



# Corruption and the Environment

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## **Abstract**

This paper examines public sector corruption in the environment and natural resources sector and suggests possible responses based on best practices. Corruption in the environmental sector diverts funds allocated for environmental programs to private pockets through embezzlement and bribery. It facilitates trafficking in wildlife and other natural resources and leads to depletion of natural resources and pollution of environment through bribery in environmental inspections and permitting system. Corruption also contributes to the development of environmentally damaging policies and practices and to unfair allocation of environmental resources that contributes to environmentally harmful practices.

The causes of corruption in the environmental sector includes typical causes attributed to any other sectors: insufficient legislation, lack of respect for the rule of law, weak democracy, wide authority given to public officials, minimal accountability and transparency, poor enforcement, low levels of professionalism, and perverse incentives. In addition, corruption in the environmental sector is also triggered by conflicts between private interests in revenue that can be gained from environmental resources and public interests in a healthy environment.

Corruption may occur across a number of transactions, starting from bribery and cronyism in developing national policy and embezzlement in implementing environmental programs to bribery in issuing permits and licenses and collecting “rents” while enforcing environmental regulations. It can be well organized from top to bottom and linked to organized crime (for example, in mineral, timber and wildlife trafficking), and it can be widely represented through a number of governmental agencies and services. The areas most vulnerable to corruption include environmental and natural resources policy and regulatory development; utilization of environmental resources; permitting and certification processes; and environmental enforcement (inspections and policing).

Strategies to address corruption in the environmental and natural resources sector include a combination of enforcement, prevention and awareness elements. For sustainability, anti-corruption efforts need to emphasize preventive reforms and public awareness components because these ultimately reduce the opportunities for corruption. Recommended strategies include: reforms to improve transparency and accountability, legislation to reduce loopholes and bureaucratic discretion, reasonable environmental standards and requirements, reduced bureaucratic red tape by simplifying and streamlining administrative processes, citizen participation and oversight through establishment of citizen watchdog groups and public-private

dialogues, professional and responsible investigative reporting in the media, and comprehensive public awareness campaigns on the causes and costs of corruption to promote citizen intolerance to corruption.

## **Introduction**

This paper examines corruption in the environment and natural resources sector. Other related papers are being written on corruption in particular industrial sectors that *use* natural resources, such as energy and agriculture. This study is distinctive in that we focus on the impact of corruption on natural resources and environmental management and preservation as well as natural resources utilization.

This paper discusses only corruption in the public sector and defines as the ***abuse of public office for private gain***. It encompasses misconduct by governmental officials such as embezzlement, fraud, cronyism, influence peddling, nepotism, patronage, extortion, and bribery.

We have organized our thoughts as follows: first, we identify the major areas in the environmental sector that are vulnerable to corruption, second, we provide several case studies to demonstrate how these vulnerabilities operate in reality and what has been done to address them, and finally, we suggest some tools and strategies that appear appropriate in preventing or mitigating the impact of corruption in the environmental sector.

## **Corruption in the Environmental Sector**

Corruption undermines democracy and reduces economic growth. It diverts public funds to serve the private interests of some public officials. It breeds poverty and public mistrust of impartial justice and the government. In the environmental and natural resources sector, public sector corruption serves the private interests of bureaucrats and criminals by taking away from citizens their rights to clean and complete environment, misallocating environmental resources, and diverting funds from conservation and preservation.

Corruption in the environmental and natural resources sectors may occur across a number of transactions, starting from bribery and cronyism on the level of developing national policy and embezzlement in implementing environmental programs to bribery in issuing permits and licenses and collecting “rents” while enforcing environmental regulations. It can be well organized from top to bottom and link to organized crime (for example, in mineral, timber and wildlife trafficking), and it can be widely represented through a number of governmental agencies and services.

Corruption impacts:

- Establishes environmentally damaging policies and practices to enrich bureaucrats and criminals;
- Allocates environmental resources in an unfair manner allowing environmentally damaging practices;
- Diverts funds allocated for environmental programs to private pockets (embezzlement, bribery);
- Allows trafficking in wildlife and other natural resources;
- Allows depletion of natural resources and pollution of environment through bribery in environmental inspections and permitting system.

The environment can be affected by corruption in other sectors, for example, in agriculture, privatization, public procurement, customs, the judiciary, and others. Thus, privatization conducted through corrupt procedures may allow new owners to use privatized land or facilities in an environmentally damaging manner; or regulations and procedures established in customs may open opportunities for trafficking in wildlife. Later, we will provide an example of how corruption in public procurement resulted in environmental damage.

Corruption’s impact is very difficult to measure. Box 1 provides just a few documented measurable examples of the impact of illegal activities in the environmental sector that can be attributed to corruption to great extent.

