

## Working Paper 39

# Behavioural drivers of corruption facilitating illegal wildlife trade: Problem analysis and state of the field review

Claudia Baez Camargo and Gayle Burgess | June 2022

## Table of contents

<b>About and acknowledgements</b>	<b>4</b>
<b>Executive summary</b>	<b>5</b>
<b>1 Introduction</b>	<b>7</b>
<b>2 Corruption associated with IWT</b>	<b>9</b>
2.1 How is corruption linked to IWT?	9
2.2 Understanding drivers of corruption linked to IWT	13
2.3 Behavioural drivers of corruption	16
2.4 Understanding corruption and its drivers: Implications for IWT practitioners	21
<b>3 Intervention and stakeholder mapping</b>	<b>23</b>
3.1 Counter Wildlife Trafficking (CWT) interventions: types	23
3.2 CWT interventions: approaches	26
<b>4 A review of experiences applying BI in CWT programmes and interventions</b>	<b>32</b>
4.1 CWT demand-side interventions and BI	32
4.2 CWT supply side interventions and BI	34
4.3 CWT interventions and programmes addressing corruption	35
4.4 What do we know about the relative effectiveness of CWT interventions?	36
<b>5 Meta analysis</b>	<b>40</b>
5.1 Need for more nuanced and precise evidence	40
5.2 A framework to identify intervention entry points	43
<b>6 Recommendations</b>	<b>46</b>
1 Innovate	46
2 Harness others' efforts	46
3 Go deeper	47
4 Fill the gaps	47
5 Complement	48
<b>References</b>	<b>49</b>

## Table of figures

<b>Figure 1.</b>	IWT actions are enabled by various forms of corruption and involve many potential actors	9
<b>Figure 2.</b>	Corruption examples relating to law enforcement	11
<b>Figure 3.</b>	Government agency or role of actors found to be corrupt	12
<b>Figure 4.</b>	Drivers of corruption interconnectedness	15
<b>Figure 5.</b>	Sources of normative pressures	19
<b>Figure 6.</b>	Situation model for combatting wildlife crime	23
<b>Figure 7.</b>	Motivations and demographics of wildlife traffickers in Namibia	24
<b>Figure 8.</b>	CWT Interventions types and example theory of change	27
<b>Figure 9.</b>	An illustrative IWT value chain	41
<b>Figure 10.</b>	Identifying entry points for anti-corruption behavioural CWT interventions	44

## Table of tables

<b>Table 1.</b>	Typology of motivations for consuming illegal wildlife products	25
<b>Table 2.</b>	Framework to assess entry points for behavioural interventions to tackle IWT-enabling corruption	45

## About and acknowledgements

This Analysis has been produced in association with the Targeting Natural Resource Corruption project.

### About Targeting Natural Resource Corruption

The Targeting Natural Resource Corruption (TNRC) project is working to improve biodiversity outcomes by helping practitioners to address the threats posed by corruption to wildlife, fisheries and forests. TNRC harnesses existing knowledge, generates new evidence, and supports innovative policy and practice for more effective anti-corruption programming. Learn more at [tnrcproject.org](https://tnrcproject.org).

### Disclaimer

This publication is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the authors and do not necessarily reflect the views of USAID, the United States Government, or individual TNRC consortium members.



### Acknowledgements

Research and writing of this Problem Analysis was led by the Basel Institute on Governance in collaboration with TRAFFIC. The Basel Institute brought expertise on anti-corruption and TRAFFIC on wildlife trade, with both organisations bringing experience, insight, and evidence around Social Norm and Behaviour Change (SNBC) approaches.

TRAFFIC is grateful to Willow Outhwaite, Thomasina Oldfield, Melissa Matthews and Gabriel Sipos for their expert reviews of the document, and to the participants in the closed roundtable delivered in June 2021, who provided their perspectives on key findings.

### Open-access licence and citation

The publication is part of the Basel Institute on Governance Working Paper Series, ISSN: 2624-9650. It is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC BY-NC-ND 4.0).

### Suggested citation

Baez Camargo, Claudia, and Gayle Burgess. 2022. "Behavioural drivers of corruption facilitating illegal wildlife trade: Problem analysis and state of the field review." Working Paper 39, Basel Institute on Governance. Available at: <https://baselgovernance.org/publications/wp-39>

## Executive summary

This Problem Analysis is a review of the efficacy and opportunities for using social norm and behaviour change (SNBC) approaches to combat illegal wildlife trade (IWT) and similar natural resource-related corruption.

Behavioural science is a rich and expansive field that has received prominent coverage in recent years for the promise it offers as a foundational yet underutilised approach to achieving biodiversity conservation. Extensive literature shows how SNBC initiatives can help combat diverse corruption problems, although for those related to natural resource management the evidence for doing so is sparse. This report synthesises the available information and suggests the next steps to redress this current lack of evidence.

### **This Analysis seeks to:**

1. Understand what SNBC approaches might or might not work in fighting corruption.
2. Identify entry points for designing social and behavioural change interventions that can effectively reduce corruption related to IWT.

### **Critical findings are summarised here:**

- Corruption is an enabler of IWT. The modalities and potential perpetrators are vast and complex, spanning petty to grand corruption, and involving a wide range of public and private actors in source, transit, and destination countries.
- In fields beyond nature conservation, SNBC approaches are considered a worthwhile complement to more traditional approaches to combat corruption (OECD, 2018a; U4, 2018). However, it is important to be aware that the starting point for designing targeted interventions to tackle corruption should always be a good understanding of the context-sensitive factors that surround the patterns of behaviour that we would like to address.
- Corrupt behaviours associated with IWT can be driven by a variety of factors. These include substandard institutional frameworks, opportunistic rule breaking, and weak monitoring and enforcement motivations and capabilities.
- In contexts where corruption thrives, corrupt behaviours can also be driven by collective action problems, entrenched (informal) governance systems, and/or social and normative factors. Examples include a prevailing norm that the majority engage in and outliers have a tendency to move towards, thus normalising corrupt acts.
- Corrupt behaviours can in some contexts be accepted, tolerated, or even expected, irrespective of the law, while social pressures and sanctions can fuel and entrench them. Mental models, or collectively held preconceptions and stereotypes, shape the perceptions of expected behaviours of others. If corruption is believed to be “normal and everywhere” and IWT “not a serious crime”, this can trigger and/or justify illicit behaviours.

- Wildlife trafficking is typically countered by a mix of legislation, enforcement, and penalties alongside social and behaviour change approaches with consumers. Traditional approaches aim to address individual incentives to engage in IWT by reducing the benefits and increasing the risks and costs. The focus is on strengthening legislation and regulation and their application, changing market incentives, and engaging in campaigns to change the behaviours of people relating to supplying and consuming illegal wildlife products.
- Behaviour change approaches focus on policy, social mobilisation, and individual behaviours determined by intrinsic and extrinsic factors associated with IWT. The aim is to influence motivations, attitudes, values, and actions of those engaging in IWT through harnessing social influence, education and communication, and nudges.
- Examples of demand-side interventions include public awareness campaigns enlisting celebrities to endorse messages against IWT, and more targeted messages informed by behavioural influence approaches, addressing individual motivations, costs, and status.
- Examples of supply-side interventions include approaches that harness social norms and appeal to deeply held cultural values, make strategic use of information that shows successes in enforcement efforts, and incorporate communications content and methods appropriate to the local context.
- Emerging insights on successes in supply-side interventions indicate these should: a) be context specific; b) address root causes; c) rely on multi-stakeholder partnerships; d) build on existing norms; and e) be regularly monitored and evaluated.
- Behavioural elements drive corruption and IWT, but the application of approaches factoring these in is rare. As such, the evidence base supporting decisions around where and how SNBC initiatives can be delivered to counter corruption and IWT needs strengthening.

To discuss any aspect of this Analysis, please contact Claudia Baez Camargo at the Basel Institute on Governance: [claudia.baez-camargo@baselgovernance.org](mailto:claudia.baez-camargo@baselgovernance.org).

# 1 Introduction

Conservation and natural resource management are greatly affected by corruption, yet there has been little dedicated research to understand how to apply current anti-corruption approaches to target this effectively. The USAID-funded Targeting Natural Resource Corruption (TNRC) project seeks to address this. The project aims to improve biodiversity outcomes by helping practitioners address the threats posed by corruption to wildlife, fisheries, and forests.

TRAFFIC and the Basel Institute on Governance are contributing to the project through various actions, including a two-year workstream on understanding and addressing corruption risks with a focus on social norms and enforcement perspectives. “Green Corruption” at the Basel Institute is a multi-disciplinary programme targeting environmental degradation through an anti-corruption and governance approach. TRAFFIC is a core consortium partner in the TNRC project, exploring traceability, big data, financial flows, social norm and behaviour change, and wildlife trade, specific scenarios and solutions.

Actions to change behaviours, attitudes, and norms are widely understood to form a critical part of efforts to combat corruption, but they are currently poorly understood and underutilised. Conservation specialists may thus be less familiar with the skills and knowledge required to implement such initiatives effectively. Akerlof (2019) notes “to our knowledge, no reviews of social norms research for application to corruption in natural resource management of fisheries, wildlife, and forests exists.” This Problem Analysis aims to help bridge this gap. Its objective is twofold.

- First, it reviews the evidence on how behavioural drivers trigger the corruption that facilitates IWT.<sup>1</sup>
- Second, it aims to identify entry points for designing social and behavioural interventions that can effectively reduce IWT-related corruption and understand what does and does not work in addressing it.

To inform this study, more than 100 publications were reviewed and eight key interviews with academics and practitioners in the field of IWT were conducted. The publications were drawn from a list compiled by anti-corruption and conservation experts familiar with the subject matter, and focusing on evidence reviews in the fields of IWT, behavioural science and anti-corruption. Further information is in the reference list.

This review assesses behavioural drivers that spur the corruption facilitating IWT. As the evidence on this topic is still nascent, insights from the literature are gathered in three related thematic areas:

---

<sup>1</sup> In this analysis, IWT is understood to include flora and fauna broadly, although it should be noted that the majority of sources consulted focus on illegally traded animal products. It should also be noted that corruption can also play a role in enabling legal but unsustainable or otherwise detrimental trading in wildlife, which, while certainly relevant, falls beyond the scope of the present analysis. For more information about corruption and trade in wild plants please see: <https://www.worldwildlife.org/pages/tnrc-topic-brief-understanding-corruption-risks-in-the-global-trade-in-wild-plants>

1. The role of corruption in driving IWT
2. The importance of identifying the underlying drivers of corruption linked to IWT
3. Specific behavioural drivers of corruption and IWT

Next, the Problem Analysis examines what kinds of approaches have been tested in the form of Counter Wildlife Trafficking (CWT) behavioural interventions to address corruption, and what has or has not worked. Because the evidence on their relative effectiveness is scarce, the Analysis also reviews the evidence on behavioural interventions to tackle IWT. A meta-analysis follows, reviewing what is known about the behavioural drivers of corruption facilitating IWT, and what has and has not worked in targeting these drivers. It focuses on identifying key themes, risk areas, and gaps that are of particular importance for practitioners.

It is important to acknowledge that targeting behavioural drivers is not a silver bullet for fighting natural resource corruption. Therefore, the Problem Analysis proposes a framework to help guide practitioners to narrow down where and how adopting a social normative and/or behavioural angle to fight corruption along the IWT chain is pertinent.

The last section concludes by identifying priorities and opportunities around which to build the evidence-to-influence knowledge, and by suggesting entry points for SNBC case studies.

More evidence is needed about the behavioural drivers of natural resource corruption, to identify critical risk areas and entry points for action. Practical approaches and tools are also needed to support Conservation and Natural Resource Management (CNRM) practitioners to design and implement more effective interventions in this field. The Problem Analysis has therefore distilled recommendations in line with this and focused on areas where a SNBC approach can complement existing interventions, whilst considering others where a full behavioural intervention is most useful.



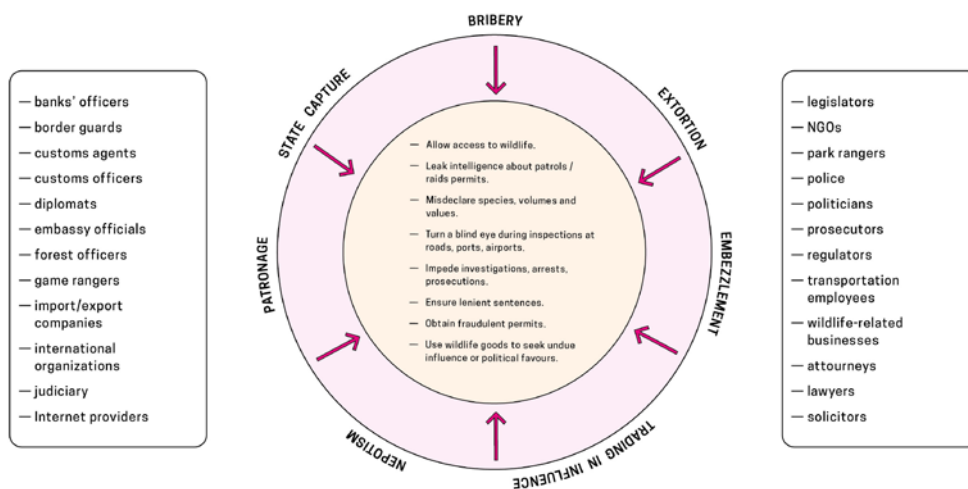
# 2 Corruption associated with IWT

## 2.1 How is corruption linked to IWT?

Corruption is acknowledged as a significant enabler of IWT.<sup>2</sup> The term “corruption” is a powerful concept because it captures the essence of the problem of defending and preserving collective goods and resources from abuse, and therefore has key elements relating to justice. It covers a large number of distinct actions and behaviours (Varraich, 2014). To complicate matters as explained by Musing et al., (2019) “In everyday language, the term is used more broadly to represent a wide variety of objectionable or immoral acts, and not only those associated with formal duty.” According to Williams (2021), corruption and other illegal and negative actions often happen in the same space, although crucially they are not the same. Corruption should not be equated to “all things illegal” or “things not liked.” Furthermore, while corruption often facilitates other illegal and negative activities, not all illegal activities involve corruption, and while corrupt actions are often illegal, specific legal definitions vary from country to country (TRAFFIC, 2021).

To be of use to IWT practitioners, a first step is to focus on the particular practices and patterns of corruption linked to IWT, and to consider the incentives and motivations of those who engage in them. As recognised by TNRC, there are several different types of corruption that may be linked to natural resource management and by extension to IWT. These include bribery, extortion, embezzlement, trading in influence, nepotism, patronage, and state capture. Figure 1 represents how some acts of corruption are used to facilitate acts that enable IWT. The list of possible IWT-enabling actions is by no means exhaustive and the figure merely illustrates the many and complex opportunities where corruption can take place.

**Figure 1. IWT actions are enabled by various forms of corruption and involve many potential actors**



2 Like TNRC, this analysis adopts the definition of corruption from Transparency International: “the abuse of entrusted power for private gain” <https://www.transparency.org/en/what-is-corruption>. See also TNRC note on corrupt behaviours: <https://www.worldwildlife.org/pages/tnrc-topic-brief-corruption-definitions-and-their-implications-for-tar-getting-natural-resource-corruption>

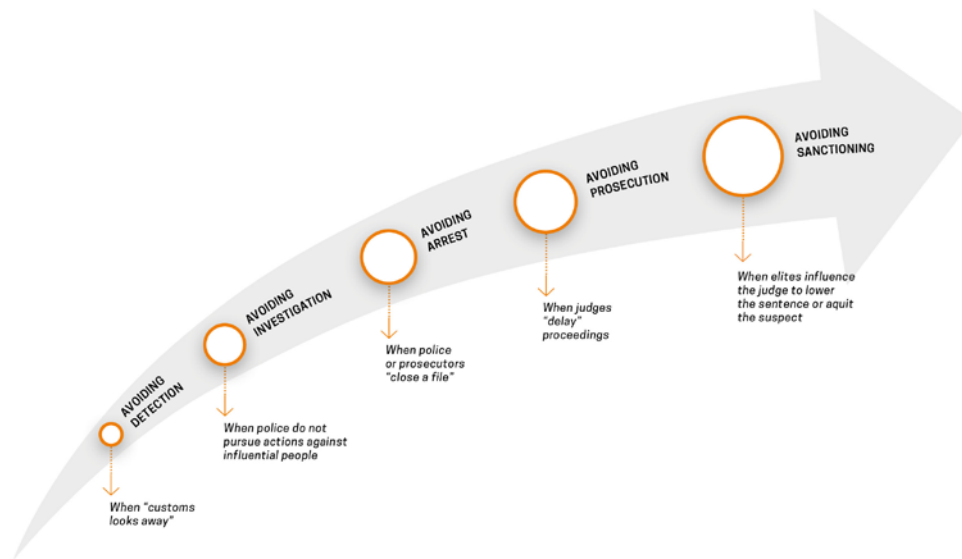
Both petty and grand corruption can play a role in enabling IWT. Concrete acts of corruption span everything from small-value exchanges (e.g. bribery by criminals of police, customs officials, or rangers to turn a blind eye to illegal shipments or reveal patrol locations and where high-value protected species are) to state capture (e.g. acquiring control of additional lands for timber harvest through document fraud, coercing judiciary and provincial officials). Such acts are exacerbated by inadequate policies or poor enforcement of regulations to protect wildlife and control its trade. Corruption can be fueled by greed or when it is perceived as normalised behaviour by high-level political and government figures, whereby rank and file members of the bureaucracy and average citizens are more likely to engage in acts of corruption themselves (Baez Camargo, 2017).

Corruption is widespread and systemic and takes place at multiple steps along wildlife trade value chains (UNODC, 2020a). These value chains relate to the more than 38,000 species listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), alongside many others protected from overexploitation under various national laws. In addition to corruption occurring along these value chains, it is also found in the criminal justice system, preventing or undermining adequate detection, investigation, prosecution, and/or sentencing in IWT cases (Wyatt and Cao, 2015; Martini, 2013; Tacconi and Williams, 2020; Zain, 2020; UNODC, 2016; UNODC, 2020a). According to the *World Wildlife Crime Report 2020* (UNODC, 2020a):

“Corruption has been found to be a critical enabler of the illicit wildlife trade, taking place at sourcing, transit, and export stages, and involving public and private sector abuse of power and trust. It can be ad hoc, involving smaller amounts of money and lower-level officials, or systemic, involving larger amounts of money, higher-level officers, and generally pre-planned.”

