

Extractive Industries, Natural Resources Management and Sustainable Development: a Review.

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Abstract

Extractive industries are those that are related to mineral and hydrocarbon products such as gold, phosphates, diamonds, oils, gas, etc. Extractive industries remain the economic bedrock for many developing countries, generating the main, if not the sole source of fiscal revenues, foreign exchange earnings and surpluses to finance much needed socio-economic development. Yet, studies and surveys indicate that developing countries have been unable to effectively use the resources from extractive industries and thereby remain poor in economic performance in comparison with countries with similar levels of income. Governance issues such weak environmental policy, resource utilization policy and fiscal policies has come to be viewed as key factors inhibiting the ability of countries to use revenues from their extractive industries for development. In many cases, large extractive industries even appear to have retarded economic and social development through a number of phenomena often referred to collectively as the "resource curse". This paper discusses the basics of governance principles, and allows application of these principles to the specific domain of natural resources management in general and extractive industries in particular in the context of sustainable development. Conceptual frameworks for social accountability, initiatives for promoting governance and transparency are discussed. Stakeholder analysis and participation pathways for sustainable development are also reviewed.

Key Words: Extractive Industry, Environment, Africa, Kenya

1. Introduction

Extractive industries engage in mineral and hydrocarbon products such as gold, phosphates, diamonds, oils, gas, etc. The industry is the economic bedrock for many developing countries, in some instances the industry constitutes the sole source of fiscal revenues, foreign exchange earnings and surpluses to finance much needed socio-economic development. Since 2002 the price of many mined commodities has risen, in some cases to record heights. The dramatic growth of China seems to be one of the most important factors explaining this boom, and as China looks certain to continue on its current economic path, it is widely believed that the price of mined commodities will remain high for the foreseeable future, as will the cost of crude oil.

Despite their immense role, studies indicate that developing countries have been unable to effectively use the resources from extractive industries and thereby remain poor in economic performance in comparison with countries with similar levels of income. Governance issues such as weak environmental policy, resource utilization policy and fiscal policies has come to be viewed as key factors inhibiting the ability of countries to use revenues from their extractive industries for development.

In many resource-rich countries in Africa, however, the lack of accountability and transparency in the management of these revenues exacerbates poor governance and often fuels cycles of corruption, conflict, and poverty. As the international community seeks alternatives to Middle Eastern oil and new reserves enter production, Africa's oil revenues will multiply over the coming decade. A number of analysts believe that economies that are overly dependent on oil wealth encourage authoritarian rather than democratic forms of governance.

To meet this challenge, civic groups, government reformers and representatives of the international community are increasingly pushing for more accountability and fiscal transparency in a number of sub-Saharan African countries. These reformist groups need specialized tools and knowledge to guard against increased corruption in resource-rich democratic states and to fight authoritarian regimes seeking to further consolidate their power. Effective transparency initiatives must foster cooperation beyond governments and multinational corporations to include the participation of legislative bodies, political parties, civic organizations and the media.

With the intensification of mining and oil production as the background, the first part of this paper broadly discusses the policy framework in the mining industry in Kenya. Secondly we discuss rival views of corruption in the extractive industries, the debate being simplified by contrasting an orthodox state theory of corruption with a somewhat less orthodox view on corporate corruption and 'state capture'. The next section comments on the potential consequences of corruption, focusing particularly on environmental degradation and the rights of local communities affected by mining. The final section of the paper discusses the challenges and pitfalls of anti-corruption initiatives. Here the paper first considers the technical and political limitations to combating corruption before commenting on broader debates about the problematic consequence of over-prioritising anti-corruption measures as a means to ensure human development. In effect, this involves asking the question: what ends does combating corruption serve?

Indicators of Growth in Global Mining Industry

Recent growth in global mining can be illustrated by considering the immense profits being made by companies in the recent past. A report published in 2006 by PricewaterhouseCoopers, entitled “Mine: Let the good times roll”, showed that the mining industry had a ‘spectacular’ year in 2005. Public mining companies experienced a 72 per cent increase in their total capitalization from 2004, with net profits increasing by 59 per cent, representing an increase of US\$45 billion. This has been good news for shareholders, who received US\$18 billion in 2005, up by 82 per cent from the previous year. The increase in profits being made by the major oil and gas producing companies is also extraordinary. America’s five ‘super majors’ reported record profits of US\$342.4 billion between 2001 and 2006.

Another indicator of the boom in the extractive industries is the amount of money being spent on global exploration. Analysis provided by the Metals Economic Group 2 shows that over the past four years the amount invested in exploration by mining companies has grown by roughly 250 per cent. Indicators suggest that the amount spent on exploration will continue to rise in the future. Indeed, for the ever-growing demand this will mean that the supply of mined commodities will become increasingly difficult to sustain. The scale of demand for mined commodities is predicted to be enormous in the near future. According to some experts, in order to meet the demand over the next 40 years mining companies will need to mine five times more than they have ever mined before. Achieving this growth in mining is far from straightforward. Discovery costs have effectively trebled over the past 30 years, the average size of mineral discoveries has diminished, and discovery rates have roughly halved.

It is in this climate that some industry analysts feel that the lack of new mining sites will become a serious issue over the next few years. Consequently, the mining industry will need to become more aggressive in exploration, and there is a consensus that mining will take on increasingly risky ventures in areas that were previously seen as too precarious by investors (International Mining Magazine 2005).

Amid this global search for mined commodities and oil, numerous African countries are experiencing tremendous growth in mining and oil production. Over the next five years the main oil exporting countries in Africa are expected to experience an increase in oil revenues of up to US\$5 billion. The US is currently importing 15 per cent of its oil from Africa, and this is expected to increase to between 25 per cent and 30 per cent in the next decade. Simultaneously, it appears that Africa has been identified by China as being one of its main sources of fuel.

The mining sectors throughout Africa are also booming, with remarkable growth throughout the continent. Indeed, it is in Africa that many of the good deposits in previously risky environments are being discovered. There are numerous countries on the continent that are considered to have abundant yet under-exploited minerals and metals. The Democratic Republic of Congo (DRC) is arguably the most exciting prospect for mining companies and, depending on increased political stability, the mining sector is

certain to continue to grow at a rapid rate in this country. Already since 2000 the value added to the economy of the DRC by mining has effectively doubled.