### **BOX 1. ILLEGAL ACTIVITIES AND CORRUPTION IMPACT IN THE ENVIRONMENTAL SECTOR (examples)**

#### Trafficking in wildlife:

- “The trafficking in threatened species, including cheetahs, chimpanzees, crocodiles, elephants and other species continues, earning smugglers profits of \$8 billion to \$12 billion annually. Among the most coveted black market items are tigers and other large cats, rhinos, reptiles, rare birds, and botanical specimens. Most illegally traded wildlife originates in developing countries, home to most of the world’s biological diversity. Brazil alone supplies some 10 percent of the global black market, and its nonprofit wildlife-trade monitoring body, RENCTAS, estimates that poachers steal some 38 million animals a year from the country’s Amazon forests, Pantanal wetlands, and other important habitats, generating annual revenues of \$1 billion. Southeast Asian wildlife has also been plundered: the Gibbon Foundation reports that in a single recent year, traders smuggled out some 2,000 orangutans from Indonesia— at an average street price of \$10,000 apiece.” (Mastny, 2002)

#### Forest sector:

- Loss of revenue to governments due to illegal logging is about US\$5 billion annually, with a further US\$10 billion lost to the economies of producing countries (Toyne, 2002).

#### Mineral Resources:

- About 20 percent of US\$6.8 of global trade in rough diamonds is illicit. (Renner, 2002)

The causes of corruption in the environmental sector, in broad brush, are similar to any other sector and include, among others: insufficient legislation, lack of respect for the rule of law, weak democracy, wide authority given to public officials, minimal accountability and transparency, poor enforcement, low levels of professionalism, and perverse incentives. The weight of each component of this generic set of corruption causes varies from country to country and changes over time.

More specifically, the basis for corruption in the environmental sector lies in a conflict between private interests in the commercial value of natural resources (mineral, water, land, forest, wildlife, etc.) and reduction in production cost by using environmentally unfriendly technologies, on one side, and, public interests in a healthy habitat, on the other side.

What makes the environmental sector distinctive from any other is that corruption here is triggered by large amounts of formal and informal revenues that can be gained from the products the environment (minerals, timber, wildlife, gems, etc.). For those countries that are rich in environmental resources and whose economies are primarily based on them, resource distribution, extraction and management become fertile grounds for corruption. There are theoretical and empirical studies that demonstrate how natural resource abundance creates opportunities for corruption and is an important factor in determining a country's level of corruption (see Leite, 1999; Renner, 2002). "Societies whose main income is derived from resource royalties instead of value added seem prone to develop a culture with widespread corruption. Resource royalties enable political leaders to maintain their stranglehold on power by funding a system of patronage that rewards followers and punishes opponents. And because such regimes rely less on revenues derived from a broad-based system of taxation, they also have less need for popular legitimacy and feel less pressure to be accountable." Such countries as Indonesia, Nigeria, Sierra Leone, Columbia, and some other developing countries with high levels of corruption and economies highly dependent upon natural resources could serve as demonstrative examples (Renner, 2002). As was stated at the Annual General Meeting of Transparency International related to corruption in natural resources industries, "...with income of the order of US\$35 billion/year for Mexico; US\$30 billion for Venezuela; US\$22 billion for Nigeria, the potential for good and the temptation for abuse are immense" (Schloss, 2000)

While abundance of natural resources can spark off corruption, resource scarcity can also result in corruption. Limited, but lucrative natural resources can have their value boosted in the black market and create temptation for public officials to fill their own pockets through illegally issued access to these resources. Thus, for example, corrupt officials may issue false permits or overlook illicit consignments of endangered wildlife species in return for bribes and kickbacks (Mastny, 2002).

Another reason why corruption often flourishes in the environmental sector relates to typically poor funding and, as a result, weak environmental institutions responsible for implementing environmental management and conservation programs, and conducting environmental control and policing.

Corruption in the environmental and natural resources sector is caused by combination of:

- Access to valuable environmental resources
- Weak environmental management institutions
- High level of bureaucracy and low level of professionalism
- Lack of transparency and accountability

Studies of corruption in the environmental sector are a relatively recent phenomenon. There is a paucity of hard data to describe the problem, assess its magnitude, and point out the transactions most vulnerable to corruption in the environmental field. There are certainly no reliable statistics on prosecutions of environmental corruption cases or statistics on administrative sanctions for abuse of environmental-related regulations that is easily accessible.

The multi-country surveys on corruption that have been conducted by international organizations, such as the World Bank and Transparency International, do not specifically address the environmental sector or define it very narrowly, which results in information that is neither comprehensive or reliable on corruption in the sector. However, in the report accompanying the 2001 Environmental Sustainability Index developed by the World Economic Forum, researchers highlight, for the first time, the very high correlation between the level of corruption and environmental outcomes: the higher the level of corruption in a country, the lower level of environmental sustainability (Levy, 2001). Some country-specific public opinion surveys conducted by these and a number of other organizations incorporate questions about corruption and the environment in a limited fashion; they provide some of the rare quantitative assessments of where corruption impacts the environmental field. Box 1 provides an overview of how corruption in the environment is represented in these surveys.



There are a number of good reports on particular corruption-related cases or issues, produced by WWF, WRI, Resources for Future, WorldWatch and others, as well as reports in the media. Several particular sectors have been studied more than others, among them forestry (see Callister, 1999, and Contreras-Hermosilla, 2001), mining (see Renner, 2002), fishery (see Environmental Justice Foundation and Fisheries Action Coalition Team, 2000), and trafficking in biodiversity (see Mastny, 2002), energy, and some others.

