



## Using Corruption Risk Assessments for REDD+ An introduction for practitioners

Aled Williams

U4 is a web-based resource centre for development practitioners who wish to effectively address corruption challenges in their work.

U4 is operated by the Chr. Michelsen Institute (CMI) – an independent centre for research on international development and policy – and is funded by Australian Department of Foreign Affairs and Trade, BTC (Belgium), CIDA (Canada), Danida (Denmark), DFID (UK), GIZ (Germany), Norad (Norway), Sida (Sweden) and The Ministry of Foreign Affairs Finland.

All views expressed in this Issue are those of the author(s), and do not necessarily reflect the opinions of the U4 Partner Agencies or CMI/U4. (Copyright 2014 - CMI/U4)

# Using Corruption Risk Assessments for REDD+

## An introduction for practitioners

Aled Williams

U4 / CMI

U4 Issue

January 2014 No 1





## Contents

<b>Abstract .....</b>	<b>iv</b>
<b>Acknowledgements .....</b>	<b>iv</b>
<b>Introduction .....</b>	<b>1</b>
What is a corruption risk assessment?.....	1
Corruption risk assessments as applied to REDD+ .....	2
<b>Part One: Assessing corruption risks for REDD+: An overview and comparison of two recent approaches .....</b>	<b>5</b>
Example A: Norad’s study “Implementing REDD+ in the Democratic Republic of Congo – How to Manage the Risk of Corruption” .....	5
Example B: UN-REDD’s study “Corruption Risk Assessment for REDD+ in the Philippines and Development of REDD+ Anti-Corruption Measures” .....	8
<b>Part Two: Responding to corruption risk assessments - Options and evidence for their effectiveness.....</b>	<b>11</b>
<b>Some practical options and concluding remarks .....</b>	<b>15</b>
<b>References .....</b>	<b>17</b>

## Abstract

Corruption Risk Assessments (CRAs) are both an analytic and due diligence exercise to identify issues associated with, contributing to, or otherwise facilitating corruption in a particular setting. An area where improved understanding of corruption risks, and the adaptation of development aid interventions to take them into account, is seen to be of crucial importance is in the implementation of programmes for Reducing Emissions from Deforestation and Forest Degradation (REDD+). This Issue considers two recent approaches to corruption risk assessment for REDD+ in the Democratic Republic of Congo and the Philippines. The intention is to provide development practitioners who may be unfamiliar with the study of corruption, or with the methods employed by CRAs, an overview of the approaches currently available for REDD+ schemes. Referring to recent literature on the evidence for the effectiveness of donor anti-corruption approaches, some practical considerations for development practitioners to improve the way in which CRAs are used are discussed.

## About the author

Aled Williams is a senior advisor at the U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute. He is a political scientist with a background in international relations and political philosophy. His work is focused on development, aid, corruption, governance, and natural resource management. Williams is currently pursuing a part-time PhD at SOAS, University of London.

## Acknowledgements

This U4 Issue was financially supported by GIZ's Forest Governance Programme. The author would like to thank Lotte Feuerstein (GIZ), Estelle Fach (UNDP) and Lars Ekman (Norad) who elaborated on the use of corruption risk assessments for REDD+ in their respective institutions. The author is grateful to GIZ's Forest Governance Programme for the opportunity to attend a workshop held in London in July 2013 on FLEGT Voluntary Partnership Agreements (VPAs) as a means to address corruption in the forest sector, which also touched on other policy options including REDD+. Thanks also to André Standing (U4/CMI), Elizabeth Hart (independent consultant) and Nora Heil (GIZ) who provided comments and suggestions for improvements to earlier drafts. All remaining errors of interpretation or omission are the responsibility of the author.

# Introduction

Development aid interventions are well known to be subject to “governance conditions” in the specific context where they are implemented. Among the governance challenges a particular intervention may face are those related to corruption or public integrity, where societal norms about fairness, equity, reasonableness, and the allocation of responsibilities, are considered to have been abused. Such abuses, whether located in the political sphere, or in the public, private or voluntary sectors pose significant threats to the success of development interventions in many different types of programmes and contextual settings<sup>1</sup>, to the extent that some objectives may not be met at all if risks are not taken into account by funders and implementers in the design and conduct of interventions.<sup>2</sup> With these challenges in mind, a range of analytic tools, including indices, surveys and other methodologies, have been created in recent years to help development institutions and their partners assess the nature and extent of corruption in the various contexts where they operate. Prominent among these tools are Corruption Risk Assessments (CRAs), and related studies such as Institutional Integrity Assessments (IIAs).<sup>3</sup>

## What is a corruption risk assessment?

Corruption Risk Assessments are an analytic but also a due diligence exercise to identify issues associated with, contributing to, or otherwise facilitating corruption in a particular setting, whether geographic, programmatic, or institutional. Broadly speaking there are two main types of focus for CRAs: (i) an assessment of the nature and extent (or seriousness) of corruption in a given setting, and (ii) an identification of the issues that generate a risk of corruption in the same setting.<sup>4</sup> CRAs usually also make an attempt to inform the design of interventions, policies, and practices so that the identified corruption risks and at least some of their causes may be taken into account. But CRAs are tricky for at least three reasons: (i) concepts of corruption may not be broadly agreed in the society under study and CRAs often rely on global normative (such as from Transparency International or the World Bank) or national legal definitions which may omit certain risk practices that are nonetheless present in a particular setting; (ii) corruption itself is an inherently challenging subject to study due to its often clandestine nature but also given the complexities of corrupt exchanges and their contextual explanations; (iii) the identification of risks implies a certain degree of prediction about future events where accumulated evidence from past experience may be of only limited use. Various potential solutions to these challenges have been proposed with the intention of strengthening the rigour and validity of CRAs, and thus their usefulness in informing the design and implementation of development interventions. These include employing a range of research methods to inform the identification of risk factors, the use of a variety of documentary and other evidence, the use of broad definitions of corruption that go beyond the generally narrow bounds, for instance, of national legal definitions, as well as the encouragement of broad assessments of the contextual setting in which actors and institutions operate (including the constraints and incentives they may experience).

---

<sup>1</sup> See, for instance, the case studies of corruption and their impact on various development goals presented in Søreide and Williams (2014).

<sup>2</sup> Burnside and Dollar (2004) go even further to argue that «A corrupt, incompetent government is not going to be able to use aid wisely and outside donors are not going to be able to force it to change its habits».

<sup>3</sup> Institutional Integrity Assessments are not the focus of this publication. Other related types of studies include Organizational Effectiveness Assessments and, to some extent, assessments of so-called “Drivers of Change”. For an overview of different public sector integrity assessment tools, see: Martini (2012).