This intensification of mining and oil production in Africa has heightened concern over the impact these industries are having on human development. Before the 1980s a dominant view was that greater exploitation of natural resources for export markets would be a key to economic growth in Africa. It was such thinking that partly inspired structural adjustment programmes and widespread liberalization of mining in the late 1980s and early 1990s. However, while these measures were clearly successful in increasing the amount of resources being exploited and exported, thereby benefiting the companies and their investors enormously, and the net impact on developing countries has been controversial.

Although disputed, numerous studies over the past two decades have shown that natural resource dependence is highly correlated with disappointing economic growth, inequality and the onset of civil conflict. Moreover, as detailed in a high-profile review of the extractive industries commissioned by the World Bank, there is growing recognition that the process of mining and oil production in developing countries is having a profound impact on the natural environment and on the rights of marginalized indigenous groups (World Bank 2004). These perverse outcomes of resource exploitation are now widely referred to as the ‘resource curse’ or the ‘paradox of plenty’.

Aspects of the resource curse remain highly contested and have given rise to a wide range of competing theories. We need not examine the literature in detail here (see for example Rosser 2006 and Ross 1999). Yet there does appear to be a strong consensus among diverse commentators that much of the problem can be explained by corruption.

In the past ten years corruption has therefore emerged as one of the leading concerns in policy developments in the extractive industries. Perhaps the most significant development came in the late 1990s when a consortium of NGOs formed the Publish What You Pay Coalition. This movement demands that major oil and mining companies make public their payments to governments so that illegal deals can be thwarted. A few years after Publish What You Pay was formed, the Extractive Industries Transparency Initiative (EITI) was launched by Tony Blair’s government, and this is now supported by other northern governments, leading multinational corporations (MNCs), NGOs and an increasing number of resource-rich states in the south.

In the past few years loans by the World Bank Group, the International Monetary Fund (IMF) and the African Development Bank, among others, have been premised on the need for anti-corruption ‘conditionalities’. Mining companies are reporting to shareholders and investors that avoiding corruption is critical to mitigating their risks, and diverse African governments, from Madagascar to Nigeria, now claim that fighting corruption is one of their top priorities in better managing resource exploitation and attracting foreign investment. In short, fighting corruption has swiftly become one of the key ideas in the effort to make resource exploitation contribute to development in Africa instead of being a source of potential harm.

The extent to which corruption is a major problem in the extractive industries remains a moot point, the analysis depending largely on what one understands corruption to be. As this paper will argue, corruption in the extractive industries is open to differing perspectives and isolating its significance is not straightforward. Moreover, despite a great deal of rhetoric in fighting corruption and achieving greater transparency in the extractive industries, there are profound political factors that undermine these efforts. These may explain why success in combating corruption appears to be modest, at best.

2. Policy and Legal Framework in Kenya

Kenya's mining industry is dominated by production of non-metallic minerals **encompassing industrial minerals such as soda ash, flourspar, kaolin and some gemstones** dominate Kenya's minerals industry. Mining accounts for less than 1% of Kenya's annual GDP. Gold is produced primarily by artisanal workers in the west and south western parts of the country, on several small greenstone belts, some part of the Lake Victoria greenstone belt (responsible for most of the gold mining ventures in adjoining Tanzania). Iron ore is mined from small localised deposits for use in the domestic manufacture of cement.

Following global oil price increases, Kenya has been faced with an energy crisis. The country is now looking towards evaluating the Mui and Mutito basins in the Mwingi district located in the eastern parts of the country. Clearly seen as one of the largest potential capital projects in Kenya is the Kwale Hill heavy mineral sands project that is being developed along the country's southeastern coast.

The government has revised its Mining Act into the new Mining and Minerals Act that requires all prospecting licenses to have an initial duration of four years. Renewals are granted to up to seven years in total, plus provisions. Exploration licenses are transferable.

Since its formation in 2001-02, the Kenya Chamber of Mines (KCM) has become an active player in the mining sector of Kenya. Currently, the larger mining companies in the country are still financing the Chamber's activities, but it is hoped that it will become self-sustaining in the near future. The KCM in conjunction with the Kenya Geological Society have been promoting mining activities in Kenya.

Many of Kenya's mineral deposits lie under property that has been settled and privately owned for many years, however, within the country itself private property ownership is protected by the constitution and only the minerals belong to the country. In the past royalties within the country have been negotiable which contributed to corruption within the country. As a result of this the government is introducing a fixed policy where fees and royalties are calculated on a formula that will be differentiated according to the type of mineral.

The mineral and mining sector has the potential of an engine of growth by diversifying exports, providing raw materials for industry, development of infrastructure, creation of

employment and ultimately alleviates poverty among communities. Kenya's geology has shown numerous mineral occurrences although little exploration has been undertaken. The mineral potential of Kenya needs to be unlocked by investing geological surveys, detailed mineral exploration and attracting new investments.

The development of the sector has however, been hampered by lack of a specific mining policy and enabling legislation. There is need to provide a guiding policy and legal framework to replace the mining Act, cap 306 as well as the Trading in Unwrought Precious Metals Act CAP 310. The realization of this framework has taken unnecessarily long. The Government started this process in 1993 with the assistance of the United Nations Development Programme (UNDP) without success.

By 2001 a study through the assistance of the commonwealth Secretariat reignited the search for the illusive policy framework. The study's report of 2004 formed a basis for the proposals for a new mining policy and legislation formulation process. On conclusion of this process this has reduced the discretionary powers of licensing authorities and provided greater security of tenure for investors. The policy has set out core principles and initiatives to guide efforts to reform the mining sector, regulate, promote investment and rationalize use of mineral resources while maximizing social economic and environmental benefits of mining. With this developments Kenya now stands at a position to compete effectively for international investment

3 Conceptualizing the problem: corruption and natural resources

Oil rigs are alighting all along this stretch of Africa's western coastline like giant metal mosquitoes, standing on the skin of the earth on spindly legs and drilling down with steel proboscises to suck out the fluid that is the lifeblood of the world economy. Like the biting insects, the rigs can cause irritation around the site of extraction, disrupting local communities or polluting farmland. But it is this resource curse – the stealthier, time-delayed payload that accompanies the extraction, just like the malaria that real mosquitoes transmit – that is the real problem (Shaxson 2007:6).