It is typical for developing countries and countries in transition that their struggle with economic and social hardships takes higher priority than environmental issues, which often are pushed to the very bottom of the national policy agenda. This results in limited systematic attention to the issue of corruption in the environment and a low priority given to this sector in the anti-corruption agenda of both international organizations and countries themselves. There are some good examples of countries implementing comprehensive environmental policies that are able to reduce opportunities for corruption and increase a wide range of benefits for their respective populations. Among them are: Madagascar where the government put environment at the top of its policy priorities and as a result was able to significantly improve environmental governance and transparency; Namibia and Botswana that introduced effective diamond and gold resources management practices that resulted in reduction of corrupt practices and in a wide range of benefits for their respective populations.

## **BOX 2 – SURVEYS ABOUT CORRUPTION IN THE ENVIRONMENT**

*As shown in the following examples from national public opinion surveys, general questions about corruption in the environmental sector are included and indicate a moderate problem. However, specific questions that would allow a more detailed understanding of the particular vulnerabilities of the environmental sector to corrupt practices are rarely incorporated in such surveys.*

In the Diagnostic Survey of Corruption in Romania conducted in 2000, bribery in the environmental sector takes 17<sup>th</sup> place among 18 listed sectors. About 3% of businesses admitted that they paid bribes frequently to obtain environmental licenses.

In survey conducted in Bosnia and Herzegovina in 2000, the environmental sector is not even listed among those that are perceived as highly corrupted. However when businesses were asked where they were asked to pay bribes most frequently, they ranked the environmental sector as the highest, before 22 other sectors, including the traffic police, tax authorities, and customs.

In a survey conducted in Slovakia in 1999, the environmental sector is also not included in a list of 26 sectors, though 13% of enterprises admitted that they encountered bribery in environmental agencies, thus placing this sector in the middle of a list of 21 other agencies where bribes were paid frequently. The average bribe is about 3,200 SK (about US\$ 80), which is in the low-to-mid range among bribes paid to other agencies. Businesses admitted that in about 8% of their visits to environmental protection agencies, a bribe was suggested; in comparison, respondents said that they had to pay bribes in 24% of all visits to get construction permits.

In the Governance and Anti-Corruption survey conducted in Peru in 2001, about 8% of responding firm managers (3% - large, 10% - medium, and 12% - small enterprises) admitted to paying bribes frequently to get environmental licenses; this amounts to about 6% of the total amount paid in bribes to all public agencies. The average amount of bribe was about 445 Soles (about US\$ 125).

According to the Honduras Governance and Anti-Corruption Survey of 2002, 4% of surveyed large enterprises reported paying bribes to obtain environmental licenses, though none of the small, medium or foreign firms admitted to any unofficial payments. 2% of respondents said that they were made to feel that bribes were necessary to obtain environmental licenses. The average unofficial payment made in the environmental sector was 50,000 L (about US\$ 2,980), which is the highest in comparison with other agencies.

The Bolivia Public Official Survey of 2001 calculated a Control of Corruption index for different public agencies and the Ministry of Sustainable Development is ranked at the 64<sup>th</sup> level with the best being the Presidential Ministry (in 98<sup>th</sup> place) and the worst being

the Health Department and the Police.

The Indonesia Corruption Survey of 2002 put the Ministry of Forestry as among government agencies perceived to be the most corrupted (11<sup>th</sup> place among 35 other agencies); 20% of responding businesses consider this ministry among the four where corruption is most prevalent. It was reported that 56% of public officials in the Ministry of Forestry are perceived to be receiving unofficial payments on a regular basis.

There are number of corruption survey conducted on country and lower levels that do not mention environment neither in questions nor in responses (Cambodia, 2000; Latvia, 1998; Albania, 1998; Ghana, 2000, and others).

Corruption is inherent in environmental sector at both “grand” and “petty” levels, as well as at levels in between.

Table 1. Levels of Corruption and Vulnerabilities in the Environmental Sector

<i>Level of corruption</i>	<i>Areas vulnerable to corruption</i>
Grand corruption	<ul style="list-style-type: none"><li>• Environmental and natural resources policy and regulations development</li></ul>
Mid-level corruption	<ul style="list-style-type: none"><li>• Distribution and designation of environmental/natural resources and territories for particular utilization (including through public procurement).</li><li>• Permitting and certifications – issuing permits and certificates for different utilization of territories and natural resources, and operating of industrial sites including permits for emissions, discharges, and solid wastes.</li><li>• Environmental assessments (including EIA)</li></ul>
Petty corruption	<ul style="list-style-type: none"><li>• Enforcement (inspections and policing) – (1) inspections by environmental protection agencies and other related agencies to assess whether established environmental standards are being met, and (2) enforcement via policing violations such as, for example, poaching, illegal logging, resource trafficking, emissions, etc.</li></ul>

Grand corruption - Environmental and natural resources policy and regulations development.

“Grand” corruption relates mostly to high level of public officials and involves large illegal transactions. Corruption at this level is also defined by the World Bank as a

form of “state capture:” “State capture refers to the actions of individuals, groups, or firms both in the public and private sectors *to influence the formation* of laws, regulations, decrees, and other government policies to their own advantage as a result of the illicit and non-transparent provision of private benefits to public officials” (The World Bank, 2000). As was mentioned earlier, the environmental sector usually takes a low position on national policy priorities in developing countries and countries in transition. Leaders in developing and transitional countries would rather sacrifice clean air and water, biodiversity and forests if they can turn them into profitable businesses and support short-term political agendas and medium-term economic benefits. This lack of vigilance allows corruption to become invasive and systemic. Decisions to adopt or reject some policies or laws can be made due to a lack of understanding and appreciation of environmental consequences *or* with full understanding but inability, due to circumstances, to approve environmentally-friendly policies. We cannot exclude, however, potential corruption here when decision makers’ private interests influence public issues.