<sup>4</sup> CRAs are distinct from well-known survey-based corruption indices, such as Transparency International’s Corruption Perceptions Index (CPI), which are attempts to quantify “levels” of corruption across sectors and/or countries on the basis of respondents’ perceptions or experience. CRAs nonetheless often refer to data from such surveys and indices.

Potential solutions have also been raised in terms of strengthening the practical usefulness of CRAs to development interventions, for instance integrating CRAs within a larger and well developed logical programmatic framework or “theory of change”, which may be altered and improved on the basis of new findings. The subject of whether contemporary examples of CRAs in development cooperation have used advanced social science research methods and have been linked to wider, iterative processes of design, implementation, and evaluation will be returned to later.

**Table One: A typology of methods for corruption risk assessments**

Method	Example/s	Benefits	Drawbacks
<b>Direct observation or experience</b>	Data on criminal cases of corruption	Data can be quantifiable and available over longer time periods	Data may be flawed, for instance due to a weak or skewed judicial system
<b>Observation of proxies for corruption</b>	Data on access to information about public regulations or processes	May give signals about the overall integrity of a process or institution	Data may not be an accurate assessment of actual corruption
<b>Surveys</b>	Data on citizen perceptions or direct experience of corruption	Data can be quantifiable and give insights into trends if samples are sufficiently large and methods consistent over time	Respondents tend to exaggerate when reporting experiences of corruption
<b>Interviews</b>	Semi-structured or free-flowing interviews with key informants	Data may allow for deep, qualitative insights into processes and institutions	Data collection usually among a relatively small population; Possibility of respondent selection bias

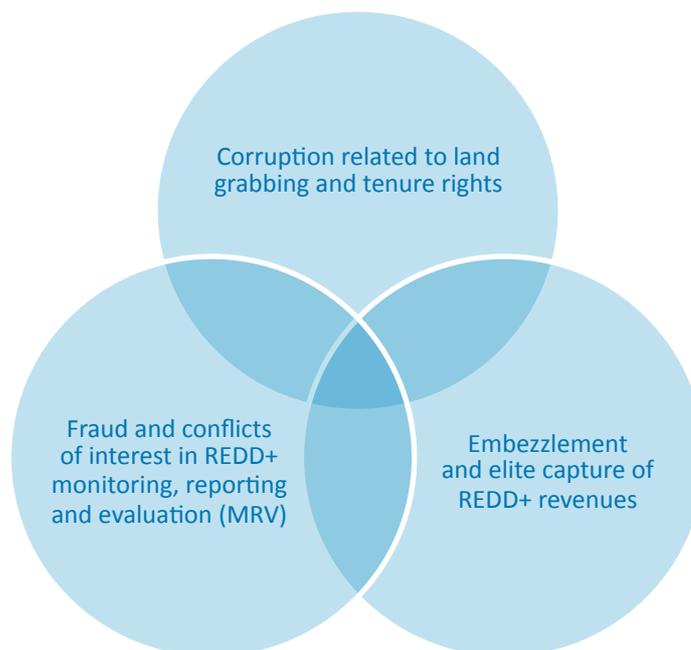
*Source: Adapted from Council of Europe (2010)*

## Corruption risk assessments as applied to REDD+

A particular programmatic area where improved understanding of corruption risks, and the adaptation of development interventions to take them into account, has been raised to be of crucial importance is in the implementation of bilateral and multilateral aid programmes for Reducing Emissions from Deforestation and Forest Degradation (REDD+). REDD+ schemes use financial incentives with the intention to reduce carbon emissions from deforestation and forest degradation, while also seeking to promote positive changes in forest governance including contributions to the sustainability of forest-dependent peoples’ livelihoods. Both generic corruption risks linked to the provision of aid in poor governance contexts (the schemes are implemented mainly in the tropical forest zones of Central Africa, Southeast Asia and Latin America) and more specific risks linked to the particular features and objectives of REDD+ schemes have recently been highlighted by a number of institutions and publications.<sup>5</sup> Academic and policy studies of these risks have been followed by the development of methodological frameworks and guides for conducting CRAs specifically for REDD+ programmes.<sup>6</sup>

<sup>5</sup> See for instance: Saunders and Reeve (2010), Brown (2010), Angelsen (2009), Barr (2011), Dermawan et al (2011), Global Witness (2011), Mayo-Anda (2011), Bofin et al (2011), UNDP (2011), Standing (2012).

<sup>6</sup> For instance, the UN-REDD Programme’s “Guidance on Conducting REDD+ Corruption Risks Assessments” (2012).

**Figure One: Generic areas of corruption risk for REDD+**

*Source: Adapted from Standing (2012)*

## The focus of this publication

REDD+ specific CRAs to some degree build on earlier, more general, risk assessment methods for development aid interventions.<sup>7</sup> Given the different CRA methodologies available for REDD+, the importance of learning from experience in conducting such studies, and the likely usefulness of integrating the (hopefully new) insights such assessments generate back into REDD+ programme design and implementation, this Issue Paper looks at two CRAs conducted for REDD+ in the country contexts of the Democratic Republic of Congo (DRC) and the Philippines. Part One introduces and compares the methodologies employed by these studies to inform REDD+ schemes. The intention is to provide development practitioners who may be unfamiliar with the study of corruption, or with the methods employed by CRAs, an overview of the approaches available for REDD+ schemes. An attempt is also made to review the relative benefits and drawbacks of these approaches for identifying and understanding corruption risks in REDD+ support.

Commissioning and overseeing credible CRAs is one task development practitioners may undertake as part of implementing REDD+ programmes. Another is making risk management choices in response to the findings of such assessments. There is now a substantial literature purporting to advise development practitioners on how to address corruption risks that may arise during aid interventions.<sup>8</sup> There is also a small but growing literature on how to address corruption risks in REDD+ interventions specifically. Actual evidence of the effectiveness of donors' anti-corruption approaches is still sparse, however.<sup>9</sup> In light of this, Part Two focuses on the risk management options open to

<sup>7</sup> Such as USAID's "Corruption Assessment Handbook" (2006).

<sup>8</sup> For a general overview see Norad's commissioned study "Contextual Choices in Fighting Corruption: Lessons Learned" (2011).

<sup>9</sup> For a meta-review of the evidence for the effectiveness of donor approaches to anti-corruption, see: Johnsen et al (2012).

development practitioners in responding to corruption risks for REDD+ identified via the assessments undertaken. The intention is to discuss options for responding to corruption risks, including a brief assessment of the available evidence for the effectiveness of each option.

