Chapter 4
Drivers
The driving forces behind wildlife crime are a complex interplay of motivations and influences, from economic incentives to socio-cultural dynamics. This chapter attempts to shed light on the diverse drivers shaping the patterns and trends of criminality connected with wildlife trafficking. Better understanding of these factors can inform the design and refinement of remedial interventions.

The approach taken is to consider motivations and influences at three stages of the trade chain: drivers of sourcing, drivers of illegal trading and drivers of demand in end markets. The following three sections of this chapter are structured to take stock of evidence about factors driving participation in crime at each of these stages. A fourth section considers the role of corruption as an enabling factor and a force undermining measures aimed to reduce illegal wildlife trade along the trade chain (Figure 4.1).

Although it is informative to consider the distinct motivations and influences for participants at different stages of the trade chain as well as the system-wide enabling role of corruption, it is important to keep in mind that these elements are interconnected. This has been described as a wildlife crime continuum in which successful crimes by individuals and organizations at different steps along the trade chain provide opportunities for other crimes. Participants each have something to offer and to gain while precise roles and relationships are context and time specific and likely to evolve.
Drivers of illegal sourcing

Context

Wildlife trafficking differs from some other forms of transnational organized crime in that the primary harm occurs up front, in the country from which the wildlife is sourced. This is different from the trade in illicit drugs, for example, where the primary concern is the prevention of health-related harms to end users, so stopping it anywhere in the trafficking chain prevents that harm from being realized. In contrast, the principal conservation harm that wildlife trade laws are designed to prevent has already occurred when animals or plants are removed from the wild. Any interdiction that occurs after this action mainly serves as a potential deterrent to future trafficking, the impact of which depends on visibility and hard to predict shifts in market incentives. For this reason, understanding the driving factors behind the decision to source wildlife illegally is vital to its protection.

In the source country, someone needs to harvest or collect the wildlife and pass it on to someone else who has the capacity to sell it within the same country or internationally. There are some markets where the harvester is also the trafficker or the consumer, like the example described in a case study in chapter 6 of this report, where orchid collectors may organize expeditions to harvest rare or novel orchid species. However, these cases are exceptional and more typically the sourcing of wildlife entering illegal trade is carried out by a distinct group in the trade chain.
Organized commercial illegal sourcing

Clearly there are some people who deliberately and professionally poach or illegally harvest wildlife for profit. Sometimes they are specialized poachers or collectors not from the local area. Evidence of rhinoceros and elephant poaching in Africa reviewed in the case studies for the current and past editions of the *World Wildlife Crime Report* has indicated the involvement of remotely directed and equipped mobile poaching gangs. Similar structures have been documented for poaching of tigers in Indonesia and abalone in South Africa.4,5

The industrialization of highly profitable illegal wildlife sourcing is best exemplified in the fisheries and timber trade sectors. In the fisheries trade sector, illegal operators often use flags of convenience and complicated multi-jurisdictional business ownership networks to avoid exposure to law enforcement.6 Profits from a wide range of fisheries have been demonstrated to attract involvement of organized crime groups.7 Research based on interviews with officials in Mexico revealed that organized crime groups in the country had infiltrated both legal and illegal fisheries trade chains, with significant control over illegal fishing operations.8 Similarly, in the timber trade sector profits from illegal logging have attracted significant corporate engagement although it appears that the involvement of small-scale producers was increasing during the 2010s as larger companies experienced increasing regulatory and market pressure.9

Additional examples of convergence between wildlife trafficking and other criminal businesses have been noted in chapter 2 of this report. Such connections have been shown to enable wildlife trafficking through power relationships with local communities, corrupt relationships and opportunities for money-laundering. They may also provide access to illicit firearms, ammunition or other tools that aid illegal wildlife sourcing directly, for killing target species, and indirectly, for protection and intimidation of other actors in the trafficking chain.10

Supplementary livelihoods and opportunism

Sometimes illegal harvest is predominantly carried out by local people who live alongside wildlife every day, often drawing their livelihood from nature in other ways. Such harvesters may live in communities remote from urban centres, with limited state presence. They may have few opportunities to earn cash income and the emergence of demand for wildlife from their area, manifested by trader offers to purchase, may represent a kind of windfall. The interest of different groups may coincide even at a local level, with specialized poachers and collectors enlisting support and involvement of local community members to aid their activities.

