



The resource bites back Entry-points for addressing corruption in wildlife crime

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Abstract

Corruption has recently risen up the global wildlife conservation agenda with a series of international agreements highlighting the role of corruption in facilitating wildlife crime. Though there are notable exceptions, there is still a weak treatment in the literature of the problems of, and solutions to, wildlife crime from an anti-corruption perspective. Identifying and promoting effective interventions that get to the heart of the corruption problems associated with wildlife crime is a shared responsibility across the wildlife conservation, anti-corruption, anti-illicit trade, and anti-organized crime communities. As well as reviewing existing empirical literature to explore the types and characteristics of corruption associated with wildlife crime, this U4 Issue identifies entry-points for addressing corruption in wildlife crime based on recent anti-corruption effectiveness literature. Building credible corruption risk assessment and corruption risk management procedures is important for improving wildlife conservation programming. This will enable generation of detailed analyses of corruption risk factors at programmatic level, the recording of baseline data on corruption prevalence, and the production of detailed plans on how best to mitigate and manage identified corruption risks.

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Introduction

Wildlife crime is big business. Estimates of the scale of illegal wildlife trade excluding illegal trade in timber and illegal fishing range considerably from USD 7.8-10 billion (Fison 2011) to USD 10-20 billion (GFI 2011) per year. When combined with the illegal timber trade and illegal fishing, illegal wildlife trade has been ranked the fourth largest global illegal trade behind drugs, counterfeit goods and human trafficking (WWF 2012). Such figures and rankings should however be read with healthy skepticism: precise data on the value of wildlife trafficking is difficult to collect given the complexity, volatility and clandestine nature of this trade (UNODC 2016).

Partly because of the attention currently being paid to wildlife crime, corruption¹ – which is recognized as a key enabler of wildlife crime – has consequently risen up the global wildlife conservation agenda. A series of international agreements has highlighted the role of corruption in facilitating wildlife crime. These include: the London Declaration on the Illegal Wildlife Trade (2014); the Kasane Statement (2015); the African Common Strategy on Combatting Illegal Exploitation and Illegal Trade in Wild Fauna and Flora and its Action Plan (2015); the Doha Declaration on Integrating Crime Prevention (2015); and the UN General Assembly's (UNGA) resolution (A/RES/69/314) on Tackling Illicit Trafficking in Wildlife (2015). The 2030 Agenda for Sustainable Development (A/RES/70/1) - including the Sustainable Development Goals (SDGs) endorsed in September 2015 - contain targets for reducing bribery, corruption and illicit financial flows (Goal 16), and set objectives to end poaching and wildlife trafficking (Goal 15). And most recently, the 17th meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) held in September-October 2016, adopted a resolution on "[Prohibiting, Preventing and Countering Corruption-Facilitating Activities Conducted in Violation of the Convention](#)"², encouraging states to integrate their obligations under CITES with those under the UN Convention Against Corruption (UNCAC) and the UN Convention against Transnational Organized Crime (UNTOC).

Though there are notable exceptions³, there is still a weak treatment in the literature of the problems of, and solutions to, wildlife crime from an anti-corruption perspective.⁴ What studies exist tend to discuss corruption associated with wildlife crime through a conservation lens (i.e. they have a main focus on conservation issues and not on analyzing corruption challenges). Only very few discuss corruption and wildlife crime through an explicit anti-corruption lens (perhaps only Brockington 2008, Robbins and McSweeney 2009, Nelson 2009, Gore et al 2013, Wyatt and Cao 2015, WWF-Traffic 2015) and even here, the majority of authors come from a conservation rather than an anti-corruption background – i.e. anti-corruption specialists have not, to date, paid attention to wildlife crime. This fact undermines the identification and promotion of effective measures to address corruption in wildlife crime for two main reasons. First, limited collaboration between the wildlife conservation and anti-corruption *research* communities means few existing studies satisfy analytical and evidence needs voiced by these

1 For this paper, while recognizing that various corruption definitions exist, we adopt the Transparency International working definition of corruption as “the abuse of entrusted power for private gain”. See: www.transparency.org

2 This link provides the final text of the resolution “Prohibiting, preventing and countering corruption facilitating activities conducted in violation of the Convention” as amended in Committee II during the CITES CoP17 (see: [CoP17 Plen. Rec. 4](#)). The official version of the final adopted text was not available on the CITES website at the time this report went to press.

3 See: Brockington 2008, Ferraro 2005, Gore et al 2013, Kelvin 2010, Leader-Williams et al 2009, Nelson 2009, Smith et al 2014, Robbins and McSweeney 2009, Wyatt and Cao 2015, WWF-Traffic 2015.

4 Ferraro stated in *Oryx* in 2005 that there were “no well-executed empirical studies of the relationship between corruption and conservation to guide practitioners”.

communities. Many studies undertaken by wildlife conservationists mention corruption, but only in general terms with few explicit insights into how to tackle it. This is understandable given the focus of these studies tends to be on wildlife and conservation crime rather than corruption *per se*. The result, however, is that many studies do not help further unpack the various types of corruption that relate to different forms of wildlife crime in different country contexts.⁵ Anti-corruption researchers are also not fulfilling analytical and evidence needs from the perspective of wildlife conservation researchers, perhaps because they do not have the kinds of expertise in conservation required to do so. A second challenge is the still limited cross-fertilization of ideas and methods between the wildlife conservation and anti-corruption *policy and practice* communities. Although there are efforts to enhance this cross-fertilization (for example via the “3C Network for Countering Conservation-related Corruption” convened by WWF International, Transparency International-UK and the Durrell Institute of Conservation and Ecology (DICE)), there is still limited exposure of the wildlife conservation community to the most recent anti-corruption effectiveness debates and *vice versa*. There is a potential risk therefore that important recent perspectives from the field of anti-corruption will not be sufficiently taken-up in new interventions meant to address corruption in wildlife crime. There is a related risk within the broad conservation community that the daunting scale of corruption challenges will lead to business-as-usual approaches or even paralysis.

Identifying and promoting effective policy and practice interventions that get to the heart of corruption within wildlife crime is a shared responsibility across the wildlife conservation, anti-corruption, anti-illicit trade, and anti-organized crime communities. Researchers, policy-makers and practitioners in each of these communities can play a role in generating new and useful empirical evidence, in sharing lessons from experience, in proposing and helping implement innovative policy and practice solutions, and in monitoring and evaluating the effectiveness of these interventions over time. The recent CITES resolution reinforces such an approach, emphasizing the necessity of inter-agency and international cooperation to address the fragmented nature of the problem: where responsibility for action falls to many players and often several governments, the outcome may be no action.

This U4 Issue aims to motivate further collaborative efforts in this direction. It does so by first reviewing the existing empirical literature to better understand the nature of corruption associated with wildlife crime, including the types of corruption and actors known to be involved, the wildlife species (and groups of species) and countries affected, and current knowledge gaps. The keyword-driven literature review included 60 publications. Most of these were peer-reviewed journal articles (37) but working papers, policy briefs, and inter-governmental, non-governmental and governmental reports were also considered (for details of the keywords, see Annex 1). We go on to review existing policy and practice interventions for addressing corruption in wildlife crime and, based on two recent anti-corruption effectiveness meta-studies (Johnsøn et al 2012 and DFID 2015), highlight promising entry points.

5 There are exceptions. WWF-Traffic (2015) is a practitioner’s guide that unpacks the problem of wildlife-related corruption across the illicit wildlife value chain and offers prescriptions for addressing particular challenges. It does not however offer country-specific anti-corruption recommendations based on empirical fieldwork.