An orthodox definition of corruption is the 'abuse of public office for private gain'. This is sometimes referred to in less prosaic terms as the 'grabbing hand of the state'. In the extractive industries myriad forms of this type of corruption may occur. However, the most notorious manifestation of corruption involves political elites and their families or cronies plundering resources for self-enrichment, or senior officials demanding large kick-backs when brokering deals with private companies.

Certainly, natural resources provide enormous revenues, often paid in lump sums, and are therefore lucrative targets for those seeking illicit wealth. In particular, the process of extracting oil or mined commodities may involve 'signature bonuses' and 'royalty payments', and a proportion of these may easily find their way into private bank accounts and not the state treasury. Nigeria is often cited as one of the worst examples of this; it is estimated that senior officials have stolen at least US\$50 billion from oil revenues since the mid 1960s. The theft of large sums of money by those in positions of significant

power is often called ‘grand corruption’. It seems to flourish in those societies where access to information is limited and revenue flows lack transparency. In situations where civil society is unable to know how much money is being earned through resource extraction, the opportunity for embezzlement is high.

As a general observation, natural resources appear particularly prone to forms of corruption. However, the link between state corruption and natural resources may be more profound than this. Numerous studies have argued that those countries that are highly dependent on natural resources for national wealth creation tend to suffer from high levels of corruption in general and tend to have authoritarian systems of government (see for example Wantchekon 1999, Leite & Weidmann 1999, Jensen and Wantchekon 2004).

A collective finding of these studies is that the type of natural resource is important: those classified as ‘point-source’ resources – such as oil, gas and certain minerals – are more problematic than resources that are diffuse, or scattered geographically (see Ross 1999, 2001). This relationship between corruption and resources is a vital issue to consider, for corruption may not simply be the cause of problems related to resource extraction: it may also be a symptom.

In the recent past Kenya has joined the list of developing countries that have increased their enthusiasm in search for oil in its vast Northeastern and coast provinces. Though exploration activities have not bore fruits yet, the exploration multinational companies are not giving up as yet. The discovery of oil and gas as well as other minerals will be a major challenge to a country already bedeviled by official corruption in its other key sectors of the economy.

Gold mines in western Kenya especially Kakamega and South Nyanza have been abandoned and left at the hands of artisanal miners due to what is termed as “uneconomical” reserves defined by political overtones. Similarly, it has taken more than three decades to operationalize the mining of limestone for cement manufacture in the Turkana region for similar reasons.

The discovery of Tiomin in Kwale district in coast province has not been without controversy with respect to governance, sharing of proceeds and land ownership and compensation issues. Vast resources that could help in the socioeconomic development of regions that are marginalized in terms of national development thus lie idle due to issues of governance.

The rentier state effect

An influential explanation for the deterioration of governance caused by abundant natural resources is related to the notion of a rentier state, first identified by Mahdavy (1970) through his studies on the impact of oil production in the Middle East. According to this theory, problems arise in resource-rich states because the rulers are able to generate wealth through undisclosed resource rents – or sovereign rents, as Collier (2005) refers to

them – rather than through taxation. In simple terms, where governments rely on taxation as their primary source of revenue, and where there are relatively fair elections, supplying public goods drives political competition. There is, therefore, dependence in the political process on broad-based public sentiment and a proclivity for those seeking or maintaining political power to engage in rent-producing activities as a result.

Where rulers are able to rely on natural resource revenue as their primary source of income, this may encourage, or reinforce, a detachment between them and the majority of citizens.³ Political competition is driven by systems of patronage and conflict, and public spending is therefore not directed towards the public good but towards maintaining political hegemony. In this scenario, unproductive rent-seeking behaviour is likely to predominate over rent-producing behaviour.

There is likely to be a concerted effort to weaken or compromise institutions that pose checks and balances, such as the media, the criminal justice system, civil society and academia, and there is an inclination to turn to militaristic methods of social control. This in turn encourages a noxious relationship between rulers and the military, with the latter being kept loyal through a sharing of the profits from resource exploitation. In short, it is assumed that in this rentier state model the wealth derived from natural resources may result in a form of centralised government that is secretive, aggressive, paranoid and uninterested in public welfare. Such governments will plunder resource wealth for their own ends, and not use it for the public good.

The consequences of this situation are thought to be far reaching, explaining further dimensions of the resource curse. For instance, being able to generate wealth through natural resource rents also serves to weaken other areas of the economy, which may be less vulnerable or valuable to rent seeking. This appears as a political or psychological form of what is known as the Dutch disease syndrome: corrupt rulers focus on their own wealth creation through embezzling or capturing rents from point-source resource extraction and they show little interest in developing other potential sectors of the economy, including agriculture, that may provide far more security and employment to people than industries such as oil, gas or mining (see Hodges (2001) for a good example in Angola).

Ross (2006) argues that the Dutch disease – whether triggered by political or purely economic factors – not only accounts for poor economic growth but also has a profound impact on inequality and social structure. In particular, the over-reliance on resources, such as oil and gas, tends to diminish female participation in the labour market by crowding out sectors that have a propensity to employ women. This in turn reduces the political influence of women, which may account for the fact that major oil and mineral producing states are characterised by atypically strong patriarchal institutions.

Summing up the multiple consequences of resource dependence in developing countries, a report published by the World Rainforest Movement (2004) claimed:

... the more that southern countries rely on exporting minerals, the worse their standard of living is likely to be. Higher levels of mineral dependence are strongly correlated with higher poverty and child malnutrition and mortality rates. They are also associated with income inequality, low spending levels on health care, low enrolment rates in primary and secondary schools, and low rates of adult literacy, as well as higher vulnerability to economic shocks. Recent academic studies reveal that overall living standards in mineral dependent states tend to suffer from high rates of corruption, authoritarian government, government ineffectiveness, military spending, and civil war.

An example of the rentier state effect: Angola

A glance at African countries shows many contenders for the rentier state effect, with several characterized by a poor history of democratic governance, relative dependence on natural resources for wealth creation, and worsening levels of corruption. In addition to Equatorial Guinea, the DRC and several countries in West Africa, Angola seems to illustrate the rentier effect vividly.

