

# Corruption and the Environment

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## Abstract

Corruption is a serious problem and social ethics has a significant impact on all societies. It is a phenomenon which is globally widespread and can be generally defined as the use of public power to benefit a private interest. It is a complex and multifaceted concept with several and heavy complications for the economy and environmental sustainability.

Despite the existing theorizations and descriptions of the political economy concerning environment/society interactions and widespread evidence of bribery and illegal exchange in natural resources management, nowadays, fighting corruption goes on widely ineffective, with serious consequences for environmental quality.

The main focus of this study is the different forms of corruption and its consequences and costs to the environment, especially in resource-rich developing countries. It explores a few practical examples taken from these countries due to the linkages between corruption and weak environmental governance.

The institutional set-up of the country such as the characteristics of the political and judicial system determines the extent of corruption. In such a context, transparency has been described as a cure for corruption.

Good governance including a broad commitment to the rule of law is crucial for environmental sustainability and is a way to put a stop to the devastating impact corruption has had on the environment.

**Keywords:** Corruption; Governance; Institutions; Transparency; Environment

## Introduction

The Earth's ecosystems are under increasing pressure from human activities, because of rising levels of greenhouse gases, habitat and species extinction, pollution, global climate change, and fish and water scarcity.

For instance, the fraction of stocks fished at a biologically unsustainable level has increased from 10% in 1974 to about 30% in 2011 [1]. The deforestation of over 13 million hectares a year in the first decade of the new millennium leads to biodiversity loss, soil erosion, fuel scarcity, and social and economic problems for decades [2]. According to Guertin [3], over 80% of the volume harvested in Latin America tropical forests is illegal and/or undeclared.

Many problems of resource depletion and environmental stress arise from inadequate institutions to deal with environmental issues and a lack of knowledge and awareness among the people [4]. Corruption can aggravate these conditions, increasing the potential for abuse and the amount of damage inflicted. It plays a large negative role in practically all environmental problems, affecting natural systems and their dependent communities.

Corruption is a universal problem. It is present in all societies, political systems and cultures. It is a cross-cultural reality and it is not only detected in democratic systems which are by definition more

open and therefore more exposed to the watchful eyes of pluralistic, interventionist media.

It is also a centuries-old phenomenon, and allusions to this type of improper behaviour can already be found in several holy texts and in the codes of ancient civilizations. However, it was not until the Modern state was established that corruption took the proportions we know today.

Corruption has real political, economic and social costs. These costs are often difficult to quantify, since corruption by its nature is difficult to measure. Yet corruption leaves people worse-off and impedes development all over the world. First, it is an obstacle to democracy and the rule of law. Second, it distorts the allocation of resources, reduces the productivity of public expenditures, lowers investment, and slows down economic growth [5-7]. Moreover, it constitutes a severe obstacle to entrepreneurship and innovation. Third, perhaps most insidiously, corruption leads to frustration and apathy among the citizens of corrupt states [8].

An additional and not less important cost of corruption is environmental degradation implying deficiencies in the basic needs of housing, clean water, sanitation, and health care. These linkages suggest the need for framing environmental problems within a broader perspective that encompasses world poverty and inequality [8].

There is a vast empirical literature about the negative environmental consequences of corruption [9-14].

In particular, in many developing countries endowed with relatively abundant natural resources, corruption is regarded as a major culprit in environmental degradation [15].

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The main focus of this study are the different forms of corruption and its consequences and costs to the environment, especially in resource-rich developing countries. It explores a few practical examples taken from these countries due to the linkages between corruption and weak environmental governance. In such a context, transparency has been described as a cure for corruption. Institutional reforms must be undertaken as an important precondition for good governance and effective definition and implementation of environmental policies.

The method adopted was the examination of existing literature on corruption and environmental degradation, including the work of Transparency International and the World Bank.

The remainder of this paper is organized as follows. Section 2 addresses forms, facets and causes of corruption; section 3 the different levels of corruption; section 4 consequences and costs of corruption in the environment and common trends in corruption and environmental degradation; section 5 addresses the importance of transparency. Finally, section 6 concludes.

### Forms, facets and causes of corruption

Corruption corresponds to the act of being corrupted, i.e. of enjoying an undue advantage by actions or omissions for one's own benefit and at the expense of the common good.

Contrary to popular opinion, corruption is not only political and does not always necessarily involve money.

