Division 47 Environment and Climate Change Sector Project "International Forest Policy"



Corruption in the forestry sector and illegal logging

The problem, its implications and approaches to combating it



commissioned by



Federal Ministry for Economic Cooperation and Development

Tangmar Marmon

Corruption in the forestry sector and illegal logging

The problem, its implications and approaches to combating it

Imprint

Published by:

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH – German Technical Cooperation –

Sector project "International Forest Policy" (Division 47) Dag-Hammarskjöld-Weg 1-5 D-65760 Eschborn, Germany T +49 61 96 79-0 F +49 61 96 79-11 15 E info@gtz.de

Internet: <u>www.gtz.de</u>

Publishers of this issue:

Sector project "International Forest Policy" (Division 47: Environment and Climate Change) in cooperation with the sector project "The German UNCAC Project" (Division 42: State and Democracy, Public Policy)

Contact:	Division 47: Peter Saile (peter.saile@gtz.de) Division 42: Dr. Frédéric Boehm (frederic.boehm@gtz.de)	
Contact person at	person at the German Federal Ministry for Economic Cooperation and Development: Heiko Warnken, Head of Department 316 – Environment	
	Federal Ministry for Economic Cooperation and Development Dahlmannstraße 4 D-53113 Bonn, Germany T +49(0)22899-535 3780 E Heiko.Warnken@bmz.bund.de	
Text:	Tangmar Marmon	
Editing:	Peter Saile	
Copy editing, lay	opy editing, layout and production: Vera Greiner-Mann, ECO Consulting Group Oberaula	
Printed by:	Druckhaus Waitkewitsch, Alsfeld	
Printed on 100 %	recycled paper.	

Eschborn, 2009



Contents

Abstract	4
Overview: The Problem of corruption in the forestry sector	5
Consequences of corruption in the forestry sector	9
Environmental consequences	9
Economic consequences	10
Social consequences	10
Approaches to combating corruption	11
Politics	11
Society	13
Economy	13
Conclusions	14
References	15

Figures

Chart: Corruption and suspicious log supply	6
Map: Corruption and illegal logging in selected European countries	7
Table: Forms of forest corruption	8

Abstract

Illegal logging is a worldwide phenomenon. Through illegal logging much higher rents can be extracted from forests than through legal operations. Corruption is almost always deeply intertwined with illegal logging. The problem of corrupt officials in forest administrations is aggravated by the fact that the majority of forests worldwide are public and thus at the mercy of those officials.

Illegal logging adversely affects society: It has devastating economic, ecologic and social consequences. In order to counter forest corruption as well as illegal logging, an improved law enforcement is a precondition. Concomitant measures are, for instance, the improvement of the institutional framework of a state, and increased civil society participation in policy shaping, management, implementation and monitoring processes. Economic measures such as cutting red tape, increasing competition or reducing scarcity rents for wood are also important aspects of the fight against corruption.



Overview: The problem of corruption in the forestry sector

According to a widely used definition, corruption is the misuse of entrusted powers¹ for private gain. When an official decision maker bases his/her decisions on how much he/she privately has to gain from them we have a cause of corruption whenever the ensuing decision is distorted by private rent-seeking.

Biased decisions mean suboptimal policy outcomes due to biased resource allocations. These resources concern primarily public policies and often natural resources. First of all, natural resources often have common good characteristics with the well-know "first-come, first-served" dilemma known as the "tragedy of the commons"²: If an individual excessively exploits a given natural resource, the cost arising therefrom is shared by the whole community proportionally, while the gain is for the individual only. It is therefore rational to seek unsustainable exploitation of natural resources, since it generates extra value individually, while the externalities³ are borne by society as a whole.

Second, natural resources enable rents provided by nature, like manna from heaven. Control over these resources is thus likely to become subject of rent seeking behaviours and distributive conflicts between interest groups within societies. The ways to seek control over these resources may, of course, be of legal or illegal nature.