Angola is Africa's second largest exporter of oil and the third largest exporter of diamonds. In 2005 the government's oil revenues rose to US\$10 billion, and this will probably double between 2005 and 2010. According to the IMF, by 2012 Angola's income from oil will surpass Norway's (cited in Amundsen, forthcoming, p 10–12). Yet despite – or perhaps because of – this impressive resource base, Angola has one of the highest levels of poverty in the world. Although statistics are extremely unreliable, Angola is also generally regarded as one of the most unequal countries in the world.

Corruption and elite plunder seem partly to explain this disparity. Between 1997 and 2002, 'unaccounted for funds' from Angola's oil industry amounted to US\$4.22 billion. In the same years, total social spending in the country – including Angolan government spending as well as public and private initiatives funded through the United Nations Consolidated Inter-Agency Appeal – came to US\$4.27 billion.

Through grand corruption many of the country's political elite are rumoured to have staggering personal wealth. McMillian (2005) reported that in 2003 nearly 50 Angolans in position of public office each had personal wealth of more than US\$50 million, while it is estimated that ten had personal wealth in excess of US\$100 million. The richest seven Angolans were in the government and President Dos Santos is believed to be the wealthiest of them all.

By all accounts Angola is also a country with dire institutional arrangements, and it appears that the situation is becoming progressively worse (see Amundsen, forthcoming). The President has excessive power, the judiciary is far from independent, the media is controlled by the state, and democratic elections have been stubbornly postponed. Civil society is intimidated and infiltrated, and as a result is largely unable to hold government accountable.

Despite signing up to the EITI (see below), Angola was ranked as the second least transparent country in the world by the International Budget Project, with only Vietnam scoring worse. A report provided by Human Rights Watch on Angola summed up the rentier effect concisely:

When a government is the direct beneficiary of a centrally controlled major revenue stream and is therefore not reliant on domestic taxation or a diversified economy to function, those who rule the state have unique opportunities for self-enrichment and corruption, particularly if there is no transparency in the management of revenues. Because achieving political power often becomes the primary avenue for achieving wealth, the incentive to seize power and hold onto it indefinitely is great. This dynamic has a corrosive effect on governance ... Instead of bringing prosperity, rule of law, and respect for rights, the existence of a centrally controlled revenue stream – such as oil revenue – can serve to reinforce or exacerbate an undemocratic or otherwise unaccountable ruler’s or governing elite’s worst tendencies by providing the financial wherewithal to entrench and enrich itself without any corresponding accountability (Human Rights Watch 2003:1).

4. Corporate corruption and state capture

At its simplest, the rentier model encourages the idea that rent-seeking elites and public officials in underdeveloped resource-rich states are the primary source of corruption within the extractive industries. In other words, corruption is caused by domestic conditions and solutions to the resource curse are to be found at this level. Yet this is only part of the problem, and state-centred theories of corruption become more complex when we ask whether corrupt relations bring any direct benefits to the companies involved. This appears to be a divisive issue.

It is now well documented that large foreign corporations active in the extractive industries have paid enormous bribes to corrupt governments. By way of example, a senior employee of a consortium of oil companies operating in Nigeria, including a subsidiary of Halliburton, confessed to French investigating authorities that a slush fund of \$180 million was used to bribe officials in Nigeria (Open Society Justice Initiative 2005:24). Although companies paying bribes are open to the accusation of complicity in corruption, there are those who suggest private companies remain unwilling partners in these criminal exchanges.

It is not uncommon to hear that companies would rather operate in areas of ‘good governance’, defined partly by transparency and the rule of law (see, for example, Bray 2003). Paying bribes is costly and being implicated in corruption scandals may undermine the ‘social licence’ of companies to operate. This was an argument made, for example, by CEO Bobby Godsell in response to evidence that AngloGold Ashanti, one of the world’s largest gold mining companies, gave cash to a rebel military group in the DRC. Payments were apparently made unwillingly and this was a matter on which Godsell claimed the company had ‘messed up’ and regretted deeply (Evans 2005).

If we accept this view, then bribe payments can be considered burdensome to private operators, raising the cost of doing business, and we may therefore assume that business would prefer not to pay them. According to some sources, corruption is part of the risk for companies operating in the extractive industries. In a report on corruption in Tanzania published by the Christian Michelsen Institute it was argued that: efforts to combat corruption are widely regarded as important for improving business conditions in developing countries. Corruption increases the cost of doing business, and imposes a tax on entrepreneurial activity (Fjeldstad et al 2006:1).

This understanding is also supported by the work of the influential Canadian think tank, the Fraser Institute, which conducts industry surveys showing which countries have the most favourable conditions for mining activities (Fraser Institute 2007). In their ranking system corruption is listed as a major deterrent to foreign investments, although excessive tax and environmental regulation also contribute to the problem for mining companies. Likewise, PricewaterhouseCoopers (PWC) reported that the threat of paying bribes is often a decisive matter for oil and mining companies when evaluating a new venture. In fact, according to PWC, 41 per cent of 32 leading mining companies in 2001 withdrew from an otherwise profitable venture owing to the threat of having to pay bribes and deal with corrupt officials (PWC 2001). A report by Global Witness (2004:83) described the negative implications of corruption for companies by explaining how transparency benefits everyone except corrupt governments:

Transparency is in the interest of almost everyone concerned – citizens, companies, donor governments and the wider international community – except a corrupt elite grown fat from the systematic misappropriation of state assets ... Multinational businesses do not benefit from having to compete on the size of kickbacks rather than technical merit, nor do they gain when their legitimate payments to governments end up funding social division.

Yet to conceptualise corruption in the extractive industries as being a risk only for private companies seems limiting. Here it is useful to review some recent work on corruption and governance by a group of experts at the World Bank Institute led by Danny Kaufmann.