A final concluding section discusses some practical implications for development policymakers and practitioners when instigating, producing, and using the results of CRAs in the context of work on REDD+ programmes.

## Part One: Assessing corruption risks for REDD+: An overview and comparison of two recent approaches

As discussed above, much general literature on how to study corruption in various contexts exists, and a certain degree of guidance on conducting CRAs is already available to development practitioners. Rather than repeat issues already well-covered elsewhere, this section compares and contrasts two specific approaches to CRA recently undertaken by Norad and the UN-REDD Programme to inform the design and implementation of REDD+ schemes in the DRC and the Philippines. An attempt is made to compare the choice of approach (including methods and focus) for each CRA and discuss the apparent benefits and drawbacks of these choices, referring to the three challenges for CRAs highlighted in the introduction. A summary of the main policy suggestions or recommendations for REDD+ design and implementation generated as a result of each CRA is provided. These policy recommendations are further reflected upon in Part Two.

### Example A: Norad's study "Implementing REDD+ in the Democratic Republic of Congo – How to Manage the Risk of Corruption"

The earliest of the studies discussed here was commissioned by Norad to assess the risks of corruption in REDD+ in the DRC. The study, commissioned at a relatively early stage in the formation of the DRC's national REDD+ framework, was conducted by the consultancy PwC with support from UNDP and Norad. Methodological guidance was drawn from the Norwegian Ministry of Foreign Affairs (MfA)' "Approach to Political Economy Analysis", which favours four steps: (i) basic country analysis, (ii) analysis of actors, institutions and reform processes, (iii) summary analysis, and (iv) operational implications. The study is based on a combination of desk research, drawing mainly on qualitative data, and field-based interviews with 63 informants drawn from domestic civil society, government institutions, private sector actors, and development donors. Face-to-face interviews were conducted in Kinshasa by the research team in March 2011 with other interviews conducted by telephone following the field visit. A separate field visit was also undertaken by part of the research team in Province Orientale (Kisangani and the surrounding environment) in collaboration with a World Bank team concurrently updating a separate political economy study on REDD+ in the DRC.

<b>Year:</b>	<b>2011</b>
<b>Commissioned by:</b>	Norad
<b>Produced by:</b>	PricewaterhouseCoopers (PwC) with Norad and UNDP
<b>Method/s</b>	Political economy analysis, desk research, qualitative key informant field interviews

The Norad study was formally conceived as a means to inform Norway, but also the National REDD+ Coordination and DRC REDD+ implementation partners, about corruption risks related to the management of REDD+ financing in the DRC. It also aimed to propose short, medium, and long-term recommendations to reduce, mitigate, and control the possible corruption risks identified. The structure of the study broadly conformed to the "four step approach" advocated by Norway's MfA, although attuned to issues considered relevant to a governance, anti-corruption and forest management related agenda. A comparatively broad operational definition of corruption (adopted both by UNDP and Transparency International) was used: "*the misuse of entrusted power for private gain*", which

allows for the inclusion of unethical practices that go beyond the boundaries of the public sector and political sphere.<sup>10</sup>

How should we assess the success of the Norad study in navigating the three main challenges for CRAs highlighted in our introduction?: (i) the difficulty of studying corruption in contexts where views and concepts about the phenomenon may not be broadly agreed, (ii) the challenge inherent in studying corruption as a clandestine and complex set of issues, and (iii) the challenge of predicting future corruption risks. The following addresses these topics in order.

### Assessing corruption as a societal concept

In terms of the study's approach to the concept of corruption in the DRC, an attempt is made to refer to the country's violent and exploitative colonial history as a backdrop against which contemporary governance challenges should be considered by development donors. Although this section of the study is necessarily brief and does not draw on the academic literature on governance during the colonial and Cold War periods, it nevertheless provides an overview of key political, economic and social events up until and including the signing of the 2002 Peace Agreement. An attempt is also made to trace a history of governance failures from the period of the Congo Independent State which, the study argues, became psychologically and culturally rooted in Congolese society, leading to a contemporary situation in which "corruption has become a way of life". The variety of studies referenced to support these statements is narrow, being mainly derived from the DRC's National Anti-Corruption Strategy and the views of a resource person rather than a meta-survey of relevant academic and policy studies or survey work on citizen perceptions or experiences of corruption. Nonetheless, a relatively expansive and historically embedded view of corruption is taken by the report's authors, in keeping with the broad UNDP definition of corruption employed.

**Table Two: Corruption risks for REDD+ identified by the Norad DRC study**

• Money laundering
• No anti-corruption specialist involved in REDD+ activities
• Generally weak forest governance
• Lack of protection and mechanisms for whistle-blowers
• Lack of media professionalization
• Lack of involvement of civil society in REDD+ processes

### Assessing corruption as a clandestine and complex issue

Political economy based analysis is presently in vogue in the field of corruption research since it offers a means to explore the relations behind and, to some degree explain, the political, economic, and social processes that relate to corrupt practices. The Norad study combined desk- and field-based research in a manner that should have provided a good qualitative understanding of the main corruption risks, even if further research could have led to deeper understanding. The methodological choice of splitting field-based interviews over two sites (Kinshasa and Kisangani) was wise in a country where governance disconnections and a lack of trust between the capital and the provinces are well-documented (Bofin et al, 2011). At the same time, the section of the report that appears to deal with the results of the field interviews is vague about the actors and mechanisms that stand behind the corruption risks identified. Institutions, actors, and power relationships are addressed at a generic

<sup>10</sup> The main forms of corruption referred to in the study are: bribery, cronyism, embezzlement, extortion, fraud, grand corruption, nepotism, patronage, petty corruption, political corruption, and state capture.

rather than specific level. More detail is provided in an annexed table which reflects interviewee comments regarding, for instance, the controlling role played by specific institutions, but this speaks more to the framework for corruption risk management rather than the role played by actors actually involved in corruption.

### **Assessing future corruption risks**

The Norad study does not shy away from making predictions of future corruption risks, grounding this in the historical governance context, past instances of corruption, and comments from interviewees. Many of these predictions appear to be very reasonable. For example, it is argued that since a number of politicians and parliamentarians are allegedly involved in industrial and artisanal logging and keep close links with logging companies, it is therefore likely that groups of influential people will seek to “influence the design of the national REDD+ framework for private gain”. At the same time, some predictions of future corruption risks appear to be designed more to frighten than to inform. The statement that “grand and political corruption will be a permanent threat” is indicative of the scale and depth of the governance and corruption challenges faced in the DRC, but such aggregate statements are unhelpful for examining where change is unlikely and where small improvements may be possible.