Illegal logging is such an intention to extract undue rents from natural resources, in the case here dealt with: the forests. Illegal logging, according to a definition by the European Commission, is understood as timber harvesting operations that take place in violation of national laws – though sometimes, particularly when timber trafficking is involved, it is as well a matter of violation of international laws. Corruption follows the same logic of rational behaviour and seconds illegal logging in many cases. A high level of corruption and little oversight and law enforcement create many irregular income opportunities which would not exist in a more formal and regulated economy. This affects particularly common goods such as forests. Forests are only able to provide their ecosystem services, which benefit the public, when they are standing and kept by and large intact. However, they only provide maximum individual benefit if they are felled.

Corruption varies from country to country and between different industries, and it is not always easy to foresee its emergence and extent. There are, however, some factors which particularly contribute to the prevalence of corruption: the size of contracts in terms of sums at stake, the frequency and degree of standardization of these contracts, traded products or provided services, the structure of the (national and/or international) trade system in terms of accessibility of markets, red tape, regulations etc., monitoring, enforcement and sanctioning mechanisms, institutional capacities and capabilities.

The structural incentives for corruption are especially high in cases of monopoly powers, be they public or private (e.g. through licenses or concessions), and where transparency, accountability and intrainstitutional competition are low (comp. Osborne, 2002; Lederman et al., 2001). This applies particularly to the management of natural resources. On the other hand, the more transparency and political competition there is, the smaller is the chance for corruption to occur. Here the peculiarities of forests come into play. According to FAO (2007), forests worldwide are still mostly owned by the state:

¹ For example a public office.

² see also Hardin, Garrett: "The tragedy of the commons". In: Science 162/1968. Online at: http://www.sciencemag.org/cgi/content/full/162/3859/1243

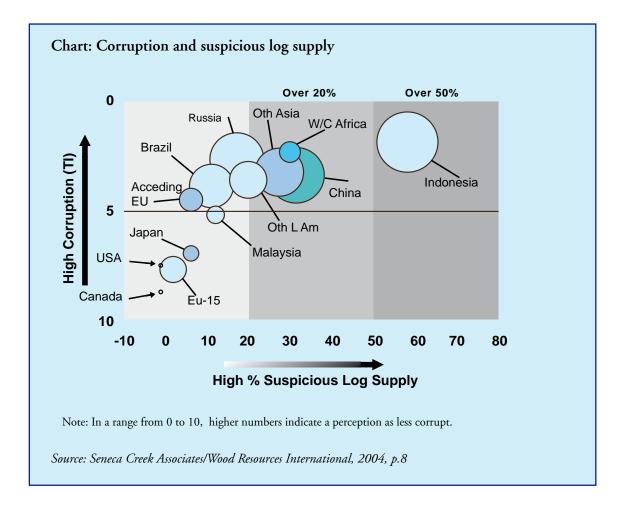
³ An externality is an impact (positive or negative) on any party not involved in a given economic transaction. An externality occurs when actions by a party cause costs (or benefits) to a third party. A typical example is the use of a public good (e.g. natural resource) for a production process which leaves this good depleted or polluted. Those costs are borne by society as a whole.

"Public forest ownership remains by far the predominant category in all regions. At the global level, 84 percent of forest lands and 90 percent of other wooded lands are publicly owned. (...) A 2005 study of forest tenure in 19 countries in Southeast Asia (...) revealed that about 365 million hectares of forests (92 percent) are public, the majority of which (79 percent) are owned by central governments. The percentage owned by local communities and groups and indigenous peoples is insignificant. Most public forests (63 percent) are managed directly and solely by central or local governments."

Public forest ownership in itself is not detrimental to effective forest management. Yet, given an environment of low transparency, high secrecy, little oversight of government officials and rampant (or at least pervasive) corruption, the ocurrence of illegal logging is very likely. Corruption thrives on poor law enforcement and at the same time creates conditions of more lawlessness. Illegal logging thrives on the same conditions. Logging is especially corruptionprone since it usually takes place in remote areas, out of reach and sight from public oversight, press coverage and public scrutiny.