Part 1: Corruption and wildlife crime: A review of the literature

This review of literature attempts to capture findings and recommendations made in studies addressing corruption associated with wildlife crime as well as the types of actors, commodities, species (and groups of species), and geographic foci covered. Wyatt and Cao (2015) already provide detailed analysis of the drivers, types, actors and methods of corruption involved in wildlife *trafficking*, which they define as the “illegal trade in live animals and plants and their products and derivatives.” Our review has a broader focus on corruption in wildlife *crime*, by which we mean the planning (inchoate offences), execution (poaching), trade, and sale of wildlife products, and the laundering of proceeds generated by the aforementioned acts. A number of studies have reviewed corruption associated with forest concession management (e.g. Amacher et al 2012 and Søreide 2007) and with marine fisheries management (e.g. Standing 2015, 2011 and 2008, Sumaila et al forthcoming 2017). Here we focus predominantly on terrestrial wildlife (animals) and associated commodities (e.g. elephant ivory). Insights from other resource sectors may however hold high relevance for mitigating corruption problems in wildlife crime. Standing (2008), for example, describes how ensuring accountability of decision makers in relation to marine fishery access agreements is decisive from an anti-corruption perspective. The role of critical decision makers (or ‘gatekeepers’) in enabling illegal access to wildlife seems equally important.

Types of studies and evidence available

Most studies we reviewed were published in conservation-focused journals (e.g. *Oryx* and *Conservation Letters*) by conservation biologists, green criminologists and related disciplines. A handful of studies were found in more general development (e.g. *Journal of Development Studies*) and criminology journals (e.g. *European Journal of Crim. Policy Res.*). None were found in specialist governance-related journals, although several working papers have been released by governance and anti-corruption research centers (The Quality of Government Institute and U4). Wildlife trade policy reviews touching on corruption have also been published by the World Bank (with Traffic, 2008) and by the US Congressional Research Service (2008). We found a broad range of evidence-types available, including: household surveys (e.g. Gillingham and Lee 2003, Madhusudan 2003, Sekhar 2003); participant observation (e.g. Brockington 2008, Singh 2008); qualitative interviews with wildlife dealers (Amman 2011) and hunting operators (Lindsey et al 2006); statistical analyses of wildlife trade (e.g. Nekaris 2010) and animal populations (e.g. Frank and Maurseth 2005, Maisels et al 2013); and case studies (e.g. Wanjiru 2015, Nelson and Blomley 2010, Wyatt and Cao 2015). Only three studies adopted a mixed methods approach (Nielsen and Treue 2011, Robbins and McSweeney 2009, and Wanjiru 2015).

Prevalence, scope and scale of corruption associated with wildlife crime

The limitations of available studies and evidence notwithstanding, there is some existing knowledge about the prevalence, scope and scale of corruption associated with wildlife crime, with UNODC (2016) providing a good recent overview, and clearly identifying corruption as the main enabler of wildlife crime. Wildlife crime is known to be particularly prevalent in countries where corruption is widespread (WWF 2012, Ayling 2012, UNODC 2012, Brennan and Kalsi 2015).⁶ Comparing Transparency International’s

6 Maisels et al (2013) in their study of forest elephant populations in Central Africa found that elephant dung density was inversely correlated with corruption as measured by the CPI. In other words, elephant dung was more widely distributed and available in higher densities in less corrupt countries. Lemieux and Clarke (2009) also find that greater levels of corruption are associated with greater elephant losses.

Corruption Perceptions Index (CPI) and the CITES Proportion of Illegally Killed Elephants (PIKE) index, Brennan and Kalsi (2015) find, for example, that high levels of corruption correlate well with African countries experiencing high levels of elephant poaching. There is evidence too that different forms of corruption are critical enabling factors for wildlife crime (again, see Wyatt and Cao 2015), facilitating for instance the flow of wildlife commodities from one place to another (GFI 2011).

In terms of scope, case evidence (e.g. Wyatt and Cao 2015) shows that a broad range of species, commodities, countries, supply chains and actors are involved (on which further discussion below). What we currently lack, however, are *reliable quantifiable estimates* of corruption in wildlife crime in different countries, as regards different species, and in terms of the different actors involved. We do not know how *big* a problem corruption really is in various forms of wildlife crime (including relative to other natural resource challenges such as the illegal timber trade and illegal fisheries), and how this varies across countries, institutions, species and commodities. We also *lack a full picture of the types, mechanisms, and modalities of corruption* in wildlife crime in all locations. Making such information available is of critical importance for generating effective anti-corruption measures that are relevant to the problems of wildlife crime and the different contexts in which it exists.

Types of corruption, corrupt actors involved, countries affected

Though analysts still disagree as to how best to categorize various types of corruption, three commonly discussed categories are grand, petty and political corruption.⁷ Grand corruption consists of acts committed at a high level of government that distort policies or the central functioning of the state, enabling leaders to benefit at the expense of the public good. Petty corruption refers to the everyday abuse of entrusted power by low- and mid-level public officials in their interactions with ordinary citizens, often attempting to access basic goods or services in places like hospitals, schools, police departments and other agencies. Political corruption is the manipulation of policies, institutions and rules of procedure in the allocation of resources and financing by political decision makers, who abuse their position to sustain their power, status and wealth.

In our literature review, nearly a third of studies (19 from 60) used the term ‘corruption’ as a catch-all term and did not attempt to categorise it as above, or unpack it into smaller component parts. From the remaining studies, however, there is evidence suggesting that a broad range of different types of corruption hold relevance for wildlife crime (e.g. Damania and Bulte 2001, Douglas and Alie 2014, Ferraro 2005, Bennett 2014, Brockington 2008), and that corruption challenges can vary across different contexts. Types of corruption discussed included: bribery, rent-seeking, patronage, local elite capture, embezzlement, collusion, payoffs, political corruption, customs mis-declarations, policy and legislative capture, kickbacks, cronyism, nepotism and fraud. In terms of the corrupt actors, only three studies from our review provided analysis of a broad range of actors (Wyatt and Cao 2015, Bennett 2014, Leader-Williams et al 2009) with most studies focusing instead on specific sub-sets of actors relevant to particular research questions, thematic interests and geographic foci. There is, however, sufficient evidence to conclude that a broad range of actors are involved in corruption associated with wildlife crime including politicians and high-level public officials (e.g. members of the judiciary), law enforcement, anti-poaching and customs officers, military personnel, forest and wildlife department officials, pastoralists, farmers, private hunting firms, local elites, hunters, poachers, traders, as well as conservation organizations. Our findings echo Smith et al’s (2014) call to “divide the overall problem of corruption in wildlife conservation

7 See Rose-Ackerman (1999) for a detailed discussion.

into specific issues based on the type of corruption and the type of conservation involved”. We would add to this a need to unpack the corrupt actors relevant for each context and consciously avoid analytical biases favoring either ‘smaller’ or ‘grander’ scale actors, or public versus private sectors.

In terms of the countries affected, our review found studies focusing on many countries including China, India, Indonesia, Kenya, Laos, Russia, and South Africa. The most frequently analyzed country was Tanzania. This may however be an issue of sampling bias rather than a signal that Tanzania faces substantially worse problems than other country contexts. Among the studies analyzing multiple country contexts, the most frequent combinations were a mix of Sub-Saharan African countries or a mix of one or more African countries plus one or more East or Southeast Asian countries. A few studies claimed a global focus, some with a particular analytical slant towards OECD countries (e.g. the United States). Overall, our findings support Wyatt and Cao’s (2015) assertion that “whilst wildlife trafficking mostly begins in developing nations, the illicit financial flows and the laundering of profits may take place in both developing and donor countries”.⁸ In other words, the conditions that enable corruption associated with wildlife crime occur in many different contexts, including OECD countries.