### **Making recommendations for addressing corruption risks**

On the basis of its analysis, what does the Norad study recommend be done to address the corruption risks for REDD+ identified? The recommendations can be divided into longer and medium term strategies, and shorter term actions. In the longer and medium term, emphasis is placed on citizen education about REDD+, systematic capacity building on the management of REDD+ funds for all forest sector stakeholders, and maintaining a permanent dialogue with politicians and senior public officials on the long term benefits of REDD+. In the shorter term, a focus is placed on building greater transparency for the forest sector and ensuring adequate control mechanisms are in place. Initiatives discussed include ensuring the monitoring, reporting and verification (MRV) system conforms with UNFCCC guidelines, implementing a national REDD+ project registry, and support to a forest mapping project (MOABI).<sup>11</sup> These recommendations, with a main focus on prevention and education, on the economic and political incentives of elites, on levels of transparency and access to reliable data, and on project control mechanisms, are typical suggestions derived from CRAs. We will return to discuss the evidence for the effectiveness of these types of interventions in Part Two, but first reflect on another approach to CRA undertaken by the UN-REDD Programme in the Philippines during 2012.

---

<sup>11</sup> See: <http://www.moabi.org/>

## Example B: UN-REDD's study "Corruption Risk Assessment for REDD+ in the Philippines and Development of REDD+ Anti-Corruption Measures"

As part of a broader set of country-level CRAs focusing on REDD+ implementing countries, the UN-REDD programme<sup>12</sup> commissioned the Ateneo School of Government in 2012 to produce a CRA for REDD+ in the Philippines, at an early stage in REDD+ work in the country. New methodological guidance for all UN-REDD CRAs was developed in anticipation of this round of country studies<sup>13</sup>, and it is this guidance that informs the methods employed by the Philippines CRA (UN-REDD: 2012). As one would expect from a methodology produced with a specific set of studies in mind, the UN-REDD CRA guidance is more expansive and more attuned to REDD+ than the more general political economy guidance underpinning Norad's DRC study. For instance, a longer and more sophisticated list of forms and types of corruption is provided in the UN-REDD guidance<sup>14</sup>, and there is an attempt to distinguish between types of corruption risk in three distinct phases of REDD+ (i.e. the readiness phase, the implementation of policies and demonstration project phase, and the verified performance phase). Nonetheless, and unsurprisingly, the same UNDP/Transparency International definition of corruption (*the misuse of entrusted power for private gain*) was used for the UN-REDD study as for the Norad report.

<b>Year:</b>	<b>2012</b>
Commissioned by:	UN-REDD Programme
Produced by:	Ateneo School of Government
Method/s	Survey, focus group discussions, desk research, key informant interviews, validation workshop

In terms of methods, the UN-REDD guidance departs quite significantly from the political economy approach used in the Norad study and can be described as a mixed methods approach, blending elements of qualitative and quantitative research, taking place within a wider process of national and subnational consultation. Although many of the same types of stakeholders were approached for the UN-REDD study as for the Norad study, they were asked to respond to a survey containing three parts: (i) a section on basic personal information, (ii) a section where they ascribed a level of risk to certain listed practices (on a scale from 0-5, see Table Two) and their perception of the impact of these risks (again on a scale from 0-5), and (iii) a section with an open field for any comments. This survey was embedded in a wider process of research and consultation, which included a literature review, a national consultation workshop to present and discuss initial findings, a subnational workshop involving the Department of Environment and Natural Resources from the Visayas and Mindanao regions, focus group discussions with anti-corruption practitioners from within government and from civil society groups, as well as a final national corruption risk assessment workshop conducted to present the survey findings and hear feedback. The expansive nature of this process is reflected in the ambitious objectives defined for the UN-REDD study. Beyond identifying and analysing corruption risks relevant for REDD+ in the country, the intention was also to build an understanding among relevant stakeholders of these risks, identify roles and responsibilities in managing them, and initiate workable monitoring mechanisms. There was also an intention to generate lessons that could be applicable to other country situations.

<sup>12</sup> The UN-REDD Programme involves the FAO, UNDP and UNEP.

<sup>13</sup> With inputs, it should be added, from the U4 Anti-Corruption Resource Centre.

<sup>14</sup> Money laundering and insider trading, for instance, are mentioned in addition to the more widely-known forms such as bribery, nepotism and embezzlement.

**Table Three: Scoring method for UN-REDD Philippines CRA survey**

Score	Likelihood	Impact
1	Impossible – never happens	Nil – No impact
2	Rare – Has been known to occur in other similar environments	Minor – Society not undermined
3	Unlikely – Uncommon, but does occur	Moderate – If stopped, society would recover rapidly
4	Likely – Commonly occurs	Major – Even if corrected, society would be compromised for some time
5	Highly likely – frequently occurs	Catastrophic – Society undermined irreparably

Source: UN-REDD (2012)

But, again, how should we assess the success of the UN-REDD study in navigating our three main challenges for CRAs? Some responses to these issues are provided in the section below.

### Assessing corruption as a societal concept

Public and media discourse on issues of corruption in the Philippines is relatively established<sup>15</sup>, to the extent that difficulties that could arise in researching issues that are not broadly understood are perhaps less likely than in other countries.<sup>16</sup> Only a few recent studies on corruption, national integrity and social accountability in the Philippines are referenced in the CRA itself, however. The CRA's extensive use of bullet points does not particularly lend itself to long discussions of the governance background and history of corruption relevant to forest governance and REDD+ schemes, and what we are given is a rather short summary of main messages and data from recent corruption perception indices. A limitation of the study is that it does not sufficiently explore the broader history and context of governance, corruption, and forest governance potentially relevant for those reading the CRA, but rather focuses more specifically on the risks for REDD+.

**Table Four: Top seven corruption risks for REDD+ identified by the UN-REDD Philippines study**

1. Politicians influencing the issuance of permits to accommodate friends or as owners of business
2. Local government units allowing illegal permits, contracts and plans
3. Misuse of official resources
4. Fraudulent reporting
5. Overpricing
6. Collusion of bidding
7. Diversion of funds

<sup>15</sup> As exemplified by the work of the Philippines Centre for Investigative Journalism formed in 1989, see: <http://pcij.org/>

<sup>16</sup> This observation is based on an assumption that topics subject to intense public and media debate will offer rich material for subsequent research, both since there is likely to be a higher volume of secondary literature to draw upon and since any interview respondents are likely to be more familiar with related concepts, terms and issues. It should be recognised, however, that researching well-trodden ground raises its own challenges.