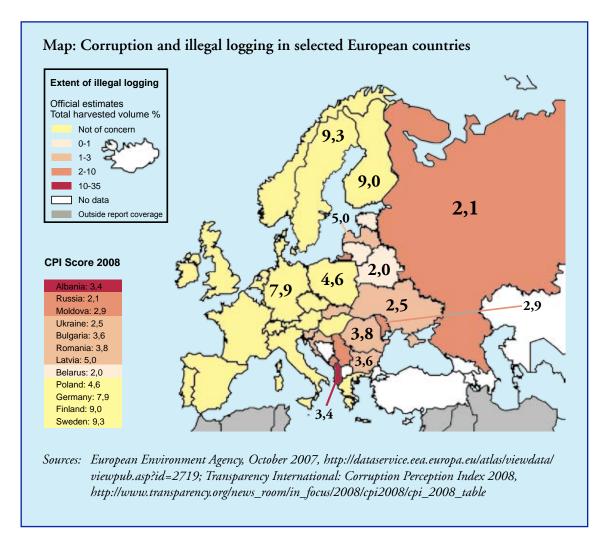
A further aspect which makes corruption in the forestry sector feasible is the fact that most forests in developing countries are not fully inventoried, which makes it harder to monitor the scale of illegal logging (Contreras-Hermosilla, 2000, p.17).

Seneca Creek Associates and Wood Resources International (2004) have prepared a report on "Illegal Logging and Global Wood Markets" for the American Forest & Paper Association in which they tried to establish a statistical correlation between corruption and illegal forest activities:





A similar correlation can be demonstrated for the European wood market:



The conclusion that can broadly be drawn from this map is the same as the one voiced by Seneca Creek Associates/Wood Resources International: The more corrupt a country is, the higher the danger of pervasive illegal logging. However, this approach comes with several caveats: First, numbers on illegal logging as well as on corruption are very hard to come by, since both are secretive activities which are usually well covered up and rarely talked about by people involved. It is therefore implicitly impossible to draw conclusions which would hold statistically. Numbers on corruption are thus based on perceptions of corruptions and as such reflect tendencies rather than hard facts. A second point is that illegal logging depends on much more factors than just corruption (intervening factors): How much forested area is there and how accessible is it for illegal loggers? Is the woodstock worth the bother (in other words: what is the value of the wood)? Does the climate allow for (illegal) logging? Are there any possibilities to get the timber to the market (among others, physical infrastructure)? Taking this into account, a high level of corruption is still very conducive since it means that there is usually a weak institutional framework with little oversight and law enforcement capacity.

An overview of different forms of forest related corruption is given by Tina Søreide (2007):

Corruption related to	Who and how	Potential impacts
Illegal logging	Firms and landowners	Deforestation, land erosion, damage to vulnerable and protected forests
Monitoring of the logging	Forest controllers, fee collection system, trading system	Informal logging/poor knowledge about actual timber production, environmental damage
Environmental control	Forest controllers	Loose controls for the protection of non-timber values, environmental damage
Timber trade/ timber theft	Forest traders, customs officers, buyers	Reduced state revenues, illegal sale of protected species, higher prices
Regulatory systems	Forest authorities, politicians	Misleading forest management plan, unsustainable logging/deforestation
Royalties	Political levels, fee collection system	Lower state revenues
Logging licences	Political levels, forest authorities, information brokers	Uncontrolled/ unsustainable logging
Concession terms	Political levels, forest authorities	Exploitation of forests, too large concession areas, less revenues

The compilation shows that all parties involved in some way in logging operations can be corrupted.

On top of that different forms of corruption can be distinguished with relevance for the forestry sector: petty corruption, grand corruption, non-collusive corruption (extortion) and collusive corruption as well as administrative and political corruption.