CITES has a dedicated Resolution on Corruption (Resolution Conf. 17.6) that urges Parties to: “Adopt measures to prohibit, prevent, detect and counter instances of corruption and ensure that any corrupt practices associated with the administration, regulation, implementation or enforcement of CITES, are punishable with appropriate penalties under national legislation” (CITES, 2016).

IWT may also involve acts of omission or subversion of existing rules or standard operating procedures, which may trigger administrative sanctions. It is also often about criminal acts which fall under the remit of the responsible law enforcement entities. As a result, wildlife traffickers can resort to corruption with the aim of subverting the law enforcement system. Figure 2 depicts examples of how corruption can come into play along the different stages of the law enforcement system.

**Figure 2. Corruption examples relating to law enforcement**

Source: Kassa, S. (2020) p. 24

There is a strong consensus in the literature reviewed and amongst the experts consulted that more evidence is needed to narrow down the instances, practices, risks, and behaviours that are relevant and concrete enough to support the design of tailored interventions to address corruption enabling IWT. As an OECD report warned (OECD, 2018a), despite the attention given to the importance of tackling corruption associated with IWT, "focused, in-depth research into the dynamics of corruption witnessed or the actors involved" remains scarce. This compromises an understanding of the targeted criminal behaviours.

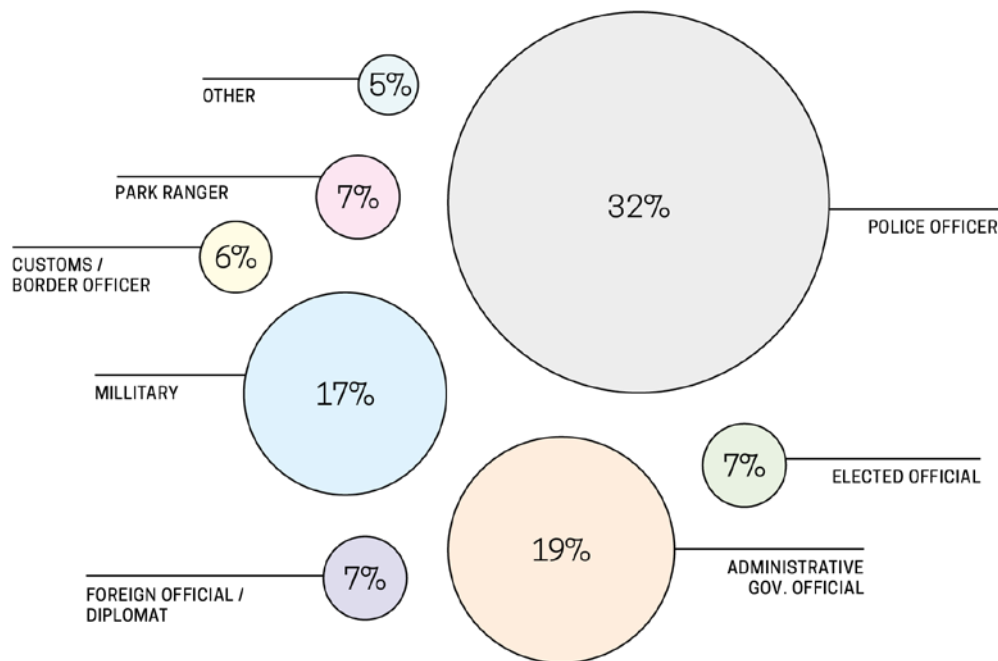
Case studies suggest that although corruption can in principle happen at every step of the IWT chain, this is not always necessarily the case. Evidence is therefore needed about when, how, and where exactly corruption is happening. For example, Moneron et al. (2020a) interviewed 73 individuals convicted of wildlife crimes and found examples of corruption ranging from bribing government customs officials at airports or border posts to facilitate the movement of an illegal wildlife product from one country to another, to the active involvement of rangers, police officials, or soldiers in poaching and transporting wildlife commodities.

Other sources agree that bribery appears to be one of the most prevalent forms of corruption enabling IWT. The *World Wildlife Crime Report 2020* (UNODC, 2020a) identified bribes as especially pernicious. Environmental Investigation Agency (EIA) research into Shuidong, China as a global illegal ivory trade hub (EIA, 2017) found that:

"bribes can make up 4–10 per cent of the final (wholesale) sales value of ivory in Asia. The overall bribes paid in [a] single case amounted to USD90,000–210,000. In 2012, along the Viet Nam–China border, there was an estimated USD18,000 to USD30,000 a day given out in bribes to border officials to allow ivory to cross borders illicitly."

An OECD study focused on East and Southern Africa (OECD, 2018b) detailed the kind of actors most likely to be engaging in corruption related to IWT. It found that, within the caveat that the data was gathered from what was publicly reported and focused on elephant ivory poaching, police officers appeared most likely to be corrupt, followed by administrative government officials and the military (Figure 3).

**Figure 3. Government agency or role of actors found to be corrupt**



Source: OECD (2018b).

Equally as important as pinpointing the exact manifestations of corruption taking place along the IWT chain is to recognise that corruption may not always be a major factor at play in enabling IWT. For instance, an analysis of communications from a wildlife trafficker revealed very little need to resort to corruption throughout most of the network’s operations (Costa, 2021). This suggests that corruption may not be particularly relevant when IWT operations take place away from the public systems of monitoring and criminal law enforcement. This in turn highlights the roles that weak governance and limited implementation capacities of public authorities also play in enabling IWT.

It is not surprising that situations where endemic corruption coexists with multiple social, economic, and political challenges, tend to be where IWT activities can also prosper (Wyatt *et al.*, 2018; Wyler and Sheikh, 2013). This aligns with the concept of crime convergence, where the illegal trade in wildlife is one facet of a business model employed by organised crime syndicates encompassing various other illegal (and sometimes also legal) trade types (illegal examples include drugs, arms, counterfeit goods, and people) (Lawson and Vines, 2014; INTERPOL, 2020; Radisch, 2016; ROUTES, 2021; Wildlife Justice Commission, 2021). The way in which corruption manifests itself in IWT is context sensitive and its modalities vary in scope as well as in prevalence. Some studies, such as van Uhm and Moreto (2018), have examined how corruption manifests itself in different contexts and

IWT markets, and have uncovered meaningful variation in the practices and risks that are exploited to traffic wildlife. Unsurprisingly, corruption risks depend not only on the nature and scope of the local and general corruption drivers, but also on their position and role in the supply chain e.g. whether a source or transit country, a criminal hub, an export and delivery hub, or a final market.

Clearly corruption as an enabler of IWT is a huge challenge that needs to be decisively tackled. Corruption is mentioned 158 times in the International Consortium for Combating Wildlife Crime (ICWC)'s Analytic Toolkit, available to all governments to assess capacities and needs in addressing IWT (UNODC, 2012). However, the modalities and prevalence of corruption need to be carefully identified through adequate insight and evidence, to ascertain typologies and patterns for different geographies and trade types.

Such a detailed level of evidence is an essential step towards ensuring anti-corruption actions are well targeted and ultimately effective – but it is also only a first step. Once specific corrupt behaviours have been identified, the next step is to understand the nature of the incentives and motivations associated with those behaviours. Developing anti-corruption interventions that are effective depends to a large extent on the degree to which they target the actual causes that give rise to corruption. This is explored further in the next section.

### Key takeaways

- Corruption enables IWT.
- While the modalities and potential perpetrators can be vast and complex, it is important to identify particular corrupt practices, patterns and motivations associated with IWT in each particular context.
- Corruption can comprise petty to grand corruption and involve a wide range of public and private actors in source, transit, and destination countries.
- These actors engage in diverse corrupt acts such as bribery, extortion, and patronage among others, in either an ad hoc or a more systemic manner.

## 2.2 Understanding drivers of corruption linked to IWT

It is often said that there is no one-size-fits-all approach to fight corruption. Indeed, corruption happens in various forms, in different places for various reasons. Therefore, to develop approaches or interventions that will be effective in addressing corruption, it is necessary to understand the drivers (including specific situations, incentives, and motivations) that impact the actions of those engaged in the corrupt behaviour of interest. There are four models that illustrate qualitatively distinct drivers of corruption relevant to the present discussion:

- a. Corruption as the result of problems in principal agent relationships
- b. Corruption as a functional, problem solving tool
- c. Corruption as a collective action problem
- d. Corruption stemming from behavioural drivers

Many accounts of corruption conceptualise it as the consequence of the decision making and acts of individuals – the proverbial “rotten apples” who break the rules in otherwise well-functioning governance systems. Consistent with this reasoning is the framing of corruption as the result of a problem in a principal-agent relationship that can be traced to inadequate laws or regulations and/or to weak formal institutions and mechanisms responsible for overseeing and enforcing implementation of the rules. Many anti-corruption prescriptions therefore focus on promoting legal and institutional reforms to address incentives, making the costs of engaging in corruption outweigh the benefits. Also consistent with a principal-agent understanding of corruption are approaches emphasising capacity building of law enforcement agencies, watchdog institutions, and civil society, and promoting transparency, accountability, and citizen empowerment.

However, in situations with high levels of corruption it is rarely the case that the sole problem is of a principal-agent nature. In fact, many countries that suffer from endemic corruption have relatively sound legal and institutional frameworks. Rather, when corruption is endemic, it is often the result of underlying governance systems and regimes (frequently of an informal nature) that are entrenched and self-perpetuating. Governance systems refer to the rules and understandings that specify roles, responsibilities, and mandates for different actors that are geared at pursuing a collective goal. Regimes are the rules and patterns of interaction that dictate how and by whom power and resources are acquired and shared in a given context.

In some cases, corruption provides a solution to concrete problems. Corruption in the context of trafficking wild fauna can have highly functional objectives: it opens doors, solves problems, facilitates exchanges and transactions, and can help build relationships with key actors and their networks. The distinction is crucial because of its implications to practitioners: targeting the corruption associated with IWT is of course essential, but it should be understood as part of a holistic approach. In other words, while addressing corruption is key to disrupting the operations of the transnational criminal networks that engage in IWT, if the underlying factors that are driving IWT (such as consumer demand or lack of economic opportunities for communities in source countries) are not addressed, corruption will simply morph, evolve, or in a worse-case scenario become (more) violent.

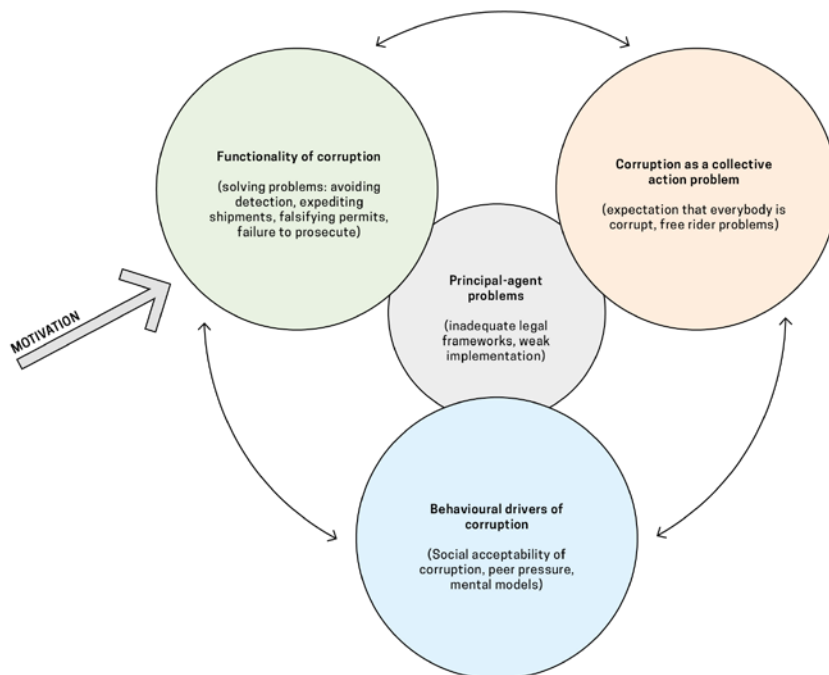
In other cases, corruption is the result of collective action problems. As Persson et al. (2013) argued, corruption becomes the only rational behaviour where individuals expect everybody else to be corrupt. A situation where political will to fight corruption is lacking (where a “principled principal” is absent) can not only render legal reforms ineffective but also send the message across society that corruption is a normalised behaviour and that not engaging will result in personal costs (or at the minimum missed opportunities) to “positive deviants”.

Tacconi and Williams (2020), for example, describe a case in South Africa of bribery in fisheries, where the knowledge that a bribe will in all likelihood be taken by someone else at some stage incentivises inspectors to accept bribes.

In other cases, corruption emerges out of decision making that is motivated by less than rational considerations such as peer pressure, prejudices and stereotypes, or automatic mental shortcuts triggered by environmental cues or other so-called behavioural factors. As discussed in Section 1.3., research on behavioural drivers of corruption reveals several different ways in which acts of corruption arise and become entrenched, stemming from decisions and behaviours that occur “despite people having good reason to act otherwise” (OECD, 2019).

While understanding the drivers of corruption is important for practitioners, a complicating factor is that several types of drivers may be at play in an interdependent, mutually reinforcing manner. In IWT the initial motivations to resort to corruption may be functional. For instance, to eradicate barriers (identifying locations of protected wildlife populations), to reduce frictions (secure free passage of goods or poachers/traffickers), or to enhance benefits (secure duplicate legal permits or expand access rights). In other words, corruption is often needed to solve problems that either exist or could arise during transactions and exchanges involved in IWT. However, IWT flourishes in contexts where corruption is also widespread. As Figure 4 illustrates, although the primary motivation to engage in corruption may be functional, IWT perpetrators very often operate where different drivers are already at play and reinforcing each other.

**Figure 4. Drivers of corruption interconnectedness**





It therefore seems logical that a type of corruption specific to IWT does not exist (see TRAFFIC, 2015a; UNODC, 2016; UNODC, 2020b). The mechanisms of the corrupt exchange are similar to those used for achieving other illicit goals and objectives. Pervasive tolerance of corrupt acts may be associated with some types of cultural norm (Klitgaard, 2017), which in turn might be reinforced by stereotypes about the normalisation of corruption and impunity, thereby creating an additionally challenging environment in which to enact real change.

Likewise, understanding that several different drivers of corruption may be at play is essential to understand why, despite many countries having good anti-corruption legal frameworks, abating corruption has proven to be such a difficult challenge in practice. Earlier, Figure 1 represented how a principal-agent approach – on which mainstream anti-corruption approaches and instruments are based – is often overshadowed and undermined by collective action problems, by certain social norms and cultural expectations, and by the fact that corruption can be a problem-solving mechanism.

Practitioners therefore need to understand the different drivers of corruption to ensure that anti-corruption interventions are addressing the root causes of the problem. Solutions to complex problems will inevitably require holistic approaches. For example, additional legal reforms are unlikely to have much impact where political will is lacking. Similarly, a social norms approach will not be helpful where corruption is a straightforward solution to problems associated with meeting essential needs. The next section looks at what is known about behavioural drivers of corruption as a step towards identifying such appropriate interventions.

### Key takeaways

- Corrupt behaviours associated with IWT can be driven by different factors, such as substandard institutional frameworks, opportunistic rule breaking, or weak monitoring and enforcement capabilities.
- In situations where corruption thrives, corrupt behaviours can be driven by:
  - collective action problems;
  - entrenched (informal) governance systems;
  - social and normative factors (as in a social or cultural prevailing norm that the majority engage in and outliers have a tendency to move towards) that normalise corrupt acts.
- These drivers, though very different, may reinforce and sustain corrupt behaviours in a particular context. This provides the backdrop to the highly functional objectives that corruption serves for IWT perpetrators.



## 2.3 Behavioural drivers of corruption

Conventional approaches to anti-corruption anticipate that people make rational decisions taking into account the incentives given by formal legal frameworks. The assumption is that strong legislative approaches disincentivise people to engage in corruption, and that, conversely, weak laws and regulations may incentivise corrupt acts.

Corruption continues to thrive however, including where well-designed formal legal frameworks are in place. As such, the determinant of corrupt behaviour cannot be solely explained as a rational choice informed by legal incentives. Anti-corruption researchers and practitioners have recently started to explore alternative policy perspectives that show promise in complementing “traditional” anti-corruption measures. Applying insights from the behavioural sciences to anti-corruption practices has proven to have great potential. This recognises that people often make decisions without taking into account formal (legal, administrative) incentives, and rely on factors such as mental shortcuts, default solutions to problems, and social and cultural expectations of acceptability (Baez Camargo, 2017).

Applying social and behavioural perspectives to research into the drivers of corruption is a relatively recent approach led by the Basel Institute on Governance (Basel Institute on Governance, 2021) and the Corruption, Justice and Legitimacy Program at Tufts University (Tufts University, 2021). While the “behavioural lens” has been applied elsewhere, including in the fields of public policy and international development (World Bank, 2015; OECD, 2018a), in recent years more and more interest in this perspective has grown amongst the anti-corruption community, as attested by an increase in the number of publications dealing with this topic (see for example U4, 2018; U4, 2020).

A fundamental theme in behavioural studies acknowledges that individuals in most situations do not make decisions in isolation from each other. Decision-making depends upon a range of intrinsic and extrinsic factors – the Socio-ecological Model (Bronfenbrenner, 1979) demonstrates influences across personal, social, community, and societal levels. This Problem Analysis focuses on social norms and mental models, which are types of behavioural influences highly relevant to the analysis of corruption.

### 2.3.1 Social norms and corruption

Some corrupt practices may be socially accepted, tolerated, or even expected, and therefore reinforced within the community even though individual members may find corruption to be against their values and morally questionable. In other words, social pressures can be so strong that they override individual preferences. The incentives to align with social norms and expectations can be particularly powerful in contexts where, due to resource scarcities and precarious livelihoods, strong personal connections sometimes constitute the only effective mechanism to pool scarce resources and provide access to goods, services, and even career opportunities (Jauregui, 2014; Ruud, 2000; Grodeland, Koshechkina, and Miller 1998; Ledeneva 1997 [for Russia and China]; Sneath 2002 [for Mongolia]; Chang, Chang, and Freese 2001, Baez Camargo, 2017, Church and Chigas, 2019).