Types of commodities and species (and groups of species) involved

Although none of the studies from our review identified how *big* a problem corruption is within wildlife crime, or revealed much information in terms of *mechanisms and modalities* of corruption, there is sufficient evidence to conclude that a very broad range - both of commodities and of species - can be impacted by different forms of corruption under different contextual circumstances (Wyatt and Cao 2015, Nelson 2009). African elephants were the species most frequently mentioned in relation to corruption in our review (in 20 from 60 studies), though other species (and groups of species) mentioned included rhino, tiger, buffalo, hippopotamus, bush pig, baboon, lemur, lion, tortoise, eland, leopard, crocodile, oryx, python, rat, cheetah, wild dog, hyena, parrot, squirrel, falcon, and bear. Just over half (31) of the studies reviewed did not identify a specific wildlife commodity related to corruption concerns. Yet the remaining 29 studies all mentioned at least one type of wildlife commodity linked to corruption, with ivory and rhino horn the most frequently mentioned.⁹ Other commodities identified were game or bush meat, tiger parts, bear bile, elephant parts (other than ivory), and live birds and reptiles falsely declared as bred in

⁸ Formal investigations into - and law enforcement actions for - economic crimes offer a potential avenue for addressing related wildlife crimes. See Keatinge and Haenlein (2016) for a discussion of this approach in relation to Kenya. Tracing illicit financial flows (IFFs) derived from wildlife crime is methodologically demanding. A recent project by the Royal United Services Institute (RUSI) has however attempted comparative analysis of IFFs across the fisheries and wildlife sectors. See: <https://rusi.org/rusi-news/new-research-project-funded-uk-government-track-funds-illegal-wildlife-trade>

⁹ Duffy (2014) provides an excellent, critical analysis of the role of corruption in the ivory trade in the 1980s; Radermeyer (2016) provides a wealth of information on corruption as a facilitator of rhino poaching and trade. It is possible that ivory and rhino horn are frequent subjects of research not because they are the most important wildlife commodities in conservation or governance terms, but due to feedback loops created by NGO campaigns.

captivity.¹⁰ Because strong demand – from importers and practitioners of traditional Chinese medicine, from trophy hunting firms, and from the exotic pet and rare egg trades - for different wildlife species and commodities comes from a variety of sources (Wyatt and Cao 2015), more formal, empirical, data on this demand (and where it might be affected by corruption) will help shed further light on where policy and practice responses need targeting. Wildlife-conservation practitioner experience is a highly valuable source of information for guiding the future foci of such empirical research. Anecdotal evidence of airport staff, for example, known among practitioners to ‘turn-a-blind-eye’ to the illegal wildlife trade, or of heads of state facilitating transnational organized wildlife crime, can help guide the design of systematic research initiatives.

Box 1: Quick facts from our literature review

- African elephant was the most frequently-mentioned species in the studies reviewed;
- Almost one third of the reviewed studies used the term ‘corruption’ only, and did not unpack this term further;
- Tanzania was the country context most-frequently mentioned in the studies reviewed (although this possibly reflects selection bias);
- Almost half of the reviewed studies mentioned a specific wildlife commodity linked to corruption concerns;
- Only three of the studies in our review adopted a mixed-methods approach.

Tabled policy and practice recommendations

Given the limited availability of studies focused on wildlife crime from an *explicit* anti-corruption perspective (i.e. where the main focus is the study of corruption and the effectiveness of anti-corruption interventions, albeit within a particular sector or context), the policy and practice recommendations tabled so far tend to refer more to wildlife conservation measures than to anti-corruption goals. While some of the tabled measures echo prescriptions found in the anti-corruption literature (improve institutional design, regulation and legislation; improve multi-agency collaboration; consider the transboundary nature of the problem; think in terms of suites of reform; improve understanding of the political-economic dimensions of reform processes), other measures do not relate to anti-corruption goals (accommodate pastoralists’ vulnerability in policy reforms, close ivory markets, balance the costs of wildlife management). Martini (2013) provides an overview of generic anti-corruption interventions that potentially hold relevance

10 The CITES Secretariat has identified captive breeding facilities and operations as being particularly vulnerable to corruption (CITES Secretariat 2015). False declarations of wildlife exports of species supposedly bred in captivity have been revealed through exports of species that either do not breed in captivity or could not breed at the rate actually reported (TRAFFIC 2012; CITES Standing Committee 2014). Guinea’s former head of the CITES Management Authority was arrested for fraudulent issuance of export permits including great apes declared as ‘captive bred’ (CITES 2015; Eagle 2015; WWF 2015). At the CITES CoP17, Parties adopted a resolution concerning monitoring of trade in animal specimens reported as produced in captivity, in order to address ongoing concerns regarding fraudulent claims of captive breeding.

to wildlife crime, while Wyatt and Cao (2015) offer perhaps the most nuanced discussion of policy and practice options. Based on interviews with anti-wildlife trafficking experts, a literature review and a case study of Vietnam, Wyatt and Cao suggest four main areas for policy and practice responses: (i) strengthening broad measures to reduce corruption (in states receiving aid), (ii) strengthening criminal justice systems with regard to the wildlife sector (in countries receiving aid), (iii) improving monitoring and transparency in the wildlife sector, and (iv) reducing demand for wildlife products and changing attitudes towards wildlife.¹¹ When considering these options - and whether to put additional funding and programming behind them - we should bear in mind that the field of anti-corruption policy and practice still depends on a fairly limited amount of empirical evidence on the *actual effectiveness* of various measures (Johnsøn et al 2012). A recent DFID Evidence Paper (2015) highlights that since not all types of corruption are the same, differing responses are required depending on context and that “anti-corruption measures appear most effective when integrated into a broader package of reforms”.

With this in mind, the next section highlights promising entry-points for addressing corruption in wildlife crime, taking Wyatt and Cao’s four priority areas as a starting point and reflecting on two recent meta-studies on the evidence for the effectiveness of anti-corruption interventions (Johnsøn et al 2012 and DFID 2015). The following discussion focuses particularly on roles for policymakers and practitioners operating directly within, or closely linked-to, official development cooperation frameworks. This is because these actors hold mandates to reduce corruption in general within the contexts where they work, and thus they tend to finance a range of wildlife conservation programmes where corruption is of concern, and support interventions (e.g. law enforcement efforts) where corruption challenges linked to wildlife crime are likely to be encountered. At the same time, we recognize that possible entry-points for addressing corruption in wildlife crime exist beyond the realms of official development cooperation, through international agreements (e.g. CITES and its compliance mechanisms), trade policies and agreements, domestic law enforcement actions, NGO interventions, and via diplomatic channels. We recognize too that the current evidence base points to corruption in wildlife crime also being a problem for countries neither receiving aid nor providing it.

11 A focus on reducing demand for wildlife products is justified from an anti-corruption perspective by the incentives for corruption such demand appears to create. If illegal markets for wildlife products did not exist, measures (including various forms of corruption) for circumventing the laws, regulations and monitoring mechanisms attempting to prevent wildlife crime would not be required. Corruption could still persist for other reasons, however.

Part 2: Addressing corruption in wildlife crime: An assessment of possible entry-points for policymakers and practitioners

Although promoting anti-corruption goals has been a focus of development cooperation for two decades, the best means for helping reduce corruption in various sectoral and country contexts is still far from obvious. Over the past few years, an emerging consensus among anti-corruption practitioners that conventional approaches – such as supporting specialized anti-corruption agencies and laws – were registering little success led to more systematic analysis of the evidence for the effectiveness of donor-supported anti-corruption interventions.¹² The findings showed that robust evidence for the effectiveness of most anti-corruption interventions was sparse. While there was strong and consistent evidence for the effectiveness of public financial management reforms in addressing corruption, evidence for the anti-corruption effects of budget support was weak and contested. There was also fair evidence that support to specialized anti-corruption agencies was actually *ineffective*, mostly because institutional designs were transplanted from one context to another with little regard for underlying political economy dynamics. These findings helped reinvigorate academic debates on the theoretical foundations of donor-supported anti-corruption interventions (see, for example, Marquette and Pfeiffer 2015), and have led to new funding investments intended to strengthen the evidence base for donor anti-corruption interventions (e.g. DFID's Anti-Corruption Evidence programme).