Grand corruption involves large sums of money and usually high ranking officials with considerable

powers. **Petty corruption**, in contrast, involves small amounts and lower ranking officials without much leverage.

Non-collusive corruption imposes extra costs on businesses, since it means that officials demand a bribe for a legal service which should have been granted anyway. The outcome for the business affected of that practice is that it can operate legally, having obtained a license or something alike.



Collusive corruption is much harder to detect and to root out and by the same token much more harmful to the state and to good governance of natural resources since in that case corrupt government officials and bribers team up in order to collusively rob the state. It means that officials permit illegal actions without reporting it. In return for their blind eyes or else active help they either get bribed or get a share of the proceeds obtained. Illegal logging often is an example of collusive corruption. When those forms of corruption take place at the administrative level this is called **administrative corruption**. On the other hand, political corruption does usually not happen at the operative level but one step before it. Here decision-making is distorted by corruption – usually in the form that firms buy off the state by bribing politicians for certain decisions in their favour (also called **state capture**). This form of corruption harms the administration of natural resources by legalising illegitimate actions, like e.g. certain forms of logging.

Consequences of corruption in the forestry sector

Corruption distorts and perverts public policies, leading to the misallocation of public funds. This entails a deterioration of public policies: Incompetent people are placed in office who cannot live up to the demands of the job (cronyism, nepotism), management performance worsens due to officials turning blind eyes towards offenders (who bribe the overseers), or worse, officialdom is directly involved in illegal acts (collusive corruption).

Pervasive corruption is a sign of weak institutions as much as it further weakens the institutions. In the case of forest governance this means that the state's tasks of monitoring the state of its forests, enforcing forest law, detecting and prosecuting offenders and regulating the sustainable use of forest resources (or at least any profitable use generating income for the state) cannot fully be accomplished. This has environmental, economic and social consequences.

Environmental consequences

Corruption leads to uncontrolled illegal logging as well as to land grabs and related forest degradation. This adversely affects forests and thus biodiversity. It leads to the depletion of forest ecosystems, which is especially grave given that forests (especially tropical ones) harbour two thirds of all terrestrial eco-regions and a large part of the world's species. Illegal logging affects not only the area logged; a much larger area around the logging area itself is affected. Forests thus affected can no longer entirely fullfil their environmental functions. This affects the people who directly depend on them for their survival (see below) but it has wider consequences: Forests deliver various environmental services: They stabilise soil through their roots, deposited biomass and plant cover; they provide physical shelter in the case of avalanches; they filtrate and clean water; they regulate the humidity ratio and water concentration of the soil; they generate direct incomes and means of living for more than 1.6 billion people, most of them poor; they are a living space for humans, and they can serve as a recreational area. Furthermore, forests provide the most important lever worldwide to contain the increasing concentration of CO₂ in the atmosphere, given their enormous CO₂ storage capacity.

The results of forests losing their capacities to exert their environmental functions due to illegal logging induced by corruption could be seen in February 2006 when thousands died in the Philippines after torrential rains which had caused mudslides:

"According to government officials and environmental groups, problems ranging from government corruption and ineffective laws to a lack of money and the political will to enforce the laws contributed to the collapse of the mountainside here in the first place, and allowed it to become a large-scale human tragedy. 'This is a failure of the implementation of laws and a failure of policy,' said Von Hernandez, the campaign director for Southeast Asia of the environmental group Greenpeace, which had warned the government last month that its current policies were bound for trouble. But the logging ban already in place is widely seen as ineffective. Endemic corruption, lack of resources and weak law enforcement have allowed illegal logging to flourish and environmental predators to go unpunished, critics said. (...) And politically, whoever sits in the presidential palace must reckon with the nation's political dynasties, several of which earned their wealth and power through logging, Mr. Hernandez said. (...) In late 2005, for instance, the environment department allowed the resumption of logging by a company owned by a senator who is an ally of the president, over the objections of residents and religious leaders. The logging concession was within a national forest reserve."