Social norms of reciprocity and obligation to a group often constitute the shared principles that determine what is and isn't acceptable behaviour. As informal relationships and activities operate outside of a legal framework, trust and loyalty are the primary means by which informal transactions are cemented. In practice these norms can work to entrench corrupt behaviours, such as when a bribe is understood not as a one-off transaction but as the initiation of a relationship based on reciprocity. A bribe might actually be given to co-opt a "useful friend" into one's network; for example, to engage a checkpoint official in persistently turning a blind eye to suspect shipments and cargo.

Breaking social norms can lead to significant costs, such as social (as well as legal) sanctions. If a gift or favour is not reciprocated then gossiping, shaming, or social ostracising can ensue. Indeed, Baez Camargo et al. (2017a) found that, in some situations, corruption considered to align with norms of reciprocity and solidarity was strongly associated with status, respectability, and shaming. For example, a corrupt person who is rich and helps others is respected, while a person who is poor but adheres to the laws is considered useless. Several studies have found a fear of losing status to be a strong driver of behaviours associated with corruption (Baez Camargo et al., 2017a, Baez Camargo et al., 2021, Burgess et al., 2018).

There are many reasons why people may get involved in IWT that underline the relevance of understanding social ties and social norms to address IWT-enabling patterns of corruption. Incentives linked to potentially significant financial rewards for relatively low risk can be reinforced through social considerations (e.g. Moneron et al., 2020b; Prinsloo et al., 2021).

Gifts of an illicit nature might be deemed necessary to establish relationships and nurture social networks. Corruption is therefore often not only a product of the exchange; social ties are frequently the prerequisite for a corrupt exchange (Wyatt et al., 2018; Moreto et al., 2014; Travers et al., 2017; Moreto, et al., 2016; Bulkan and Palmer, 2008; van Uhm and Moreto, 2018; Massé et al., 2017; Kamat, 2019).

Unwritten understandings about reciprocity and loyalty may permeate and cement social ties between poachers and rangers. Van Uhm and Moreto (2018), for example, allude to how park rangers in Uganda have been known to accept bribes to mobilise their networks and ensure that monitoring and policing activities do not detect an IWT operation. Social understandings and pressures in hierarchical networks within the public sector can also exacerbate corruption risks associated with IWT (see Box 1 for an example from Cambodia).

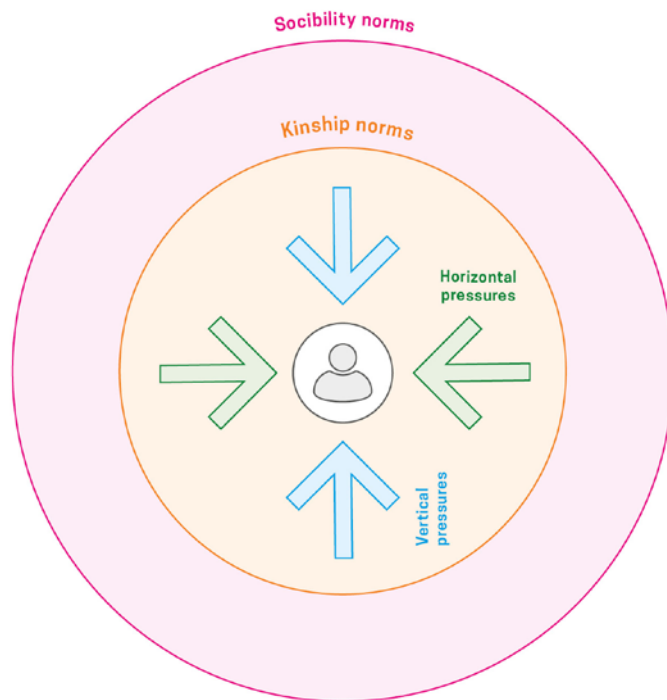
### **Box 1: Patronage practices in Cambodia**

In the Cambodian forestry sector, social pressures and collusive practices often take the form of hierarchical, reciprocally binding patronage relationships. Under pressure to generate revenue, officials within forestry departments often resort to extortion and bribery (for example enforcing a system of informal taxation of sorts on loggers), safe in the knowledge that they are protected in these activities by their patron. This pattern of money being passed up and protection being sent down offers clear corruption opportunities to traffickers in a country where forest decimation continues at alarming rates (Milne, 2015).

Expectations of reciprocity and traditions of gift giving and hospitality that are central to many collectivist cultures have been recognised as drivers of IWT in consumer markets, especially when the wildlife products are granted significant value and meaning. Concepts such as *guanxi* (Mandarin for relationships and networks) and *mianzi* (face) can, in certain circumstances, be akin to a bribe, currying favour or making the gift receiver more conducive to the gift giver's needs and asks (Burgess et al., 2018).

Any anti-corruption practices targeting the behaviours of individuals must take into account the many different social networks and associated pressures to which individuals might be subjected. Jackson and Köbis (2018) have proposed a useful framework that categorises social pressures into four types: horizontal (peer pressure), vertical (stemming out of hierarchical relationships), kinship norms (expectations about family obligations) and sociability norms (norms and expectations prevailing in the wider context) (Figure 5).

**Figure 5. Sources of normative pressures**



Source: Jackson and Köbis, 2018

### 2.3.2 Mental models and corruption

Everyone is exposed to social context and certain cultural experiences from a young age. They include the internalisation of common ideas through which to make sense of the wider world. These so-called mental models are collectively held preconceptions, stereotypes, or even worldviews that come to define what is considered to be “normal”. They define attributes expected from people in various roles (e.g. patrol officers always ask for bribes), institutions (the judiciary only protects the wealthy), national identities (Brazilians are excellent soccer

players), gender (men are breadwinners and women look after the children), and so on. Such perceptions about the generalised patterns of action can trigger automatic decision making and can also contribute towards justifying (consciously or unconsciously) behaviours that may or not be understandable on the basis of evidence or objective cost-benefit calculations (Stahl et al., 2017; Klitgaard, 2017).

In situations where mainstream narratives reinforce the idea that corruption is the norm, individuals have a heightened propensity to engage in corruption. Illicit actions can be justified (consciously or unconsciously) by the validation stemming from conventional wisdom that corruption is “simply the way things are done”, that “everybody else is doing it”, and that “dishonest behaviour is necessary to get ahead” (Kahan, 2003; Mauro, 2004; Dong, Dulleck and Torgler, 2009; Barr and Serra, 2009; Kotzian, 2011; Carson, 2013; Pfeiffer and Rose, 2014; Zaloznaya, 2014; Hoffman and Patel, 2017). Naturally, this may become a self-fulfilling prophecy, which can also reinforce other conventional narratives such as those that assume that impunity is the norm and/or that law enforcement agencies are ineffective, if not corrupt.

One of the relevant mental models associated with corruption encountered during research conducted by the Basel Institute on Governance and TRAFFIC concerns national identity and the images it conjures in the collective imagination (Baez Camargo, 2017; Burgess et al., 2018). This was particularly notable in the case of Uganda (Baez Camargo et al., 2017a), where research participants provided examples of expressions used to solicit a bribe that included the command to “act like a Ugandan”. Most of them associated “Ugandaness” with corruption, bribery, being driven by money, astuteness, and sharp-mindedness. Conversely, Rwandan participants identified national identity with values of integrity and protecting the collective good (Baez Camargo et al., 2017b). In Uganda, people commonly justified their actions by making reference to the many corruption scandals involving high-level political figures, on the grounds that if the elites can benefit from corruption why should average citizens not do so too? In TRAFFIC’s research, national identity was also found to be an especially persuasive behaviour change tactic in collectivist cultures such as those in China and Viet Nam (Burgess et al., 2018).

An Ipsos MORI study highlighted the relevance of leadership in shaping mental models about what are appropriate and acceptable behaviours (Branson et al., 2012). Related to this, according to a webinar participant, wildlife traffickers are now said to be actively avoiding the port of Dar es Salaam in Tanzania because there is a perception that the anti-corruption crusade led by the late president Magufuli has made it extremely difficult to bribe officials there (Focused Conservation, 2021).

In Uganda, Kassa et al., (2020) found several mental models used to justify poaching and participation in the trafficking of wildlife products (Box 2).

**Box 2: Mental models reinforcing acceptability of wildlife trafficking**

- Wildlife is not valuable
- Wildlife is a commodity
- Wildlife compete with humans for resources
- Wildlife trafficking is a benign form of informal trade
- Wildlife trafficking is perceived by others as legitimate
- Wildlife trafficking brings wealth and status

Source: Kassa et. al. 2020

Also in Uganda, van Uhm and Moreto (2018) describe how park rangers sometimes engaged in poaching. If such activity is considered “less illegal”, it opens the door to discretionary decision making, also justifying actions such as not checking the cargo of a truck in exchange for a gift because the potential offence is “not that bad”. Rangers have also been known to obtain seized goods and reintroduce them to the IWT market, which aligns with the mental model of wildlife being just another commodity.

**Key takeaways**

- Corrupt behaviours can in some situations be accepted, tolerated, or even expected.
- Irrespective of the law, social pressures and sanctions can fuel and entrench corrupt behaviours.
- Mental models, or collectively held preconceptions and stereotypes, shape the perceptions of expected behaviours of others.
- If corruption is believed to be “normal and everywhere” and IWT “not a serious crime”, such assumptions can trigger and/or justify illicit behaviours.

## 2.4 Understanding corruption and its drivers: Implications for IWT practitioners

Corruption is known to be an important enabler of IWT. However, corruption is a broad concept with many different potential manifestations. This makes general pronouncements about the need to fight corruption of limited use, unless specific types of corruption are identified as relevant. Corruption is furthermore a global phenomena: it is highly context sensitive and no country is totally spared from it. Therefore, IWT practitioners who wish to address corruption as an enabler must first undertake a meaningful diagnosis of the precise types of corruption that

represent the greatest obstacles to advancing conservation goals in each particular case. Different IWT markets and supply chains will involve different regions and actors, so the specific corruption risks will vary accordingly. A Political Ecology Analysis may be a suitable starting point (Nash, 2020).

Once key risks have been identified, it is critically important to understand the factors or drivers that are motivating or causing individuals to engage in the corrupt behaviours. As discussed, there are several kinds of drivers. Knowing which factors are at play in producing a particular corruption pattern is fundamental to designing effective interventions.

In this analysis, the focus is on behavioural drivers of corruption linked to IWT. A behavioural approach calls into question the essentially rational and calculative nature of corruption. Instead, it points to factors which support decisions that reproduce beyond the individual to generate collective patterns which, because they are repeated and reinforced, become deeply entrenched. Corruption in real life manifests itself less in the form of individual acts of misuse, but as collective practices and routine behaviours at the level of groups, networks, and even communities. Therefore, the focus and unit of analysis shifts from the individual to the group, highlighting the role of social norms, peer pressure, and cultural expectations as powerful drivers of peoples' "propensities" (rather than "mere" choices).

A key element to emphasise is how practices arising from deeply entrenched social norms and values (e.g. gift giving stemming out of norms of reciprocity and traditions of hospitality) can seamlessly penetrate the public (government) domain. Thus, the same action may be imbued with different normative implications depending on the actors and circumstances involved. To complicate things further, the abstract distinction between the public and private sectors is often blurred in situations where the state is weak and informal non-state actors wield substantial power and influence. This means that, once social norms and cultural practices are accounted for, the use of dichotomies (public/private, corrupt/non-corrupt, legitimate/illegitimate, etc.) becomes problematic.

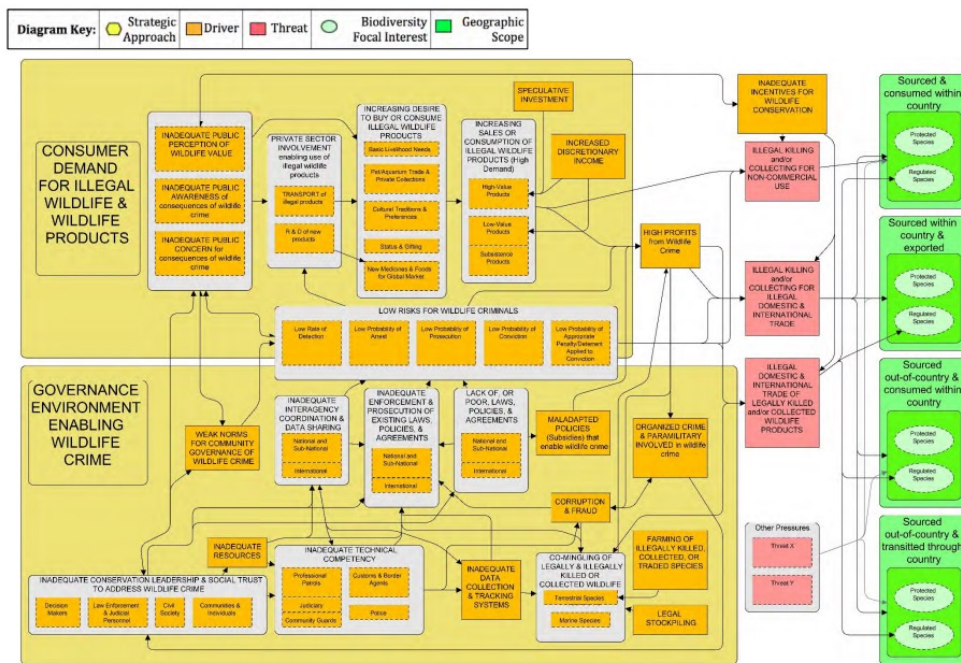
In practice, anti-corruption practitioners need to associate the correct nuances to their analysis of IWT and corruption issues to understand how specific actions and behaviours are understood by the very people who are involved in them. Where social norms and mental models are involved, often ambivalence is a given, as a gift easily morphs into a bribe and double standards are effortlessly applied. Understanding such nuances and complexities is a key factor for designing effective interventions.



# 3 Intervention and stakeholder mapping

This problem analysis highlights a nascent topic, namely how the corruption that enables IWT is fueled by behavioural as well as functional factors. As established in the previous section, understanding when and how this might be manifesting itself across different contexts and in specific cases is key to identification of effective Counter Wildlife Trafficking (CWT) interventions targeting corruption. Figure 6 depicts USAID’s general “Situation Model” for combatting wildlife crime illustrating the potential entry points as vast, thus emphasising the need to add nuance and clarity as to when and where behavioural CWT interventions might be appropriate.

**Figure 6. Situation model for combatting wildlife crime**



Source: Measuring Efforts to Combat Wildlife Crime (USAID, 2017)

Building upon earlier insights and discussion, the next step is to understand what is known about the design and relative effectiveness of behavioural anti-corruption CWT interventions. Perhaps unsurprisingly, the number of such interventions to tackle corruption that facilitates IWT is quite limited. Therefore, presented below is an inductive approach to review what is known about the effectiveness of the different types of behavioural interventions that have been tested to a) tackle IWT b) tackle corruption and c) tackle the corruption that enables IWT in particular.

## 3.1 Counter Wildlife Trafficking (CWT) interventions: types

This section reviews CWT interventions according to their goals and the types of approaches they adopt. The three main categories of CWT interventions to tackle IWT aim to:

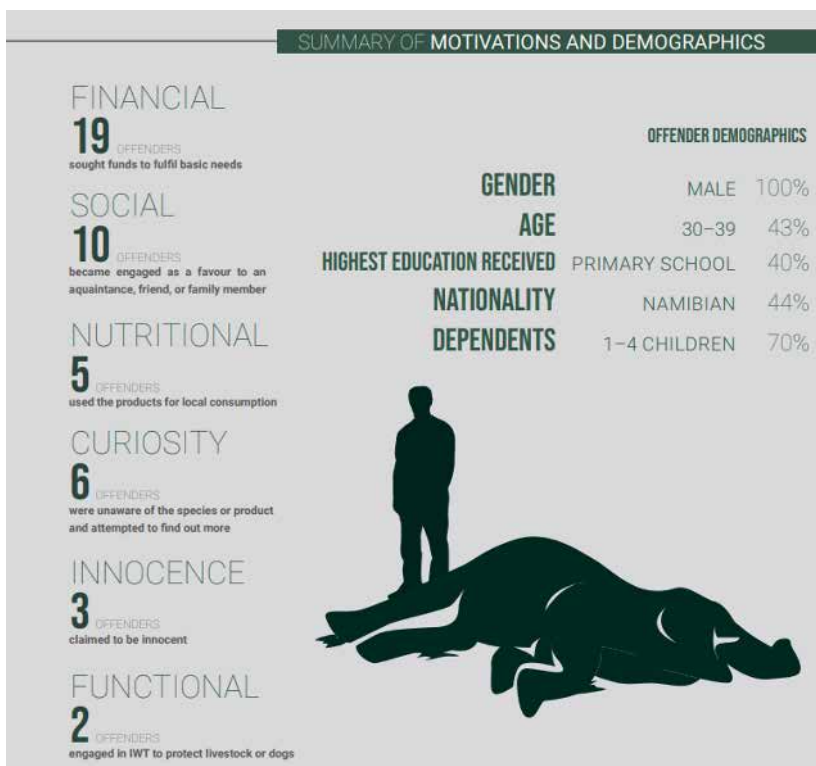
1. Stop poaching and thereby reduce supply.
2. Target trafficking to disrupt and ultimately dismantle criminal networks.
3. Reduce demand by addressing the motivations and understandings that inform consumers’ decisions.

These are considered under two headings as follows:

### 3.1.1 Interventions aimed at reducing supply of wildlife for illicit markets

These types of interventions typically focus on activities such as poaching and illegal logging, taking place where the wildlife is sourced. CWT activities can involve a repressive or preventive focus. The former is associated with law enforcement actions aimed at the detection, arrest, and conviction of poachers. Preventive approaches typically involve some form of engagement with communities living alongside wildlife who may participate in IWT for a variety of reasons, such as economic need, traditional hunting and logging practices, perceived higher social status acquired through the proceeds of IWT, a lack of alternatives, or even negative relationships between community members and protected area authorities (Biggs et al., 2016; Lotter and Clark, 2014; IIED, 2018). For example, interviews with 73 incarcerated offenders convicted of wildlife crimes in Namibia (Prinsloo et al., 2021) revealed motivations spanning financial, social, nutritional, curiosity, and “functional” reasons (see Figure 7).