Forms of corruption vary but they include abuse, omission or misappropriation. Machiavelli's (1469-1527) famous statement, "Favori agli amici, nemici della legge" (For one's friends everything, towards one's enemies justice) illustrates well the abuse of powers meant to uphold the common good but instead are in fact used as an assumption of the superiority of those who hold them. Omission is perhaps the most common form of corruption in our society. To omit is to avoid doing or saying something that should be done or said and allow a certain problem to continue, unchallenged. Misappropriation is related to abuse and occurs when a role or resource be it public or private, is misappropriated by those who manage it for their own gain.

Among the various facets of this phenomenon (bribery, kickbacks, embezzlement, fraud, conflict of interest, extortion, abuse of discretion or favoritism/nepotism [16], economists often retain those related to public decisions and adopt a definition similar to "the sale by government officials of government property for personal gain" [17], or in the words of the World Bank, the abuse of public office for private gains [18].

Other factors (historic, social, political, judiciary and cultural) in addition to economic factors seem to play a relevant role in what causes corruption, since the values shared by the people of a certain country influence how they behave, their commitment to work and the economic life, the working of institutions and the legal framework they

operate on, the economic performance of countries and, as a consequence, their level of corruption.

It is therefore not easy to find explanations for corruption given the lack of understanding on the mechanisms and structural relations between these different determinants.

### Different levels of corruption

Corruption may occur at different levels of government, such as the payment of bribes to politicians who define policies, or bureaucrats who administer and monitor regulations. These agents may act in their self-interest and engage in corrupt behaviour.

Pope [19], discusses the cases of big and small corruption. The first involves payment of a bribe (or other) to a high ranking official to influence the setting of a policy parameter. Small corruption involves payments to distort the implementation of existing laws, which involves payments to junior bureaucrats. The monitoring problem is compounded by weak enforcement of laws that protect the environment.

Thus, environmental regulations typify a large class of activities in the public sector regarding governmental authorities which are not only required to set regulations but also to monitor the degree of compliance. These governmental authorities differ between countries depending on the specific economic, political, social and natural conditions found there.

So, while corruption is not environmentally destructive in a general sense, poor governance results in bad policy formulation, management, monitoring and enforcement, and this can become apparent through problems with environmental sustainability.

Governmental institutions in developing countries are often weaker, less efficient and more corrupt than in developed countries [20].

When institutions are weak, some of them are susceptible to be corroded by corruption, e.g. environmental laws are ignored, or environmental protection agencies are under-funded so that officials are forced to take bribes to survive, making governments less responsive to its citizens and more able to ignore environmental damage.

Especially in many developing countries endowed with relatively abundant natural resources, corruption is regarded as a major culprit in environmental degradation [15]. Natural resources have facilitated the emergence of corruption networks that feed on the revenues derived from the extraction of natural resources, which are the property of the people of those countries.

Desai [21], in a comparative study of ten developing countries states that "...political elites use their power to... exploit their countries' vast natural resources in partnership with selected businesses, with no regard to environmental degradation." Also, petty corruption by mid and low level officials and bureaucrats both at the centre and local level is widespread and endemic.

### Consequences and Costs of Corruption to the Environment

#### In the renewable resources sector

The World Bank report on corruption and forestry emphasizes that examples of clandestine corrupt activities in the sector abound [22].

The report provides a list of activities which may be considered corruption occurring in the forestry sector with detrimental influence on forest management and conservation. Examples include the logging of timber species protected by law and extracting more timber than authorized. It includes payments to senior politicians to obtain timber concessions (state capture) and payments made to bureaucrats to under-report the amount of harvesting (administrative corruption). The lack of institutions to enforce rules or the existence of officials swayed through bribes has led to the overharvest of timber and to the use of unsustainable forest management practices [23,24].

Moreover, timber companies can bribe officials to ignore inconvenient and expensive regulations, resulting in toxic effluents and other by-products of industry being released unchecked into the environment [25].

A report on deforestation in Indonesia by the Environmental Investigation Agency and Telapak [26], explicitly asserted, "Forests are being destroyed because Indonesia is one of the most corrupt countries in the world".

Deforestation is thought to lead to floods, landslides, and forest fires. For example, flash floods in Northern Sumatra were attributed to illegal logging [27]. Also, the illegal burning of forests in Sumatra and the consequent smog across Singapore and Malaysia [28], and forest clearance in Madagascar [29], have been widely publicized.

As land is being deforested for timber or to create space for palm oil and rubber plantations, or because of the flammable ground cover igniting forest fires due to illegal logging, the habitats of thousands of species are being destroyed.

