



## Corruption in natural resource management – *an introduction*

Natural resources often provide fertile ground for corruption. Since a substantial number of partner countries in development cooperation are richly endowed with natural resources, these contexts pose a particular challenge for effective donor action. The risk of corruption cuts across natural resource sectors – from non-renewable resources such as oil, gas, minerals and metals, to renewable resources such as forests, fisheries and land. There are, however, important variations in the challenges presented by these sectors and the manner in which corruption in relation to them can be addressed.

The basic relationship between corruption and natural resources is twofold. Firstly, the presence of natural resource endowments may cause corruption. The existence of appropriable resource revenues, for which various social groups may vie, can result in a high level of rent-seeking behaviour. Secondly, corruption may occur within natural resource management (NRM) systems themselves, leading to the sub-optimal use of these resources and to poor development outcomes in terms of



by Ivar Kolstad,  
Tina Søreide, and  
Aled Williams, CMI  
[ivar.kolstad@cmi.no](mailto:ivar.kolstad@cmi.no)  
[tina.soreide@cmi.no](mailto:tina.soreide@cmi.no)  
[aled.williams@cmi.no](mailto:aled.williams@cmi.no)

Download this Brief from  
[www.U4.no/themes/natural-resources](http://www.U4.no/themes/natural-resources)

economic growth and/or poverty reduction. The level of corruption within NRM systems is a product not only of the resource endowments at stake, but also of the institutional arrangements in place to govern their use.

Donor interventions to reduce corruption in NRM therefore need to address both the potentially negative impact of resource endowments – including rent-seeking and patronage – and the design of governance systems for their proper management. The latter may involve, for example, promoting good concession or negotiation practices, promoting transparent and accountable revenue management, or helping to curtail petty corruption in monitoring and enforcement systems.

This U4 Brief<sup>1</sup> provides a broad overview of the relationship between corruption and natural resource management, outlining the main challenges and issues at stake. It also points to possible areas for donor intervention, though without making specific policy recommendations. Further analysis and recommendations for policies on specific aspects of this issue will be made available via the U4 Theme Pages on Corruption and Natural Resource Management at [www.U4.no/themes/nrm](http://www.U4.no/themes/nrm)

## How natural resources corrupt

There is a growing body of evidence that natural resources can be a curse rather than a blessing. Countries endowed with natural resources, on average, grow more slowly than countries without such resources.<sup>2</sup> What is commonly referred to as the ‘resource curse’ has been linked by research both to rent-seeking behaviour and to patronage. Yet the largely positive experiences of certain resource-rich countries, such as Botswana and Norway, suggest that the resource curse need not be deterministic, and that there are ways of influencing the impact of resources on institutions and on development.

Recent analysis emphasises the effects of resource rents on corruption. One argument is that natural resource rents lead to rent-seeking, or the socially costly pursuit of rents. Though rent-seeking and corruption are not one and the same, some forms of rent-seeking do qualify as corruption. The main problem is not that there is competition for rents, but that the skills, time and energy individuals use

to compete for resources could have alternative uses. In oil rich countries, skilled individuals can benefit more from becoming oil bureaucrats than from starting a business in another field. This is socially costly as it entails the redistribution of an existing cake rather than the cake’s expansion.

Where resource rents are high and institutional quality is low, a number of entrepreneurs will choose to become rent-seekers. If there are externalities in production (i.e. profitability increases in the number of producers), an increase in resource rents will cause so many entrepreneurs to shift into rent-seeking that total national income will be reduced. Rent-seeking can therefore be said to make the size of the cake smaller, or an economy worse off, even though it has received an additional infusion of income through natural resources. A rent-seeking perspective suggests that countries with bad institutions suffer a resource curse, while those with good institutions do not. Some rent-seeking models, however, suggest that additional factors are also important in determining whether natural resources lead to increased rent-seeking: the effect of resources may depend on the initial level of rent seeking, while ethnic fractionalisation in a country may exacerbate rent-seeking problems.