**Figure 7. Motivations and demographics of wildlife traffickers in Namibia**



Source: Trading Years for Wildlife (Prinsloo et al., 2021)



### 3.1.2 Interventions aimed at disrupting and dismantling trafficking activities

IWT activities supplying end markets require a multitude of steps between the harvest, processing, accumulation, packaging, and transportation of wildlife goods undertaken by individuals, companies, and organised criminal networks that operate at a transnational level. Focusing on the networks as a whole, rather than the myriad activities targeting the individuals and companies within them, activities aimed at disrupting the operations of these networks include collecting intelligence, undercover operations, whistleblower mechanisms, collaboration with law enforcement authorities at the national and international levels, and monitoring of criminal cases. Other initiatives aimed at disrupting trafficking include engaging with private-sector actors from high-risk sectors (e.g. financial, e-commerce/social media, and transportation) to raise awareness of the risks and develop tools to help them detect suspicious transactions or shipments (United for Wildlife, 2021). Risk mitigation is a primary motivation for many private-sector actors potentially exposed to IWT.

### 3.1.3. Interventions aimed at reducing consumer demand for illegal wildlife

These types of interventions recognise multiple motivations for product purchase, acquisition, and use. These are included in Table 1 as follows:

**Table 1. Typology of motivations for consuming illegal wildlife products**

Category	Behaviours that represent...
Cultural	... the purchase or use of products in recognition or celebration of a specific facet of cultural heritage or tradition.
Emotional	... the purchase or use of products to fulfil hedonistic pleasure, e.g. for personal adornment or household display.
Financial	... the purchase or use of products for investment purposes, as a financial security strategy or similar.
Functional	... the purchase or use of products to fulfil an everyday purpose or function.
Nutritional	... the purchase or use of products to fulfil a simple need for protein or food.
Medicinal	... the purchase or use of products for perceived treatment of illness or promotion of wellness (i.e. curative /preventive).
Recreational	... the purchase or use of products as part of a leisure or pastime activity

<b>Reputational</b>	... the purchase or use of products for reputational gain or “face”, e.g. to gain currency in a business transaction.
<b>Social</b>	... the purchase or use of products for social gain – to impress a peer group with a newfound “status” or wealth.
<b>Spiritual</b>	... the purchase or use of products to bring “good luck” or good fortune in business or life.

Source: Burgess, 2016.

## 3.2 CWT interventions: approaches

In terms of approaches to operationalise CWT interventions, there are two main categories relevant to this study:

1. Traditional interventions that are largely “preventive” or punitive in nature and aim to tackle the systems and controls regulating the illegal harvest and trade of wildlife products.
2. Social and behaviour change (SBC) interventions that are largely “persuasive” in nature and focus on policy, social mobilisation, and individual behaviours determined by intrinsic and extrinsic factors.

The latter have more recently been applied to change the attitudes, norms, and behaviours of consumers of wildlife products.

### 3.2.1 Traditional approaches

Traditional approaches to CWT have focused on strengthening legislation and regulation, building the capacity of law enforcement and other implementing agencies, changing market incentives to discourage individuals from engaging in IWT, and running awareness and education campaigns. Efforts to improve the effectiveness of implementing legislation are also a facet.

In line with strategies to combat other illicit commodity markets, such as narcotics, weapons, or counterfeit products, traditional conservation approaches to address harmful wildlife trade have primarily focused on supply disruption and mitigation (e.g. UNODC, 2016; Burgess et al., 2018). Efforts try to ensure laws are better enforced and carry stronger penalties and deterrents, with information gathered on trade routes and smuggling methods to increase interdictions and seizures. Public engagement has featured less prominently and has focused on mobilising public sympathy for endangered animals, calling for policy changes, or raising awareness of laws (Burgess, 2016). Some brand building by membership-based NGOs has occurred via campaigns to increase funding for related actions.

More recent initiatives in wildlife end-use markets have started to focus on complementary actions, aiming to reduce consumer desire for illegally traded products. Initiatives have aligned with a demand reduction (DR) policy ambit, whilst not strictly conforming to the economic use of that term. In line with situational crime prevention models underpinning much recent CWT effort, the aim of DR

initiatives is to reduce the rewards criminals perceive for engaging in wildlife crime, in turn undermining incentives of high fiscal return for low risk (see e.g. Clarke, 1980). The theory of change is that by reducing consumer desire for illegal wildlife products, such incentives for traders diminish, while parallel efforts to increase the effort and effectiveness of law enforcement will increase the costs to e.g. conceal contraband and avoid detection along smuggling routes.

Figure 8 illustrates the theory of change developed by TRAFFIC in relation to different types of CWT interventions.

**Figure 8. CWT Interventions types and example theory of change<sup>3</sup>**



For the most part, these approaches rely on a cost-benefit analysis as the basis of individuals’ motivations to engage in IWT. Considering the array of preventive / punitive (e.g. laws, legislation, regulation, policies, penalties, deterrents, and the enforcement thereof) and persuasive (e.g. public campaigns, mass media messaging, public conduct drives, etc.) measures governments enact to combat wildlife crime, overall these combine to reduce the benefits and increase the risks and costs of engaging in IWT.

Effective law enforcement, investigations, interdictions, and seizures aim to exert a significant deterrence effect, which must be complemented by efforts to ensure an adequate enabling environment for change is in place. Examples include:

- corporate behaviours such as using codes of conduct and corporate social responsibility;
- auditing and certification processes to ensure legality and sustainability;
- developing alternative livelihoods and consumption behaviours;
- conservation and social marketing to make the desirable or “good” behaviours associated with these appealing.

<sup>3</sup> More information available at: <https://www.traffic.org/about-us/our-conservation-strategy/>

Other more conventional approaches centre on:

- education and awareness raising;
- providing information about the environmental damage and other costs generated by IWT;
- aiming to educate and empower individuals to resist and renounce IWT-related behaviours on the supply and the demand side.

Some supply-side CWT interventions, especially those used in conjunction with fauna conservation efforts, focus on changing community behaviours towards wildlife and IWT, manipulating material incentives and assuming existing social capital will be conducive to promoting change (Nyirenda et al., 2010, Minato et al., 2010, Hubsche and Shearing, 2018). A notable example is the “First line of Defence” (FLoD) approach to strengthening local community engagement in combating IWT. FLoD methodology is based on a theory of change that identifies four causal pathways for community-level actions, namely:

- a. strengthening disincentives for illegal behaviour;
- b. increasing incentives for wildlife stewardship;
- c. decreasing costs of living with wildlife; and
- d. supporting non-wildlife related livelihoods.

Several organisations, including the Behavioural Insights Team and TRAFFIC (2018a), argue that traditional interventions should do more to address the root causes of high-priority target audiences’ decisions to engage in IWT, buy IWT-related products, or engage in the corrupt behaviours fueling IWT (Akella and Allan, 2012; Burgess, 2016; TRAFFIC, 2018a; Olmedo et al., 2017). Such approaches may not be feasible in the case of illegally trafficked timber, where many of the productive forests are under ownership or management of large concessions, thereby limiting the scope for community-based interventions.

When behavioural factors are strongly at play, it is unlikely problems addressing undesirable behaviours are related to a lack of access to information, proper attitudes, the right incentives or sanctions, or a need for further regulation such as a ban or prohibition (OECD, 2018a). Indeed, the evidence overwhelmingly shows that information alone is a weak route to behaviour change when other barriers such as conflicting motives, hassle, ingrained habits, social norms, or non-conscious drivers of behaviour tend to dominate (Rare and BIT, 2019). Adopting interventions informed by behavioural insights help ensure such aspects are addressed.

### **3.2.2 Behavioural Insights (BI) approaches**

A behavioural change approach to tackle IWT is “one that uses cognitive, psychological and social science research, insight, evidence and approaches to influence the motivations, attitudes, values and actions” of those engaging in IWT (Burgess, 2019).

Although new evidence about applications of behavioural science to policy and development co-operation continues to grow, there are nonetheless some approaches that have been tested in the field of CWT and which hold promise.

**1 – The first category of BI uses a social influence approach.** Social influence refers to how behaviour is affected by what other people do, or by what other people think. Examples of social influence approaches include:

- **Addressing social norms:** Sometimes people may behave even against their personal preferences and beliefs if there is the expectation of a social norm that, if broken, will bring them shame or other socially relevant cost. For example, an Asian businessman who personally believes it is wrong to purchase rhino horn to offer as a gift to partners and clients, but does so out of the expectation that he will not be respected or taken seriously by his peers if he abstains (TRAFFIC and BIT, 2019).
- **Normative social information:** Promoting public campaigns and advertising messages to achieve a desired outcome on the basis that it is the socially accepted and correct behaviour. For example, placing signs at restaurants for tourists to be exposed to socially approved behaviours concerning illegal bushmeat consumption, stressing that most tourists do not condone its consumption (Wallen and Daut, 2018).
- **Opinion leaders and role models:** Using influential personalities, celebrities, religious leaders, and important business or political figures to pledge and appeal to people not to engage in IWT under the assumption that it matters who delivers the message and that social standing or fame convey credibility (Abrahamse and Steg, 2013; Wallen and Daut, 2018). For example, celebrity ambassadors who appear in public service messages to protect wildlife (TRAFFIC and BIT, 2019). Reformed poachers can also command significant persuasive influence and credibly articulate the benefits of embracing alternative livelihoods and the costs and threats of participating in poaching activities (Alim, 2021).

**2 – A second category of BI-informed approaches involves education and communication strategies.** Unlike conventional awareness raising and educational campaigns that commonly feature general information on legal issues and/or social and economic costs of IWT, adopting a behavioural approach entails targeting a selected and demarcated behaviour in a carefully targeted audience (Monroe, 2003). Examples include:

- **Formulating specific messages:** Using information about what is known about the attitudes and motivations around the selected behaviour in a compelling manner to decrease the likelihood that biases or prejudices might override the behaviour change message. For example, a general message such as “Save the animals” may allow the audience to recall examples of good behaviour that they have previously performed (e.g. making an environmentally friendly/ socially conscious purchase of clothes or a household item) and use this recollection to justify purchasing an illegal wildlife product – so-called “moral licensing”. More specific messaging may help to overcome this phenomenon (TRAFFIC and BIT, 2019).

- **Highlighting personal and short-term consequences:** Knowing the consequences of a potential action and wishing to avoid them is often a motivating factor for people to change their behaviour. However, people often struggle to estimate the magnitude of long-term costs. Focusing on immediate short-term and personal consequences of involvement in IWT is recommended (TRAFFIC and BIT, 2019).
- **Avoiding resorting to fear or shame:** Messaging employing shocking claims, adopting a lecturing style, giving a moralised commentary, or seeking to alarm people into feeling guilt for their “bad” behaviour is questionable in general but may also, from a behavioural science perspective, stimulate a counterproductive result (see Brennan and Binney, 2010; Burgess, 2016).
- **Triggering positive emotions:** Where changing behaviour is costly or difficult, people tend to resolve the guilt by reacting against the message: denial, defensiveness, or motivated avoidance of the issue. Eliciting emotions with positive attributes, such as pride at what you could do, can be more effective (see TRAFFIC and BIT, 2019).
- **Using a combination of logical and emotional arguments:** Other success factors for messaging include appealing to the heart as well as the head (i.e. using emotional and logical arguments); recognising and rewarding any “good” behaviour; and playing to peoples’ natural tendencies towards loss aversion, cognitive biases, and heuristics (Burgess et al, 2018).
- **Challenging conventional wisdoms:** Media coverage and public attention to changing trends and attitudes can help to challenge collectively held prejudices and mental models. Interviews with individuals who chose not to engage in IWT practices or coverage of high-profile arrests or enforcement actions can change peoples’ perceptions about IWT being a high-profit, low-risk activity. Highlighting positive deviant examples in a corrupt system helps to convince people that not all officials are corrupt, while stories of successful law enforcement operations can also serve as a deterrent to IWT engagement.
- **A key goal is tackling the default assumption that corruption is the normal state of affairs.** Conventional information-based interventions must factor this in and use the right type of information and messages that emphasise not only the costs of corruption but also question the normative assumptions and conventional wisdom about it.
- **Highlighting the unequal distribution of the costs of corruption:** The extent of public sector corruption should be compared with the high levels of hardship it causes to the majority of “ordinary” people, while a small minority is unaffected.
- **Avoiding reinforcing negative preconceptions:** Overcommunicating the extent of corruption may backfire as it can confirm expectations that corruption is the norm, that it is unavoidable, and that it goes unpunished.

**3 – A third category of BI-informed approaches involves nudges.** Nudges comprise positive reinforcement and/or indirect suggestions of ways to influence the behaviour and decision making of groups or individuals without significantly prohibiting alternative options or altering incentives. Nudging contrasts with other ways to achieve compliance, such as education, legislation, or enforcement.

Examples include:

- **Aligning the consumer intention-action gap:** When consumers of IWT express a wish to avoid purchasing illicit goods but nevertheless continue to do so, there might be opportunities to apply a nudge to make it easier to take the desired decision. For example, Wallen and Daut (2018) suggest developing text messaging programmes or smartphone applications that provide information about known IWT retailers and alert consumers to alternative choices.
- **Making it easy:** The strongest lesson from behavioural science is to make the desired behaviour as easy, effortless, and friction-free as possible. The smallest of details can make a big difference if it increases the amount of effort it takes to achieve a behaviour (Defra, 2008; BIT, 2015).
- **Providing clear alternatives:** Research suggests that people are more likely to change their purchasing decisions when they are offered a clear alternative (TRAFFIC and BIT, 2019).

### Key takeaways

- Wildlife trafficking is countered by a mix of legislation, enforcement, and penalties alongside social and behaviour change approaches with consumers.
- Traditional approaches aim to address individual incentives to engage in IWT by reducing the benefits and increasing risks and costs. The focus is on strengthening legislation and regulation and their application, as well as changing market incentives and promoting campaigns to change behaviours of those who supply and consume illegal wildlife products.
- Behaviour change approaches aim to address policy, social mobilisation, and individual behaviours determined by intrinsic and extrinsic factors associated with IWT. The focus is on influencing the motivations, attitudes, values, and actions of those engaging in IWT.
- Promising behaviour change approaches harness social influence, education and communication, and nudges.



## 4 A review of experiences applying BI in CWT programmes and interventions

A review of the literature and stakeholder mapping reveals that the conservation community in general, and IWT practitioners in particular, have amassed a rich array of tools and experiences for informing their programmes and interventions. Few, however, explicitly tackle the corruption that enables IWT. Even fewer deal with behavioural drivers or use behavioural insights to tackle IWT-related corruption.

This section provides an overview of the behavioural approaches that have been developed and applied to tackle IWT, acknowledging that the majority have so far been delivered with consumers. Box 3 lists some of the resources available.

### Box 3: Resources available to support interventions

- [www.changewildlifeconsumers.org](http://www.changewildlifeconsumers.org) is a community of practice and comprehensive repository of behavioural tools and approaches aimed at addressing demand for wildlife products. Examples of the many practical tools available include a Toolkit for reducing the desire for ivory, practical guidelines for choosing the right messenger, and messaging approaches for demand reduction.
- Oxford University's [Oxford Martin Programme on the Illegal Wildlife Trade](#), a collaborative initiative focusing on consumer demand and behaviour change aspects of IWT.
- [WWF's Fuller Symposium](#) focusing on the science of behaviour change and effective methods that influence behaviour (WWF, 2017).
- The [3C Network for Countering Conservation-related Corruption](#) convened by WWF, Transparency International UK and the Durrell Institute of Conservation and Ecology (DICE) at the University of Kent (UK).
- The [People Not Poaching Communities and IWT Learning Platform](#) – a joint project between the IUCN CEESP/SSC Sustainable Use and Livelihoods Specialist Group (SULi), the International Institute for Environment and Development (IIED) and TRAFFIC – fosters learning and experience sharing to support and engage communities in initiatives to reduce poaching and IWT.

### 4.1 CWT demand-side interventions and BI

There are several public campaigns that seek to raise awareness whilst applying a social influence approach by enlisting celebrities to endorse messages against IWT. They include the WildAid ambassadors and the Wild for Life campaign of UNEP and CITES. Similarly, WWF's "Travel Ivory Free" campaign used a combination of visual displays and high profile-figures as ambassadors to convince tourists and



locals in China and South-East Asian countries to stop buying ivory and purchase sustainable gifts instead (Behavioral Insights Team, 2019; WWF, 2020). Between 2017 and 2021, the intention to purchase ivory dropped from 43% to 22%; almost half (Globescan, 2021).

Other examples demonstrate how a BI-informed message can be formulated, making it much more precise and targeted compared to more conventional messaging often found in public awareness campaigns. Indeed, a review of CITES Parties' experiences in implementing demand reduction campaigns (CITES, 2019) led to the CITES Secretariat identifying that:

“It is critical that Parties understand the difference between well-targeted demand reduction strategies through behaviour change and mass campaigns to raise awareness of the plight of endangered species and the various negative impacts of poaching and wildlife trafficking. Although both approaches have their merits, the former is more imperative in order to address the urgent needs.”

Highlighting the principle of focusing on costs to the individual, one study aimed at reducing the purchase of exotic pets found that informing potential purchasers about the risk of zoonotic disease or legal consequences of exotic pet ownership reduced intention to buy. However, providing information on animal welfare or conservation risks did not achieve the same effect (TRAFFIC and BIT, 2019).

In Viet Nam, the “Chi Initiative” aimed to address new and emerging uses of rhino horn – associated with status and medicinal applications. TRAFFIC originally developed this behaviour change initiative using findings from comprehensive consumer research, which identified wealthy Vietnamese businessmen between 35 and 55 years old as a key rhino horn user group. The overarching message of Chi is that success, masculinity, and good fortune come from an individual's strength of character and not from the use of rhino horn and other illegal wildlife products (TRAFFIC, 2017). Self-expressed intent to purchase rhino horn in the future dropped amongst the target audience from 16% in 2013 to 9% in 2017.