Poverty may be a driving factor in the decision to poach for some, but poachers may not necessarily be acting in desperation. A study of prisoners in Nepal found that those incarcerated for crimes related to wildlife trafficking comprised between 10 per cent and 20 per cent of the overall prison population in the two regions studied.11 Most of the 384 prisoners in the study who had been convicted for offences related to wildlife trafficking were poor (56 per cent) and from indigenous communities (75 per cent). Of the 116 prisoners individually interviewed, all but one being male, most said that their involvement in wildlife crime was simply an easy way to make extra money. The study concluded that illegal wildlife trade in Nepal was neither a primary livelihood strategy, nor formal organized crime.

Two research studies in Southern Africa involving wildlife crime offender interviews in Namibia and South Africa showed similar findings. The South Africa study involved interviews with 73 offenders incarcerated for offences related to wildlife trafficking, including poaching and illegal trade in abalone, cycads and rhino horn.12 Most were low level participants in poaching, transport or processing and many were from marginalized communities who were either unemployed or informally employed, with little access to alternative economic opportunity. The Namibia study involved interviews with 45 male offenders incarcerated for offences related to wildlife trafficking. Most of the offenders were low-level poachers or traders within the supply chain with limited knowledge of the market they were supplying. They were either fully or partially employed, mostly in agriculture, but engaged in poaching/trading occasionally and on an opportunistic basis.13
Similarly, a survey of convicted wildlife crime offenders in prison in Indonesia conducted by UNODC for this report found that out of the 11 interviewees self-identified as poachers, all male, only one appeared to be regularly occupied with such activity. Rather, most were small-scale farmers with fields abutting wildlife areas, some of whom hunted non-protected wildlife. About half of the poachers interviewed (five out of eleven) claimed not to know what they were doing was illegal. The other half typically came across a chance opportunity to earn some cash for their families and took it knowingly.

Their situation is similar to that of the fishers interviewed in Peru for the illegal seahorse trade case study in chapter 6 of this report. Peruvian fishers may find seahorses tangled in their nets as by-catch when targeting other fish species. Usually dead or dying, returning these animals to the sea may seem pointless to the fishers, while retaining them requires very little additional effort. The choice to capitalize on wildlife that is already lost at the time encountered may not be a difficult one for people who make their living from nature. Of course, those who buy the seahorses and sell them to international traffickers have gone beyond simple opportunism. Consolidators active within the Peruvian seahorse trade chain appeared to be among the wealthier community members and/or owners of small businesses who had the means to transport wildlife to urban centres.

**People and wildlife in conflict**

Opportunistic engagement in illegal wildlife sourcing sometimes occurs in the context of human-wildlife conflict. For example, one prisoner interviewed in Indonesia during the aforementioned UNODC survey reported helping a neighbour poison an elephant that was destroying crops and then taking the ivory in the hopes of making some money on the side.\(^4\) A different offender reported that his community had installed an electric fence to stop elephants from raiding their crops and collected ivory from three of the five elephants that died as a result.\(^5\) Another caught a tiger in a snare intended to prevent wild pigs from eating his rice crop and collected the bones after the tiger had decomposed, finding a buyer for them over a year afterwards.\(^6\) Many claimed it was their first time handling protected species and that they were caught through enforcement sting operations.

**Perceptions of legality**

Part-time participants in illegal wildlife sourcing are not alone in claiming ignorance of the law. It appeared from interviews carried out for the rosewood case study in chapter 6 of this report that the effect of national legislation and regulatory measures was not always clear to participants in the timber industry in Nigeria. Although timber in rough or sawn form has long been on the Nigeria Customs list of banned exports,\(^7\) the CITES Management Authority of Nigeria issued permits for the export of many containers of rosewood in 2017 and 2018.\(^8\) Timber harvesting in Nigeria is largely governed at the state level and there are 36 states and a federal capital territory, each with its own set of forestry laws, most with little enforcement capacity.\(^9\) By the time the timber reaches port it is very difficult to determine whether a particular piece of timber was harvested legally or not.\(^10\) As a result of this complexity in applicable legal provisions participants, even at the supply side of this market, may not always have been aware when they were involved in illegal trade.