Clark Gibson, in his book “Politicians and Poachers” (1999), demonstrates, using evidence from Zambia, Kenya, and Zimbabwe, how political institutions influence politicians and bureaucrats to construct wildlife policies that further their own interests. Different configurations of electoral laws, legislatures, party structures, interest groups, and traditional authorities in each country shape the choices of policymakers - many of which are not consonant with conservation (Gibson, 1999).

In addition, due to shortages in the national or local budgets, the governments often underfund their programs and allow governmental agencies to supplement resources through their engagement in commercial activities (logging, banking, construction etc.) and, in so doing, they open their doors for financial abuses and corruption.

Among the major reasons for grand corruption in the environmental sector are: lack of transparency and accountability in decision making process, disproportionate

influence of wealthy external interests, insufficient laws including those on financial disclosure and lobbying, and broad authority given to public officials that is not coupled to accountability and oversight.

There are few documented examples that can be used to demonstrate the effects of state capture in the environmental sector. One of them relates to biodiversity loss on the Philippines' Negros Island that began when large tracts of forested land in the second-half of the 19th century were converted to sugar plantations. This situation worsened after independence when the national political system was dominated by sugar oligarchs, who constituted a powerful lobby known as the "sugar bloc" and who "successfully twisted economic and foreign policy to serve their short-term ends" (World Wildlife Fund, undated). Another example can be found in widespread patronage in the Philippines during Joseph Estrada's presidency when construction on the San Roque Dam in Pangasinan commenced despite warnings coming from environmental experts (Pabico, 2000). In Indonesia under President Suharto, licenses for mining, logging, and use of fertilized lands were awarded to domestic and foreign businesses that were closely linked to or broadly supportive of the regime and with no environmental considerations; this ultimately resulted in depletion of resources and deforestation (Renner, 2002).

#### Mid-level corruption - Distribution of environmental resources, and permitting and certification processes.

Corruption at the mid-level happens more often, and hence those who work in the environment and natural resources sector can provide more examples. This type of corruption is defined as mid-level because, like grand corruption, large amounts of money can be at stake especially if activity leads to significant profit, or it can involve lesser amounts of money but can be rather widespread. At the same time, this type of corruption usually involves mid-level officials either at the national or local level as opposed to the top national leadership. At this level, corruption is represented in the

wide ways: from bribes, gifts, influence peddling, favoritisms, nepotism, and speed money to kickbacks and embezzlements.

The major stimuli for this kind of corruption include loopholes in laws and regulations that allow for overly broad interpretations, broad authority given to public officials with little accountability, and lack of transparency in decision making processes.

Demonstrative examples can be found in the forestry sector where significant amounts of money are often paid to obtain timber concessions or such concessions are handed out as political patronage to key supporters. (Callister, 1999). Such concessions are not constrained only to the timber industry; other resources, such as minerals, petroleum and water are also vulnerable. Another documented example can be drawn from the Philippines where a congressman was quietly issued the environmental license in 1998 for his rubber processing plant by a regional official whom he had promoted less than two weeks before. (Severino, 1998).

Another example that demonstrates widespread corruption in the environmental sector and that involves both grand and mid-level corruption can be found in Mexico. In the speech at the National Accord for Transparency and Combating Corruption on February 26, 2001 in Mexico City, Mexican President Vicente Fox described corruption as deeply rooted in the environmental sector in Mexico under the previous administration. According to the President, “the nation’s public property invaded and used for private interests; beach areas and ecological reserves illegally exploited by former and current public servants as well as businessmen and foreigners; environmental impact certificates and forest, fishing, and hunting permits granted on a discretionary basis; preferential treatment given to companies responsible for polluting; distribution of water for political purposes; punitive actions not carried out.” Interviewed by the World Press, Mexican Environment Secretary Víctor Lichtinger described the previous system as a system of “agreements” and privileges. “There were semi-official companies and political leaders who could not be touched, who were

beyond the reach of the law.” To illustrate this, José Ignacio Campillo García, the head of Mexico’s Environmental Protection Agency (Profepa), referred to the situation with licenses granted to private individuals for use of beach areas that resulted in underpayment of about US\$88 millions in fees and taxes and construction of residential and tourist facilities within protected natural areas on the sea coast zone, licenses for exporting wildlife allowing an individual to export 50,000 birds, and licenses for extensive logging. The current administration is facing a challenge to review actions taken by the previous administration and develop new policies and practices to prevent irregularities and corruption in the future (Mongeand Ortiz, 2002).