Similarly, Breaking the Brand runs interventions, particularly in Viet Nam, to reduce consumer demand for rhino horns. Their approach is based on evidence showing that rhino horn users care about the status and prestige they believe usage bestows upon them in the eyes of their peers. In contrast, appealing to their empathy, for example by showing pictures of poached rhinos, is not effective. The research identified two possible motivations to stop: a) negative effects on health; and b) perceived negative impact on status. The initiative's strategy is to create uncertainty about the safety of the product and to trigger status anxiety, akin to earlier campaigns on tobacco and road safety (Johnson, 2014).

Some of the most successful efforts to change consumer behaviour in China and Viet Nam have used a twin-track approach whereby BI is utilised to complement conventional programmes and initiatives. One track involves efforts, activities, and communications around implementing a strong law enforcement response (e.g. ensuring the laws are appropriate, perceived to be an adequate deterrent, and effectively enforced) while restricting consumer choice (e.g. by retailers removing

products from sale, or manufacturers using alternatives). The second track involves those influential with consumer groups and other target audiences issuing messaging to help inspire and shape individual motivation. (TRAFFIC, 2018).

## **4.2 CWT supply side interventions and BI**

### **Approaches targeting social norms and cultural values**

In a study analysing conservation policies and practices in southern Africa, Hübschle and Shearing (2018) make a strong case for the involvement of communities in anti-poaching programmes. Their recommendations go beyond the common approaches that centre on material incentives and increasing the costs of engaging in IWT to suggest that local culture should be harnessed. They propose appealing to the concept of “ubuntu”—the collective values representing personhood, humanity and morality that are closely linked to values of solidarity. The authors point out that while many responses focus on individuals, through recruitment of informants, capacity building of park rangers etc., community goodwill is crucial for success. Harnessing ubuntu could mean promoting a vision where defending wildlife can be understood as promoting a sense of pride within a community. This would help counterbalance the stereotypes of rhino kingpins and poachers, who have emerged as essentially “self-styled freedom fighters”. However, it is unclear whether this approach has actually been operationalised and implemented.

An interesting initiative working with locally held values was Big Life Foundation’s “Maasai Olympics”, which sought to replace traditional lion-killing with a sport competition for Maasai warriors to prove their worth to their community (World Bank, 2018; Biggs et al., 2016; Massé et al., 2017; IIED, 2016; IIED, 2018). In a similar initiative, Maasai warriors were enlisted in a programme whereby participants were encouraged to protect lions rather than killing them (Hazzah et al., 2014; Manfredo, et al., 2017). This programme was built on sustaining the social standing and values of these warriors who were previously associated with lion killing. Simultaneously, the programme worked with the broader community to maintain recognition of the group’s values and social prestige following this transition of warrior behaviour.

Appealing to local, deeply held values can also be implemented through top-down government interventions. For example, a Fatwa issued in 2014 against IWT in Indonesia playing on religion and shared social norms (Wallen and Daut, 2018) stated “all activities involving hunting or trading endangered species are forbidden, unclean.” Subsequently, Kerinci Seblat Tiger Protection and Conservation and the Lingkar Institute reported that communities were more afraid of breaking the Fatwa than breaking the law (Iswadi, 2018).

### **Strategic use of information to curb poaching**

The NGO Eagle Network has teams that support investigations and law enforcement operations and a dedicated media team to publicise their activities and, importantly, their successes (OECD, 2018b; Bale, 2016). This latter aspect is critical and complements the law enforcement approach, especially where there is a high expectation of impunity. This is because it works to contradict conventional wisdoms, while it is also known that people tend to underestimate the risks of being caught in illicit activities (Sundstrom, 2019).

A very different approach to strategic communications is exemplified by the work of Greenhood in Nepal where, despite having some of the world's stiffest punishments for IWT, red sandalwood poaching has persisted on a massive scale, with research suggesting the main motivation is a perception of easy extra money. Rather than using conventional means to reach out to individuals, Greenhood has done so through music. They use traditional music and have produced videos where the negative consequences of IWT are sung about in relation to traditions and cultural values, and they have proved extremely effective. (See [Greenhood program description](#)).

### Key takeaways

- There are positive experiences in applying behaviour change approaches to counter the demand for and supply of wildlife.
- Examples of demand-side interventions include public awareness campaigns enlisting celebrities to endorse messages against IWT and more targeted messages informed by behavioural influence approaches, addressing individual costs and status.
- Examples of supply-side interventions include approaches that harness social norms and appeal to deeply held cultural values, making strategic use of information that shows successes in enforcement efforts, and incorporating communications content and methods that are appropriate to local contexts.

## 4.3 CWT interventions and programmes addressing corruption

Of all the CWT programmes and interventions reviewed for this study, only three incorporate an explicit anti-corruption component:

1. The Eagle Network purposefully seeks to detect and expose corruption in the criminal cases in which they have been involved, from arrests through until the cases reach the courts.
2. PALF, a collaboration between the Congolese Ministry of Forest Economy and Sustainable Development, the Aspinall Foundation, and the WCS, supports anti-IWT law enforcements, interventions, and trainings.
3. Wildlife Direct has an Eyes in the Courtroom programme which, although not explicitly labelled as an anti-corruption initiative, is clearly designed and well positioned to detect whether corruption is preventing cases from progressing as they should.

## 4.4 What do we know about the relative effectiveness of SNBC informed CWT interventions?

This section provides a general overview of the effectiveness of CWT interventions on the understanding that lessons of what has worked in achieving CWT goals in particular contexts can provide a basis to help formulate potential entry points for social and behaviour change approaches to tackle corruption. There have been some efforts to measure the impact of such interventions (see Coalition to End Wildlife Trafficking Online, 2020; USAID Wildlife Asia, 2020; CITES, 2019) although one of the expert interviewees expressed significant doubts about valid attribution of causality on the basis of the limited monitoring and evaluation data available.

A review of initiatives that have sought to engage communities in tackling IWT by Roe and Booker (2019) revealed both the wide range of different community engagement approaches utilised to date and the lack of regular, robust monitoring and impact measurement. The sheer diversity of initiatives makes it difficult to draw clear, quantifiable conclusions about what does and does not work. Nevertheless, the authors argue that community-based approaches can be effective in reducing poaching and/or improving wildlife numbers. Among the common success factors Roe and Booker and others have identified are:

- 1. Ensuring initiatives are locally driven and responsive to the local context.** Special attention should be given to involving communities in defining solutions, not just engendering a culture of passive reliance on externally provided benefits (see also Rizzolo et al., 2016). Successfully involving communities necessarily means developing long-term and trusting relationships with the communities (Travers et al., 2017)
- 2. Understanding the root causes of the behaviour of interest.** It is essential to develop proactive rather than reactive strategies to address a particular behaviour. Many initiatives highlight the importance of long-term relationships between project implementers and local people based on shared objectives, trust, and reciprocity.
- 3. Forming multi-stakeholder partnerships.** Partnerships are often central to successful initiatives, both to get support and also to generate the necessary mix of skills. However, it should be noted that a lack of co-operation between organisations has been cited as a problem in some countries with interventions overlapping and competing for territory. Conversely, there could be benefits to targeting different groups with different messages since there is no one approach to changing everyone's behaviour (Olmedo et al., 2017).
- 4. Identifying and building on existing cultural norms.** While communities need to be central to conservation efforts, Minato, et al. (2010) consider that interventions should also aim to work with naturally occurring social processes, not against them. They argue for research on social norms in different contexts that may lead to the development of more powerful policy instruments aimed at long-term social change rather than short-lived measurable outcomes. Jones et al. (2008) stress the importance of evaluating how traditional values and informal institutions that contribute to conservation may be affected by the introduction of law enforcement approaches. Box 4 illustrates this with reference to a case study from Madagascar.

**Box 4: Taboos and social norms support conservation in Madagascar**

→ There are several examples of how public policies, including those aimed at attaining conservation goals, can be made more effective by formulating them in a manner which is consistent with traditional cultural values and social norms. Jones and colleagues have described one such approach in Madagascar that appealed to the concept of Fady, which is a system of traditional taboos or prohibitions, to prevent poaching, logging and trade of protected species. This approach holds promise, notably because it harnesses deeply held social norms relating to acceptable behaviours in the handling of wildlife. The social sanctions that rule breakers incur, can be more powerful in practice than those emanating from a formal legal framework, especially when state implementation capabilities in remote areas is challenging. In fact, a powerful lesson learned is that, as the authors conclude: “where capacity to enforce external conservation rules is limited, informal institutions may provide the only effective regulations.”

Source: Jones et al., 2008.

- 5. Rigorously monitoring and documenting outcomes.** There is a need to understand better the effectiveness of different approaches to build knowledge that can be used to inform future project, programme, and policy design.
- 6. Clearly identifying and focusing on the behaviours and outcomes of interest.** Defining the behaviour of interest and investigating associated attitudes, norms, motivations, and incentives is key (McKenzie-Mohr, 2011; Olmedo et al., 2017). This requires pre-intervention research, which can also establish baselines against which to compare post-intervention data for evaluation (Ferraro and Pattanayak, 2006). Having measurable objectives is also a key, although rarely adopted, component of intervention design (Salafsky et al., 2002; Powers, 2004; Sweeney, 2011). Such careful attention is not always present. St John et al. (2010) reviewed social psychology theories of behaviour and how they have been used in the context of conservation and natural resource management. They found that many studies focus on general attitudes towards conservation rather than attitudes towards specific behaviours of relevance to conservation, and thus have limited value in designing interventions to change specific behaviours (e.g. reduce hunting of a threatened species). In addition – and because attitudes may not necessarily be reflected in behaviours – it is important to investigate whether there may be other factors at play such as social norms or circumstances related to need that may be sufficiently strong to override personal preferences.
- 7. Knowing when a behavioural approach is not adequate or insufficient.** Olmedo et al. (2017) evaluated several interventions taking place in Viet Nam to address rhino poaching and through key informant interviews sought to identify implementation challenges and to evaluate whether they followed best practice. The most pressing difficulties related to a lack of law enforcement action and effectiveness. The findings suggest that addressing the major barriers to success

in countering IWT is key and that behavioural approaches can be utilised to target citizens, civil society, and the private sector in a complementary manner.

Another important consideration is to assess the relative importance of different drivers in generating incentives to engage in IWT. When long-standing and deep systemic issues (such as poverty, lack of access to land, ethnic conflict) are at play, it is unlikely that approaches to tackle attitudes will be helpful. Box 5 illustrates this.

#### **Box 5: Lessons from a community conservation programme in Uganda**

→ Infield and Namara recount an experience with working with communities in a national park in Uganda. For a period of seven years communities were supported, educated and trained on a variety of topics to do with dialogue, conflict reduction, access to community resources and community development projects. The programme succeeded in shifting individual attitudes, whereby community members came to more strongly appreciate the importance of the conservation of park resources. This attitudinal change was, however, not mirrored in any meaningful change in the desired behaviours. While the participant communities did become more active in demanding more resources be made available to them for community projects, the high levels of poaching and illegal grazing prevailing before the intervention were not reduced. Furthermore, the changes in attitudes proved to be fragile and vulnerable to contradicting actions observed from park rangers and other law enforcement actors. Problems and conflict involving issues of land ownership and lack of economic opportunities continued to problematise the shifting of activities away from those more consistent with supporting conservation goals. A possible implication from the shortcomings of this programme is that, in addressing complex conservation problems, engaging just one stakeholder group and working with them to change attitudes and promoted behavioural change is unlikely to yield the desired results unless other key stakeholders are also engaged and their respective attitudes and behaviours addressed. Similarly, promoting attitudinal change and education without addressing underlying systemic problems of economic need and unresolved conflict will likely be ineffective as the incentives to change behaviours will likely be overpowered by considerations of basic needs.

Sources: Infield and Namara, 2001

**8. Being aware of unintended consequences and doing no harm.** Promoting robust impact measurement for CWT interventions is an area where progress can be made, making it possible to promote peer learning and ensure increasing value for money of CWT interventions. A gap seems particularly problematic in traditional areas of anti-corruption work, such as focusing on training and other capacity building activities for law enforcement officials. In this regard, the EAGLE network has noted that “increasing [the] capacity of a corrupt system is not only ineffective but counter-productive.” The problem, it argues, lies in a lack of appropriate standards to measure impact, allowing the “capacity building approach’ to continue regardless of its lack of results” (OECD, 2018a). Consequently, an important consideration is whether well-intentioned interventions might simply fuel corruption or produce other negative unintended consequences.

Travers et al. (2017) assessed community-based initiatives and concluded that, when introducing material incentives, there is a risk that households from neighbouring communities or further afield may be incentivised to migrate to villages receiving support. Such a honeypot effect has been observed at protected areas around the world (Wittemyer et al., 2008; Ferraro and Kramer 1997; Balmford and Whitten, 2003). There is also a risk that neighbouring communities might decide to increase wildlife crime so that their village is included in an intervention or that the undesirable behaviour may simply be displaced to other places.

“Doing no harm” should consider whether any intervention, if successful and well received, can be sustainably maintained over a long-term. Travers, et al. (2017) warn that failure to commit to working long-term with target villages can result in ill-feeling towards wildlife and conservation activities, which their research suggested can drive further wildlife crime. A doing no harm approach also means extensively researching and understanding underlying pressures and conflicts that, if unaddressed, may drastically undermine the activities and goals of an intervention. Infield and Nmara (2001) describe how even in cases of successful community-based initiatives, attitudes among community members can be volatile and a single incidence of negative behaviour (for example by park staff) can sour relations with a community for months or even years. Other work also suggests that the existence of fundamental and unresolved conflicts makes it difficult to improve relations between the park and a community, despite implementation of programmes aimed at doing so (Scott, 1998).

Another consideration is how to prevent elite capture when there are pre-existing power exclusions of vulnerable groups or social cleavages and inequalities within communities (Laws, 2017; Biggs et al., 2016).

### Key takeaways

- The evidence base on the relative effectiveness of CWT programmes and interventions is nascent.
- Emerging insights on success factors in supply-side interventions suggest that they should: 1) fit the context; 2) address the root causes of the behaviour; 3) rely on multi-stakeholder partnerships; 4) build on existing norms; and 5) be regularly monitored and evaluated.
- The emerging evidence base on behaviour change approaches to counter wildlife trafficking suggests that it is important to narrow down precisely the behaviours and outcomes of interest.
- It is equally important to recognise when such approaches are not feasible, or may have unintended and harmful consequences.



## 5 Meta analysis

This section brings together the key implications from the preceding review concerning IWT-related corruption, drivers thereof, and CWT interventions. The intention is to propose a framework to help practitioners identify how they might incorporate behavioural insights in their own CWT initiatives.

### 5.1 Need for more nuanced and precise evidence

It seems clear that behavioural elements can be both a driver and justification for participating in IWT. Behavioural drivers are the social pressures and beliefs associated with the social acceptability of engaging in IWT. Behavioural justifications include moral licencing and other self-serving justifications providing “reasons for questionable behaviours and making them appear less unethical” (Shalvi et al., 2015). It is clearly important to devise interventions that can help address the tensions between social legitimacy and the illegality of IWT.

The same logic applies to developing approaches to combat corruption that enables IWT. A general issue is that clear evidence is often lacking of exactly where and how corruption arises in the form of regularised patterns of behaviour that fuel IWT. It does not suffice to indicate all the points where corruption may hypothetically or anecdotally occur.

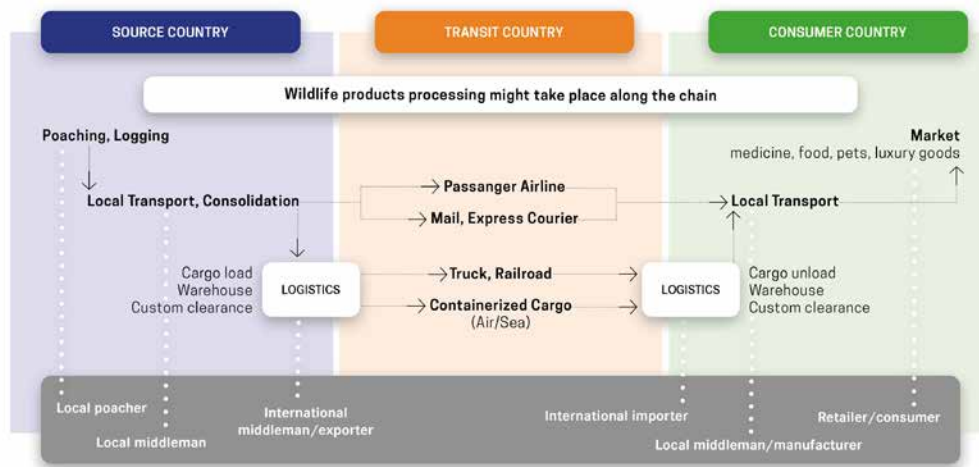
There are some laudable programmes and initiatives that have been successful in implementing behaviour change approaches to tackle IWT-related corruption that can provide guidance and inspiration to practitioners.

As evidence emerges about the scale and the ways in which IWT proceeds with impunity, it makes intuitive sense that corruption must be to blame for the ineffectiveness of any legal and institutional mechanisms in place to protect wildlife and address wildlife crimes. However, as intuitive as that may seem, often the existence of corruption is assumed more than proven. For example, as one of the experts interviewed for this study noted, a large number of arrests yet very few prosecutions implies, but does not prove, that high-level political interference is preventing cases from proceeding according to law.

There is also evidence suggesting that corruption along the IWT supply chain is not necessarily systemic but is used only if, when, and where it is necessary (Costa, 2021; Kassa et al., 2020). Therefore, the specific areas or mechanisms where corruption is most instrumental to IWT will be context dependent, as will the exact corrupt behaviours and the actors engaging in them. Furthermore, every country where IWT is undertaken has one or more roles (e.g. supply market, transit country, consumer market) which will influence where IWT activity (and corruption) will tend to be concentrated (Figure 9).



**Figure 9. An illustrative IWT value chain**



Source: TRAFFIC, 2015b.

A high level of precision in narrowing down and identifying concrete behaviours where corruption is derailing anti-IWT efforts is precisely what is needed to allow the design of effective interventions. The box below provides examples of cases where corruption patterns around IWT have been identified.