## Assessing corruption as a clandestine and complex issue

Advocates of political economy analysis for CRAs are likely to closely scrutinise studies using different methods, such as this one for the Philippines, for the depth and credibility of their analysis. Put crudely the benefit of directly approaching stakeholders via surveys is that, typically, a larger number of respondents can be questioned. This may help avoid the selection bias that can occur when a smaller number of respondents are interviewed. At the same time, respondents may exaggerate their perceptions or experiences of corruption when responding to surveys, leading to concerns that the margins of error for survey results may be too wide for the findings to be useful. In the case of the UN-REDD Philippines study, a greater level of analytic depth was arguable introduced through the initial workshops and literature review, which allowed for the generation of specific categories of risk then used in the subsequent survey. The introduction of a national validation workshop to discuss and hear feedback on the eventual survey results can also be viewed as a “safety mechanism” to ensure no wildly exaggerated findings were entered into the final report. An alternative view, however, is that once survey results are presented in a public setting they take on a life of their own and become self-reinforcing.<sup>17</sup>

## Assessing future corruption risks

In contrast to the Norad study in the DRC, the problem of predicting future corruption risks is clearly addressed in the UN-REDD study. The authors note that REDD+ activities in the Philippines were still at an early stage (the readiness phase) when their research was conducted, thus limiting the precision with which they could identify corruption risks. They note too that apart from documented evidence of the activities of “carbon cowboys”<sup>18</sup> in the issuance of forest permits, evidence of past corruption specific to REDD+ was very limited at the time their work was conducted. Rather than attempt to extrapolate into the future on the basis of very little evidence, the authors suggest a sensible alternative: to conduct further studies in the future when REDD+ activities are more advanced. The possibility to conduct CRAs as part of an iterative process of data gathering, assessment, reflection, and redesign is a promising one, and is further discussed in Part Two.

## Making recommendations for addressing corruption risks

What does the UN-REDD study recommend be done, on the basis of its analysis, to address the corruption risks for REDD+ identified? The authors suggest actions in the short (1-2 years), medium (3-5 years) and longer term (more than 5 years), that encompass both preventive and prosecutorial measures. In the shorter term, actions such as research to provide a baseline on “corruption hotspots” in REDD+ geographic areas are included, as well as making use of legal remedies provided under new supreme court rules on the prosecution of environmental cases. In a medium term perspective, the recommendations focus on consolidating key governance institutions such as the Office of the Ombudsman and the Integrity and Anti-Corruption Committee (IACC) under the Department of Environment and Natural Resources. An example provided is to integrate anti-corruption into the Safeguards Information System (SIS) and REDD+ Registry. For the longer term, further preventive measures are discussed such as the establishment of an award or positive incentive scheme for the most transparent REDD+ project.

---

<sup>17</sup> On a larger scale, this has been argued to be a problem with Transparency International’s Corruption Perceptions Index (CPI). Alex Cobham argues in *Foreign Policy* (2013) that the CPI is “an unhelpfully distorted reflection of the truth” since perceptions of corruption in one year may lead to similar perceptions in the next.

<sup>18</sup> A term for unscrupulous individuals who attempt to secure undue personal benefits through forest carbon projects, often by cheating indigenous communities.

## Part Two: Responding to corruption risk assessments - Options and evidence for their effectiveness

Development practitioners commission or produce corruption risk assessments in order to improve their understanding of the possible corruption challenges a project, programme, or approach may encounter in a particular setting. CRAs are also usually required to fulfil formal due diligence obligations. Typically, and as we see from the two example assessments for REDD+ discussed above, CRAs make policy and practice recommendations that intend to improve the way in which a development intervention addresses the highlighted risks. Practitioners ideally act on the basis of these recommendations and seek to implement them in a manner consistent with the overall objectives of the development intervention in question. But responding to the results of CRAs can be anything but straightforward. The recommendations put forward by individual CRAs may be poorly formulated or thought through, and challenges in studying corruption (if not adequately addressed by a CRA) may mean certain recommendations are inappropriate for the context in which they are meant to be implemented. These potential challenges could be minimised through a continued focus on high-quality methods for CRAs and the use of iterative studies to reflect the dynamic circumstances of development interventions. But it is important to recognise too that recent research in the field of anti-corruption shows that the evidence base for many conventional, and intuitively useful, donor policies and practices is often weak and contested. This complicates the corruption risk management choices development practitioners face when responding to the results of CRAs: while the analysis may recommend a certain set of anti-corruption actions, the overall evidence for the likely effectiveness of these actions can be based on quite fragile ground. Practitioners may well ask themselves whether the suggested measures will indeed be effective.

The following section focuses on the recommendations put forward in the two CRAs for the DRC and the Philippines and reflects on their usefulness in light of recent anti-corruption literature. This section does not provide a definitive analysis of the current evidence base for all possible donor anti-corruption interventions, which would require a much longer and thorough treatment than is possible here. Rather the aim is to provide a discussion of the particular corruption risk management options identified in our two case examples, while reflecting on evidence for the effectiveness of these measures in recent anti-corruption literature.<sup>19</sup>

### **Categorising corruption risk management options from two recent CRAs**

How should we categorise the types of corruption risk management options highlighted in the two CRAs for the DRC and the Philippines? The studies' recommendations fall into roughly seven types as shown in Table 5. But what is the nature and strength of the evidence for the effectiveness of these types of interventions, and what does recent anti-corruption literature tell us about potential pitfalls? Let us review each type of measure in turn.

---

<sup>19</sup> This section draws in particular on two recent meta-studies that assess evidence for the effectiveness of donor anti-corruption approaches: Mungiu-Pippidi et al. (2011) and Johnsen et al. (2012).

**Table Five: Categories of anti-corruption measures identified in two case examples**

Type of measure	Example
Transparency measures	Tools for forest resource mapping and forest inventories
Capacity building and awareness-raising	Education programmes focused on citizen rights and responsibilities under the forest code
Policy dialogue	Dialogue on benefits of REDD+ with politicians
Social accountability and third party monitoring	Media and civil society watchdog training
Further research	Mapping of corruption hotspots in REDD+ areas
Schemes to reward good practice	Award scheme for most transparent REDD+ project
Legal sanctions	Use of legal tools for the prosecution of environmental cases

### Transparency measures

Increasing transparency has been a major policy prescription for reducing corruption risks in many different types of context and sectors. For REDD+, gathering and publishing baseline information on forest resources is considered crucial not only because this data will be used to determine future payment levels to projects, but also because it should allow for better monitoring via official bodies, civil society, and citizens. If monitoring REDD+ is important for reducing opportunities for corruption, then so too is the data needed for credible monitoring. A consistent theme in the anti-corruption literature in recent years, however, has been that transparency and access to information is a necessary but insufficient condition for addressing corruption. In a cross-country survey, Kolstad and Wiig (2007) find a positive correlation between transparency (in political funding, openness in political institutions, freedom of speech and freedom of the press) and less corruption. But to be effective in addressing corruption, a wider literature recognises that greater levels of information need to be coupled with a higher degree of public accountability than is often the case. Since it appears that those contexts in which opacity in resource governance is greatest are also often those where accountability institutions are generally found wanting, it has been argued that transparency measures may work least well where they are needed most. This is not to say that transparency is not important. Quite the contrary and there are many other reasons why transparency should be considered a public good. The main message from recent literature is rather that transparency is best approached in combination with other anti-corruption interventions.