**From legal to illegal**

The rosewood case study in chapter 6 of this report illustrates how participants in well-established wildlife trade sectors may fail to adapt to regulatory changes and try to sustain what has become an illegal business. While lamenting the loss of trees, the local traditional leaders interviewed for this report in Taraba State, Nigeria, expounded the benefits that the rosewood trade had brought to their areas. They said it had reduced crime generally within their communities by providing employment to the youth. The trade was “taxed” by many formal and informal authorities, distributing the benefits to hundreds of families. It allowed the growth of infrastructure—including the construction of sawmills and lumber depots, the purchase of specialist vehicles and cranes, and the accumulation of skills. Many of the timber trade workers interviewed spoke of the losses suffered when the rosewood legal exports abruptly ended owing to CITES compliance concerns,\(^21\) but the benefits in one of the country’s
poorest states had been significant and motivation to sustain involvement in this business, inside or outside the law was considerable.

**Tradition**

Financial incentives aside, involvement in illegal wildlife sourcing can also be driven by cultural tradition. Research in the periphery of Chinko reserve in the east of the Central African Republic found that some of those involved regarded elephant hunting as part of their cultural identity, a mark of bravery and manhood, a tradition that was passed between the generations. One of the largest threats to local communities was reportedly conflict with a group of men from the Sudan, who annually took a break from their cassava farms to go on an international hunting expedition, sometimes travelling over 1,000 km on horseback to find elephants to shoot. These Sudanese men were said to have hunted with spears until the 1980s and while they had switched to automatic weapons, the motivation apparently remained largely cultural, not profit driven.22

**Drivers of illegal trading**

**Context**

Both harvesters and consumers may participate in the illegal wildlife trade unwittingly, but with limited exceptions traders illegally buying, transporting, processing and selling wildlife along the trade chain do not. Smuggling wildlife requires knowing participation in the illegal market. Without illegal traders, the sources of supply and demand would never meet. In a sense, it is the illegal traders who individually or in combination help connect the illicit market, drawing revenues from the steps they manage along the trade chain and making the connections from the place of supply to the place of demand and actively working to ensure that associated business remains viable.

The exceptions are people or businesses trading wildlife wholly in ignorance of relevant laws, likely as tourist souvenirs or manufactured goods. Although not the focus of this analysis of drivers of wildlife crime, such participants may be responsible for a significant proportion of wildlife seizure incidents in some countries. For example, a review of seizures made by European Union countries in 2019 showed that over 25 per cent were packaged medicines containing wildlife ingredients or pieces of coral, typically carried in personal baggage.23 It is not known what proportion of these air passengers were aware that they were breaking the law.

**Specialized roles**

Illegal trading roles vary in terms of scope of engagement and influence along the trade chain.24 Some participants may act as local consolidators of illegally harvested wildlife goods before onward sale to urban centres or export markets, perhaps with limited insight into demand-side developments. Others draw profit from handling discrete roles, such as export, import, brokering, storage, keeping and breeding live specimens or handling the interface with processors. Case study examples in chapter 6 of this report and previous editions of the World Wildlife Crime Report highlight the key role that local consolidators play within source countries, channelling goods into onward trade chains. The same evidence sources show another phenomenon for illegal wildlife trade bridging continents: the involvement in trafficking chains of people from end market countries who arrived in source countries as workers in industries such as forestry, mining and infrastructure development. Later in the trade chain, there may be specialist wholesale and retail dealers with a good understanding of the end market but potentially with limited insight into supply-side factors. For some commodities various roles may be merged, with international traffickers handling multiple steps along the trade chain.