**Box 6: Highly detailed case studies of corruption in IWT**

- Corruption in the Cameroon timber sector. A series of publications by TRAFFIC (Ngeh, 2016; Mahonghol et al., 2016a; Mahonghol et al., 2016b; Mahonghol et al., 2016c; Mahonghol et al., 2016d)
- Forest crimes in Gabon and the Republic of the Congo (EIA, 2019)
- Corruption involved in disappearing rhino horn seizures in Mozambique (Save the Rhino, 2015)
- Abuse of CITES permits and the role of corruption (Outhwaite, 2020)
- Gifting of wildlife products to gain power and influence in Vietnam (GlobeScan, 2018)
- Corruption in Kenyan ports as an obstacle to fighting IWT (Outhwaite and Little, 2020)

Practitioners should be clear about the priorities, outcomes, and goals that are being pursued and question where, in which specific cases, and around what specific behaviours would addressing corruption make a difference in generating the hoped-for conservation gains. A full diagnosis should reveal where exactly tackling corruption will be relevant in significantly improving the desired outcomes.

Developing rigorous and context-sensitive indicators to measure progress outcomes and impact, and therefore ascertain the effectiveness of interventions to tackle IWT-related corruption, is extremely challenging but necessary (Tacconi and Williams, 2020). For example, indicator 31 of the ICCWC Toolkit examines the provisions against corruption in national legislation that can be used in the investigation and prosecution of wildlife crime (UNODC, 2012). However, as discussed above, this only covers one type of driver and many countries that have reasonably strong anti-corruption legal frameworks continue to experience high levels of corruption. USAID has laid out a strategic approach to counter IWT that focuses on corruption and includes useful, concrete, project-level indicators which can be reviewed by practitioners and tailored to particular initiatives and goals (USAID, 2017).

It might also be important to identify other compounding factors that enable IWT and accurately establish their relative importance with respect to corruption issues. For example, in situations where there is limited state capacity and weak governance, many IWT activities will likely go undetected. While corruption might be very prevalent in such instances, it would be wrong to assume that is the case.

Although it is taken as read that corruption correlates with poverty, it is often difficult to be sure which way the causality goes. Negin et al. 2010 suggest it is bi-directional. Tacconi and Williams (2020) cite research indicating that during the period 2002–2017, the annual poaching rates across 53 sites in Africa were strongly correlated to demand for ivory in China. Between countries and between sites, poaching rates were positively correlated to indicators of corruption and poverty. Poverty and need are clearly powerful drivers behind the motivation of many of those engaging in IWT at the wildlife sources. The relationship is however not automatic or linear, Knapp et al (2017) in their study found that the lowest-income households were not poaching. As corruption strongly correlates with other variables, it is complicated to figure out where things can begin to unravel to effect change.

Therefore, it is important to try to generate evidence and guidance that can help practitioners diagnose where and how exactly corruption enables IWT in their respective contexts, and to assess its relative impact in overall IWT outcomes compared with other factors such as weak monitoring and poverty.

### Key takeaways

- Behavioural elements drive corruption and IWT. However, further evidence is needed on where and how behavioural elements sustain the corruption that enables IWT.
- It is also important to keep building the evidence base on how corruption enables IWT, considering more precisely the scale, functionality, and other compounding factors in relation to the larger value chain.
- It is crucial to identify precisely the specific corrupt behaviours that derail CWT interventions and develop approaches to tackle them specifically. Developing indicators and measuring progress, outcomes, and impact should be tailored to fit this context.

## 5.2 A framework to identify intervention entry points

This problem analysis proposes a framework (outlined below) to guide practitioners on how to identify entry points for anti-corruption behavioural interventions based on impact and feasibility across four key areas of the IWT chain, namely:

1. Source
2. End markets
3. Trafficking
4. Policy (cutting across 1–3 and encompassing law enforcement, prevention, and persuasion).

### There are two criteria:

**1 Impact** refers to assessing each situation to identify those areas, behaviours, shortcomings, or challenges where, if progress is achieved in addressing IWT-enabling corruption, it will have a significant effect. Practitioners should think in big-picture terms when identifying intervention opportunities. The aim is not to fight each and every form of corruption plausibly associated with IWT, but to choose the corruption issues that pose the biggest challenges to achieve macro-level outcomes.

The next step is ascertaining whether a behavioural intervention is adequate for addressing these priority areas. Assessing impact necessitates practitioners aligning their programmes and initiatives with high-level goals and outcomes such as UN Resolution 69/314 (UN, 2015, currently being updated) and CITES Resolution Conf. 17.6 (CITES, 2016). When a critical mass of practitioners align their indicators and impact measurement approaches, it will be possible to generate data that can be compared and aggregated, to build on different experiences, and to learn what works with a greater degree of certainty. Ultimately this would be of benefit to the entire CWT community.

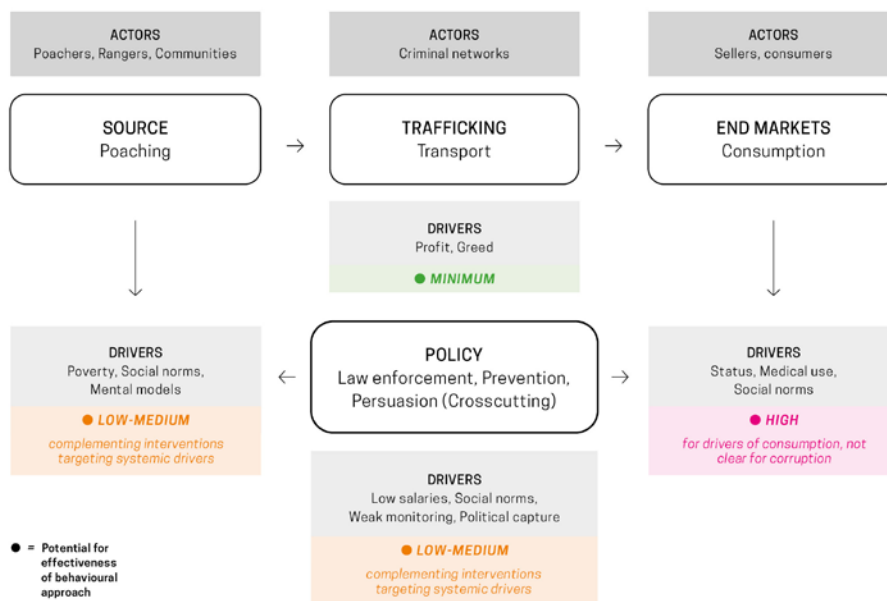
**2 Feasibility** recognises that some corruption challenges associated with IWT might be relatively easy to address while others are extremely complex, relating to deeply entrenched political and social dynamics and therefore impossible to address in the short to medium term. Strategically identifying and implementing the steps that incrementally support the pursuit of medium- and long-term goals is important. Feasibility also includes identifying any windows of opportunity for effecting change when they are available. Tacconi and Williams (2020) describe a wildlife conservation situation in India with pervasive corruption where all the parties involved preferred the status quo. This made “the identification of options to reduce the illicit use of resources and corruption extremely challenging.” Therefore, identifying where tensions may be, for instance where personal preferences clash with perceived social norms such that people have incentives to move away from the status quo, can help in assessing the feasibility of designing and implementing a successful intervention.

Assessing feasibility requires an understanding of the drivers of the relevant corrupt behaviours. Some drivers will be amenable to a behavioural approach, in others a behavioural element can usefully complement other approaches, and

sometimes a behavioural approach will be inadequate. Context mapping is a process that can be used to visualise this and engage multiple stakeholders in decision making about priorities and the way forward (Woodrow, 2016).

Table 2 summarises the analytical framework to assess entry points for behavioural interventions to tackle IWT-enabling corruption, illustrating the different dimensions that come into play to undertake an assessment. Figure 10 visualises this process.

**Figure 10. Identifying entry points for anti-corruption behavioural CWT interventions**



**Key takeaways**

- The behavioural framework proposed guides practitioners to identify entry points for anti-corruption behavioural interventions across four key areas of the IWT chain: source, end markets, trafficking, and policy.
- Criteria 1 is impact: assessing the potential contribution of an intervention that aims to counter key corruption challenges.
- Criteria 2 is feasibility: assessing the complexity and windows of opportunity for an intervention that aims to counter corruption.
- Effectiveness of anti-corruption behavioural interventions will tend to be greater where there is evidence of behavioural drivers at play in fuelling or reinforcing patterns of corruption.
- CWT interventions adopting a behavioural insights will often be most useful as a complement to other approaches that tackle other drivers of corruption such as poverty or profit.

**Table 2. Framework to assess entry points for behavioural interventions to tackle IWT-enabling corruption**

Areas	Types of drivers of IWT-enabling corruption	Feasibility considerations	Impact considerations	Types of corruption that could be targeted
Source	<ul style="list-style-type: none"> <li>– Poverty</li> <li>– Lack of access to land</li> <li>– Resource tenure</li> <li>– Social norms</li> <li>– Mental models</li> </ul>	<p>Often several different drivers are at play.</p> <p>Structural drivers like poverty, low salaries of rangers, and lack of access to land/tenure issues are powerful and need to be addressed.</p> <p>Behavioural insights to address social norms and/or mental models of corruption can complement interventions tackling structural drivers.</p>	<p>Experts consulted agreed that tackling corruption at the source would have significant impact on high-level IWT goals, because it has the potential to decrease poaching levels significantly.</p>	<ul style="list-style-type: none"> <li>– Rangers accepting bribes to alert traffickers of monitoring patrol schedules.</li> <li>– Community members believe bribing to avoid detection of wildlife goods is acceptable.</li> </ul>
Trafficking	<ul style="list-style-type: none"> <li>– Greed</li> <li>– Profit</li> <li>– Social norms</li> <li>– Mental models</li> </ul>	<p>Traffickers at the highest levels of transnational criminal networks have a primary motivation of greed and the desire for wealth. Developing a behavioural approach in this area is likely to be much less impactful than a pure law enforcement approach.</p> <p>Low- to medium-level traffickers will likely be affected by poverty and lack of economic opportunity as well as social norms and prejudices prevalent in their contexts.</p> <p>Behavioural insights to address social norms and/or mental models of corruption can complement interventions tackling structural drivers. However, the drivers of corruption incentivising individuals at this level will likely be systemic (non-IWT specific). Addressing them could necessitate joining forces with other stakeholders for whom corruption is a priority issue. This is a low feasibility endeavour at least in the short to medium term.</p>	<p>Disrupting and disarticulating trafficking networks at the highest level would have a great impact on the overall conservation issue.</p> <p>Tackling the social norms and mental models that support the acceptability of corruption, enabling low- to medium-level trafficking to thrive, could have a significant impact on the conservation issue.</p>	<ul style="list-style-type: none"> <li>– Bribing of public officials at exit and entry points (ports, airports, customs).</li> <li>– Bribing of police at road checkpoints.</li> <li>– False declarations and fraudulent permits.</li> </ul>
Policy	<ul style="list-style-type: none"> <li>– Low salaries</li> <li>– Hierarchical networks</li> <li>– Political interference</li> <li>– Fear of reprisals</li> <li>– Peer pressure</li> <li>– Social norms</li> </ul>	<p>Corruption in law enforcement is typically a principal-agent problem, linked to weak state monitoring and enforcement capacities.</p> <p>However, the evidence indicates officials working in law enforcement are also impacted by social pressures and mental models similar to those prevailing in the local context.</p> <p>Behavioural insights could be explored as a complement to conventional principal-agent measures to tackle corruption in law enforcement institutions. Again, corruption in this area will be a problem affecting stakeholders beyond IWT, thus suggesting the desirability of building cross-thematic anti-corruption initiatives and networks.</p>	<p>Combatting corruption in the law enforcement and criminal justice institutions involved in acting upon IWT cases would have a significant impact.</p> <p>Successful convictions of “big fish” are needed to destabilise trafficking networks. Such high-level cases can additionally be instrumental in increasing the perceived risk of detection, countering stereotypes about impunity and triggering additional deterrence effects.</p>	<ul style="list-style-type: none"> <li>– Bribery at different points along the law enforcement and criminal justice system.</li> <li>– Coercion, extortion, and peer pressure within law enforcement institutions.</li> </ul>
End markets	<ul style="list-style-type: none"> <li>– Status</li> <li>– Social norms</li> <li>– Cultural values</li> </ul>	<p>Drivers of demand for wildlife products prominently consist of considerations about status, respectability, and other factors associated with sociality and culture. An illegal wildlife product could be gifted to curry favour. It could be used in place of a monetary bribe to secure favourable access rights and land tenure, or evade scrutiny and free passage for illegally transported goods.</p>	<p>The Social and Behaviour Change initiatives aiming to reduce demand for illegal wildlife products could make more explicit links to tackling corrupt acts that involve the purchase and gifting or other misuse of illegally traded and acquired wildlife products. More links could be made between existing IWT-focused legislation and that covering corporate malpractice, greed, and similar.</p>	<ul style="list-style-type: none"> <li>– Combatting corporate and other types of gifting of illegal wildlife products, as a proxy for a monetary bribe.</li> </ul>

# 6 Recommendations

## 1 Innovate

Adopt new interventions that build on existing evidence and pilot innovative methodologies and theories of change to overcome the limitations of conventional anti-corruption instruments. Developing interventions that consider networks as well as individuals could be implemented to tackle corruption that is fueled by social norms and peer pressure.

Identified entry points for prioritised pilot interventions:

- **Peer-led interventions to tackle the social acceptability of corruption.**  
Work with individuals who are socially influential and well connected in the communities of interest to act as champions to disseminate messages of behavioural and attitudinal change. They could include professional, religious, women-led or other networks, and take advantage of pride in collective identity or adherence to the principles in a faith. They could also use a commercial driver, e.g. to set businesses apart for their integrity and desire to break new ground, whilst building brand awareness and attracting new business and clients. Suggested targeted behaviours could include:
  - **Bribe taking or acceptance by park rangers**, whether passively receiving money offered or actively demanding money, to turn a blind eye to poaching practice being conducted locally.
  - **Community-level peer pressure** to engage in IWT and addressing the prowess perceived within the community for those making money from illicit acts.
  - **Corporate gifting** to turn a blind eye to illegal wildlife product consumption or to curry favour amongst those influential in the criminal justice system.
  - **Issuance of fraudulent permits** for logging and other forms of natural resource extraction, alongside the transport of goods across provincial borders or to other countries.

## 2 Harness others' efforts

Build and strengthen networks beyond the IWT/conservation movements to make efficient investments, generate synergies, and promote win-win collaborations around the joint challenge of corruption in other sectors, such as drug trafficking, extractives, and human rights.

Identified entry points for prioritised pilot interventions:

- **Regionally focused multi-stakeholder anti-bribery campaigns.**  
Collaborate with practitioners from other sectors to identify patterns of bribery that collectively affect them. Suggested targeted behaviours could include bribe taking by police and other key law enforcement actors: corruption in this sector will have an impact across different thematic areas.

- **Building on existing efforts and momentum at the national level.**  
Take advantage of existing anti-corruption initiatives such as the “Furnace Blazing” campaign led by Vietnamese Communist Party General Secretary Trong to combat influence peddling through corporate gifting and the 2019 Vietnam Corruption Barometer.

### 3 Go deeper

Understand fully the issues being addressed and how the development and implementation of behaviour change campaigns can be improved and further operationalised to support anti-corruption goals. Monitoring and evaluation is essential to improve the success of any CWT interventions.

Identified entry points for prioritised pilot interventions:

- **Approaches to measure individual behaviour and social norm changes.**  
Use a mix of quantitative and qualitative methods, such as randomised control trials, pre- and post- intervention comparisons, survey vignettes, Unmatched Count Technique, and other approaches to obtain baseline and outcome measurements for monitoring and evaluation.

Suggested targeted behaviours could include:

- **Social acceptability of bribery** amongst park rangers.
- Intention, tolerances towards and claimed past practice around **corporate gifting behaviours**.

### 4 Fill the gaps

Identify areas and stakeholders not already considered who could provide new impetus and impact to anti-corruption initiatives. For instance, has there been sufficient attention to the prevalence of corruption in law enforcement agencies charged with detecting, investigating, prosecuting, and sanctioning wildlife crimes? More nuanced evidence of the modalities in which corruption compromises law enforcement and associated drivers would be the basis for operationalising new approaches to anti-corruption in support of CWT.

Investigate supporting and empowering civil society to counter corruption in the IWT sector: this approach has proven effective in other areas.

Identified entry points for prioritised pilot interventions:

- **Social accountability initiatives** often begin with capacity-building and awareness-raising elements, which can usefully be informed by behavioural insights.
- Suggested targeted actions could include **prototyping various messages** geared at addressing commonly held mental models and stereotypes that normalise corruption and confer social acceptability on those engaging in IWT.



## 5 Complement

Use behavioural insights to amplify the effectiveness of conventional law enforcement and alternative livelihood interventions. For example, highlighting success stories of effective public audits, expenditure tracking exercises, or the number of corruption cases prosecuted can set a precedent, contradict conventional wisdoms, and deter people from engaging in corruption.

Identified entry points for prioritised pilot interventions:

- **Programmes to strengthen the response capacity of agencies** charged with enforcing the law in IWT cases could be complemented by targeted messaging informed by behavioural insights.
- Suggested targeted actions could include messaging on strengthened **monitoring of codes of conduct breaches and enforcement of disciplinary actions**, formulated such that conventional wisdoms and corruption reinforcing the mental models of officials are selectively targeted.

# References

Abrahamse, W. and Steg, L. (2013). Social influence approaches to encourage resource conservation: A meta-analysis. *Global Environmental Change* 23(6): 1773–1785.

Akella, A.S. and Allan, C. (2012). *Dismantling Wildlife Crime: Executive Summary*. TRAFFIC, Cambridge, UK. [https://www.traffic.org/site/assets/files/7385/dismantling-wildlife-crime\\_2.pdf](https://www.traffic.org/site/assets/files/7385/dismantling-wildlife-crime_2.pdf)

Akerlof, K. (2019). *A review of social norms for informing the reduction of corruption in natural resources management*. DOI: 10.13140/RG.2.2.21000.78080

Albanese, J. (2011). *Transnational Crime and the 21st Century: Criminal Enterprise, Corruption, and Opportunity*. New York: Oxford University Press.