#### Petty corruption -- Enforcement (inspections and policing

Petty or “survival” corruption is practiced by public officials who may be grossly underpaid or depend on small rents from the public to feed their families” (TI Source Book 2002). Petty corruption in the environmental sector occurs mostly during environmental inspections and the policing of illegal acts such as poaching, illegal logging, discharges, emissions, etc. In this kind of corruption, insignificant amounts of money and low-level officials are usually involved, unless it is part of a vertically organized corrupt scheme that can reach into higher levels of government. The most common forms of corruption at this level are bribery, influence peddling, and nepotism. The major reasons for this kind of corruption include inspection regulations that are open to overly broad interpretation, insufficient inspection procedures, lack of accountability, low salaries for inspectors, and unattainable environmental standards that are established without consideration of the resources needed for businesses or technologies available to meet these standards. The vulnerability to corruption of particular environmental sectors can be deconstructed into detailed elements. For example, Box 3 presents an extensive list of corrupt practices in the forestry sector developed by Callister (1999). Such lists can help to identify the most appropriate and efficient tools and strategies to address corruption in particular environmental sub-sectors.

**BOX 3. EXAMPLES OF CORRUPTION IN THE FORESTRY SECTOR (taken from Callister, 1999)**

***'Grand' Corruption***

- Companies providing support to political parties, bribing politicians, senior government officials or military officers, to:
  - obtain a timber concession;
  - obtain extensions to existing concessions;
  - obtain approval for a timber processing venture;
  - avoid prosecution for transgressions;
  - avoid payment of fines or other fees; and
  - negotiate favorable concession/investment agreements, including tax holidays and other investment incentives.
- Politicians, high-ranking military and government officers using their status to effect the same outcomes as above, for their own companies or those of relatives or political allies.
- Companies bribing communities to agree to grant them timber harvesting rights.

***'Petty' Corruption***

- Companies bribing military personnel, junior and local government officials, to:
  - falsify declarations of volume or species harvested;
  - avoid reporting harvesting of prohibited species or diameters;
  - falsify export documentation or ignore document irregularities;
  - avoid reporting and prosecution for non-compliance with forest management regulations established in the concession contract;
  - permit illegal movement of timber;
  - ignore logging in protected areas and outside concession boundaries;
  - allow timber processing without the necessary approvals; and
  - ignore infringements of timber processing regulations, including pollution controls.

All three levels of corruption can coexist in a country or province with or without explicit interlinkages. Frequently, petty corruption “is simply a downwards projection of much more damaging forms of corruption at higher levels” (TI Source Book 2000).

**Experience in addressing corruption in the Environmental Sector**

Solving problems of potential corruption may not be a typical focus of environmental programs, though a number of current programs recognize the impact that corruption has on the environmental sector. They seek to address it by including activities to promote transparency and accountability in environment and natural



resources management and enhance community participation in governmental decision making processes with regards to natural resource allocation and management (e.g. Nepal, Philippines and Indonesia). When corruption is not taken into account and no anti-corruption measures are incorporated, the risk that the project can fail to achieve its objectives increases due to possible diversion of funds through corrupt activities or obstacles created by corrupt practices.

Several cases of corruption in environment-related activities can help illustrate these points.

#### Case 1. Russia Far East Forest

World Wildlife Fund (WWF) estimates that the Russian budget loses over US\$1 billion in taxes, fees, and other payments annually due to illegal wood harvesting, processing, and trade, while legal revenue constitutes approximately US\$ 6 billion per year. Illegal logging flourishes in all the primary wood-producing areas of the country; it is estimated by different sources at 20 to 50 per cent of total harvested timber, varying from area to area. Among 6,383 forest-related illegal action cases investigated in Russia in 1999, 3,113 cases were brought to court and in only 907 of these cases have any parties been found guilty and received sentences (Kotlobay. 2002).

The Russian Far East region differs from other regions of Russia in terms of its specific climate, distinctive landscape, and unique plants and animals. However, the region suffers from significant loss in biodiversity, rapid decrease of its most valuable forests, and change in microclimate and hydrological regime due to forest mismanagement, illegal logging, and other kinds of forest crime. WWF has been implementing the Forest Program in Russia since 1994. It has witnessed frequent cases of illegal logging and forest crime. To address this problem, in 1998 WWF initiated a monitoring force, the CEDAR Mobile Group, within the Tiger State Inspectorate of the Department of Natural Resources of Primorskiy Krai. It has the authority to conduct inspections of any wood processing enterprise. During inspections, the Cedar Mobile Group revealed more than 24 cases of illegal logging, for which 14 criminal

investigations have been initiated. Penalties of over 1 million rubles (about US\$ 34,000) have been imposed, and about 3,000 cubic meters of wood, along with tractors, chainsaws, and other equipment used by illegal loggers was confiscated. The CEDAR Mobile Group cooperates effectively with local police in the region. To improve the professionalism of the inspectors, WWF conducted two training sessions with 40 forest inspectors on current legislation related to the forestry sector and legal aspects of forest harvesting crimes. The experience of WWF and other NGOs has attracted the interest of the Ministry of Natural Resources of the Russian Federation, which as a result has conducted a large-scale inspection of forest areas to pinpoint logging infringements.