The most recent consolidated advice directed towards policymakers and practitioners interested in making anti-corruption impacts is perhaps contained within DFID (2015). Here, the main message is that anti-corruption interventions must be fit for particular contexts and will probably work best when integrated in broader reforms, such as public financial management reforms. Devising generic anti-corruption prescriptions for sectors is, in this light, not a favored approach, although doing so may helpfully raise awareness among sector stakeholders of the challenges and potential solutions. Recent anti-corruption policy and practice advice focuses instead on the *methods* that programme designers, funders and implementers can use to improve their analysis of the risks corruption poses to specific programmatic goals, encouraging a combination of 'corruption risk assessment' with an active approach to managing the identified risks (Johnsøn 2015). The logic behind this is that anti-corruption solutions identified at the programme level are more likely to fit contextual circumstances than approaches identified at more macro-levels. They are therefore more likely to be effective, assuming, that is, that assessments of corruption risks accurately reflect *actual* risks and that the policy and practice choices taken as a result *accurately reflect* risk assessments.

Developing programmatic level corruption risk assessment and corruption risk management approaches holds promise for nurturing effective anti-corruption interventions that support wildlife conservation goals. Such approaches also offer opportunities to develop baseline data and establish monitoring and evaluation regimes for tracking the results of anti-corruption interventions in the wildlife sector over time. Monitoring and evaluation approaches in relation to anti-corruption programming in development aid *in general* are discussed by Johnsøn (2015) and Johnsøn and Søreide (2013). Programmatic interventions alone are unlikely, however, to be able to address broader driving factors linked to corruption in wildlife crime, implying that programmatic interventions need support from national, regional and global political agreements and formal institutions. In the following, we return to Wyatt and Cao's (2015) four priority

12 See Johnsøn et al (2012) for a detailed overview, including a table with the most commonly supported anti-corruption interventions listed against the strength of the evidence for their effectiveness.

areas for anti-corruption interventions in wildlife trafficking and discuss the strengths and weaknesses of these as potential entry-points in light of the literature on effective anti-corruption approaches.

Strengthen broad measures to reduce corruption

Broad efforts to reduce overall levels of corruption in aid-receiving states with wildlife sectors have been tabled as important policy and practice measures for reducing corruption specifically in relation to wildlife trafficking. This includes interventions such as introducing or strengthening anti-corruption laws, criminalizing bribery, encouraging access-to-information provisions, ensuring declarations of assets, and ensuring whistleblower protection. The logic motivating such efforts is that without broad societal approaches to mitigating corruption, narrower sectoral initiatives will falter given all sectors depend on the basic functioning of laws, institutions and regulations in a given society. A fundamental flaw in this approach has, however, been widely discussed within the anti-corruption research community, and to some extent within the anti-corruption policy and practice world. Essentially, attempts to address corruption via development cooperation through helping 'tighten' laws and 'strengthen' regulations and institutions are argued to have largely failed because they have assumed aid-receiving societies function according to Weberian-state principles or along so-called principal-agent lines (Marquette and Pfeiffer 2015). In other words, the assumption is that countries receiving aid largely function like countries providing aid (or a particular vision of aid-providing countries), and that reducing corruption is simply a matter of improving oversight and control mechanisms. We know, however, that while there is fair to strong evidence that public financial management and tax and procurement reforms can have positive anti-corruption effects in aid-receiving countries (Johnsøn et al 2012), there is also fair evidence that anti-corruption laws can have different outcomes in anti-corruption terms. In other words, they do not necessarily work to reduce corruption and may act as a façade to please actors demanding governance improvements while actually masking a weak anti-corruption commitment and the continuation of patronage and rent extraction systems (Moene and Søreide 2015). For this reason, monitoring and evaluation regimes for anti-corruption laws, as well as other broad anti-corruption measures such as access-to-information provisions, asset declarations and whistleblower protection, are important for tracking actual implementation and generating the potential for corrective measures. Once corruption has been identified, investigated and proven, consistent and predictable responses on the part of actors in development cooperation can potentially help reduce the impact of resulting sanctions on ordinary people.

Strengthening criminal justice systems with regard to the wildlife sector

Another focus of previously tabled anti-corruption measures for the wildlife sector is to strengthen criminal justice systems in aid-receiving countries. The logic here is that many of the ways in which corruption facilitates wildlife crime relates to criminal justice and law enforcement actors, while many of the means for reducing corruption linked to wildlife crime will involve improved law enforcement and judicial integrity. Johnsøn et al (2012) find that there is some evidence (albeit a small amount) supporting the anti-corruption effectiveness of interventions aimed at improving judicial integrity and judicial independence. They also find a similar amount of evidence with regard to police reform, but that this small amount of evidence suggests such interventions have had mixed anti-corruption outcomes. In short, great care is needed when undertaking interventions aimed at improving criminal justice and law enforcement systems from an anti-corruption perspective, with a main challenge being the real possibility that criminal justice and law enforcement actors are themselves actively involved as 'corruptors' in the

political economy of wildlife crime.¹³ Wanjiru (2015), Messer (2000) and Leader-Williams et al (2009) all point to such involvement on the part of law enforcement actors in the wildlife sector.¹⁴ This is not to say, however, that *all* judicial and law enforcement actors in a particular sector or country are involved and detailed corruption risk assessments can help highlight ‘islands of integrity’ or, conversely, help identify the few perpetrators, so that the risks of such actors undermining efforts to pursue anti-corruption interventions linked to wildlife crime are minimized.

Box 2: Monitoring turtle poaching using fake eggs

The US Agency for International Development (USAID) recently awarded NGO Paso Pacifico USD 10,000 to tackle sea turtle trafficking from Nicaragua using a new technology: fake turtle eggs fitted with GPS transmitters. The idea is to improve understanding of turtle-poaching routes and actors to inform law enforcement prioritizations. From an anti-corruption perspective, a challenge in using such information is that it may lead to the targeting of smaller-scale perpetrators while leaving the broader political economy of corruption in a given context mostly intact.

Source: Hance (2016)

Box 3: Analyzing implementation of laws with regard to wildlife crime in Tanzania

The International Union for the Conservation of Nature’s (IUCN) Environmental Law Center, with Traffic East Africa, has identified gaps and patterns in the implementation of laws with regard to wildlife crime in Tanzania. Initial results show the majority of cases are either dropped or appealed suggesting both inadequate knowledge of wildlife crimes within the judiciary and corruption. An online database – called “Wildlex” – on wildlife crime cases is one output from the project.

See: <http://www.wildlex.org/about>

13 Downs (2013) finds that efforts to pursue strong law enforcement approaches in the forest sectors of Indonesia and Papua New Guinea have tended to fail to address broader systems of illegal activities and societal injustices. She suggests corruption is one reason why law enforcement approaches often focus on smaller-scale rather than larger-scale actors.

14 There is evidence that, in some contexts, professionals who choose not to engage in corruption can face derision and disrespect, if not worse, from colleagues (Fjeldstad et al 2003).