Alim, A.N. (2021). *Stop the Illegal Wildlife Trade: The reformed poacher who became a ranger*. <https://www.independent.co.uk/stop-the-illegal-wildlife-trade/reformed-poacher-ranger-stop-illegal-wildlife-trade-b1764029.html>

Anagnostou, M., Mwedde, G., Roe, D., Smith, R., Travers, H. and Baker, J. (2020). Ranger perceptions of the role of local communities in providing actionable information on wildlife crime. *Conservation Science and Practice* 2(6).

Baez Camargo, C. (2017). *Can a Behavioural Approach Help Fight Corruption?* Basel Institute on Governance, Policy Brief 1, May 2017. <https://baselgovernance.org/publications/policy-brief-1-can-behavioural-approach-help-fight-corruption>

Baez Camargo, C., Bukuluki, P., Lugolobi, R., Stahl, C. and Kassa, S. (2017a). *Behavioural influences on attitudes towards petty corruption: a study of social norms, automatic thinking and mental models in Uganda*. UK Department for International Development, London, UK. <https://baselgovernance.org/publications/behavioural-influences-attitudes-towards-petty-corruption-study-social-norms-0>

Baez Camargo, C., Gatwa, T., Dufitumukiza, A., Stahl, C. and Kassa, S. (2017b). *Behavioural influences on attitudes towards petty corruption: a study of social norms, automatic thinking and mental models in Rwanda*. UK Department for International Development, London, UK. <https://baselgovernance.org/publications/behavioural-influences-attitudes-towards-petty-corruption-study-social-norms-automatic>

Baez Camargo, C., Bukuluki, P., Sambaiga, R., Gatwa, T., Kassa, S. and Stahl, C. (2020). Petty corruption in the public sector: A comparative study of three East African countries through a behavioral lens. *African Studies*, 79(2): 232–249.

Baez Camargo, C., Costa, J., and Koechlin, L. (2021). Informal networks as investment in East Africa. *Global Integrity Anti-Corruption Evidence Programme (GI-ACE)*.

Bale, R. (2016). How Saving One Chimp Led to a New Kind of Anti-Poaching Group. National Geographic. <https://www.nationalgeographic.com/animals/article/ofir-drori-wildlife-corruption-laga> [Accessed 11th February 2022].

- Balmford, A. and Whitten, T. (2003) Who Should Pay for Tropical Conservation, and How Could the Costs Be Met? *Oryx*, 37, 238-250.
- Barr, A., Serra, D. (2009). The Effects of Externalities and Framing on Bribery in a Petty Corruption Experiment. *Experimental Economics* 12: 488–503.
- Basel Institute on Governance. (n.d.). *Research*. <https://baselgovernance.org/public-governance/research-projects> [Accessed April 2021]
- Behavioural Insights Team (2019). *Behavior Change For Nature: A behavioral Science Toolkit for Practitioners*. <https://www.bi.team/publications/behavior-change-for-nature-a-behavioral-science-toolkit-for-practitioners/>
- Biggs, D., Cooney, R., Roe, D., Dublin, H.T., Allan, J.R., Challender, D.W.S., and Skinner, D. (2016). *Conservation Biology* 31 (1): 5-12.
- BIT (2015). [https://www.bi.team/wp-content/uploads/2015/07/BIT-Publication-EAST\\_FA\\_WEB.pdf](https://www.bi.team/wp-content/uploads/2015/07/BIT-Publication-EAST_FA_WEB.pdf)
- Branson, C., Duffy, B., Perry, C. and Wellings, D. (2012). *Acceptable Behaviour? Public opinion on behaviour change policy*. <https://www.ipsos.com/sites/default/files/publication/1970-01/sri-ipsos-mori-acceptable-behaviour-january-2012.pdf>
- Brennan, L. and Binney, W. (2010). *Fear, guilt, and shame appeals in social marketing*. *Journal of Business Research*, 63(2): 140–146.
- Bronfenbrenner, U. (1979). *The ecology of human development: experiments by nature and design*. Cambridge: Harvard University Press.
- Bulkan, J., and Palmer, J. (2008). Breaking the rings of Forest Corruption: Steps Towards Better Forest Governance. *Forests, Trees and Livelihoods* 18 (2): 103-131.
- Burgess, G. (2016). Powers of Persuasion. *TRAFFIC Bulletin* 28(2): 65–73.
- Burgess, G. (2019). Changing Corrupt Behaviors through an INTEGRITY Framework. <https://www.worldwildlife.org/pages/tnrc-video-behavior-change-webinar>
- Burgess, G., Zain, S., Milner-Gulland, E.J., Eisingerich, A.B., Sharif, V., Ibbett, H., Olmedo Castro, A. and Sohl, H. (2018). *Reducing demand for illegal wildlife products*. TRAFFIC, Cambridge, UK. <https://www.traffic.org/publications/reports/reducing-demand-for-illegal-wildlife-products/>
- Burgess, G. and Broad, S. (2020). Evolving evaluation: exploring new measures to assess the impact of end-market interventions to address harmful wildlife trade. *TRAFFIC Bulletin* 34(2): 77–88. <https://www.traffic.org/site/assets/files/13362/evolving-evaluation.pdf>
- Burgess, G. and Verissimo, D. (2021). *A Briefing Paper on Research Methods to Identify the Drivers and Dynamics of Demand and Impact of Demand Reduction Initiatives*. TRAFFIC, Cambridge, UK. <https://changewildlifeconsumers.org/site/>

[assets/files/1563/traffic\\_briefing\\_note\\_research\\_methods\\_to\\_identify\\_drivers\\_and\\_dynamics\\_of\\_demand\\_final.pdf](#)

Carson, L.D. (2013). Deciding to Act Corruptly. *SSRN Scholarly Paper No. ID 2305628*. Social Science Research Network, Rochester, NY.

Carter, B. (2017). Using behavioural insights to address complex development challenges. *K4D Helpdesk Report*.

CITES (2016). *Prohibiting, preventing, detecting and countering corruption, which facilitates activities conducted in violation of the Convention*. Res. Conf. 17.6. [https://cites.org/sites/default/files/document/E-Res-17-06\\_0.pdf](https://cites.org/sites/default/files/document/E-Res-17-06_0.pdf)

CITES (2019). Elephant Trade Information System (ETIS). <https://cites.org/eng/prog/etis>

CITES (2019). *Final Consultant's Report: Review of Demand Reduction Initiatives by CITES Parties*. CoP18 Inf. 4. <https://cites.org/sites/default/files/eng/cop/18/inf/E-CoP18-Inf-004.pdf>

Coalition to End Wildlife Trafficking Online (2020). *Offline and in the wild*. <https://www.endwildlifetraffickingonline.org/our-progress>

Cooney, R., Roe, D., Dublin, H., Phelps, J., Wilkie, D., Keane, A., Travers, H., Skinner, D., Challender, D., Allan, J. and Biggs, D. (2016). From Poachers to Protectors: Engaging Local Communities in Solutions to Illegal Wildlife Trade. *Conservation Letters*, 10(3): 367–374.

Costa, J. (2021). *Working Paper 35: Social network analysis applied to illegal wildlife trade between East Africa and Southeast Asia*. Basel Institute on Governance, [https://baselgovernance.org/publications/SNA\\_IWT](https://baselgovernance.org/publications/SNA_IWT)

Chang, C.S., Chang, N.J., Freese, B.T., 2001. Offering gifts or offering bribes? Code of ethics in South Korea. *Journal of Third World Studies* 18 (1): 125–139

Church, C., and Chigas, D. (2019). Understanding Social Norms: A Reference Guide for Policy and Practice. *Henry J. Leir Institute*. [https://sites.tufts.edu/ihs/files/2019/10/SN\\_CorruptionRefGuide\\_AUG2019-linked.MR\\_.pdf](https://sites.tufts.edu/ihs/files/2019/10/SN_CorruptionRefGuide_AUG2019-linked.MR_.pdf)

Defra (2008). *A Framework for Pro-Environmental Behaviours*. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69277/pb13574-behaviours-report-080110.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69277/pb13574-behaviours-report-080110.pdf)

Dong, B., Dulleck, U., Torgler, B. (2009). Social norms and corruption, in: Ciccone, A. (Ed.), *Proceedings of the European Economic Association and the Econometric Society European Meeting*. Presented at the European Economic Association and the Econometric Society European Meeting, Barcelona Graduate School of Economics, Catalonia, Spain, pp. 1–48.

EIA (2014). Vanishing Point – Criminality, Corruption and the Devastation of Tanzania's Elephants. <https://eia-international.org/report/vanishing-point-criminality-corruption-and-the-devastation-of-tanzanias-elephants>

EIA (2017). *The Shuidong Connection: Exposing the global hub of the illegal ivory trade*. <https://eia-international.org/wp-content/uploads/EIA-The-Shuidong-Connection-FINAL.pdf>

EIA (2019). Toxic Trade: Forest Crime in Gabon and the Republic of Congo and Contamination of the US Market. [https://content.eia-global.org/posts/documents/000/000/830/original/Toxic\\_Trade\\_EIA-web.pdf](https://content.eia-global.org/posts/documents/000/000/830/original/Toxic_Trade_EIA-web.pdf)

Ferraro, P.J. (2005). Corruption and conservation: the need for empirical analyses. A response to Smith & Walpole. *Oryx* 39(3): 257–259.

Ferraro, P.J. and Kramer, R.A. (1997). Compensation and Economic Incentives: Reducing pressures on protected areas. In R. Kramer, C. van Schaik, and J. Johnson (eds.). *Last Stand: protected areas and the defense of tropical biodiversity*. New York: Oxford University Press.

Ferraro, P.J., and Pattanayak, S.K. (2006). Money for Nothing? A Call for Empirical Evaluation of Biodiversity Conservation Investments. *PLOS Biology* 4(4): e105.

Focused Conservation (2021). Online webinar, March 2021. [https://focusedconservation.org/webinar\\_episode2/](https://focusedconservation.org/webinar_episode2/)

Globescan (2021). Demand Under the Ban. China Ivory Consumption Research. [https://3ng5l43rkkzc34ep72kj9as1-wpengine.netdna-ssl.com/wp-content/uploads/2021/10/WWF\\_GlobeScan\\_China\\_Ivory\\_Consumption\\_Research\\_2021\\_Report.pdf](https://3ng5l43rkkzc34ep72kj9as1-wpengine.netdna-ssl.com/wp-content/uploads/2021/10/WWF_GlobeScan_China_Ivory_Consumption_Research_2021_Report.pdf)

Gore, M., Ratsimbazafy, J. and Lute, M. (2013). Rethinking Corruption in Conservation Crime: Insights from Madagascar. *Conservation Letters*, 6(6): 430–438.

Grodeland, A.B., Koshechkina, T.Y., Miller, W.L., 1998. “Foolish to Give and Yet More Foolish Not to Take”. In-Depth Interviews with Post-Communist Citizens on Their Everyday Use of Bribes and Contacts. *Europe-Asia Studies* 50 (4): 651–677.

Harrison, E., Dzingirai, V., Gandiwa, E., Nzuma, T., Masviele, B. and Ht, N.. (2015). *Progressing CBNRM in Zimbabwe*. PLAAS Policy Brief 35.

Hazzah, L., Dolrenry, S., Naughton, L., Edwards, C.T.T., Mwebi, O., Kearney, F., and Frank, L. (2014). Efficacy of Two Lion Conservation Programs in Maasailand, Kenya. *Conservation Biology* 28 (3): 851–860.

Hoffman, L.K., and Patel, R.N. (2017). Collective Action on Corruption in Nigeria: A Social Norms Approach to Connecting Society and Institutions. *Chatham House Report*.

Hübschle, A. and Shearing, C. (2018). *Ending wildlife trafficking: Local communities as change agents*. DOI: 10.13140/RG.2.2.11973.81123.

IIED (2016). Engaging communities to combat illegal wildlife trade: a Theory of Change. *Briefing*.

IIED (2018). Local communities: the overlooked first line of defence for wildlife. *Briefing*.

Infield, M., and Namara, A. (2001). Community attitudes and behaviour towards conservation: an assessment of a community conservation programme around Lake Mburo National Park, Uganda. *Oryx* 35 (1): 48-60.

INTERPOL (2020). *Wildlife crime: closing ranks on serious crime in the illegal animal trade*. <https://www.interpol.int/en/News-and-Events/News/2020/Wildlife-crime-closing-ranks-on-serious-crime-in-the-illegal-animal-trade>

Iswadi (2018). *Community Effort and Initiatives to tackle illegal wildlife trade. Actions in Bengkulu. Sumatera*. Online slideshow. <https://www.slideshare.net/IIEDslides/community-effort-and-initiatives-to-tackle-illegal-wildlife-trade-actions-in-bengkulu-sumatera>

Jackson, D. and Köbis, N. (2018). *Anti-corruption through a social norms lens*. <https://www.cmi.no/publications/6772-anti-corruption-through-a-social-norms-lens>

Jauregui, B. (2014). Provisional agency in India: Jugaad and legitimation of corruption. *American Ethnologist* 41 (1): 76-91.

Johnson, L (2014). Breaking the Brand of Rhino Horn in VietNam: the first 12 months. [http://www.rhinosourcecenter.com/index.php?s=87dae108eb1c5c3e683a9ef5cd-b3ed5f&act=refs&CODE=ref\\_detail&id=1402022312](http://www.rhinosourcecenter.com/index.php?s=87dae108eb1c5c3e683a9ef5cd-b3ed5f&act=refs&CODE=ref_detail&id=1402022312)

Jones, J.P.G., Andriamarivololona, M.M., and Hockley, N. (2008). The Importance of Taboos and Social Norms to Conservation in Madagascar. *Conservation Biology* 22 (4): 976-986.

Kahan, D.M. (2003). The Logic of Reciprocity: Trust, Collective Action, and Law. *Michigan Law Review* 102 (1): 71-103.

Kamat, V.R. (2019). Dynamite Fishing in a Marine Protected Area in Tanzania: Why Youth Perceptions Matter. *Coastal Management* 47(4): 387-405.

Kassa, S., Baez-Camargo, C., Costa, J., and Lugolobi, R. (2020). A worm's-eye view of wildlife trafficking in Uganda - the path of least resistance. Working Paper 33, Basel Institute on Governance, <https://baselgovernance.org/publications/working-paper-33-worms-eye-view-wildlife-trafficking-uganda-path-least-resistance>

Kideghesho, J., Røskaft, E. and Kaltenborn, B. (2006). Factors influencing conservation attitudes of local people in Western Serengeti, Tanzania. *Biodiversity and Conservation*, 16(7): 2213-2230.

Klitgaard, R. (2017). *On culture and corruption*. Paper presented at the Public Integrity and Anti-Corruption workshop at Nuffield College, Oxford, June 13, 2017. <https://www.bsg.ox.ac.uk/sites/default/files/2018-05/BSG-WP-2017-020.pdf>

Knapp, E., Peace, N. and Bechtel, L. 2017. Poachers and Poverty: Assessing Objective and Subjective Measures of Poverty among Illegal Hunters Outside Ruaha National Park, Tanzania. *Conservation & Society* 15, (1): 24-32. <https://doi.org/10.4103/0972-4923.201393>.

- Kotzian, P., 2011. *Cosi fan tutte: Information, Beliefs, and Compliance with Norms. Zeitschrift für Soziologie.* 40 (4): 158–173.
- Laws, E. (2017). *The political economy of the illegal wildlife trade.* K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.
- Lawson, K. and Vines, A. (2014). *Global Impacts of the Illegal Wildlife Trade The Costs of Crime, Insecurity and Institutional Erosion.* Chatham House, LONDON, UK. <https://www.chathamhouse.org/sites/default/files/public/Research/Africa/0214Wildlife.pdf>
- Lemieux, A. and Clarke, R. (2009). The International Ban on Ivory Sales and its Effects on Elephant Poaching in Africa. *British Journal of Criminology* 49(4): 451–471.
- Lotter, W. and Clark, K. (2014). Community involvement and joint operations aid effective anti-poaching in Tanzania. *PARKS* 20(1): 19–27.
- Mahonghol, D., Ringuet, S., Nkoulou, J., Amougou, O.G. and Chen, H.K. (2016a). *Les flux et les circuits de commercialisation du bois : le cas du Cameroun.* Edition TRAFFIC. Yaoundé, Cameroun et Cambridge, Royaume-Uni. <https://www.traffic.org/site/assets/files/1340/timber-trade-flows-routes-cameroon-french-xs.pdf>
- Mahonghol, D., Cheteu, L.B., Ngeh, P., Ringuet, S., et Chen, H. K. (2016b). *Evaluation de la mise en oeuvre du système de traçabilité du bois au Cameroun.* Edition TRAFFIC. Yaoundé, Cameroun et Cambridge, Royaume-Uni. <https://www.traffic.org/site/assets/files/1340/evaluation-implementation-timber-tracing-system-french.pdf>
- Mahonghol, D., Fondjo, T., Ngeh P., Ringuet, S. and Chen, H.K. (2016c). *Feuille de route du comité national de coordination multi-acteurs pour l'application de la législation forestière au Cameroun.* Edition TRAFFIC. Yaoundé, Cameroun et Cambridge, Royaume-Uni. <https://www.traffic.org/site/assets/files/1340/development-roadmap-stakeholders-national-co-ordination-committee-french.pdf>
- Mahonghol, D., Mbe, N. L., Ngeh P. (2016d). *Développement d'éléments de base à la mise en place d'un « outil informatisé pour la surveillance de commerce du bois au Cameroun.* Edition TRAFFIC. Yaoundé, Cameroun et Cambridge, Royaume-Uni. <https://www.traffic.org/site/assets/files/1340/transparency-timber-legality-system-french.pdf>
- Manfredo, M., Bruskotter, J., Teel, T., Fulton, D., Schwartz, S., Arlinghaus, R., Oishi, S., Uskul, A., Redford, K., Kitayama, S. and Sullivan, L. (2017). Why social values cannot be changed for the sake of conservation. *Conservation Biology* 31(4): 772–780.
- Martini, M., 2013. *Wildlife crime and corruption.*
- Massé, F. (2019). Anti-poaching's politics of (in)visibility: Representing nature and conservation amidst a poaching crisis. *Geoforum* 98: 1–14.
- Massé, F., Gardiner, A., Lubilo, R. and Themba, M. (2017). Inclusive Anti-poaching? Exploring the Potential and Challenges of Community-based Anti-Poaching. *South African Crime Quarterly* (60).