Indonesia is home to 80 percent of the world's few remaining orangutans, and because of illegal logging has seen their population dwindle by half in the past decade. Illegal logging is a major contributor to the poaching of orangutans, as they are displaced and made vulnerable to poaching. Orangutans are important to the jungles of Indonesia because they seed the forest through the fruit they eat. In this respect they are known as a keystone species, which means that their extinction would lead to extinctions of other species that rely on them. Although there are many orangutan orphanages in the region, it is estimated that for every rescued infant four adult females and three infants die [8].

Other species threatened with extinction through over-harvesting are wild animals including elephants (sought for ivory), rhinoceros (sought for their horns) and tigers (whose bones and organs are demanded for their presumed therapeutic properties).

Foreign countries have a role to play. Neighboring countries could prevent domestic companies that are fuelling demand for illegally traded products from taking advantage of a country's poor governance. Also, stimulating the interest for certified products by overseas countries will reduce the incentive to produce goods through illegal means. Corporations are often not aware of the specific sources of their imports.

### **In the non-renewable resources sector**

Corruption in the non-renewable resources sector has worsened the environmental degradation of an already destructive industry. Corruption in bidding and the awarding of concessions removes many of the penalties for operating in an unsustainable manner.

Mining operations produce mining tailings, smelter gases, overburden flotation chemicals, and oxidization products including acids, air pollutants and sludge as by-products [30]. Lax environmental laws coupled with corrupt government officials often allow companies operating in this industry to regulate themselves, in exchange for kickbacks or bribes to look the other way in terms of environmental damage. As a consequence, most of these hazardous pollutants are illegally discharged. In Peru, for instance, the run-off from mining operations has contaminated a river that supplies 70 percent of the drinking water to Lima's population.

Mining activities also lead to vast land degradation and soil erosion which can lead to flooding and can also divert drainage systems [31]. Many companies are not held liable for the damage they cause due to a lack of enforcement of environmental regulations.

The most immediate way to decrease corruption in the non-renewable sector is to increase transparency and accountability. In mining, gas and oil resource rich countries, too often the wealth generated by these resources is not managed transparently. Ordinary population remain mired in poverty while a very few line their pockets with the proceeds of corruption.

The extractive industries transparency initiative (EITI) seeks to do just that. It was launched in 2003 with the goal of asking governments and companies from extractive industries to publicly disclose information about generated revenues and all financial payments in the mining, gas and oil industries. EITI has no specific environmental component: it is focused on transparency of revenue. EITI is voluntary and dependent on the commitment of participating countries and the resources they commit to it.

Another significant initiative for the extractive industries is the Publish What You Pay campaign, which invites international extractive companies in the oil, gas and mining sectors to entirely disclose all their financial transactions to the governments where they operate.

One positive example of transparency in the extractive industries comes from São Tome e Príncipe. In response to a new supply of oil discovered off the shores of this country, President declared in 2004 that government revenues from the oil would serve to benefit economic and social progress, including public access to information on the disbursement of revenues [8].

### **In the infrastructure sector**

Dams have significant social, economic and environmental impacts. Large dams disturb hydrological flows and destroy aquatic as well as terrestrial ecosystems. Dams have effects on downstream aquatic ecosystems, the disruption of seasonal river flow changes on which local species depend, and blockage of migration and breeding pathways.

Also, dams can generate long-term and often irreversible damage on ecosystems and biodiversity. As many species prefer valley bottoms for feeding and reproduction, large-scale inundation can lead to dramatic reductions, or possible elimination, of species [32]. Many large dams lead to the displacement of entire villages, for instance in Xinjiang, China. Along with the social, economic, and political equality, displacement can also lead to further environmental damage as people settle in other potentially sensitive lands. According to official Chinese statistics, only one third of those displaced have been able to re-establish their lives at satisfactory standards, another third have settled

into subsistence livelihoods, while the remaining third have become mired in poverty [33].

Corruption and poor governance can exacerbate the social and environmental issues that dams present to communities and ecosystems [8,34].

For example, corrupt oversight can undermine environmental impact statements used in publicly disclosing the long-term impacts of a dam. Reduced transparency in the decision-making process of dam location and construction can lead to misallocation of funds and poor construction practices. These, in turn, increase the costs associated with managing the dam as well as the risk of dam breaches.

Corruption in the oversight of dams can similarly lead to insufficient monitoring of environmental and public health conditions, after the structure is built, leaving local communities with despoiled water systems and unhealthy environments.

