auctions were marred by irregularities and discretionary attributions. Logging titles were not awarded to the most technically competent companies nor to the highest bidders (Collomb and Bikie 2001; Cerutti *et al.* 2008).

In 2000, the Cameroon government accepted World Bank demands for an independent observer on the Inter-Ministerial Committee which oversaw the allocation of concessions. Six auctions have taken place since then, and by 2006 all 101 concessions available were contracted.

The auction system has had some positive effects. The fees that logging companies pay to acquire logging rights have gone up, directly raising state revenues. Although the link between higher bids and less corruption is not easy to establish (as competition might also have increased bribes), the system probably allowed more professional logging companies from abroad to break old-established vested interests and penetrate the Cameroon forestry sector. This may have had the side effect of improving management practices.

On the negative side, the auction system and the presence of an independent observer have not been a guarantee against corrupt practices. Between 2000 and 2005, the observer reported numerous doubtful practices that threatened genuine competition and confidentiality. There is little evidence that any of these issues were seriously taken into account or that bidding practices were modified. In 2006, when all available concessions were already allocated, it was once more an external actor – the World Bank – that requested the government to investigate weaknesses and improve the auction system.

There are many options for improving the auction system, such as appointing a government body to act upon and implement the observer's recommendations and concerns (Cerutti *et al.* 2008). However, for any reform to succeed there needs to be recognition by the Cameroon government that reforms are needed and could bring positive impacts for Cameroon and its people.

Increasing accountability and transparency (which supports accountability) raises the likelihood of uncovering corrupt behaviour, thus reducing the net benefits derived by those involved. Bolivia provides an example of structural reforms aimed at increased accountability and transparency (Box 13.3). The impact on corruption of an increase in transparency depends on various factors, such as the capacity of the recipients of information to process it (e.g., their education) and their ability to act on the information (e.g., capacity to hold those in power to account) (Kolstad and Wiig 2009). Accountability and transparency in land use planning, to minimise *grand corruption*, can be improved by increasing ministerial oversight, allowing stakeholders to participate in planning processes, and making land use plans and resource inventories widely available (Transparency International 2002). A clear and, if possible, simplified forest regulatory framework that reduces the subjectivity of bureaucratic decision making (FAO 2001; Kishor and Damania 2007) contributes to accountability and transparency (Magrath *et al.* 2007). Auctions can increase transparency in allocating logging concessions and reduce rents, thus further reducing the incentive to bribe (Contreras-Hermosilla and Vargas Rios 2002; Gray 2002). If auctions specified technical criteria that concessionaires must meet, the more technically competent would win concessions, thus reducing the risk of forest degradation.

A reduction in rents in the forest sector can also be achieved by reforming national forestry taxation systems which have allowed companies to make excessive profits (Repetto and Gillis 1988; Contreras-Hermosilla 1997; WRI 2000), although it seems that this is no longer the case in African countries (Karsenty personal communication). Reducing profits to an unrealistic level could mean that the more reputable companies leave the sector (Contreras-Hermosilla and Vargas Rios 2002). The impacts of changes in forestry taxation systems on forestry management are difficult to predict and depend largely on local conditions and production parameters (Karsenty in press).

Reducing excessive rents derived from land uses that replace forests, such as oil palm plantations, is also fundamental in reducing the influence of corruption on deforestation. Excessive rents imply significant potential benefits from corruption aimed at changing the land use allocation of forests. These rents can be reduced by appropriate taxation and a cut in subsidies to agroindustries that cause deforestation.

Box 13.3. Forest governance reforms in Bolivia

In 1996, following broad structural reform in Bolivia over the previous two decades, the government passed Forest Law 1700, which introduced sweeping changes to the regulatory framework of forest management. Many of these changes were designed to minimise political interference and the use of public office for private purposes, as well as corruption and forest crime. The implementation of the reforms has had some problems, but corruption appears to be less than before.