- Mauro, P., 2004. The Persistence of Corruption and Slow Economic Growth. *IMF Staff Paper* 51 (1): 1–18.
- McKenzie-Mohr, D. (2011). *Fostering sustainable behavior: An introduction to community-based social marketing* (3rd ed.). Gabriola Island, BC: New Society.
- Milne, S. (2015). Cambodia's Unofficial Regime of Extraction: Illicit Logging in the Shadow of Transnational Governance and Investment. *Critical Asian Studies* 47 (2): 200-228.
- Minato, W., Curtis, A., and Allan, C. (2010). Social Norms and Natural Resource Management in a Changing Rural Community, *Journal of Environmental Policy & Planning* 12 (4): 381-403.
- Moneron, S., Brock, B. and Newton, D. (2020a). *Insights from the Incarcerated: An assessment of the illicit supply chain in wildlife in South Africa*. TRAFFIC, Cambridge, UK. <https://www.traffic.org/publications/reports/insights-from-the-incarcerated/>
- Moneron, S., Armstrong, A. and Newton, D. (2020b). *The People Beyond the Poaching*. TRAFFIC, Cambridge, UK. <https://www.traffic.org/publications/reports/the-people-beyond-the-poaching/>
- Monroe, M. (2003). Two Avenues for Encouraging Conservation behaviors. *Human Ecology Review*, 10(2), 113-125. Retrieved April 7, 2021, from <http://www.jstor.org/stable/24706961>
- Moreto, W. D., Brunson, R. and Braga, A. (2014). "Such Misconducts Don't Make a Good Ranger": Examining Law Enforcement Ranger Wrongdoing in Uganda. *British Journal of Criminology* 55(2): 359–380.
- Moreto, W. D., Brunson, R. and Braga, A. (2016). 'Anything We Do, We Have to Include the Communities': Law Enforcement Rangers' Attitudes Towards and Experiences of Community-Ranger Relations in Wildlife Protected Areas in Uganda. *The British Journal of Criminology* 57 (4): 924–944.
- Musing, L., Harris, L., Williams, A., Parry-Jones, R. van Uhm, D.P. and Wyatt, T. (2019). *Corruption and wildlife crime: A focus on caviar trade*.
- Nash, R. (2020). *A Political Ecology Lens for Addressing Corruption in Conservation and Natural Resource Management*. Targeting Natural Resource Corruption. <https://www.worldwildlife.org/pages/tncr-introductory-overview-a-political-ecology-lens-for-addressing-corruption-in-conservation-and-natural-resource-management>
- Negin, V., Abd Rashid, Z. and Nikopour, H. (2010). *The Causal Relationship between Corruption and Poverty: A Panel Data Analysis*. [https://mpra.ub.uni-muenchen.de/24871/1/MPRA\\_paper\\_24871.pdf](https://mpra.ub.uni-muenchen.de/24871/1/MPRA_paper_24871.pdf)
- Ngeh, P., Tako-Eta, T.P., Mahonghol, D. and Chen, H.K. (2016). *Evaluation of the monitoring of forest law enforcement in Cameroon*. TRAFFIC Edition. Yaounde,

- Cameroon and Cambridge, United Kingdom. <https://www.traffic.org/site/assets/files/1340/evaluation-monitoring-forest-law-enforcement-cameroon.pdf>
- Nowell, K. (2012). *Wildlife Crime Scorecard: Assessing Compliance with and Enforcement of CITES Commitments for Tigers, Rhinos and Elephants*. World Wildlife Fund.
- OECD (2018a). *Behavioral Insights for Public Integrity. Harnessing the Human Factor to Counter Corruption*. OECD Publishing, Paris, <https://www.oecd.org/gov/behavioural-insights-for-public-integrity-9789264297067-en.htm>.
- OECD (2018b). *Strengthening Governance and Reducing Corruption Risks to Tackle Illegal Wildlife Trade: Lessons from East and Southern Africa*. Illicit Trade, OECD Publishing, Paris, <https://doi.org/10.1787/9789264306509-en>
- OECD (2019). *Tools and Ethics for Applied Behavioural Insights: The BASIC Toolkit*. OECD Publishing, Paris, <https://doi.org/10.1787/9ea76a8f-en>
- Olmedo, A., Sharif, V. and Milner-Gulland, E. (2017). Evaluating the Design of behavior Change Interventions: A Case Study of Rhino Horn in Vietnam. *Conservation Letters* 11(1): e12365.
- Open Development Mekong (2019). *Vietnam Corruption Barometer, 2019*. [https://data.opendevlopmentmekong.net/library\\_record/vietnam-corruption-barometer-2019](https://data.opendevlopmentmekong.net/library_record/vietnam-corruption-barometer-2019)
- Outhwaite, W. (2020). *Addressing corruption in CITES documentation processes*. TNRC Topic Brief. <https://www.worldwildlife.org/pages/tnrc-topic-brief-addressing-corruption-in-cites-documentation-processes>
- Outhwaite, W. and Little, L. (2020). *Countering wildlife trafficking through Kenya's seaports*. TRAFFIC, Cambridge, UK. <https://www.traffic.org/site/assets/files/12726/kenyas-ports-analysis-1.pdf>
- Peiffer, C., and Rose, R., 2014. Why Do Some Africans Pay Bribes While Other Africans Don't? SSRN Scholarly Paper No. ID 2505997. Social Science Research Network, Rochester, NY.
- Persson, A., Rothstein, B., and Teorell, J. (2013). Why Anticorruption Reforms Fail-Systemic Corruption as a Collective Action Problem. *Governance* 26 (3): 449-471.
- Powers, L.A. (2004). Evaluation of one and two-day forestry field programs for elementary school children. *Applied Environmental Education & Communication* 3 (1), 39-46.
- Prinsloo, D., Riley-Smith, S. and Newton, D. (2021). *Trading Years for Wildlife: An investigation into wildlife crime from the perspectives of offenders in Namibia*. TRAFFIC, Cambridge, UK.
- Radisch, J. (2016). "Illicit trade: Convergence of criminal networks", in *Illicit Trade: Converging Criminal Networks*. OECD Publishing, Paris, <https://doi.org/10.1787/9789264251847-4-en>.

Rare and The Behavioural Insights Team. (2019). *Behavior Change For Nature: A Behavioral Science Toolkit for Practitioners*. Arlington, VA: Rare.

Rizzolo, J., Gore, M., Ratsimbazafy, J. and Rajaonson, A. (2016). Cultural influences on attitudes about the causes and consequences of wildlife poaching. *Crime, Law and Social Change* 67(4): 415–437.

Rizzolo, J.B. (2017). Exploring the Sociology of Wildlife Tourism, Global Risks, and Crime. *Conservation Criminology*: 133–154.

Roe, D., and Booker, F. (2019). Engaging local communities in tackling illegal wildlife trade: A synthesis of approaches and lessons for best practice. *Conservation Science and Practice* 1 (5): e26.

ROUTES (2021). *Shared Skies: Convergence of Wildlife Trafficking with Other Illicit Activities in the Aviation Industry 2*. [https://www.traffic.org/site/assets/files/13694/routes\\_shared\\_skies\\_report.pdf](https://www.traffic.org/site/assets/files/13694/routes_shared_skies_report.pdf)

Runhovde, S. (2017a). Comparing Discourse to Officer Perceptions: The Problems of War and Militarization in Wildlife Crime Enforcement. *Critical Criminology* 25(2): 275–291.

Runhovde, S. (2017b). Merely a transit country? Examining the role of Uganda in the transnational illegal ivory trade. *Trends in Organized Crime* 21(3): 215–234.

Ruud, A.E. (2000). Corruption as Everyday Practice. The Public–Private Divide in Local Indian Society. *Forum for Development Studies* 27 (2): 271–294.

Salafsky, N., Margoluis, R., Redford, K.H., and Robinson, J.G. (2002). Improving the Practice of Conservation: a Conceptual Framework and Research Agenda for Conservation Science. *Conservation Biology* 16 (6): 1469–1479.

Save the Rhino (2015). Rhino horns seized in Mozambique’s biggest bust go missing. <https://www.savetherhino.org/poaching-crisis/rhino-horns-seized-in-mozambiques-biggest-bust-go-missing/>

Scott, J. (1998). *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale University Press

Shalvi, S., Gino, F., Barkan, R., and Shahar, A. (2015). Self-Serving Justifications: Doing Wrong and Feeling Moral. *Current Directions in Psychological Science* 24 (2): 125–130.

Sollund, R. (2017). *Perceptions and law enforcement of illegal and legal wolf killing in Norway: organized crime or folk crime?* Palgrave Communications.

Sneath, D., 2002. Reciprocity and Notions of Corruption in Contemporary Mongolia. *Mongolian Studies*. 25, 85–99.

- Spira, C., Kirkby, A. and Plumptre, A. (2019). Understanding ranger motivation and job satisfaction to improve wildlife protection in Kahuzi-Biega National Park, eastern Democratic Republic of the Congo. *Oryx* 53(3): 460–468.
- Stahl, C., Kassa, S. & Baez-Camargo, C. (2017) *Drivers of Petty Corruption and Anti-Corruption Interventions in the Developing World - A semi-Systematic Review*. Basel, Basel Institute on Governance
- St John, F.A.V., Edward-Jones, G., and Jones, J.P.G. (2010). Conservation and human behaviour: lessons from social psychology. *Wildlife Research* 37(8) 658-667.
- Sundström, A. (2019). Why Do People Pay Bribes? A Survey Experiment with Resource Users. *Social Science Quarterly* 100 (3): 725-735.
- Sweeney, D. (2011). *Show me change: a review of evaluation methods for residential sustainability behaviour change projects*. National Centre for Sustainability, Swinburne University of Technology, Melbourne.
- Tacconi, L. and Williams, D. (2020). Corruption and Anti-Corruption in Environmental and Resource Management. *Annual Review of Environment and Resources* 45(1): 305–329.
- TRAFFIC (2015a). Strategies for fighting corruption in wildlife conservation. <https://www.panda.org/?257350/Strategies-for-fighting-corruption-in-wildlife-conservation>
- TRAFFIC (2015b). *Illegal Wildlife Trade: Leadership By The Transportation And Logistics Sector: An Introduction and Discussion document*. [https://www.traffic.org/site/assets/files/8832/w\\_traps-transportation-discussion-document.pdf](https://www.traffic.org/site/assets/files/8832/w_traps-transportation-discussion-document.pdf)
- TRAFFIC (2017). Chi Briefing Paper. <https://www.traffic.org/site/assets/files/8811/chi-initiative-briefing-paper.pdf>
- TRAFFIC (2018a). Reducing Demand for Illegal Wildlife Products. [https://www.traffic.org/site/assets/files/11081/demand\\_reduction\\_research\\_report.pdf](https://www.traffic.org/site/assets/files/11081/demand_reduction_research_report.pdf)
- TRAFFIC (2018b). Wildlife Crime and Corruption: Options for moving forward. [https://www.traffic.org/site/assets/files/9927/anti\\_corruption\\_report\\_web.pdf](https://www.traffic.org/site/assets/files/9927/anti_corruption_report_web.pdf)
- TRAFFIC (2021). *TNRC: Introduction to Anti-Corruption Online Course* <https://www.traffic.org/tnrc-introduction-to-anti-corruption-online-course>
- TRAFFIC and the Behavioural Insights Team (2018). *Reducing Demand for Illegal Wildlife: Designing Effective Messages*.
- Travers, H., Mwedde, G., Archer, L., Roe, D., Plumptre, A., Baker, J., Rwetsiba, A. and Milner-Gulland, E. (2017). *Taking action against wildlife crime in Uganda*. IIED. <https://pubs.iied.org/sites/default/files/pdfs/migrate/17604IIED.pdf>
- Tufts University (n.d.). Corruption, Justice, and Legitimacy Program. <https://sites.tufts.edu/ihs/cjprogram> [Accessed April 2021]

- U4 (2020). Corruption, informality and social norms. <https://www.u4.no/publications/corruption-informality-and-social-norms>
- U4 (2018). Anti-corruption through a social norms lens. <https://www.u4.no/publications/anti-corruption-through-a-social-norms-lens>
- UN (2015). *Tackling illicit trafficking in wildlife*. Resolution 69/314. [https://www.un.org/ga/search/viewm\\_doc.asp?symbol=A/RES/69/314](https://www.un.org/ga/search/viewm_doc.asp?symbol=A/RES/69/314)
- United for Wildlife (n.d.). <https://unitedforwildlife.org/> (accessed April 2021)
- UNODC (2012). *ICCWC Wildlife and Forest Crime Analytic Toolkit*. Revised Edition. [https://cites.org/sites/default/files/common/resources/pub/ICCWC\\_Toolkit\\_v2\\_english.pdf](https://cites.org/sites/default/files/common/resources/pub/ICCWC_Toolkit_v2_english.pdf)
- UNODC (2016). *World Wildlife Crime Report 2016: Trafficking in protected species*.
- UNODC (2020a). *World Wildlife Crime Report 2020: Trafficking in Protected Species*. [https://www.unodc.org/documents/data-and-analysis/wildlife/2020/World\\_Wildlife\\_Report\\_2020\\_9July.pdf](https://www.unodc.org/documents/data-and-analysis/wildlife/2020/World_Wildlife_Report_2020_9July.pdf)
- UNODC (2020b). *Scaling Back Corruption: A guide on addressing corruption for wildlife authorities*. [https://www.unodc.org/documents/corruption/Publications/2020/Scaling\\_back\\_corruption\\_FINAL.pdf](https://www.unodc.org/documents/corruption/Publications/2020/Scaling_back_corruption_FINAL.pdf)
- USAID (2017). *Measuring Efforts to Combat Wildlife Crime: A Toolkit for Improving Action and Accountability*. [https://pdf.usaid.gov/pdf\\_docs/PA00KQR6.pdf](https://pdf.usaid.gov/pdf_docs/PA00KQR6.pdf)
- USAID Wildlife Asia (2020). *USAID Wildlife Asia counter wildlife trafficking digest: Southeast Asia and China, 2019*. Issue III, September 2020. <https://www.traffic.org/site/assets/files/13112/uwa-traffic-cwt-2019-digest.pdf>
- van Uhm, D.P. and D. Moreto, W. (2018). Corruption within the illegal wildlife trade: A symbiotic and antithetical enterprise. *British Journal of Criminology*: 58(4): 864–885. <https://doi.org/10.1093/bjc/azx032>
- Varraich, A. (2015). Corruption: An Umbrella Concept.
- von Essen, E., Hansen, H.P., Källström, H. and Peterson, T. (2016). *Illegal Hunting: Between Social and Criminal Justice*.
- Wallen, K. and Daut, E. (2018). The challenge and opportunity of behavior change methods and frameworks to reduce demand for illegal wildlife. *Nature Conservation* 26: 55–75.
- Wellsmith, M. (2011). Wildlife Crime: The Problems of Enforcement. *European Journal on Criminal Policy and Research*. 17(2): 125–48.
- Wildlife Justice Commission (2021). *Convergence of wildlife crime with other forms of organised crime*. <https://wildlifejustice.org/wp-content/uploads/2021/05/Crime-Convergence-Report-SPREADS-V07.pdf>

- Williams, A. (2021). *Definitions matter: What do we mean when we talk about corruption in conservation, and what difference does it make?* <https://www.worldwildlife.org/pages/tnrc-blog-definitions-matter-what-do-we-mean-when-we-talk-about-corruption-in-conservation-and-what-difference-does-it-make>
- Witter, R. and Satterfield, T. (2018). The Ebb and Flow of Indigenous Rights Recognitions in Conservation Policy. *Development and Change* 50(4): 1083–1108.
- Wittemyer, G., Elsen, P., Bean, W.T., Coleman, A., Burton, O., and Brashares, J.S. (2008). Accelerated Human Population Growth at Protected Area Edges. *Science* 321 (5885):123-126.
- Woodrow, P. (2016). *A Systemic Analysis of Corruption in the Criminal Justice System in Lubumbashi, DRC.* <https://sites.tufts.edu/ihs/a-systemic-analysis-of-corruption-in-the-criminal-justice-system-in-lubumbashi-drc/>
- World Bank (2015). *World Development Report: Mind, Society, and behavior.* <https://www.worldbank.org/content/dam/Worldbank/Publications/WDR/WDR%202015/WDR-2015-Full-Report.pdf>
- World Bank (2018). *Tools and Resources to Combat Illegal Wildlife Trade.*
- WWF (2017). The Nature of Change: The Science of Influencing Behavior. 2017 Fuller Symposium Recordings. <https://www.worldwildlife.org/pages/the-nature-of-change>
- WWF (2020). SAVE NATURE PLEASE: A Behaviour Change Framework for Conservation. <https://wwf.panda.org/?1036441/Using-behavioural-science-for-conservation>
- Wyatt, T. and Cao, A. (2015). *Corruption and wildlife trafficking.*
- Wyatt, T., Johnson, K., Hunter, L., George, R., and Gunter R (2018) Corruption and Wildlife Trafficking: Three Case Studies Involving Asia. *Asian Journal of Criminology* 13(1):35–55.
- Wyatt, T., van Uhm, D. and Nurse, A. (2020). Differentiating criminal networks in the illegal wildlife trade: organized, corporate and disorganized crime. *Trends in Organized Crime* 23(4): 350–366.
- Wyler, L.S. and Sheikh, P.A. (2013). *International illegal trade in wildlife: Threats and U.S. policy.* <https://sgp.fas.org/crs/misc/RL34395.pdf>
- Zain, S. (2020). *Corrupting Trade: An Overview of Corruption Issues in Illicit Wildlife Trade.* <https://www.worldwildlife.org/pages/tnrc-introductory-overview-corrupting-trade-an-overview-of-corruption-issues-in-illicit-wildlife-trade>
- Zaloznaya, M. (2014). *The social psychology of corruption: Why it does not exist and why it should.* *Sociology Compass* 8 (2), 187–202
- Zúñiga, N. (2018). *Behavioral changes against corruption.* Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute. <https://www.u4.no/publications/behavioural-changes-against-corruption.pdf>