5. Corporate corruption

Since the mid 1990s the World Bank has been the main driving force in elevating the issue of corruption into mainstream policy debates. Initial work by the bank tended to emphasise bureaucratic and public sector corruption, and it has depicted the private sector as one of the primary victims. Yet in the past few years Kaufmann and his colleagues have challenged what they call ‘conventional wisdom’ on this subject. Perhaps most importantly they have turned to business surveys to show that companies operating in weak states or in those states undergoing transition, are not simply passive victims but are active parties to corruption as it brings several benefits. In essence, what Kaufmann and his colleagues have realised is that corruption is not only the abuse of public office for private gain, but also the use of public office for private gain by third parties: the

grabbing hand of the state is joined by the grabbing hands of private companies. Discussing evidence of corporate corruption Kaufmann and his co-authors argued:

It is critical to recognise, from a political economy perspective, that these forms of corruption generate substantial gains ... thereby challenging the premise that these firms are coerced and making it that much more difficult to develop effective constraints on such behaviour (Hellman et al 2002:21).

This is an argument that may seem provocative or unexpected coming from the World Bank, but it is one that is familiar to those who are increasingly concerned about what they see as the destructive power of multinational companies. For example, John Rumbiak, supervisor of the Institute for Human Rights Study and Advocacy in Papua, Indonesia remarked: as an activist from the Global South, I have witnessed, in excruciating detail, the devastating impacts of multinational corporations on the natural environment, on the basic human rights of people – primarily indigenous communities – and also on the democratic governance of entire countries (Rumbiak 2003).

In conceptualising corporate corruption, Kaufmann makes several important distinctions. Perhaps most significant is the unbundling of corporate corruption into administrative corruption and state capture. Administrative corruption involves bribe payments to circumvent the implementation of existing laws and regulations, whereas state capture refers to the process whereby companies illicitly affect policy decisions, legislation and regulatory frameworks for their own benefit. In other words, state capture describes how companies change the rules of the game in their favour, whereas administrative corruption describes how companies get away with breaking the rules.

Based on research on the activities of firms in transitional economies, Hellman et al (2000:3) describe how state capture is often widespread, giving rise to what they call a 'capture economy':

In many transitional countries a capture economy has emerged, where rent-generating advantages in the form of policies, laws and regulations, are sold by public official and politicians on an 'a la carte' to private firms.

Here the analysis focuses on transitional states, but in other publications by the World Bank on state capture the authors make it clear that this is also a growing problem in numerous advanced OECD nations. By using this expanded and less conventional definition of corruption, Kaufmann and Vincente (2005) have conducted empirical studies that challenge other well-known corruption indices. Due largely to the influence corporations have on the political process, countries such as the US, Canada, Spain and Italy, are ranked below the likes of Chile, Botswana and South Africa in terms of their levels of corruption. Indeed, the US scores particularly badly, and although Kaufmann and Vincente do not provide detail, we suspect that the political influence of the oil majors contributes to America's poor governance ranking.

6. Legal corruption

In analysing state capture, Kaufmann recognises that there are also numerous ways in which companies may capture the state without recourse to crude exchanges of cash, and this influence may be deemed illegal or not depending on the country in which it takes place. Of particular interest for Kaufmann is the practice where companies lobby governments and donate money to political parties. However, we can perhaps take this analysis further and note how the undue influence of companies is not only achieved by offering gifts and bribes, but can also manifest in threats and ‘bullying’. In particular, companies may influence state policy by threatening the withdrawal of investments (see “Mining, corruption and environmental degradation” below for an example).

Appreciating the wide range of ways in which companies can exert undue influence, Kaufmann and Vincente (2005) advance the notion of ‘legal corruption’. In doing so they lead the debate on conceptualising corruption into contentious territory. They write:

It is timely to explore a less traditional definition of corruption, one that accounts more broadly for the undue benefits derived by the private few from their excessive influence in shaping the institutions, policies, laws and regulations of the state to their own ends. Vested interests that remove public policy from the realm of democratic – i.e. contestable – decision-making should be an important component of this new definition. Undue influence by private vested interests on the state sector may, or may not, involve the exchange of a bribe or related form of illegal corruption. In other words, room is thus provided, in this more neutral definition of corruption, for so-called legal forms of corruption, which can be defined simply as the ‘privatisation of public policy.’ Such an alternative definition focuses on the key mediating institution or agent committing the abuse of power, namely the institution of (undue) influence, driven by vested interests.

It is a moot point whether Kaufmann’s definition of legal corruption will gain widespread recognition, and we suspect that corruption will continue to be seen in a narrow legalistic sense. Moreover, it is not clear that he has fully developed the notion of legal corruption. Indeed, while it seems clear that democratic decision-making can be undermined by private and non-elected interests – and this appears to be a particular problem in the extractive industries – it would be interesting if the concept of legal corruption was extended to the level of inter-governmental organisations such as the World Bank. As is well known, the World Bank is frequently accused by critics of being an institution less concerned with the plight of the poor in developing countries than with the interests of powerful MNCs based in OECD countries. We need not explore to what extent this accusation has merit, but it seems reasonable to argue that if legal corruption is to become a meaningful concept it should be extended to cover the activities of governments and inter-governmental organisations, not only companies.

7. The political economy of corruption

On one level orthodox ‘state-centred’ theories of corruption and the somewhat less orthodox theories of ‘corporate corruption’ may seem to be in contrast to each other,

though we do not believe that the study of corruption must choose between these competing theories in an exclusive way. The more obvious question is whether in actual case studies it is possible to detect where the power lies in corruption. In other words, when a bribe is paid we may wonder whether it is the result of a public official extorting a company, or whether it is the result of a company wanting to buy favours and influence.

We may speculate that in the extractive industries the bribe takers have a strong bargaining power, and this may increase in the future. The intensification of international demand for resources, coupled with the growing competition from a host of foreign companies, may mean political elites can play companies off against each other and insist on burdensome bribes and favours in return for concessions and licences. Yet in countering this scenario, one group of experts suggests that a combination of superior technical expertise held by companies, as well as the short-term mindset of officials, may tip the balance of power in favour of companies:

It would be wrong to suggest that foreign investors hold all the cards as they negotiate with host countries; but they often have the best possible professional support from advisers charged with acting in their best commercial interests. Host states might lack the resources to do the same and might find themselves sorely tempted to exchange their long-term right to regulate foreign investors for short-term gains (Ayine et al 2005:2).