Improve monitoring and transparency in the wildlife sector

The movement of wildlife and wildlife commodities listed in the CITES Appendices is regulated, and trade permit and monitoring systems are in place that aim to ensure legal, sustainable and traceable trade in listed species. Most countries' CITES systems are, however, poorly funded and anecdotes abound of incompetence and a lack of monitoring capacity.¹⁵ There is also evidence to suggest corruption disrupts and distorts CITES regulatory and monitoring systems, thereby in part explaining illegal flows of wildlife and wildlife commodities observed via case studies and other empirical analyses.¹⁶ Improving monitoring systems and enhancing overall transparency in the wildlife sector are therefore tabled as important anti-corruption measures. A range of possible means for enhancing monitoring activities exist, including improving the integration of a wide variety of stakeholders (including NGOs) in monitoring work, tracking a wide selection of data (on permits and licensing), making data available via a broad range of media, implementing asset declaration systems and due diligence procedures, and digitalizing permitting and licensing systems. In considering which interventions to prioritize, it should be noted that there is fair evidence that supporting NGOs and community monitoring is not necessarily effective from an anti-corruption perspective (Johnsøn et al 2012). While some studies point to positive benefits of NGO involvement and community monitoring work, there is also evidence pointing to corrupt practices within NGOs themselves. Recent (and still to be published) research on multi-stakeholder transparency measures in other resource sectors, namely the extractive industries, notes that transparency initiatives tend to assume the existence of an 'active citizenry' primed to react to new information and demand public accountability from authorities (Lujala and Epremian, forthcoming 2017). Apathy among, or simply constraints on (e.g. limited time or money), people are rarely recognized by the proponents of such initiatives as obstacles to public accountability via enhanced transparency. Detailed assessments of contexts, including of different peoples' actual incentives, are therefore important for determining how, where, when and with whom to engage in improving monitoring and transparency in the wildlife sector.

Box 4: E-governance for reducing wildlife corruption - Could it work?

E-governance in the form of digital or computerized licensing and certification systems are commonly thought to be possibly effective means for reducing corruption. Recent comparative case evidence from Bangladesh shows, however, that merely introducing e-governance is insufficient for controlling corruption. The nature and maturity of proposed e-governance measures matter, including how public officials at different levels engage in e-governance feedback loops. Although e-governance can potentially improve monitoring, whether it does so depends on the effectiveness of related law enforcement efforts, among other factors.

Source: Baniamin (2015)

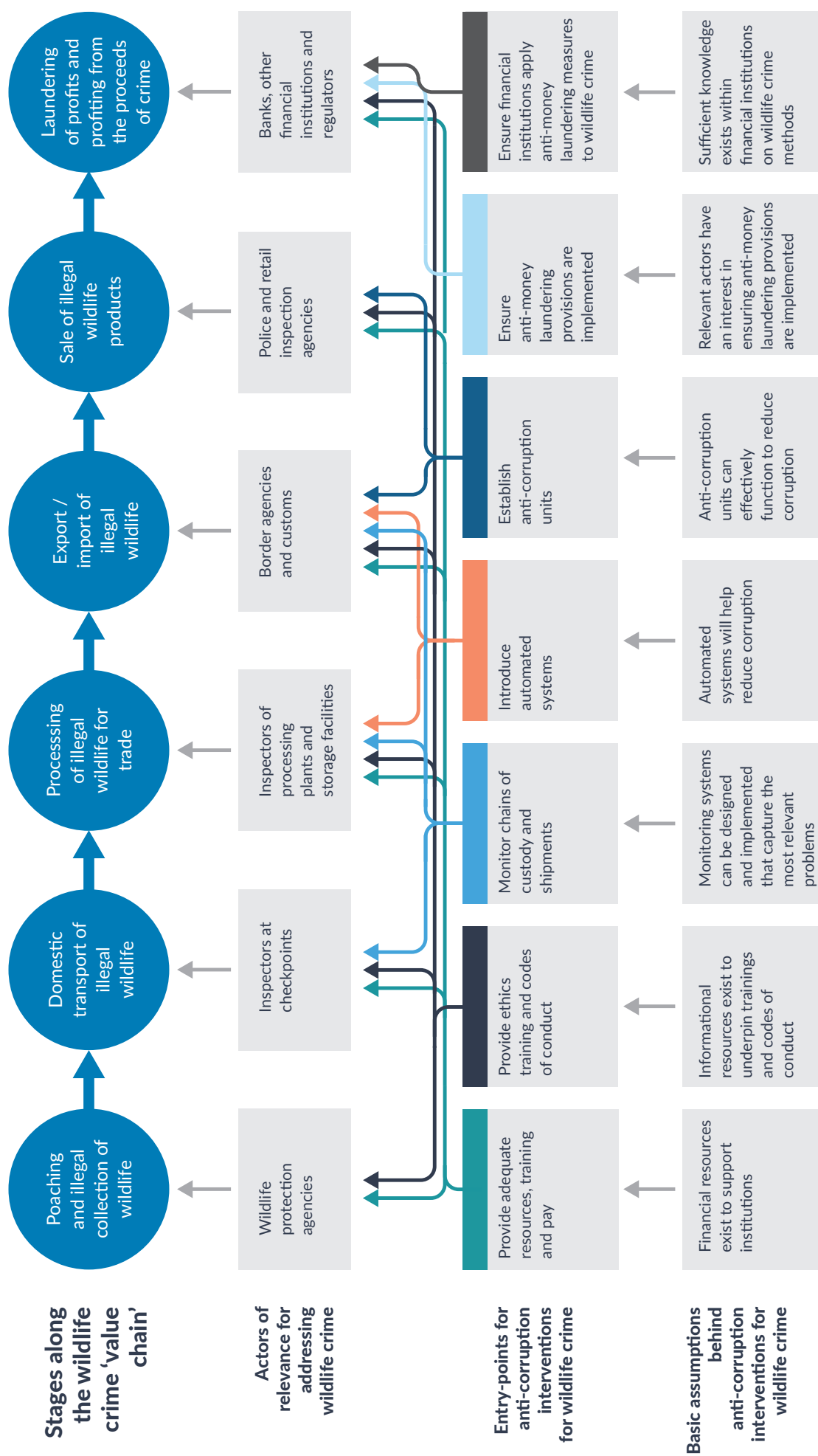
15 A 2014 report by law firm DLA Piper on criminal justice and eleven countries' anti-wildlife trafficking efforts found a host of weaknesses, including legal loopholes, chronic shortage of funds for prosecutors and courts, and inadequate penalties. Available at: <http://www.dlapiperprobono.com/export/sites/pro-bono/downloads/pdfs/Illegal-Wildlife-Trade-Report-2014.pdf>

16 The European Union and Senegal put forward in 2016 a draft CITES Resolution on "Prohibiting, preventing and countering corruption facilitating activities conducted in violation of the convention" that was formally adopted at the CITES CoP 17. Still, others are unconvinced of the possibilities for addressing corruption in the wildlife sector via CITES (e.g. Amman 2011).

Reduce demand for wildlife products and change attitudes towards wildlife

Passas (1998) argues that when states outlaw certain goods without reducing demand, this creates asymmetries in demand and supply that motivates corruption and black markets. Broad policy measures that are effective in reducing poverty and inequality may be the best overall means of reducing such asymmetries (see Wyatt and Cao 2015 for further discussion), although this should not be directly equated with reducing demand for wildlife products. More targeted campaigns aimed at reducing demand for wildlife products and changing consumer attitudes towards wildlife are viewed as potentially important anti-corruption measures given the likely reduction in incentives for engaging in corruption in the first instance. Despite the centrality of natural resource sectors and commodities to national economic development goals in most countries, there is a dearth of research on whether reducing demand for specific natural resource commodities actually leads to reductions in the prevalence of corruption in related sectors. Wildlife is arguably not as central a resource to most national economies as, say, the extractive industries, although it is a resource of strategic importance in some country contexts (e.g. as a basis for Tanzania's tourism sector). Again, detailed assessments in different contexts should help policymakers and practitioners arrive at an improved appreciation of how, for instance, carefully researched and demographically targeted interventions might contribute to reducing demand for particular wildlife species and commodities. The good news is that, according to Johnsen et al (2012), there is some evidence to suggest that media-based anti-corruption campaigns can be effective. Unfortunately, Duffy (2014) finds that media coverage of animal poaching has tended not to highlight the key role played by corruption, and media campaigns may be of little use where consumers are already aware of the illegality of wildlife products. Awareness among policymakers regarding the role of corruption in wildlife crime might, however, be expected to improve given corruption is increasingly cited in global policy documents as noted above.