Source: New York Times, 21 February 2006

Economic consequences

Corruption distorts (and usually increases) market prices. Based on an economic simulation Seneca Creek Associates/Wood Resources International (2004) estimate that world prices for wood are depressed by illegal timber by 7 to 16 percent. Since most illegally harvested timber does not enter the international market, price (and market) distortions are mainly a problem for the local economy of the affected country. Small and medium enterprises (SMEs) are usually hardest hit by the price distortions and loose out against more competitive bigger rivals. When illegal timber is smuggled through international borders it affects the economies of various countries, driving up operation costs for legal producers not only in the country of origin but as well in third countries.

Moreover, in a corrupt setting investment risks and legal operation cost are driven up. This can start a vicious circle driving more and more companies into informality and secretive (i.e. corrupt) business practices. Or else, it may force them to cease operations. Where forest administrations are corroded by corruption forests usually do no longer contribute their share to GDP. This poses a problem for the state (lost revenues in taxes not paid) as well as for the forestry sector since it will be perceived as worthless, which can put at risk both further official investments and protection efforts. According to World Bank estimates the revenues lost in terms of uncollected taxes and royalties due to illegal operations in the sector amount to 5 billion USD (Kishor/ Oksanen, 2006, p.12).

Social consequences

Corruption thrives on but also accelerates the deterioration of respect for the law. The more pervasive corruption is, the more rapidly society becomes corroded by distrust in the state and its representatives (police, judges, officials, politicians). This, in turn, creates difficulties in governing the society. Extensive forest areas are often known as lawless areas where the state is absent. Brasil is an apt example, where cases of extra-judicial killings of forest conservation campaigners (such as Chico Mendez or Dorothy Stang⁴) are part of the struggle between conservationists and loggers.

Illegal logging causes social disruption due to the destruction of the living space of people and the ensuing deterioration of rural living conditions. Often companies operating in the forests try to buy off locals, thus creating greed and envy which have the potential to sustainably threaten social peace in the community.

⁴ Chico Mendez was a Brasilian rubber tapper and unionist who fought for the preservation of the rainforest. He was murdered in 1988 by cattle ranchers. Dorothy Stang was an American-born nun who was murdered in the Brasilian state of Pará, purportedly because of her efforts to stop illegal logging for cattle breeding.



Approaches to combating corruption

Since corruption affects politics as well as society and economy measures to stem it should be implemented in all of these areas.

Politics

The most important measure to fight corruption effectively and sustainably is improving the quality of institutions and of law enforcement. Without an adequate institutional backbone and a functioning law enforcement system which persistently increase the risk of disclosure and punishment corruption and illegal logging induced by corruption cannot be reduced effectively.5 An improved institutional quality increases trust in the state and reduces significantly transaction cost (among them non-collusive corruption, which is often necessary in deficient institutional settings to get things under way). As well, it increases the will of investors to take riskier investment decisions, which not only has the potential to benefit the environmental sector but the economy as a whole.

In the case of forest authorities one way of improving their performance is a better equipment with technical hardware and with capacities which are all necessary for the personnel to exert their tasks. Forest authorities are, among other things, responsible for monitoring and oversight of the observation of concessions and laws. If those authorities are not highly mobile and do not have the technical equipment nor the manpower to show presence in the field, they will never be able to prevent illegal logging⁶.

However, better equipment alone is no warranty against corruption. In general, an increase in transparency and simultaneously a reduction of discretionary power are regarded necessary in the fight against corruption. This implies regulatory reforms of the (forest) authorities. The purpose must be to establish a regular and open reporting system (with information available publicly), regular scrutiny of the forest authority's balance sheets (e.g. by the comptroller's office and/or a special anti-corruption unit), and possibly additional controls by a third party of the procedures most prone to corruption, like the awarding of contracts and concessions. Yet, when implementing regulations with the aim of better oversight and control it is important that this effort does not backfire - an overdose of regulations and red tape will be costly for business and will create opportunities to cut short on institutional procedures via corruption.