Complicating this line of inquiry is the possibility that conceptualising corruption between companies and public officials as a competitive exchange, with 'winners' and 'losers', is something of a simplification. For one thing, corruption may often be mutually beneficial for both parties. Consider, for example, the case of Equatorial Guinea, Africa's third largest exporter of oil, with the US being the primary consumer. In 2004 a US Senate special investigation was launched amid mounting evidence that ExxonMobile ChevronTexaco, Marathon and Hess, among others, had paid several million dollars in bribes for oil drilling rights, reduced tax burdens and favourable environmental regulations. The same companies were accused of assisting President Obiang and other leading politicians to launder vast sums of public money out of the country. In 2004 it was alleged that US oil companies were giving more than US\$4 million to relatives of President Obiang so that they could live and study in the US (see McSherry 2006).

According to Lawrence Cockcroft of Transparency International (TI), such mutually beneficial deals are widespread in Africa, and the payment of bribes is often associated with reduced tax burdens for companies.

Most African countries operate some form of tax break for new investors, with varying degrees of generosity. In fact, such incentive schemes are frequently deceptive in that the real deal is being done in spite of them and alongside of them, with a key cabinet minister or official coming to an alternative arrangement which may well guarantee an offshore payment for the individual in question as well as a 'tax holiday' for the company concerned (Cockcroft cited in Bond 2006b:18).

The possibility that corruption in the extractive industries may represent a mutually beneficial relationship between the bribe giver and the bribe taker is made more likely by the fact that political elites and governments have direct economic interests in private companies. Such conflicts of interest may create a complex blurring of private and public governance, rendering the distinction between a state theory of corruption and a corporate theory of corruption untenable in many cases. Thus, for example, the extensive report on the mining sector in the DRC by a UN panel of experts identified an 'elite network' profiting from the illegal plunder of resources in that country, and contained a long list of Congolese officials, military personnel and private businessmen (United Nations 2001). More recently reports have emerged of systemic corruption involving the rapid privatisation of the DRC's largest state mining company, Gecamines. Canadian and South African junior mining companies are thought to have formed joint ventures with Congolese officials that have gained Gecamine's assets for exceptionally low prices (Hund and Verbruggen 2006:55).

Similarly, in a recent report published by the National Democratic Institute for International Affairs on the potential role of legislatures in promoting transparency in Africa's extractive industries, conflicts of interest were noted as a serious problem in Ghana, as well as many other countries.

In countries with weak ethical standards, legislators are just as likely as members of the executive branch to maintain business or personal ties perceived to be conflicts of interest. In Ghana, for instance, elected representatives and government ministers may serve on the boards of corporations over which they have direct or indirect oversight ... Extractive industry oversight may be further undermined by legislators' private business dealings with mining or oil companies (Bryan & Hofmann 2007:27).

As alluded to by Kaufmann's research, we know that conflicts of interest are also a potential problem that can spread to the governments of so-called 'home countries', and it is therefore not only an issue in developing countries with weak state capacity. It is a matter of growing concern that many of the key mining and oil companies make substantial contributions to political parties in OECD countries. As argued by Amnesty International, the reluctance of the US government to prosecute four major mining and oil companies for their catalogue of human rights abuses may be explained by the fact that in 2002 these companies donated US\$2.8 million to the Republican Party's election campaign (Amnesty International 2005). To make matters worse, senior politicians and diplomats frequently move from public office to take up senior positions in companies. The lists of senior board members of the largest mining companies contain many former diplomats, politicians and senior statesmen.

Joseph Stiglitz points out that the revolving door syndrome is equally a problem at the level of inter-governmental organisations, although few have scrutinised this. In an article published in the British newspaper *The Guardian* Stiglitz argues:

... there seems to be no such rule on revolving doors in place at the IMF; its first deputy managing director moved from his senior public sector job to the vice-chairmanship of

one of America's largest financial institutions. The IMF is widely viewed as reflecting the ideology and interests of the financial community, of responding more to its concerns than those of the developing countries it is supposed to be helping. In Indonesia, there were billions of dollars to bail out foreign creditors, but paying out far smaller sums to provide food and fuel subsidies for those thrown out of their job or who saw their wages plummeting was viewed as a waste of money. Western banks benefit from such bail-outs (Stiglitz 2002).

This may be regarded as a controversial argument, but it is noted here to raise awareness that corruption cannot be conceptualised only as a domestic problem because it also has international and inter-governmental dimensions. Indeed, in an era when increasing power is wielded by non-elected officials in inter-governmental organisations, combined with the dramatic rise in power and wealth of MNCs, it is clear that state-centred theories of corruption are highly limiting. In other words, as the governance of natural resources transcends national boundaries, so too must our analysis of related corruption.

8. The impact of corrupt resource extraction on the environment and local communities

From the above discussion, we can see how the issue of corruption in the extractive industries is both multidimensional and contested. However, the issue of corruption is further complicated when we consider its manifestation in terms of the environment and local communities. These are two areas that are increasingly controversial in the extractive industries, although the issue of corruption is not often considered.

Mining, corruption and environmental degradation

According to industry analysts, there have been considerable improvements among mining companies over the past ten years to mitigate environmental impact, although the same commitment is less clear from companies in emerging markets such as China, India and Russia, as well as many of the junior mining companies that seem to operate below the radar of civil society scrutiny. Most countries require in-depth environmental impact assessments that lead to environmental management plans, which should contain details of what precautions companies need to take and how their activities should be monitored. Care needs to be taken not to typecast the entire mining industry as environmentally destructive, and it must be recognised that some environmental impact is unavoidable when supplying commodities that are in demand. However, mounting evidence suggests that mining has been excessively destructive to our natural environment and there is little reason to believe it will not continue to be so in the future.

Perhaps the most worrying aspect of mining involves pollution and the contamination of the environment with highly toxic substances. The most spectacular pollution occurs when waste, known as tailings, is dumped directly into the environment with little processing, or when tailing dams fail and huge quantities of contaminated water are released into the surrounding area. According to the United States Environmental Protection Agency, the contamination of water with metals and toxic substances from

mining represents one of the top three ecological security threats in the world (WRI 2003).

Mining is also destructive in terms of the excavation and dumping of soil and rocks. In this regard technological improvements may have been counterproductive. Open-pit mining is thought by some to have a more profound impact on the environment than deep-shaft mining. It occurs at a more rapid rate and has become more economically viable as a result of the development of ever more powerful bulldozers and land clearing machines.