Example of a theory of change for addressing corruption along the wildlife crime 'value chain'



Conclusion and a way forward

The recent upsurge in illegal wildlife trade, particularly the large scale poaching of African elephants and rhinos (along with numerous other high value species including pangolins, big cats and sea turtles) is a major challenge to conservation in the 21st century. The role corruption plays in today's illicit trade (UNODC 2016; Rademeyer 2016a and 2016b) is reminiscent of its role in the illegal ivory trade from Southern Africa in the 1980s (Duffy 2014), and a stark reminder of its pervasive force and enduring nature.

Policy and practice responses are gradually recognizing the facilitating role of various forms of corruption associated with wildlife crime. But there is a long road ahead for the anti-corruption research, policy and practice communities to better grapple with the challenges of corruption in wildlife crime. There is a pressing need for more empirical evidence (including from mixed methods, political economy and longitudinal studies) focused specifically on unpacking the prevalence and types of corruption - as well as the actors involved - in corruption associated with wildlife crime. Future research could usefully draw on the literature on corruption in other resource sectors.¹⁷ The incentives and motivations for engaging in corruption, particularly among law enforcement and other public office holders charged with protecting wildlife, need to be the subject of detailed further analysis. The objective should be to develop bottom-up analysis that assesses various wildlife product 'value chains' and the corruption risks and vulnerabilities associated with them.

Pending such studies, the wildlife conservation research, policy and practice communities can still engage with existing anti-corruption lessons to inform a strategic approach and response to corruption in wildlife crime. Two decades of accumulated anti-corruption experience in development cooperation is now available to help guide anti-corruption measures in the wildlife sector (in the form of recent meta-studies: DFID 2015 and Johnsen et al 2012). Perhaps the most important lessons from this experience are the need to:

- Establish credible corruption risk assessment, corruption risk identification, and corruption risk management procedures (see Johnsen 2015 for a discussion of how such procedures map onto project cycles).
- Enable the generation of detailed analyses of corruption risk factors and vulnerabilities at programmatic level, the recording of baseline data on corruption prevalence that can be tracked over time, the noting of key programmatic assumptions and logics (or *theories of change* – see Table 1 for an example), and the production of detailed plans on how best to mitigate and manage identified risks.¹⁸
- Ensure an iterative risk assessment process, whereby initial data, assumptions, and approaches are periodically reviewed and interrogated and, if necessary, modified according to changing circumstances.¹⁹

17 Williams and Le Billon (forthcoming 2017) provides a discussion of corruption issues in oil, gas, mining, fisheries, biofuel, wildlife, forestry and urban land, attempting to demonstrate how a political ecology approach can further understanding of corruption challenges.

18 It is common for many of the basic assumptions listed in Table 1 not to be present in particular contexts: relevant institutions can be vastly under-funded, basic data and information may be lacking, and key stakeholders may not be interested in successful implementation.

19 Such an approach i) aims to reduce the possible harms (to species, people, livelihoods, economies and institutions, e.g. see Downs, 2013) that could arise from uninformed anti-corruption approaches, while offering guidance on practical, operational ways forward, and ii) provides clear and tangible guidance for conservation and anti-corruption practitioners regarding mutually supportive interventions.

As further analyses of corruption risks in the wildlife sector become available, they are likely to underline why taking *no* action is highly undesirable from a global wildlife conservation as well as a global sustainable development perspective. As with wildlife populations themselves, sectoral and societal corruption levels and characteristics are known to be dynamic rather than static, with upwards and downwards trajectories both possible. In other words, corruption's impacts on species and livelihoods could get considerably worse unless anti-corruption measures become more effective. To reach this goal, further collaboration between the anti-corruption and wildlife conservation communities is necessary, given the potential for crucial 'blind-spots' within both these communities (i.e. wildlife conservation practitioners' awareness of specific corruption issues and cases that anti-corruption specialists are unfamiliar with, and *vice versa*). Such collaboration should revolve around the development of corruption risk assessment and corruption risk management approaches specifically tailored to wildlife conservation. The intention would be to provide a framework so that integrating contextualized information about corruption in wildlife crime *from the bottom-up* becomes a routine component of wildlife conservation interventions. In particular, considerable existing knowledge among wildlife conservation practitioners and those engaged in law enforcement efforts for wildlife crimes should be systematically harnessed.

Enhanced contextual knowledge generated via formalized corruption risk assessments in the wildlife sector could constitute a powerful tool for wildlife conservationists pressing for reforms in areas beyond the immediate realm of wildlife policy and practice. The results of corruption risk assessments could particularly further inform ongoing dialogues with national authorities and bodies with responsibilities for governing, monitoring, and enforcing laws and regulations in the wildlife sector, complementing existing reporting procedures such as those stipulated by CITES. Such results could also help identify new stakeholders or agents of change, or ways to approach old problems via new means. The results could also help distinguish between problems that involve some form of corruption, and other types of problems linked less to corruption and more to crime or mismanagement. The availability of contextualized information via corruption risk assessments could help wildlife conservation interventions avoid pitfalls that have plagued many past anti-corruption interventions: the wholesale transplanting of a particular approach (e.g. institutional designs of anti-corruption agencies) from one context to another, with little regard for underlying political economy dynamics. It may also be possible to improve understanding of why politicians in wildlife-rich countries are not acting to safeguard their wildlife resource base to meet development targets.

A main principle behind corruption risk assessment, identification and management is to enable a process of *choosing* which corruption risks are *most important* to address, and devising credible means for managing them. The assumption is that, given the prevalence of various types of corruption in wildlife sectors, it will not be feasible to address each possible risk at once. A focus can, however, be placed on identifying and targeting human, institutional and financial resources towards the *most serious* corruption threats to wildlife conservation goals in particular contexts.

References

- Amacher, G.S., M. Ollikainen, E. Koskela. 2012. "Corruption and forest concessions". *Journal of Environmental Economics and Management*. Vol. 63. Issue 1.
- Ammann, K. 2011. "The Vietnamese and rhino horn: A dealer speaks". *Swara*. October-December.
- Ayling, J. 2013. "Harnessing third parties for transnational environmental crime prevention". *Transnational Environmental Law*. Volume 2, Issue 2: 339-362.
- Baniamin, H.M. 2015. *Controlling corruption through e-governance: Case evidence from Bangladesh*. U4 Brief No. 5. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/controlling-corruption-through-e-governance-case-evidence-from-bangladesh/>
- Bennett, E.L. 2014. "Legal ivory trade in a corrupt world and its impacts on African elephant populations". *Conservation Biology*. Vol. 00. No. 0.
- Brennan, A.J. and J.K. Kalsi. 2015. "Elephant poaching and ivory trafficking problems in Sub-Saharan Africa: An application of O'Hara's principles of political economy". *Ecological Economics*. Vol. 1. Issue 20.
- Brockington, D. 2008. "Corruption, taxation and natural resource management in Tanzania". *The Journal of Development Studies*. 44:1, 103-126.
- CITES Standing Committee. 2014. Relationship between ex situ production and in situ conservation: report of the Standing Committee. CoP14 Doc. 48 (Rev. 1)
- CITES. 2015. *CITES Secretariat confirms the arrest of former wildlife director in Guinea and applauds national authorities' work*. Available at: https://cites.org/eng/guinea_arrest_20150903
- CITES Secretariat. 2015. *Enforcement Matters*. Report of the Secretariat to the Sixty-sixth meeting of the Standing Committee Geneva (Switzerland), 11-15 January 2016. SC66 Doc. 32.1, paragraph 21.
- Damania, R. and E.H. Bulte. 2001. *The economics of captive breeding and endangered species conservation*. CIES Discussion Paper 0139. Center for International Economic Studies and School of Economics. University of Adelaide.
- DFID. 2015. *Why corruption matters: Understanding causes, effects and how to address them*. DFID Evidence Paper. Department for International Development. London.
- Douglas, L.R. and K. Alie. 2014. "High-value natural resources: Linking wildlife conservation to international conflict, insecurity and development concerns". *Biological Conservation*. No. 171.
- Downs, F. 2013. *Rule of law and environmental justice in the forests: The challenge of 'strong law enforcement' in corrupt conditions*. U4 Issue No. 6. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/rule-of-law-and-environmental-justice-in-the-forests-the-challenge-of-strong-law-enforcement-in-corrupt-conditions/>
- Duffy, R. 2014. "Waging a war to save biodiversity: the rise of militarized conservation". *International Affairs*. 90: 4, 819-834.