As has been stated above, high levels of political competition correspond with a lesser proneness to pervasive corruption. It can thus be regarded as a useful strategy to enhance political competition, between parties but also between different state entities and between different subsidiary levels (departments, municipalities, central state etc.). Yet, without a consistent and functioning law enforcement system, increased political competition will not necessarily lead to less corruption. This is because competition in itself can be perverted and together with collusive corruption, lead to a situation of state capture, the systematic buying of policies by business.

Strengthening law enforcement in order to combat corruption and related illegal logging extends to several areas:

- environmental law,
- land tenure regulation and certification,
- forest law,
- civil law,
- criminal law.

⁵ This is even more important for donors who give direct budget support to countries. A defective institutional system and weak law enforcement may lead to considerable misallocation of this support.

⁶ This problem has been described to the author by staff of the Bolivian *Superintendencia Forestal*, the State's oversight authority.

Those efforts as well as anti-corruption measures and provisions should ideally be incorporated in the National Forest Programme⁷ (nfp) if one exists.

A better forest monitoring (which could as well be delegated to independent third parties or civil society groups, see below) together with a duly strengthened system of law enforcement should improve the general environment for sustainable, legal and profitable forest activities and boost public confidence in the state. One of the most distinguished efforts internationally to improve law enforcement in the forestry sector is the FLEGT initiative. FLEGT stands for Forest Law Enforcement, Governance and Trade:

"... in 2003, the European Commission adopted a European Union (EU) Action Plan for Forest Law Enforcement Governance and Trade (FLEGT). The key regions and countries targeted, which together contain nearly 60% of the world's forest and supply a large proportion of internationally traded timber, are Central Africa, Russia, Tropical South America and Southeast Asia. The FLEGT Action Plan was endorsed by the Council (...) in November 2003.

Though the ultimate goal of the Action Plan is to encourage sustainable management of forests, *ensuring legality of forest operations* is considered a vital first step. The Plan focuses on *governance reforms and capacity building*, to ensure timber exported to the EU comes only from legal sources. It includes ideas for action in areas such as public procurement and the private sector.

A key element of the Action Plan is a voluntary scheme to ensure that only legally harvested timber is imported into the EU from countries agreeing to take part in this scheme. The Council adopted a Regulation in December 2005, allowing for the control of the entry of timber to the EU from countries entering into bilateral FLEGT Voluntary Partnership Agreements (VPA) with the EU. Once agreed, the VPAs will include commitments and action from both parties to *halt trade in illegal timber*, notably with a license scheme to verify the legality of timber. The agreements will also *promote better enforcement of forest law* and promote an inclusive approach involving civil society and the private sector."

Source: European Commission, 2008, highlights by the author

The process exists as well without the Trade component, called FLEG. The World Bank is supporting regional FLEG processes: "Three Regional FLEG ministerial processes have been initiated so far – in East Asia (2001), Africa (2003), and Europe and North Asia (2005). All three FLEG processes have been remarkably successful in eliciting high-level political commitment and fostering a spirit of shared responsibility. (...) The ministerial processes have also been successful in drawing the attention of policy makers to new and innovative tools – such as customs collaboration and anti-money-laundering laws – to combat illegal logging and forest corruption." (World Bank 2006)

Another example of the fight against corruption in the forestry sector is as well supported by the World Bank – the strengthening of forest governance in Indonesia (World Bank 2006):

"Promoting transparency: The initiative's goal is to make accurate and up-to-date forest sector information continuously availabe to decision makers. This includes: a) improving the information management process that generates and archives information on Indonesia's forest and timber resources; b) establishing a comprehensive disclosure policy that clearly articulates what information can be publicly disclosed and what is confidential; c) developing effective disclosure mechanisms that allow multiple stakeholders to access accurate and up-to-date information on Indonesia's timber and forest resources; and d) encouraging an improved decision-making process able to use the information.