The combined impact of topsoil excavation, toxic waste and the tendency for mining operations to require large amounts of water, becomes particularly damaging when mining occurs in areas of high biodiversity. Indeed, mining represents an important threat to protected areas and natural forests. As a result of the increasing pressure to find new deposits, mining operations in many parts of the world are responsible for the shrinking of natural habitats and protected areas. The World Resource Institute (WRI) is one of the leading organisations that provides data on the environmental hazards of mining. Although deforestation is linked most obviously to logging, the WRI claimed in 1997 that 38 per cent of the world's remaining pristine forests are threatened by mining activities and exploration (cited in World Rainforest Movement 2004). In 2003 the WRI provided data showing that more than 25 per cent of the world's mines are situated in or within a 10 km radius of strictly protected areas; that roughly 30 per cent of the world's mines and new exploration sites are situated within areas of intact ecosystems; and that roughly 30 per cent of the world's mines are located in stressed watersheds (WRI 2003).

It is difficult to know to what extent corrupt activities can increase the negative environmental impact of mining. Environmental organisations and civil society groups argue that the fundamental fault lies with skewed policy priorities. According to them, governments and key lending organisations seem to place environmental considerations low down on their list of priorities. There is a perceived apathy towards environmental concerns caused by the quest for profits.

However, as a general concern, less developed countries with weak political institutions may be particularly vulnerable to excessive environmental degradation by mining activities. This is partly because in the poorer states there will probably be less urgency in balancing economic considerations with environmental concerns. But it is also highly likely that where there is inadequate state capacity to regulate mining, unethical and criminal activities may flourish with impunity. This was the conclusion reached by the WRI:

Many mineral-dependent countries in the developing world lack important safeguards to ensure that responsible mining occurs, such as the ability to enforce laws, control corruption, and foster a strong civil society. Nearly one quarter of active mines and exploration sites are located in countries where governance structures are weakest (WRI 2003:4).

Moreover, through a process of state capture, mining companies may weaken environmental regulations. Reports suggest that investment deals struck between copper mining companies and the Zambian authorities mean that some of the companies are now exempt from being prosecuted for environmental degradation (Anon. 2005). This is a matter of serious importance, as copper mining in Zambia is thought to have a highly negative impact on the environment and people's health. In one township situated near a copper mine, it has been estimated that 90,000 children have been exposed to lead and zinc poisoning, and extremely high levels of sulphur dioxide emissions have been recorded (Feeney 2001).

A further issue of concern relates to the efforts by mining companies to gain access to formerly protected areas. Consider the case of Ghana. In the early 1980s, Ghana was one of the first African countries to liberalise mining laws under the guidance and with support of the IMF and World Bank. Ghana has in the past been regarded as a mining success story, being the second largest exporter of gold on the continent. Yet the impact on Ghana's tropical forests of the burgeoning mining sector has been ruinous. According to a report published by the World Rainforest Movement (2004), an average of 2 million hectares of forest is lost to mining every year. In 2003, a coalition of civil society groups began a campaign to reverse the decision made by the government to grant exploration licences to mining companies within protected forest areas. It was claimed by the coalition that the granting of these licences was demanded by international mining companies, who threatened the Ghanaian government with the prospect of moving their investments to Tanzania. This appears to be a clear example of state capture through aggressive tactics or bullying.

The case of Ghana may be a warning to other African countries. Reports already suggest that in the DRC there have been encroachments into protected forests, including gold mining in the Okapi Wildlife Reserve and the Kahuzi-Biega National Park. As mining is predicted to grow substantially over the next few years, it seems likely that the pressure on the government of the DRC to provide mining licences in conservation areas will increase. The extent to which these decisions will be subject to democratic processes remains doubtful.

Mining, corruption and the exploitation of local communities

Mining often occurs in rural areas inhabited by people who have lived in the region for generations. Many of these people are recognised as indigenous and have a traditional way of life intimately connected to their environment. With the continuing expansion of the mining industry, an increasing number of such communities are coming into contact with mining companies.

In theory mining represents opportunities for local economic development, as it creates jobs and enormous wealth potential. Yet it is clear that mining also creates immense tensions at the level of local communities, and this is a subject that continues to receive much disapproval and concern. Indeed, in the 2004 World Bank's Extractive Industries Review (EIR), the issue of the impact of mining on indigenous communities was given

considerable attention. It was noted by the EIR that the vast majority of human rights abuses reported to international human rights organisations by indigenous groups stem from the exploitation of natural resources on their lands.

Submissions to the EIR by organisations working on behalf of indigenous groups raised a number of interrelated concerns. These can be summarised as follows:

- Although contested, it is recognised in international law that indigenous groups have the power to withhold their consent to activities that adversely affect their human rights. Such groups are expected to have access to information, be fully integrated into relevant decision making processes, and to be autonomous – an ideal referred to as ‘free, prior, informed consent’ (FPIC). In many cases of resource exploitation, FPIC is not adhered to. In extreme cases indigenous groups are simply ignored, and they only realise that their lands have been given to companies when work begins or eviction notices are served. Forced removals can follow and the suffering that results is tremendous.
- Where financial compensation for relocations is given, it is often presented in the form of one-off payments. In comparison to the enormous wealth that mining companies enjoy, these payments are frequently seen as miserly and they are quickly spent.
- Where mining companies seek formal consent from affected communities, this is often achieved through propaganda, impressive presentations, and extremely attractive promises for the future, which are misleading. People are assured of employment opportunities and investment in local infrastructure, including roads, schools and healthcare facilities. Individuals are told they will receive generous sums of money when relocating. Local people who are either illiterate or unable to access more information seem easily swayed by such offers, yet communities are rarely offered unbiased assessments that include the potential negative impacts of mining.
- Promises made by companies form part of their voluntary corporate social responsibility programmes. They are typically not legally binding and communities can be presented with ambiguous detail on time frames. The situation is ripe for broken promises and disappointing outcomes.
- The environmental degradation that tends to accompany mining operations can have a severe impact on local communities through water shortages, air pollution, contamination of natural water supplies by toxic waste, and the resulting loss of local biodiversity. Compensation for the impact of environmental degradation is rarely forthcoming.
- The local economic development achieved by mining tends to be to the detriment of indigenous peoples. Although promised access to mining jobs, employment opportunities are in fact limited because of a skills shortage. The majority of new jobs are taken by an influx of specialised labour, and indigenous people tend to

occupy a marginal and precarious position in the resulting new economy. As a result of losing their traditional lands, they are denied the ability to live in a self-sustainable way, and are expected to find new money-making ventures to survive.