The head of the forestry agency, the *Superintendencia Forestal*, is selected from a list of three names provided to the President by a two-thirds senate majority. The Superintendent's assignment lasts for 6 years, thus straddling the 4-year presidential term, and may only be removed by the Supreme Court through due process. Financing for the Superintendent is independent from the National Treasury.

To make decisions more transparent, the Superintendent holds annual public hearings to report to the public on the agency's progress. The Superintendent is empowered to consult with stakeholder groups, thus limiting the exclusive influence of bureaucrats and ensuring that decisions are open to participation and public scrutiny. An independent international third party controls the transit of wood, although the government carries out parallel verification.

Previously, volume-based charges encouraged private sector operators to gain control over as much forest land as possible. This resulted in the politically influential gaining the upper hand and concentration of operations. Now, the adoption of a uniform area charge (US \$1 per hectare of concession) has reduced the discretionary power in awarding concessions. The public forest administration, previously dominated by vested interests and whose decisions were shaped by short-term political considerations, was reformed. Logging concessions are now awarded through international, public processes. Licences are awarded for a 40-year period, subject to favourable 5-year audits. The responsibilities for field operations were transferred to private firms.

Management plans that follow government guidelines are now prepared by independent forest professionals. These professionals are also held legally responsible for the implementation of the plans and they are independent of the concessionaires. The Forestry Law also provides specific controls regarding the examination of these planning documents and the use of independent inspection agents. Random inspections, of forests, at roadsides, or of stockyards and sawmills, are required to ensure compliance. Routine 5-year audits are required to prove that the plans are being implemented.

Sources: FAO (2001, 2005); Contreras-Hermosilla and Vargas Rios (2002)

Conclusion

Corruption needs to be taken into account in developing REDD+ policies and measures.

First, the larger the share of REDD+ revenues controlled by government officials the greater the incentive will be for corrupt behaviour. Therefore, assigning the rights to REDD+ credits to individuals, communities and companies may reduce the incentives for corrupt behaviour in the public sector. This could, however, simply displace corruption from the public sector to the private sector – to lawyers, auditors and surveyors, for example. Similarly, NGO employees could use their positions for their own benefit. Appropriate mechanisms for accountability and transparency of payments would, therefore, still be required, and they would need to cover non-government as well as government stakeholders involved in REDD+.

Second, if REDD+ revenues are channelled through the government system, appropriate financial oversight will be required to avoid a leakage of funds (see Box 13.1). Assessing the risk of leakage could inform the development of appropriate management systems for REDD+ funds, which could take the form, for example, of trust funds similar to those used for biodiversity conservation (see Chapter 8 in this book).

Third, the concept underpinning REDD+ is that it should offset the opportunity costs of alternative land uses. The design of a national REDD+ architecture should ensure that those who lose from not practising alternative land uses receive sufficient compensation for their potential losses. Otherwise, they would have an incentive to bribe officials to give them the right to carry out alternative land uses. On the other hand, if they stand to benefit from REDD+ more than from the alternatives, they may be tempted to bribe to be given the right to implement REDD+.

Finally, REDD+ could help reduce corruption. Ministries of economy are not usually involved in forest sector management. For example, in Indonesia, the Ministry of Trade has responsibilities for pulp and paper production, but the rest of the forest sector comes under the Ministry of Forestry. More involvement by ministries of economy can be expected to lead to greater scrutiny (i.e., more accountability), thus encouraging more and better reporting on the performance of the forest sector (i.e., more transparency). Introducing monitoring, verification and reporting mechanisms would contribute to better transparency, which would support accountability.

In conclusion, corruption can be expected to pose a significant risk to the implementation of REDD+ in highly corrupt countries. In those countries, sector-specific anti-corruption policies are less likely to be effective. In less corrupt countries, sectoral anti-corruption policies are more likely to be successful and can have synergies with REDD+ monitoring, verification and reporting mechanisms.

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