⁷ National Forest Programmes are an internationally accorded instrument for the implementation of crosssectoral national forest policy. They should take place as a dialogue between all stakeholders and be ideally an integral part of national sustainability and poverty reduction strategies. NFPs aim at the sustainable use of forests. To that end political strategies and action plans should be formulated within a cross-sectoral and multi-stakeholder dialogue and their implementation, monitoring and evaluation be accorded. An NFP is a political process which creates transparency through consultations and public debates and which facilitates negotiations between partners and continuous consensus building.



Promoting law-enforcement: The government is implementing and supporting a comprehensive framework of measures, designed in extensive multistakeholder consultations, to prevent, detect and suppress forest crimes and improve law enforcement in Indonesia. This framework includes the following: a) support for the establishment of a forest crime case tracking system that will allow multiple stakeholders to monito and hold the government to account for its law enforcement operations and judicial processes; b) assistance with the implementation of Indonesia's anti-money laundering legislation, as it relates to forest crimes; c) continued support for an interagency forest law enforcement strike force; and d) support for participation by the Indonesian government in the Asia FLEG process."

When fighting crossborder forest crimes and corruption it has already proved fruitful to join forces with other states and organisations. One such approach which is worth considering is the ASEAN-WEN (ASEAN Wildlife Enforcement Network) initiative. It is a regional intergovernmental law-enforcement network designed to combat illegal wildlife trade. It enables countries to share information and learn from each other's experiences. Such approaches could as well work in the area of forest crimes. Since corruption often facilitates and/or entails illegal trafficking it seems worthwile to include anti corruption training and knowledge building in those initiatives.

Society

Since society is adversely affected by corruption, illegal logging and forest destruction, societal participation is key in combating it. Otherwise long lasting results cannot be achieved. Civil society should be adequately engaged when it comes to policy formulation (stakeholder consultation), forest monitoring, forest management and corruption prevention.

Different to satellite surveillance techniques which allow tracking forest crimes, corruption affecting forests is harder to track. Since corruption is a social phenomenon it is best tracked by special investigation units and/or civil society pressure groups. Those groups sometimes as well monitor activities in the forest and uncover illegal practices. Examples of successful work in this area are Global Witness, Greenpeace and several indpendent forest monitoring groups⁸.

Civil society participation is no panacea, since ordinary citizens often as well are prone to corruption. Yet, it is usually a useful tool to control authorities: "To date, just and fair forest management, also with respect to forest protection, has mainly been achieved where the population themselves have performed management tasks. The best protection against corruption is the creation of a joint management system comprised of representatives of the municipality and legitimate representatives of the local population." (GTZ, 2005, p.16)

Economy

Corruption is an economic phenomenon and there are various economic mechanisms against it. Generally, the better and the more open the business environment, the less advantages are to gain from corruption. Excessive red tape, overregulation and intransparent procedures all may lead to corruption. So reducing them should reduce operating cost for businesses and contribute to curbing corruption.

Apart from increasing political competition, it should be similarly favorable to increase economic competition, in the fight against corruption. More competition can (but need not) lead to less secrecy and incentives for corruption. However, since there will always be some who try to gain an illegal advantage over competitors, this measure will most likely be of limited impact only, unless accompanied by better law enforcement.

Apart from better law enforcement and cutting red tape, economic incentives as well can work to reduce illegal logging. Less return from illegal logging may

⁸ Independent Forest Monitoring (IFM) is defined by Global Witness as follows: "IFM is the use of an independent third party that, by agreement with state authorities, provides an assessment of legal compliance, and observation of and guidance on official forest law enforcement systems. Its independent-but-official status is central to the concept of IFM. (...) (...) monitors work in the interests of the public, independent of the host organisation whether it be a govenrment agency or otherwise." (Global Witness, 2005, p.18)

make this practice less attractive and may thus reduce the need to bribe officials. This can be achieved via an increase of the price of wood (though this may also backfire and trigger increased illegal logging), or, since prices are usually not set nationally, via the reduction of scarcity rents, i.e. the premium gained when demand exceeds supply⁹. Scarcity rents of wood can be reduced improving marketing infrastructure¹⁰ for wood products or the promotion of wood production, e.g. in plantations. Other ways of boosting the value or market access of wood are certification schemes or the increase of the value of standing forests, e.g. via payment for environmental services schemes or carbon credits.