### Capacity building and awareness-raising

Johnsøn et al (2012) show there is little empirical analysis of the effectiveness of awareness-raising in reducing corruption. What studies exist provide somewhat conflicting messages. While some studies view awareness-raising positively, others warn of possible negative consequences of public awareness-raising campaigns (Bryane, 2007; Disch et al, 2009). One can imagine a hypothetical situation where a programme focused on raising citizen awareness of their rights and responsibilities under a forest code results in public disillusionment when it is realised many of these rights are, in practice, not justiciable, and corrupt violations of the code continue as usual. As with transparency, this certainly does not mean that capacity building and awareness-raising is unimportant, and there may well be longer term gains in public accountability and the rule of law that are simply difficult for conventional research to pinpoint. An important lesson for development practitioners is to take into account the 'room for manoeuvre' of different stakeholders when designing and implementing

capacity-building and awareness-raising activities: will they be in a position to act on their new capacities and awareness? If not, what else is required?

### Policy dialogue

Policy dialogue, as suggested in Norad's DRC study, intended to "educate" political elites in implementing countries about the benefits of REDD+, thereby presumably reducing their inclination to engage in corruption, is a controversial prescription from an anti-corruption perspective. Development projects are often implemented in close dialogue with domestic elites, and are typically closely aligned to their interests. But corruption may still occur and numerous cases have been clearly documented.<sup>20</sup> Other means of addressing corruption through policy dialogue with elites appear, however, to have met with some limited success. In Uganda, for example, development donors led by DFID pioneered a "Joint Response to Corruption" in early 2009, in light of the need to consolidate accountability reforms ahead of the inflow of oil revenues. The approach, which drew on ideas from the OECD DAC Anti-Corruption Task Team, involved creating a common platform for government-donor dialogue and a shared-script approach to monitoring anti-corruption progress. This meant participating donors could agree on a common analysis of corruption, formulate joint messages and responses to partner government counterparts, and create an outline of the desired outcomes of their dialogue. De Vibe (2012) notes the approach showed promising results in terms of the quality and consistency of political dialogue on corruption issues, but that domestic sanctions for corruption cases highlighted via the dialogue still fell short of that necessary to achieve full public accountability.

### Social accountability and third party monitoring

Civil society-based initiatives to counter corruption have also been a recurring theme in anti-corruption policy and research debates. Mungiu-Pippidi et al, in their 2011 meta-study for Norad's Evaluation Department, have claimed statistical and qualitative evidence for the importance of civil society in successful anti-corruption efforts. At the same time, they observe over the last decade a trend towards professionalization of civil society groups, supported with donor funding, that they argue has tended to decrease these groups' effectiveness as anti-corruption watchdogs. The point the authors make is that highly corrupt countries, from an historical perspective, have also been countries "bound by particularism" (Mungiu-Pippidi et al, 2011) and that the genuine losers in such societies (rather than professional NGO lobbyists) form the most powerful potential watchdogs against malfeasance and corruption. The question is to what degree domestic civil society groups (and other potential "integrity champions") are able to harness genuine societal grievances and direct them in a meaningful way to generate anti-corruption reforms.

### Further research

Johnsøn et al (2012) note that while a large number of studies of corruption have been conducted (with fewer explicitly on *anti*-corruption) very few studies have focused on what has been *effective* in anti-corruption efforts. Mungiu-Pippidi et al (2011) also point to a dearth of evidence and the need for more and higher quality research focused on the effectiveness of anti-corruption efforts. The available meta-studies have not focused on whether there is an empirical relationship between more and higher quality research on anti-corruption and improved outcomes of anti-corruption interventions. One might assume that there is a connection between the availability of high quality empirically-grounded research and better policy and practice in most fields, including anti-corruption. A crucial caveat, however, is that the insights research generates may well be difficult to implement in practice for a variety of reasons. Another caveat is that policy and practice are not simply reflections of the best available scientific evidence and advice, but also take into account a range of other considerations.

---

<sup>20</sup> See, for example, the chapter by Eirik Jansen in Søreide and Williams (2014).

## Schemes to reward good practice

There has been little research done on whether special incentive schemes that reward good practice (such as rewarding a particularly transparent forest inventory) work to reduce corruption risks. It is often assumed good practice will be integrated in the design and operation of frameworks established, or institutions responsible for, particular development interventions from the very beginning. There is, however, emerging interest among policymakers and practitioners in the use of performance-related aid, partly as a means to control corruption risks. Indeed, REDD+ programmes themselves are already intended to link certain performance criteria to financial disbursements as a means to safeguard REDD+ aid funding and objectives. Whether such incentives actually work to reduce corruption risks in particular interventions, however, should be the subject of rigorous further study.

## Legal sanctions

There is a general acknowledgement in the anti-corruption literature that legal sanctions in the form of prosecutions rely heavily on the independence and integrity of the judiciary, which is by no means guaranteed in many countries where development cooperation takes place (USAID, 2002). What research has been conducted on legal sanctions against corruption has therefore tended to focus on the role of the judiciary in addressing corruption, including judicial reform. Johnsen et al (2012) find that the existing literature in this area suggests that support to judicial reform has not achieved the expected results. While this meta-study notes that there is fair evidence for the importance of the effectiveness and independence of the judiciary in addressing corruption, there is weak evidence for the success of efforts of donors in supporting the development of judicial independence (Johnsen et al, 2012).