To approach the problem of illegal logging and forest crime in a more systematic way, WWF commissioned in 2001 several studies in the Primorskiy Krai of the Far East region to identify vulnerabilities to crime and assess the magnitude and impact of forest crime. These studies revealed that illegal logging in Primorskiy Krai constitutes from 30 to 50 percent of the total amount of harvested timber, that up to 80 percent of the timber in storage is of illegal origin, and that several hundred thousand cubic meters of illegally cut and subsequently legalized timber is exported from the Primorskiy Krai every year. The studies showed that practically each stage and level of forest management and utilization is vulnerable to crime and misdeeds that involve bribery, favoritism, nepotism, embezzlement, and other kinds of corruption. They also mapped out some particular processes to pinpoint exactly where and how such crimes are committed. The studies concluded that enforcement measures are not enough to fight forest crime and called upon the design of comprehensive strategies that include both preventive and enforcement measures (Kotlobay and Ptichnikov, 2002; Kotlobay, 2002).

*Lessons learned:* This particular case demonstrates how within a traditional environmental program, WWF initiated several activities targeted at corruption and other kinds of forest crime. Starting from small but aggressive activity focused on the consequences of illegal activity, WWF concluded that more comprehensive strategy was needed. A lesson that can be learned from this example is that while to secure

resources and ensure effective results of the program at the program design or implementation stage, it is necessary to look at potential risks that can be imposed due to corruption and embed safeguarding activities and strategies to prevent corruption. It might require a single but strong activity to address the major threat caused by corruption (like the CEDAR Mobile Group). It might be more effective to look at the problem of corruption in a systematic way and develop a multidimensional strategy that includes preventative, educational and public awareness measures that would have long lasting effects.

### Case 2. Lesotho Highlands Water Project

The estimated US\$ 8 billion Lesotho Highlands Water Project has been designed to divert water from the Orange River to the urban and industrial Gauteng region in South Africa through a series of dams and tunnels blasted through the mountains. The first dam in this multi-dam scheme, called Katse, was completed in 1995. The second, called Mohale, is currently under way, despite the fact that critical social and environmental problems affecting thousands of people remain unresolved. Widespread corruption in this project is thought to be one reason that the social fund intended to help affected communities has not reached its recipients. (International Rivers Network, IRN's Lesotho Campaign).

In April 1999, a huge corruption scandal was exposed involving the Chief Executive of the Lesotho Highlands Water Project, Mr. Masupha Sole, and 12 of the biggest dam-building companies in the world. The companies were accused of paying bribes to win lucrative dam-building and engineering contracts. In November 1999, Mr. Sole was convicted of 13 counts of bribery and sentenced to 18 years in prison for taking more than \$2 million in bribes over a ten-year period from intermediaries representing the 12 construction firms, including ABB (Swedish/Swiss), Acres International (Canadian), Impregilo (Italian), Lahmeyer (German), and Sogreah (French). In September 2002, Acres International was convicted of two counts of bribery for paying over US\$ 260,000 to Mr. Sole through an agent in order to secure contracts in the dam

building scheme. Though no Acres staff or officers will receive jail sentences, the company is expected to be fined (Probe International Press Advisory, October 2002).

In this particular example, the corruption revealed by Lesotho authorities was manifested in the public procurement process of an environment-related project. It appears that there were no effective control mechanisms in place to prevent corrupt activities that had been occurring for a period of 10 years and ultimately led to damaging environmental consequences that effected thousands of people.

The environmental groups concerned with the environmental impact of the Lesotho Highlands Water Project mobilized a strong lobbying campaign to bring the attention of the public and decision makers to the environmental problems associated with dam construction. However, they did not attend to the corruption problems plaguing the project. Given the large amounts of money involved in the project, one might speculate that project decisions were influenced more by the profit interests of construction firms and some public officials than by environmental concerns. Attention to corruption issues from the start might have improved the environmental outcomes.

*Lessons learned:* This example demonstrates that in order to advocating for their traditional interests, while environmental groups might also serve a useful public oversight and monitoring function to assess whether environmental projects are vulnerable to corrupt practices – from planning to procurement to implementation. Throughout their life cycles, environmental projects are prone to corruption and civil society organizations can serve as effective watchdogs that observe and expose any potential misconduct. Also, this example demonstrates how corruption in other sectors (in this case, procurement) can become damaging for the environment. A lesson that can be learned from this example is that it is necessary to assess and address corruption risks imposed by sectors outside of environment that in the end can be damaging for the environment.

### **Tools and Strategies to address corruption in the Environmental Sector**

There have been several attempts to identify particular anti-corruption strategies that relate directly to environmental sector vulnerabilities. For example, at the Workshop on Corruption and the Environment at the 9<sup>th</sup> International Anti-Corruption Conference, Mr. Steiner, the Director General of The World Conservation Union (IUCN), in his introductory remarks identified the following measures that need to be taken to minimize the scope of corruption related to the environmental sector (Steiner, 2000):

- “Clearly articulate and define the values corruption accords to the environment and natural resources. This can be done through **legislation** (protected areas, pollution standards etc), **policies** (environmental management), and **conventions** (World Heritage Sites; Ramsar; Biodiversity; Climate Change etc).
- Establish an effective **monitoring system** that relies on public, private and civil society input. Only by **pooling resources, information and exposing corrupt practices** through joint initiatives can we close the loopholes. The environment – perhaps more than any other sector – lends itself to such a collaborative effort as NGOs and business have extensive networks, resources and knowledge they can deploy in the absence of adequate public sector funding.
- Develop an effective system of **incentives and sanctions** to reward compliance. The price of corruption must increase dramatically but at the same time the rewards for clean business transactions must also be raised. Simply banning a corporation from all future tenders for one case of corruption may not be as powerful an incentive as a one year ban after which it can regain access to a market if it has put in place checks and balances to avoid future corruption.”