- The impact of resource extraction is typically greater for women. Whereas women traditionally occupy an integral position in indigenous communities, resource extraction tends to promote men's dominance in the local political economy. Companies, almost exclusively run by men, tend to negotiate with local men and ignore women completely. The few jobs available through mining are given to men only, and the influx of mining labour tends to comprise men without families. Mining communities therefore tend to be excessively patriarchal.
- The negative impact on communities is exacerbated when mining operations close, and often this occurs suddenly with no consultation. The closure of mines creates an upsurge in local unemployment, which results in a myriad of social problems. Infrastructure maintained for the sake of resource extraction may be neglected and its upkeep becomes burdensome for local authorities. Local communities often complain that when mining ends there is a significant deterioration in their quality of life, and they are faced with the long-term consequences of unemployment and an impoverished environment.

Where mining has conformed to this list of negative outcomes for local communities, it is tempting to label the entire process as corrupt and lacking in transparency and accountability. However, care needs to be taken to distinguish between corruption and bad policy or unethical business practices. Many of the negative consequences for communities caused by mining can be attributed to reckless planning and skewed priorities. It should also be realised that achieving an ideal scenario by mining companies is far from straightforward. For example, although compensation for communities relocated from mining activities may often be scandalously low, there are no industry standards in this regard. Calculating compensation is therefore arbitrary and mining companies complain that any amount given will be seen as too little by their critics.

However, several aspects of the relationship between mining companies and local communities are cause for concern. Two of the key aspects we have dealt with already, namely the potential for corruption to cause environmental degradation, and the potential that state capture will allow mining companies to encroach on protected areas. These issues are clearly related to the plight of indigenous peoples.

Moreover, as a general point, we strongly suspect that in countries with weak institutions and high levels of corruption related to mining and oil production, the state may have scant regard for the well-being of the rural poor. The rentier state syndrome suggests a country in which public sentiment is not critical to political hegemony, and civil society is weak, intimidated, and denied access to impartial systems of justice. The fact that corrupt elites may have direct financial investments in mining ventures also suggests that costly interventions and community development programmes may be less likely to materialise.

If we are to be more specific than this, we can hone in on the local dynamics between companies, authorities and communities. Here we are interested in how mining companies turn to bribery or engage in corrupt relations with local authorities or other gatekeepers to manage the tensions that arise within communities.

9. The capture of local communities

There are several examples suggesting that mining companies attempt to buy influence in communities, and we can think of this as a localised dimension of state capture. For example, a consortium of Kenyan mining firms and Tiomin, a Canadian mining giant, has recently received the go-ahead to begin mining titanium mineral sands on the East Coast of Kenya. This venture is controversial for several reasons: there are allegations of elite level corruption; the project involves the relocation of approximately 1 500 families; and environmentalists remain highly concerned that the process of extracting the mineral sands may have a profound impact on the environment and the health of local communities (Kithi 2004).

As a response to fears of future environmental degradation and concerns about the extremely low compensation being offered for the relocations, the affected communities formed their own committee. This was tasked with collating information and petitioning the local and national authorities. According to the Kenyan Human Rights Commission, the dynamism of this organisation was severely undermined by the fact that its leadership tier was subject to bribes and inducements by representatives of the mining firms. Several of the committee leaders were given motorbikes, while others were actually employed by the mining company.

A similar situation has been reported in South Africa in Limpopo Province, where roughly 80 per cent of the world's platinum is located. Some members of the communities situated on the site of the largest platinum mine in the world, near Polokwane, have mounted a well-publicised campaign against Anglo Platinum for what they see as unjust relocations and insufficient compensation. Anglo Platinum is thought to earn as much as US\$1 billion a year from this mine alone. Many community members are unhappy with the one-off payment of approximately US\$3 000 offered to each family for moving, and they claim that the housing provided for relocated families is sub-standard. Further criticism is levelled at the way the compensation payments are made – Anglo Platinum has offered half the money in advance, and the remainder when the last family from the communities has moved. It is felt that this is a deliberate ploy to encourage division in the communities and ensure that those who agree to the relocation package will put pressure on those who are holding out for greater compensation.

In its negotiations with the communities, Anglo Platinum is also accused of dividing the community through direct bribe payments. According to best practice, Anglo Platinum encouraged the communities to set up democratically elected committees to oversee the relocations and communicate directly with the company. But Anglo Platinum is paying the executives of these committees for their time, which some believe accounts for the

committees' overwhelming support for the company. Since they were formed, the committees have unanimously decided that their executives cannot be re-elected.

In many African countries, mining companies therefore engage in corrupt practices to gain consent and control of land. This may involve payments to local authorities and also payments and favours to tribal authorities. In the troubled Ongoni region of Nigeria, Shell have been accused of paying 50,000 naira for the signatures of village chiefs and community development committees in order to gain consent for mining on their lands (Rowell et al 2005:13).

These examples of local communities and their interaction with a mining company, if accurate, are indicative of a state of affairs we suspect is common in regions that are poor and the state is relatively weak. Those who control mining operations can engage in corrupt and illegal means to consolidate their local power, restrict potential protest, and thereby create a favourable environment for exploitative mining activities. This may involve the payment of bribes to local authorities, traditional leaders, civil society groups, local media and the police. We do not know how widespread this problem is, but it seems to be a recurring story in the available literature. We also find similar stories outside Africa. For example, in a damning report on mining in the Philippines, written in 2006 by a group of NGOs .

10. Observations.

- There is need for a comprehensive policy framework for the administration, utilization and management of extractive resources for socioeconomic equity, political stability and sustainable development.
- Transparent systems of resource governance with stakeholder involvement at all levels is a prerequisite for sustainable development in the extractive industries
- Policy and legal reforms are necessary for the regulation and promotion of mineral investments, rational use of mineral resources for maximum social and economical benefits
- Mining operations should be conducted in a socially and environmentally responsible manner
- Policy initiatives should be deliberately directed not only at large scale mining but also at small scale operations which offer opportunities to support rural livelihoods and local entrepreneurship.

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