Conclusions

Corruption is a pressing problem which creates great problems for the governance of a society and its natural resources. In forest management it contributes to the uncontrolled depletion of forests and undermines on a large scale political efforts to sustainably manage forests. The fight against corruption is a vital part of the protection of forest ecosystems. There are several instruments for that which have all to some extent already been tested and found valuable. Indispensable in the fight against corruption is the participation of civil society, not least because corruption is a social phenomenon which can only be rooted out by society as a whole. Illegal logging and related forest corruption is by no means a problem of single states. Given the ever increasing importance of forests in the struggle against climate change, desertification and loss of biodiversity, forest corruption and destruction should be treated as a worldwide problem. In order to stem it states have to join forces.

⁹ Another (similar) definition by Cavazos Cepeda (2005) describe a scarcity rent as "... the rent that accrues to the owner of a natural resource just because it is scarce".

¹⁰ A step to be delibered carefully since it may well imply increased road construction into the forest, which in turn may deteriorate environmental assets.



References

Cavazos Cepeda, Ricardo: Scarcity Rents and Rent Seeking. Berkeley 2005.

Contreras-Hermosilla, Arnoldo: The underlying causes of forest decline. CIFOR Occasional Paper 30. Jakarta 2000.

European Commission: FLEGT/FLEG. In: <u>http://</u> <u>ec.europa.eu/environment/forests/flegt.htm</u> (as of June 2008).

European Environment Agency, October 2007; http://dataservice.eea.europa.eu/atlas/viewdata/ viewpub.asp?id=2719

FAO: State of the World's Forests 2007. Rome 2007.

Global Witness: A guide to independent forest monitoring. London 2005.

GTZ: Preventing corruption in resource allocation. Land reform, forest management, agriculture irrigation. A practical guide. Eschborn 2005.

Hardin, Garrett: "The tragedy of the commons". In: Science 162/1968. Online at: <u>http://www.sciencemag.</u> <u>org/cgi/content/full/162/3859/1243</u> As of May 2008.

Kishor, Nalin/Oksanen, Tapani: Combating illegal logging and corruption in the forestry sector. In: Environmental Matters Annual Review July 2005 – June 2006. Washington 2006.

Lederman, Daniel/Loayza, Norman/Reis Soares, Rodrigo: Accountability and corruption. Political institutions matter. World Bank Policy Research Working Paper. Washington 2001. **Conde, Carlos H.:** "Danger of Philippine Landslides often ignored, critics say", The New York Times, 21 February 2006.

Osborne, Evan: On the opportunity cost of corruption. Osaka 2002.

Seneca Creek Associates/Wood Resources International: Illegal logging and global wood markets: The competitive impacts on the U.S. wood products industry. Poolesville, Maryland 2004.

Søreide, Tina: Forest concessions and corruption. U4 Issue 3 2007. Bergen 2007.

Links for further information:

http://www.asean-wen.org/index.php

http://www.gtz.delanti-corruption

http://www.u4.no

http://transparency.org

http://www.globalwitness.org

http://www.gtz.de/de/themen/ laendliche-entwicklung/1822.htm

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH

– German Technical Cooperation –

Sector project "International Forest Policy" (Division 47)

Dag-Hammarskjöld-Weg 1-5 65760 Eschborn, Germany

T +49 61 96 79-62 48 F +49 61 96 79-62 48 E peter.saile@gtz.de, tangmar.marmon@gtz.de I www.gtz.de