These strategies reflect some of the very basic measures towards preventing corruption that can be embedded directly into most environmental programs.

Sector-specific strategies have been developed for the forestry sector. Both Callister (1999) and Kotlobay and Ptichnikov (2002) suggest particular activities targeted at transactions that are prone to corruption. Box 4 presents very specific activities

suggested in the WWF report to address illegal logging and forest crime in the Russian Far East.

**BOX 4. WWF SUGGESTED STRATEGIES TO TACKLE ILLEGAL LOGGING AND OTHER FOREST CRIME (taken from Kotlobay and Ptichnikov, 2002)**

**Taking urgent measures to counter illegal forest turnover and degradation**

- Banning or considerably reducing the procurement of hardwoods for 2-3 years.
- Conducting effective forest management (forest cadastre) and determining the remaining stocks of hardwoods and valuable coniferous trees.
- At least doubling the payment for the use of forests, especially hardwood trees.
- Creating a regional center to coordinate activities and train personnel of all state structures that control the distribution, procurement and sale of biological resources.

**Making accounting for forest resources more transparent and effective**

- Tightening control over the accuracy of statistics provided by lumbering enterprises in their annual reports.
- Introducing mandatory sale of standing timber to commercial timber procuring organizations through auctions, and reducing considerably the non-competitive use of timber by issuing appropriate instructions by the heads of administrations at all levels.
- Ensuring the publication of information in the mass media about the allotment of sites, introducing open registration of applications for use of forests, holding contests and giving leasing rights with investment requirements for reforestation and non-commercial intermediate wood cutting.
- Stopping short-term lease of forest sites. Promoting long-term lease of forest sites and rejecting short-term lease.

**Tightening control over logging**

- Separating the controlling functions of leshozes (local public forest management agency) from economic ones.
- Ensuring that all leshozes are financed from the budget (by 2005).
- Making the work of the State Protection Services more effective by improving its financing from the
- budget and revising and expanding the powers of its staff, including rewarding its employees through the use of funds obtained in the form of penalties and compensations paid for violations of forest utilization rules.
- Developing a document at the federal level that regulates the confiscation of technical and transport means used for illegal logging and transportation of timber.
- Establishing a ceiling for damage that may be caused by breaches in forest utilization rules beyond which a lease-holders company will be stripped of his lease and logging license.

**Control over timber transportation and storage**

- Proposing that regulations on transport certificates for the transportation of unprocessed timber be worked out and enacted at the federal level.
- Tightening control over mandatory registration of all warehouses and exchanges of unprocessed timber by appropriate administrative and tax authorities.
- Raising penalties for the transportation of timber without proper documents.

**Control over the sale of timber**

- Introducing customs codes for the Korean and Siberian Pine.
- Developing and enacting regulations on the mandatory sale of unprocessed timber to foreign countries through auctions.
- Raising export duties for unprocessed timber and lowering them for processed timber in order to encourage timber processing inside the country.

These two examples of anti-corruption measures demonstrate very different levels of detail that such strategies can be tailored to address – from generic mechanisms that can be applied to most environmental programs to very specific customized approaches for particular sub-sectors that attend to local conditions.

In developing an anti-corruption strategy or its components, the first and the most logical step should be to conduct a sectoral diagnostic assessment of corruption. This process should include both a multidisciplinary assessment, involving targeted audience surveys and focus groups, and assessments of existing legal frameworks, institutions and programs. The focus of the assessment should be to identify and analyze existing programs and activities conducted by different institutions and stakeholder groups, to pinpoint particular transactions in the environmental sector that are the most vulnerable to different kinds of corruption, to identify openings for anti-corruption interventions, and, finally, to develop priorities for anti-corruption strategies. Such an overview can provide clear direction to develop practical programs that target the most vulnerable and harmful impacts of corruption.

Development and implementation of the strategy should be based on best practices and lessons learned from anti-corruption activities implemented in the environmental sector and any other sector when it is appropriate.

It has been proven in practice that the most effective anti-corruption strategies are those that combine enforcement, prevention and awareness elements. For

sustainability, anti-corruption efforts need to emphasize the preventive reforms and public awareness components because these ultimately reduce the opportunities for corruption to occur in the first place.

In Table 1, we identified several types and levels of corruption in the environmental sector. Table 2 presents both the areas vulnerable to corruption and anti-corruption tools that are likely to be appropriate and effective in addressing corruption.