Increased natural resource rents also provide governments with more opportunities and greater incentives to pay off political supporters to stay in power. Since being in power means having access to resource rents, politicians are willing to spend more today to stay in power tomorrow. A politician can, for example, choose between consuming resource rents or spend them on providing public sector employment for his or her supporters to increase the probability of being re-elected. Public funds used on patronage of this kind could have been spent in more socially productive ways, meaning that patronage implies an inefficient allocation of public resources. In this context, rents from natural resources have three effects: i) they increase income directly and indirectly, ii) the incumbent has greater incentives to provide supporters with public sector jobs, and iii) if institutions are sufficiently bad, an increase in rents will cause national income to fall. The critical institutions are those that govern the allocation of public resources i.e. institutions that hold politicians to account for their use of public funds. There is an important relation to the rentier state here in so far that natural resource rents may weaken accountability of governments to citizens. By controlling substantial oil revenues, governments can reduce pressures for accountability and democratisation, including direct oppression or the prevention of the formation of social groups independent of the state.

1 This U4 Brief is based on the paper: Kolstad, I., and Søreide, T., (2007) *Corruption in natural resource management: a primer for policy makers*, mimeo, Bergen: Chr. Michelsen Institute.

2 Sachs and Warner (1995), *Natural resource abundance and economic growth*, NBER working paper series 5398.

## How natural resource management is corrupted

In general, a number of preconditions are required for corruption to take place in resource management systems. Firstly, there must be personal benefit for those involved in the corrupt act; second, they must have the authority to influence decisions; and, thirdly, they must have the opportunity to act corruptly within the institutions in which they operate. What constitutes a personal benefit is relative to the personal means of individual decision-makers, and could represent only a small fraction of the overall amount involved in, for example, an oil concession contract. The authority to influence decisions related to the contract, on the other hand, implies a certain position within a bureaucratic hierarchy, while the opportunity to engage in corruption reflects the overall quality of the surrounding institutions.

### Actors in natural resource management

Corruption in natural resource management can occur at all phases of resource exploitation, though some stages are more at risk of corruption than others and may be affected by corruption in different ways. Understanding the various roles and influences of actors involved in resource management is extremely important for addressing these risks. Both domestic and foreign firms can be involved in resource exploitation, with these firms often varying greatly in size and operating with numerous sub-contractors. Banks provide financial solutions for complex international transactions, while agents and expert consultants of all kinds offer practical assistance regarding resource concessions. Finally, export credit agencies, donors, development banks and even insurance companies can have a decisive influence on resource management systems. The strength of each actor's role will depend not only on its own agreements with the government of the resource-rich country in question, but also on the nature of its agreements with other actors, or the nature of agreements between these other actors and the government. Though resource management systems are intended to prevent informal solutions, there are strong incentives for various actors to make secret arrangements to obtain a favourable cut of resource concessions.

### Corruption risks prior to operation

In the early phases of managing a resource, there can be considerable uncertainty about the choice of management solutions, ownership issues, expected revenues, distribution and other political or economic considerations. Expert advice may point in different directions and there may be disagreement between local and national decision-makers over how best to manage the resource. Some form of license-agreement will commonly exist between the government and private firms,

but the legal details of these arrangements may vary considerably in terms of control or ownership of the resource, the exploitation period and the sharing of revenues between the parties involved. There are incentives, therefore, for firms to attempt to influence political decisions concerning resource management at an early stage. This influence can include various honest marketing efforts, grey-zone practices, or clear-cut corruption. Even if signed under international law, the value of resource concession contracts is uncertain in some countries. Thanks to their monopoly on jurisdiction, a government may alter the terms without significant risk of sanctions, thereby claiming higher revenues. In some countries, firms may attempt to diminish such risks by making 'good contacts' in regulatory authorities, or through the use of bribery.