EAGLE. 2015. *Former CITES authority of Guinea in prison*. Eco Activists for Governance and Law Enforcement. Available at: <http://www.eagle-enforcement.org/news/former-cites-authority-of-guinea-in-prison-A57/>

Ferraro, P. 2005. "Corruption and conservation: The need for empirical analyses. A response to Smith and Walpole". *Oryx*. Vol 39. Issue 3.

Fison, M. 2011. "The £6bn trade in animal smuggling". *The Independent*. Available at: <http://www.independent.co.uk/environment/nature/the-1636bn-trade-in-animal-smuggling-2233608.html>

Fjeldstad, O-H., Kolstad, I., S. Lange. 2003. *Autonomy, incentives and patronage: A study of corruption in the Tanzania and Uganda revenue authorities*. CMI Working Paper No. 9. Chr. Michelsen Institute. Bergen. Available at: <https://www.cmi.no/publications/1688-autonomy-incentives-and-patronage>

Frank, B. and P.B. Maurseth. 2005. *The spatial econometrics of elephant population change: A note*. Working Paper No. 507. German Institute for Economic Research. DIW Berlin.

GFI. 2011. Transnational crime in the developing world. Global Financial Integrity. Washington, D.C. available at: http://www.gfintegrity.org/storage/gfip/documents/reports/transcrime/gfi_transnational_crime_web.pdf

Gillingham, S. and P.C. Lee. 2003. "People and protected areas: A study of local perceptions of wildlife crop-damage conflict in an area bordering the Selous Game Reserve, Tanzania". *Oryx*. Vol. 37.

Gore, M.L., J. Ratsimbazafy, M.L. Lute. 2013. Rethinking corruption in conservation crime: Insights from Madagascar. *Conservation Letters*. No. 6.

Hance, J. 2016. "How to catch a poacher: Breaking Bad and fake eggs". *The Guardian*. Tuesday 26th July.

Henson, D.W., R.C. Malpas, F.A.C. D'Udine. 2016. *Wildlife law enforcement in Sub-Saharan African protected areas: A review of best practices*. Occasional Paper No. 58. International Union for the Conservation of Nature (IUCN). Cambridge, UK, and Gland, Switzerland.

Johnsøn, J. 2015. *The basics of corruption risk management: A framework for decision making and integration into the project cycles*. U4 Issue No. 18. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/the-basics-of-corruption-risk-management-a-framework-for-decision-making-and-integration-into-the-project-cycles/>

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 to reducing corruption*. U4 Issue No. 7. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/mapping-evidence-gaps-in-anti-corruption-assessing-the-state-of-the-operationally-relevant-evidence-on-donors-actions-and-approaches-to-reducing-corruption/>

Johnsøn, J. and T. Søreide. 2013. Methods for learning what works and why in anti-corruption: An introduction to evaluation methods for practitioners. U4 Issue No. 8. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/methods-for-learning-what-works-and-why-in-anti-corruption-an-introduction-to-evaluation-methods-for-practitioners/>

- Keatinge, T. and C. Haenlein. 2016. "Follow the money: How financial investigation can help combat poaching in Kenya". *Newsweek*. 7/2/16. Available at: <http://europe.newsweek.com/following-money-how-financial-investigation-can-combat-poaching-kenya-476506?rm=eu>
- Kelvin, S.H. and O.D. Peh. 2010. Fighting corruption to save the environment: Cameroon's experience. *Ambio*. 39:336–339.
- Leader-Williams, N., R.D. Baldus, R.J. Smith. 2009. "The influence of corruption on the conduct of recreational hunting". In Dickson, B., J. Hutton, B. Adams (Eds). *Recreational Hunting, Conservation and Rural Livelihoods: Science and Practice*. Blackwell Publishing.
- Lebovitz, M.S., H. Newbigging, A. Puritz. 2014. *Empty threat: Does the law combat illegal wildlife trade? An eleven country review of legislative and judicial approaches*. DLA Piper. Available at: <http://www.dlapiperprobono.com/export/sites/pro-bono/downloads/pdfs/Illegal-Wildlife-Trade-Report-2014.pdf>
- Lemieux, A.M. and R.V. Clarke. 2009. "The international ban on ivory sales and its effects on elephant poaching in Africa". *British Journal of Criminology*. No. 49.
- Lindsey, P.A., R. Alexander, L.G. Frank, A. Mathieson, S.S. Románach. 2006. "Potential of trophy hunting to create incentives for wildlife conservation in Africa where alternative wildlife-based land uses may not be viable". *Animal Conservation*. No. 9.
- Lujala, P. and L. Epreman. forthcoming 2017. Transparency and natural resource management: Empowering the public with information? In Williams, A. and P. Le Billon. (Eds.). *Corruption, natural resources and development: From resource curse to political ecology*. Edward Elgar Publishing. Cheltenham and Northampton, MA.
- Madhusudan, M.D. 2003. "Living amidst large wildlife: Livestock and crop deprecation by large mammals in the interior villages of Bhadra Tiger Reserve, South India". *Environmental Management*. Vol. 31.
- Maisels, F. S. Strindberg, S. Blake, G. Wittemyer, J. Hart, E.A. Williamson. 2013. "Devastating decline of forest elephants in Central Africa". *PLoS ONE*. 8(3).
- Marquette, H. and C. Peiffer. 2015. *Corruption and collective action*. Developmental Leadership Program, University of Birmingham. Birmingham.
- Martini, M. 2013. *Wildlife crime and corruption*. U4 Expert Answer No. 367. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/wildlife-crime-and-corruption/>
- Moene, K. and T. Søreide. 2015. "Good governance facades". In. Rose-Ackerman, S. and P. Lagunes. (Eds.) *Greed, corruption and the modern state: Essays in political economy*. Edward Elgar Publishing. Cheltenham and Northampton, MA.
- Nelson, F. 2009. *Reforming wildlife governance in East and Southern Africa: The role of corruption*. U4 Brief No. 12. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/reforming-wildlife-governance-in-east-and-southern-africa-the-role-of-corruption/>