## Some practical options and concluding remarks

What should development practitioners take away from the above discussion? In the absence of clearer evidence on “what works” in terms of donor anti-corruption interventions, should donors simply discard CRAs as a tool? Given development agencies continually face situations where the objectives of their programmes are subject to a range of corruption risks, it is sensible that CRAs should continue to be employed. At the same time, donors face increasing pressures to show development results, to use public aid funds wisely and judiciously, and to conform to an institutional “zero-tolerance to corruption in aid” approach. The question is therefore what development practitioners can do to improve the way in which CRAs are designed, implemented, and actually used to inform their work. The following practical considerations may be drawn from our earlier analysis of the CRAs conducted for REDD+ in the DRC and the Philippines, as well as from interviews with selected development practitioners for this publication.

### **Build support for integrating improved social science methods into CRAs**

Current methodologies used by development donors for CRAs to inform REDD+ programmes do not conform to the latest state-of-the-art approaches in social science research on the study of corruption in development contexts.<sup>21</sup> Moreover, those conducting CRAs should reflect more closely on the evidence (or lack of it) in relevant literature when proposing particular avenues for anti-corruption policy and practice. This apparent disconnect between social science research on corruption and development, on the one hand, and the methods employed and content included in donor CRAs, on the other, could be due to a number of quite complex factors, from budgetary and programmatic constraints within donor agencies, to a diversity of views on what constitutes “good” social scientific research on corruption. Still, more could be done to pool existing social scientific knowledge to leverage improved methods for donors’ CRAs. A starting point could be to hold a public competition supported by several donor institutions where social scientists are challenged to propose new approaches. The winner could be invited to operationalize their approach and design a new common framework for donor CRAs.

### **Clarify the overarching purpose of CRAs and design their implementation accordingly**

There is a serious tension between, on the one hand, a CRA aiming at an authoritative, critical and independent assessment of corruption in a particular setting and, on the other, a CRA that aims to be a development intervention in itself, for instance through the use of a participatory assessment process and/or workshops that build dialogue on corruption issues with programme partners.<sup>22</sup> Although both aims have their values, one can question whether such different objectives can satisfactorily be met by a single study. Where a particular study is part of a wider process of consultation with programme partners, incentives for self-censorship will generally be strong since donors rely on continued cordial relations to deliver interventions and these relations can be challenged by discussions about corruption. A solution could be to instigate separate, parallel, studies (possibly using different methods) that set out to meet these different aims. Front-line donor programme staff may themselves not be well-placed to commission critical, independent corruption assessments, and this may be more appropriately done by central evaluation or research departments.

---

<sup>21</sup> A range of approaches from the broad traditions of political science, economics, social anthropology, criminology and others are relevant for studying corruption in developing countries, and it is difficult to single-out any particular one. There is a trend in social science research on development topics in general towards attempting to combine the best of qualitative and quantitative approaches, although primarily quantitative or qualitative methods may be suitable for certain types of research questions. A plurality of research approaches is often considered desirable by social scientists for any topic.

<sup>22</sup> I am grateful to André Standing for pointing out this tension.

## **Take an iterative approach to CRAs and link them to programme design, evaluation, and redesign**

With the advent of the UN-REDD programme's series of CRAs to inform their work in multiple countries, the production of CRAs for REDD+ has become less *ad hoc*. Yet the results of such CRAs may not be central to the process of REDD+ programme design, implementation, and evaluation which will be influenced by many other factors, not least diplomatic and political considerations. Such studies may also only be produced on a single occasion, rather than several times over the length of a programmatic intervention. Recent work on "theories of change" as a tool for programme design and evaluation in anti-corruption (Johnsøn, 2012) argues donors benefit from greater clarity in the underlying logic behind their programmatic interventions. CRAs and other studies can and should be used iteratively to inform the design, evaluation and eventual redesign of particular interventions. The salient point here is that corruption risks, wider country conditions, and aid interventions themselves are dynamic rather than static and a close eye needs to be kept on how risks evolve and change over time, including how aid interventions themselves impact on the prevalence of corruption risk.

## **Use CRAs as a framework for partner dialogue on corruption and link this to emerging practice in the area of "joint donor responses to corruption"**

A main purpose behind many CRAs, including those reviewed as part of this publication, is to enable donors to enter into a dialogue with their partners on the sensitive but important topic of corruption and its impact, or potential impact, on the goals of development interventions. In many instances, these CRAs will not be revealing entirely new information to experienced donor practitioners, but will provide a framework for focusing on certain risks and practices that the donor wishes to signal as detrimental to an intervention's outcomes. Conducting a CRA, however, particularly where it is not a central element in a programme's design and implementation, is likely to be an insufficient signal that corruption is taken seriously in a particular programme, and it may even be viewed mainly as a due diligence exercise. As discussed earlier, emerging practice in the area of joint responses to corruption shows that there are means available to raise dialogue on corruption issues to a higher political level through donors acting in concord and with consistency over time. CRAs can and should be linked to such joint donor efforts to ensure their potential effects are maximised. This dialogue can potentially be supported through commissioning separate but parallel and more independent assessments of corruption risks that allow donors to compare findings with the results of CRAs produced together with programme partners.

## **Use CRAs as an internal agency "support mechanism" on issues of corruption**

An often-voiced challenge development practitioners face is how to address concerns about corruption (which may turn out to be unfounded) in programmes without necessarily instigating a formal internal process of investigation and/or audit which is likely to be costly, cause delays to much-needed development interventions, and challenge relations with crucial programme partners. In addition to using CRAs to inform dialogue with external partners, more could be done by donors to use CRAs as a means to discuss internally concerns and issues around corruption. The evidence collected as part of both more participatory and more independent CRAs should ideally be viewed as an integral part of supporting the success of particular programmatic interventions. An iterative approach to assessing corruption risks could provide a framework that helps donor staff discuss and address corruption professionally throughout an intervention's lifetime. To be clear, no CRA should replace formal investigations or audits where there are concrete suspicions or hard evidence of corruption or malfeasance related to an aid programme.