### Corruption risks during operation

Decisions about how much of a resource to extract, the length of time for which it can be extracted and who is permitted to conduct the extraction, are not always respected. Concession holders may abuse the terms of their agreement with sector regulators, and resources may also be harvested by those not legally entitled to do so. Institutions are therefore required to monitor the use of resources and enforce basic regulations and contracts. There is substantial scope for bureaucratic corruption in natural resource management, particularly where regulations are complicated, un-transparent or contradictory. In some countries, low-pay coupled with non-meritocratic hiring, firing and promotion practices mean that there is little to lose from taking bribes. Weak monitoring and enforcement capacities – both within resource management bureaucracies but also in other public sector bodies, such as customs – can also increase the

***“Donor policy in resource rich countries should focus in particular on reducing corruption in the form of rent-seeking and patronage.”***

prevalence of corrupt practices. After production has taken place for some time, actors may want to renegotiate the terms of their contracts. While renegotiations can be entirely legitimate, there is also scope for opportunistic renegotiation which reduces or eliminates the expected benefits of competitive bidding at earlier stages in the process. There is scope, too, for corruption in renegotiations, for instance, where a government body or individual official threatens to cut a firm's share of resource revenues to obtain a bribe.

## Addressing corruption related to natural resources

Addressing the ‘curse’ of natural resources requires that we know the precise mechanisms through which natural resource rents affect development. Rent-seeking and patronage can explain the negative effects of natural resources on many economies, and there are a number of examples where these phenomena occur in natural resource rich countries. There is also considerable empirical evidence that corruption, in the form of rent-seeking and patronage, is at the core of the resource curse-phenomenon. The evidence shows that rent-seeking, institutions governing the private sector, as well as patronage and institutions of democratic accountability, determine whether countries suffer a resource curse or not. Donor policy in resource rich countries should focus in particular on reducing corruption in the form of rent-seeking and patronage.

Helping to improve the economic environment for entrepreneurs, supporting institutional development – including for parliaments and judiciaries – improving taxation capacity and supporting democratic reform, can also all have a positive impact in resource rich countries. Donors must be careful, however, that their support does not intensify rent-seeking behaviour and patronage networks in resource rich contexts. This has implications not only for the type of aid support given but also the process through which aid interventions are decided. Direct budget support, for example, may work to directly increase the pool of revenues to be fought over in countries where natural resources are abundant.

Making natural resource management systems themselves less corrupt is, of course, extremely important. Donors can play a role in promoting good concession and negotiation practices which prevent favouritism and ad hoc bureaucratic decisions. Concession laws and tender rules must not only meet international standards, however. They must also be enforceable and their effectiveness will depend on their support by an efficient judiciary and public administration. Monitoring and enforcement capacity should also be addressed, and there can be substantial scope for improvement through new and simple technologies, which can be donor funded. Resource revenue management must be transparent, and both the Extractive Industries Transparency Initiative (EITI) and IMF Reports on Observance

of Standards and Codes are important points of reference for donors in this regard. To be effective, transparency must be coupled with accountability and this demands continuous and close analysis of the political and economic situation in partner countries that are rich in resources.

## Conclusion

This introduction has aimed at providing a broad and initial overview of the relationship between corruption and natural resource management. The resource curse is a continuing challenge for effective donor intervention in resource rich countries. It is particularly pronounced in contexts where the initial level of corruption is high, where existing institutions are poor, where there is an absence of political competition, a high degree of ethnic fractionalisation, and a low level of education. A comprehensive approach, therefore, is needed to effectively transform resources into positive development outcomes. Corruption in natural resource management systems themselves also need to be directly addressed. Since corruption varies across industries and involves a variety of different actors, strategies to control the problem in individual sectors require concentrated review. Measures are often aimed at improving laws and standards, but these must be enforceable and supported by efficient institutions. The U4 Theme Page on Corruption and Natural Resource Management will make available further analysis and recommendations for enhancing donor policies in this regard. Issue Papers, Briefs and Literature Lists will address a variety of natural resource sectors and issues, to be accessed at [www.U4.no/themes/natural-resources](http://www.U4.no/themes/natural-resources)

## Further reading

U4 Theme Page on Corruption in Natural Resource Management: [www.U4.no/themes/natural-resources](http://www.U4.no/themes/natural-resources)

Robinson, J. A., Torvik, R. and Verdier, T. (2006), “Political foundations of the resource curse”, *Journal of Development Economics*, 79, 447-468

Mehlum, H., Moene, K. and Torvik, R. (2006), “Institutions and the resource curse”, *The Economic Journal*, 116, 1-20

Robbins, P. (2000), “The rotten institution: Corruption in natural resource management”, *Political Geography*, 19, 423-443