- Nelson, F. and T. Blomley. 2010. "Peasants forests and the king's game? Institutional divergence and convergence in Tanzania's forestry and wildlife sectors". In Nelson, F. (Ed.). *Community rights, conservation and contested land: The politics of natural resource governance in Africa*. Earthscan. London and New York.
- Nekaris, K.A.I., C.R. Shepherd, C.R. Starr, V. Nijman. 2010. "Exploring cultural drivers for wildlife trade via an ethnoprimateological approach: A case study of slender and slow lorises (*Loris* and *Nycticebus*) in South and Southeast Asia". *American Journal of Primatology*. 72: 877-886.
- Nielsen, M.R. and T. Treue. 2011. "Hunting for the benefits of joint forest management in the Eastern Afromontane Biodiversity Hotspot: Effects on bushmeat hunters and wildlife in the Udzungwa Mountains". *World Development*. Vol. 40. No. 6.
- Passas, N. 1998. "A Structural Analysis of Corruption: The Role of Criminogenic Asymmetries". *Transnational Organized Crime*. Vol 4, Spring: 42-55.
- Radermeyer, J. 2016a. *Tipping point: Transnational organized crime and the 'war' on poaching*. The Global Initiative Against Transnational Organized Crime. Geneva.
- Radermeyer, J. 2016b. *Beyond borders: Crime, conservation and criminal networks in the illicit rhino horn trade*. The Global Initiative Against Transnational Organized Crime. Geneva.
- Robbins, P., K. McSweeney, A.N. Chhangani, J.L. Rice. 2009. "Conservation as it is: Illicit resource use in a wildlife reserve in India". *Human Ecology*. 37: 559:575.
- Rose-Ackerman, S. 1999. *Corruption and government: Causes, consequences and reform*. Cambridge University Press. Cambridge and New York (NY).
- Sekhar, N.U. 2003. "Local people's attitudes towards conservation and wildlife tourism around Sariska Tiger Reserve, India". *Journal of Environmental Management*. No. 69.
- Singh, S. 2008. "Contesting moralities: The politics of the wildlife trade in Laos". *Journal of Political Ecology*. Vol. 15.
- Smith, R.J., D. Biggs, F.A.V. St. John, M. Sas-Rolfes, R. Barrington. 2014. "Elephant conservation and corruption beyond the ivory trade". *Conservation Biology*. Vol 29. No.3.
- Standing, A. 2008. *Corruption and industrial fishing in Africa*. U4 Issue No. 7. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/corruption-and-industrial-fishing-in-africa/>
- Standing, A. 2011. *Making transparency work in Africa's marine fisheries*. U4 Issue No. 11. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/making-transparency-work-in-africa-s-marine-fisheries/>
- Standing, A. 2015. *Corruption and state corporate crime in fisheries*. U4 Issue No. 15. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/corruption-and-state-corporate-crime-in-fisheries/>

- Sumaila, R. J. Jacquet, A. Witter. Forthcoming 2017. "When bad gets worse: Corruption and fisheries". In Williams, A. and P. Le Billon. (Eds.). *Corruption, natural resources and development: From resource curse to political ecology*. Edward Elgar Publishing, Cheltenham and Northampton, MA.
- Sundström, A. 2015. *Corruption and violations of conservation rules: A survey experiment with resource users*. Working Paper No. 10. The Quality of Government Institute. University of Gothenburg.
- Søreide, T. 2007. *Forest concessions and corruption*. U4 Issue No. 3. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/forest-concessions-and-corruption/>
- TRAFFIC. 2012. *Captive Bred or Wild Taken?* TRAFFIC International. Cambridge.
- UNODC. 2012. *Wildlife and forest crime: Analytic toolkit*. United Nations Office on Drugs and Crime. Vienna. Available at: http://www.cites.org/eng/resources/pub/Wildlife_Crime_Analytic_Toolkit.pdf
- UNODC. 2016. *World Wildlife Crime Report: Trafficking in Protected Species*. United Nations Office on Drugs and Crime. Vienna and New York (NY). Available at: https://www.unodc.org/documents/data-and-analysis/wildlife/World_Wildlife_Crime_Report_2016_final.pdf
- Wanjiru, C.R. 2015. *The illegal trade in wildlife resources and the implication for international security: A case of poaching of ivory in Kenya*. Masters Thesis. Institute of Diplomacy and International Studies. University of Nairobi.
- Williams, A. and P. Le Billon. (Eds.). Forthcoming 2017. *Corruption, natural resources and development: From resource curse to political ecology*. Edward Elgar Publishing, Cheltenham and Northampton, MA.
- World Bank and TRAFFIC. 2008. *What's driving the wildlife trade? A review of expert opinion on economic and social drivers of the wildlife trade and trade control efforts in Cambodia, Indonesia, Lao PDR, and Vietnam*. World Bank Sustainable Development Network Discussion Paper. Washington, D.C.
- WWF. 2012. *Fighting illicit wildlife trafficking: A consultation with governments*. WWF Report. World Wildlife Fund International. Available at: http://d2ouvy59p0dg6k.cloudfront.net/downloads/wwffightingillicitwildlifetrafficking_lr_1.pdf
- WWF and TRAFFIC. 2014. *Illicit wildlife trafficking: An environmental, economic and social issue*. Issue No. 14. United Nations Environment Programme (UNEP) Perspectives Series.
- WWF and TRAFFIC. 2015. *Strategies for fighting corruption in wildlife conservation: A primer*. WWF International Report. Gland. Available at: http://wwf.panda.org/wwf_news/?257350/Strategies-for-fighting-corruption-in-wildlife-conservation
- Wyatt, T. and A.N.Cao. 2015. *Corruption and wildlife trafficking*. U4 Issue No. 11. Chr. Michelsen Institute. Bergen. Available at: <http://www.u4.no/publications/corruption-and-wildlife-trafficking/>
- Wylter, L.S. and P.A. Sheikh. 2008. *International illegal trade in wildlife: Threats and U.S. policy*. CRS Report for Congress. Congressional Research Service. Washington, D.C.

Appendix I: Literature review key search terms

- Corruption (*anti-corruption, transparency, accountability, good governance*) + wildlife
- Corruption (*anti-corruption, transparency, accountability, good governance*) + illegal wildlife trade
- Corruption (*anti-corruption, transparency, accountability, good governance*) + wildlife trafficking
- Corruption (*anti-corruption, transparency, accountability, good governance*) + poaching
- Corruption (*anti-corruption, transparency, accountability, good governance*) + CITES
- Corruption (*anti-corruption, transparency, accountability, good governance*) + wildlife conservation
- Corruption (*anti-corruption, transparency, accountability, good governance*) + wildlife crime
- Corruption (*anti-corruption, transparency, accountability, good governance*) + elephant
- Corruption (*anti-corruption, transparency, accountability, good governance*) + rhino
- Corruption (*anti-corruption, transparency, accountability, good governance*) + ivory
- Corruption (*anti-corruption, transparency, accountability, good governance*) + tiger
- Wildlife + bribes (*bribery, fraud, fraudulent, extortion, kickbacks, patronage*)
- Illegal wildlife trade + bribes (*bribery, fraud, fraudulent, extortion, kickbacks, patronage*)
- CITES + bribes (*bribery, fraud, fraudulent, extortion, kickbacks, patronage*)
- Wildlife conservation + bribes (*bribery, fraud, fraudulent, extortion, kickbacks, patronage*)
- Wildlife crime + bribes (*bribery, fraud, fraudulent, extortion, kickbacks, patronage*)
- Elephant + bribes (*bribery, fraud, fraudulent, extortion, kickbacks, patronage*)
- Rhino + bribes (*bribery, fraud, fraudulent, extortion, kickbacks, patronage*)
- Ivory + bribes (*bribery, fraud, fraudulent, extortion, kickbacks, patronage*)
- Tiger + bribes (*bribery, fraud, fraudulent, extortion, kickbacks, patronage*)

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INDEXING TERMS

Anti-corruption	Corruption
Wildlife crime	Anti-poaching
Empirical studies	Aid effectiveness
Illegal wildlife trade	
Wildlife trafficking	

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Corruption has recently risen up the global wildlife conservation agenda with a series of international agreements highlighting the role of corruption in facilitating wildlife crime. Though there are notable exceptions, there is still a weak treatment in the literature of the problems of, and solutions to, wildlife crime from an anti-corruption perspective. Identifying and promoting effective interventions that get to the heart of the corruption problems associated with wildlife crime is a shared responsibility across the wildlife conservation, anti-corruption, anti-illicit trade, and anti-organized crime communities. As well as reviewing existing empirical literature to explore the types and characteristics of corruption associated with wildlife crime, this U4 Issue identifies entry-points for addressing corruption in wildlife crime based on recent anti-corruption effectiveness literature.

Building credible corruption risk assessment and corruption risk management procedures is important for improving wildlife conservation programming. This will enable generation of detailed analyses of corruption risk factors at programmatic level, the recording of baseline data on corruption prevalence, and the production of detailed plans on how best to mitigate and manage identified corruption risks.