When regulations relating to dams exist, bureaucrats with discretionary powers must be willing and able to ensure they are implemented. As with all sectors, those public management activities that involve discretion are in most need of reform and monitoring, especially when the socially desirable regulations are vital to the greater health of the environment and the public at large [15].

### Common trends in corruption and environmental degradation

Transparency International identified a number of trends that characterizes corruption in most of the cases [8]:

- Environmental corruption is especially prevalent where economic development is low;
- Corruption is prevalent across a wide spectrum of political systems, yet it is most severe in countries with weak democracies;
- Weaknesses in governance structures inhibit good governance and facilitate corruption in the environmental field;
- Monopolies, whether state controlled or controlled by a corporation, create opportunity for corruption within the economic sectors in the environmental field;
- Countries that depend on the exploitation of their natural resources experience high levels of corruption, and hence poor environmental governance;
- The export partners of corrupt governments often exacerbate illegal activities which degrade the environment by providing the demand for natural resources;
- The institutions and governments which provide economic assistance to developing nations, whether in the form of foreign direct investment or foreign aid, have the ability to influence behaviour.

### Transparency

Putting environmental management and integrity systems in place is not easy. However, to do so is important. It is an opportunity for intervention on the fronts of conservation, preservation, and environmental justice, through the tool of transparency.

Transparency and accountability at all government levels have been described as a cure for corruption and as an important precondition for good governance, economic growth and effective definition and implementation of environmental policies [35]. Moreover, the

existence of a central decision-making body that is impartial enough to implement rules in a fair, efficient and predictable manner is very important.

Transparency has developed into a strong international norm. In recent years, corruption and possible anti-corruption measures have been extensively discussed at the national, international and multilateral levels [36]. The level of corruption depends on the extent to which the laws are binding and enforced.

The personal cost of corruption is the loss of a job and the jail-time if caught and prosecuted. Individuals will act corruptly so long as the perceived gains from corruption outweigh its costs. The more apathetic the judicial system is, the lower the probability of detection is. Thus, judicial laxity reduces the opportunity cost of being corrupt. Hence, countries with strict laws and efficient judicial systems tend to be less corrupt and vice versa.

To combat corruption the government may undertake institutional reforms to improve the efficiency of the judiciary system and the level of regulatory compliance. However, it is assumed that such reforms are a gradual process and necessitate investment in legal and administrative infrastructure.

Moreover, when the administration or the political order is considered as illegitimate, the social pressures against acts of corruption become less important. Corruption can therefore be effectively curtailed by an administration that enjoys an enduring legitimacy.

So, the legal strengths of a country play an important role in reducing corruption levels. If nobody is above the law then the incidence of corrupt activities is least likely.

A strong rule of law, supporting civil society and clear rules of conduct for people in public office inhibits the propensity for corruption activities [37].

### Conclusions

The phenomenon of corruption has long been a major concern and has received particular attention in recent years from both policymakers and researchers.

Corruption is a negative phenomenon which affects all facets of society and seeks to suffocate official norms and procedures. It is not something new; instead it is something which has been with us since the birth of public institutions.

Despite the great increase in the attention given to the principle of transparency in recent years, many governments continue to rule largely in secrecy [38]. The resistance against greater government transparency seems to be strong.

Corruption, once entrenched, is difficult to eliminate. It is an eternal struggle and one that is not easy to win. It requires constant vigilance and transparency, as well as a great deal of work at all levels of society. The fight against corruption should include moral education, values and norms of society which play an important role.

The country's legal system plays an important role in reducing corruption levels. The level of corruption depends on the extent to which the laws are binding and enforced.

The popular image of the poor performance of Justice all over the world, except, mainly, in northern European countries, particularly



with regard to fighting corruption, remains unchanged i.e. discredited: repression comes rather late, is slow and costly (for those who expose it), selective (two sets of standards, one for the poor another for the wealthy), complacent, ineffective (countless cases of acquittal or prescription) followed, in the case of the latter by the inevitable return to previous functions. If corruption is to be effectively repressed, governments must be equipped with the mechanisms that will enable them to enforce the law and the guiding principles of good governance.

Corruption has been linked not only to economic and social development but also to environmental sustainability. The non-compliance with environmental laws has its roots in the corruption of the political system. Thus, an additional and important cost of corruption is environmental degradation, as it has been highlighted in this study.

Good governance including a broad commitment to the rule of law is crucial for environmental sustainability and a way to put an end to the devastating impact corruption has had on the environment.

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