TABLE 2. Vulnerabilities and Possible Responses

<i>Level of corruption</i>	<i>Areas vulnerable to corruption</i>	<i>Anti-Corruption Tools</i>
Grand corruption	<ul style="list-style-type: none"> <li>• Environmental and natural resources policy and regulations development</li> </ul>	<ul style="list-style-type: none"> <li>• Lobbying for reforms: transparency, accountability, citizen empowerment</li> <li>• Watchdog groups</li> <li>• Public oversight</li> <li>• Public-private dialogues</li> <li>• Investigative reporting</li> <li>• Public awareness campaigns</li> </ul>
Mid-level corruption	<ul style="list-style-type: none"> <li>• Distribution and designation of environmental/natural resources and territories for particular utilization (including through public procurement).</li> <li>• Permitting and certifications – issuing permits and certificates for different utilization of territories and natural resources, and operating of industrial sites including permits for emissions, discharges, and solid wastes.</li> <li>• Environmental assessments (including EIA)</li> </ul>	<ul style="list-style-type: none"> <li>• Process reengineering (streamlined procedures – “one-stop-shops,” transparency with embedded control mechanisms)</li> <li>• Straightforward regulations to minimize discretion and enhance transparency and accountability</li> <li>• Justified reasonable standards and requirements</li> <li>• Watchdog groups</li> <li>• Investigative reporting</li> <li>• Stakeholder groups awareness and education</li> </ul>



Petty corruption	<ul style="list-style-type: none"> <li>• Enforcement (inspections and policing) – (1) inspections by environmental protection agencies and other related agencies to assess whether established environmental standards are being met, and (2) enforcement via policing violations such as, for example, poaching, illegal logging, emissions, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Process reengineering (streamlined and transparent procedures with embedded control mechanisms)</li> <li>• Strengthened and more efficient enforcement</li> <li>• Incentive/reward system</li> <li>• Stakeholder groups awareness and education</li> <li>• Independent inspection groups (like WWF CEDAR groups in Russian Far East)</li> </ul>
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To address corruption on the level of policy development, anti-corruption program should be focused on reforming the decision-making process to be more transparent, opening draft documents to public discussions, conducting negotiated rule-making, implementing control mechanisms to ensure public official accountability, and introducing clear and open procedures for lobbying. Anti-corruption strategy on a policy development level can be viewed as inherently cross-sectoral. To achieve better results, interested civil society groups representing different sectors can develop coalitions or alliances around common interests and goals, and together lobby government for reforms.

To prevent corruption and pursue particular environmental interests on the level of policy development, additional activities can be considered. Citizen watchdog groups, for example, have proved to be very effective in monitoring the government. Such watchdog groups usually consist of professionals in environment and policy development who develop and implement a system of monitoring of government activities including, for example, establishing policy priorities and decision making process, and reporting and publicizing any discovered wrongdoings. Another tool that can be effective is establishing an institutionalized dialogue among stakeholder groups and the government to address and resolve potential corruption problems in

environmental programs early through developing policies and laws. This can be accomplished by establishing joint working groups or councils, or implementing negotiated rule-making procedures. The mass media can also play an important role, working along with the watchdog groups, to conduct investigations into alleged corruption and publicizing their reports. Public awareness is a very essential element in developing public understanding and getting public support for reforms.

To address corruption in the distribution of environmental resources, and in permitting and certification, anti-corruption strategies should be focused on several areas: bylaws and regulations, process reengineering, and effective oversight. It is essential to ensure that bylaws and regulations are clear and do not leave too much room for subjective interpretation and bureaucratic discretion. Existing and draft laws and regulations should be assessed to increase the risk for committing corrupt transactions. Laws and regulations should be written in a plain language to reduce the opportunity for subjective interpretations.

Streamlining is an important element in preventing corruption in any process related to the distribution of resources or issuing permits. Streamlining or simplification makes procedures clear and straightforward, reduces the number of direct interactions with officials, and reduces bureaucratic red tape to enhance process transparency and embed internal and external controls.

Enhancing transparency in bureaucratic procedures and decision making process is very essential to reduce opportunities for bureaucrats to manipulate with rules and regulations in their personal interests. Laws and regulations should be publicly available so that operators can know and understand the rules. This would reduce opportunities for official extortion due to the legal illiteracy of citizens.

Watchdog groups can also be very effective for this kind of corruption by monitoring decisions made by government and keeping officials accountable for their actions.

Corruption that occurs in enforcement practices (inspections and policing) requires similar type of responses as the previous one with regards to process streamlining and establishing clear regulations. At this level direct interactions between citizens and businesses and representatives of environmental enforcement agencies are most frequent. Officials who conduct inspections are usually underpaid and are not given incentives for conducting fair inspections. Incentive based system that envisions rewards for professional honest inspections should be introduced along with strong control and oversight mechanisms.

### **Conclusions**

The environmental and natural resources sector has number of areas that are vulnerable to different kinds and levels of corruption. Some environmental programs and projects address corruption by improving transparency and accountability in government practices by conducting traditional for environmental programs activities such as, for example: increasing public awareness, introducing better management practices, conducting training, improving legal and regulatory system. But often, environmental programs underestimate the damaging impact of corruption in achieving their environmental objectives and do not include direct anti-corruption activities into their scope of work. Those programs that try to address corruption often do it in a non-systematic way or as a single activity and thus are not very successful in achieving significant results.

It is our strong opinion that any environmental and natural resources programs should assess any potential risk of corruption and develop an adequate strategy to address it. Anti-corruption activities can be either

Why USAID should address corruption in its environmental programs?

- To secure resources allocated to environmental programs and prevent embezzlement of program funds
- To make programs more efficient by removing bureaucratic red tape and opportunities for corruption

embedded into environmental programs or vice versa anti-corruption program can be extended to environmental sector. In both cases though experts from both, environment

and anti-corruption areas, should be equally involved to make efforts more professional and effective.

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