## References

- Angelsen, A. (ed). 2009. *Realising REDD+: National Strategies and Policy Options*. Center for International Forestry Research. Bogor.
- Barr, C. 2011. "Governance risks for REDD+: How weak forest carbon accounting can create opportunities for corruption and fraud". In Transparency International. 2011. *Global Corruption Report: Climate Change*. Earthscan Books. London and Washington D.C.
- Bofin, P., M. du Preez, A. Standing, A. Williams. 2011. *Addressing governance and corruption challenges in schemes for Reducing Emissions from Deforestation and Forest Degradation (REDD)*. U4 Report 1: 2011. U4 Anti-Corruption Resource Centre. Chr. Michelsen Institute. Bergen.
- Brown, M.L. 2010. "Limiting Corrupt Incentives in a Global REDD Regime". *Ecology Law Quarterly*. Vol. 37. pp. 237-266.
- Bryane, M. 2007. *The rise and fall of the anti-corruption industry*. LGI Policy Brief. Local Government Institute. Budapest.
- Burnside C. and D. Dollar. 2004. *Aid, Policies, and Growth: Revisiting the Evidence*. World Bank Policy Research Working Paper. Washington D.C.
- Cobham, A. 2013. "Corrupting Perceptions: Why Transparency International's Flagship Corruption Index Falls Short". *Foreign Policy*. July 22<sup>nd</sup> 2013. Accessed at: [http://www.foreignpolicy.com/articles/2013/07/22/corrupting\\_perceptions](http://www.foreignpolicy.com/articles/2013/07/22/corrupting_perceptions)
- Council of Europe. 2010. *Corruption Risk Assessment Methodology Guide*. Council of Europe Technical Paper. Corruption and Money-Laundering Unit. Economic Crime Division. Strasbourg.
- De Vibe, M. 2012. *A Joint Response to Corruption in Uganda: Donors Beginning to Bite?* U4 Practice Insight No. 1: 2012. U4 Anti-Corruption Resource Centre. Chr. Michelsen Institute. Bergen.
- Dermawan, A., E. Petkova, A. Sinaga, M. Muhajir, Y. Indriatmoko. 2011. *Preventing the Risks of Corruption in REDD+ in Indonesia*. Centre for International Forestry Research. Working Paper 80. Bogor.
- Disch, A., E. Vigeland, and G. Sundet. 2009. *Anti-Corruption Approaches: A Literature Review*. Norad Evaluation Department. Oslo.
- FAO, UNDP and UNEP. 2012. *Guidance on Conducting REDD+ Corruption Risks Assessments*. UN-REDD Programme Guidance Document. 6<sup>th</sup> December 2012.
- Global Witness. 2011. *Forest Carbon, Cash and Crime: The Risk of Criminal Engagement in REDD+*, Global Witness. London.
- Johnsøn, J. 2012. *Theories of change in anti-corruption work: A tool for programme design and evaluation*. U4 Issue No. 6: 2012. U4 Anti-Corruption Resource Centre. Chr. Michelsen Institute. Bergen.
- Johnsøn, J., N. Taxell, D. Zaum. 2012. *Mapping evidence gaps in anti-corruption: Assessing the state of the operationally relevant evidence on donors' actions and approaches for reducing*

- corruption*. U4 Issue 7:2012. U4 Anti-Corruption Resource Centre. Chr. Michelsen Institute. Bergen.
- Martini, M. 2012. *Overview of Integrity Assessment Tools*. U4 Expert Answer. U4 Anti-Corruption Resource Centre. Chr. Michelsen Institute. Bergen.
- Mayo-Anda, G. 2011. *Tackling corruption for governing REDD+ in the Philippines*, U4 Issue 4:2011. U4 Anti-Corruption Resource Centre. Chr. Michelsen Institute. Bergen.
- Mungiu-Pippidi, A., B.V. Mundo, A.C.S. Braga, M. Weinhardt, A. P. Solares, A. Skardziute, M. Martini, F. Agbele, M. F. Jensen, C. von Soest, M. Gabedava. 2011. *Contextual Choices in Fighting Corruption: Lessons Learned*. Norad Evaluation Department. Report 4/2011. Oslo.
- PriceWaterhouseCoopers. 2011. *Implementing REDD+ in the Democratic Republic of Congo: How to manage the risk of corruption*. Report commissioned by Norad and prepared by PwC in collaboration with Norad and UNDP.
- Saunders, J. and R. Reeve. 2010. *Monitoring Governance for Implementation of REDD+*. Background Paper. Monitoring Governance Safeguards in REDD+ Expert Workshop. 24<sup>th</sup>-25<sup>th</sup> May 2010. Chatham House. London.
- Standing, A. 2012. *Corruption and REDD+: Identifying Risks Amid Complexity*. U4 Brief 2: 2012. U4 Anti-Corruption Resource Centre. Chr. Michelsen Institute. Bergen.
- Søreide, T. and A. Williams. (Eds.) 2014. *Corruption, Grabbing, and Development: Real World Challenges*. Edward Elgar Publishing. Cheltenham and Northampton (MA).
- Trivunovic, M., J. Johnson, H. Mathisen. 2011. *Developing an NGO Risk Management System: Considerations for Donors*. U4 Issue 9:2011. U4 Anti-Corruption Resource Centre. Chr. Michelsen Institute. Bergen.
- UNDP. 2011. *Staying on Track: Tackling Corruption Risks in Climate Change*. United Nations Development Programme. Geneva.
- UN-REDD Programme. 2012. *Guidance on Conducting REDD+ Corruption Risk Assessments*. FAO. UNDP. UNEP.
- UN-REDD Programme and Ateneo School of Government. 2012. *Corruption Risk Assessment for REDD+ in the Philippines and Development of REDD+ Anti-Corruption Measures*. FAO, UNDP. UNEP.
- USAID. 2002. *Guidance for promoting judicial independence and impartiality*. Technical Publication Series. USAID Office of Democracy and Governance. Washington D.C.
- USAID. 2006. *Corruption Assessment Handbook*. USAID and Management Systems International. Washington D.C.

U4 Anti-Corruption Resource Centre  
Chr. Michelsen Institute (CMI)  
Phone: +47 47 93 80 00  
Fax: +47 47 93 80 01  
u4@u4.no  
www.U4.no

P.O.Box 6033 Bedriftssenteret  
N-5892 Bergen, Norway  
Visiting address:  
Jekteviksbakken 31, Bergen

This U4 Issue is also available at:  
[www.u4.no/publications](http://www.u4.no/publications)

INDEXING TERMS:

REDD+  
Congo  
The Philippines  
Corruption Risk Assessment  
Donors

Cover image by  
*Ben Beiske* on flickr.com

Corruption Risk Assessments (CRAs) are both an analytic and due diligence exercise to identify issues associated with, contributing to, or otherwise facilitating corruption in a particular setting. An area where improved understanding of corruption risks, and the adaptation of development aid interventions to take them into account, is seen to be of crucial importance is in the implementation of programmes for Reducing Emissions from Deforestation and Forest Degradation (REDD+). This Issue considers two recent approaches to corruption risk assessment for REDD+ in the Democratic Republic of Congo and the Philippines. The intention is to provide development practitioners who may be unfamiliar with the study of corruption, or with the methods employed by CRAs, an overview of the approaches currently available for REDD+ schemes. Referring to recent literature on the evidence for the effectiveness of donor anti-corruption approaches, some practical considerations for development practitioners to improve the way in which CRAs are used are discussed.