**Shaping market opportunities**

It would be oversimplistic to characterize all illegal wildlife traders as simply connecting those sourcing wildlife with existing end markets. In addition to managing steps along the trade chain, there is evidence that traffickers can play an active role in manipulating demand in end markets to sustain or expand business opportunities. Some products have been reinvented for different markets repeatedly. For example, rhinoceros horn was highly sought after in the 1980s for two purposes: as traditional medicine in various countries in East Asia and for the handles of traditional
Rhinoseros horn as a medicinal ingredient has been banned in China since 1993 and around the same time a proclamation was made forbidding its use in Yemen. Illegal trade flows steeply fell and it was not until the mid-2000s that rhinoceros horn was again marketed, this time in Viet Nam for a variety of purposes, including cancer treatment and as a remedy for the effects of excessive alcohol consumption. As demand for consumptive use in Viet Nam has apparently fallen in recent years, as evidenced by price decreases, it has again been remarked in the same country in the form of collectible decorative items, including libation cups, bangles and beads.

The emerging market for jaguar canines and claws may be similar, created by traffickers due to the availability of supply from animals killed for livestock protection, not pre-existing demand. Unlike Asian and African big cats, jaguars have not historically been exploited in the main destination markets in Asia. Although there is some circumstantial evidence of emerging export trade, a CITES review of jaguar trade concluded that most demand for jaguar parts was local within range states, where teeth and claws were being marketed as souvenirs and trinkets. The complexities of trafficking connections between supply and demand for the trade in big cat bones are explored further in Box 4.1.

**Tactical adaptation**

In addition to pushing their products actively, illegal traders also engage in corruption and undermine the rule of law in countries along the trafficking chain, which appears to be essential to moving products along transport routes and across controlled borders predictably. A review of evidence of financial flows and payment mechanisms from over 40 wildlife crime cases in Africa, Asia and Latin America found bribery of officials to be a common tactic, particularly the procurement of false documents and arrangements to avoid shipment inspection. Opportunities to secure safe passage for illegal goods through corruption can have a significant impact on how smuggling routes are established and how they adapt over time.

Where corruption does not work, illegal traders find other ways around law enforcement. Most trafficked species are available from several countries, so good enforcement in one may compel illegal traders to switch sourcing and operate out of another. Illegal traders also take steps to reduce risk exposure, changing shipment routing to avoid law enforcement scrutiny along direct or exposed trade routes. For example, from about 2018 there was a series of prosecutions of elephant ivory traffickers in East Africa that appears to have influenced illegal traders to switch to exporting ivory from the other side of the continent entirely. Between 2010–2015, the weight of tusks in seizures made in or intercepted from Kenya and the United Republic of Tanzania dwarfed those connected with Nigeria and the Democratic Republic of the Congo. Between 2016–2021, the reverse was true (Figure 4.2).

Both sourcing and routing shifts in response to enforcement action have been observed in elephant ivory trade and rhinoceros horn trade patterns analysed in previous editions of the *World Wildlife Crime Report* and documented in regular CITES reports on these commodity sectors. Together these shifts in sourcing and trafficking routes have been characterized for other illegal commodities as a balloon effect, where an enforcement squeeze in one place leads to a bulge elsewhere, with a resulting spread of related harms.
The five big cat species classified as members of the _Panthera_ genus (jaguar, leopard, lion, snow leopard and tiger) range variously in Africa, Asia and Latin America and have long been subject to harvest pressure for trade in their parts for local and international markets. The _World Wildlife Crime Report 2020_ examined in detail the poaching, trafficking and consumption of tiger bone, mostly destined for medicinal use in Asia. It also touched upon wider concerns about trade impacts on jaguars and lions, including issues related to big cat bone trade and the use of other body parts, such as skins, teeth and claws.

The complexity of supply and demand factors for big cats provides insights into the serious challenges of understanding and addressing drivers of wildlife trafficking. All five species have declining wild populations, all but the jaguar are classified as threatened in the IUCN Red List of Threatened Species and all but the lion are listed in CITES Appendix I. Trade is a key driver of poaching, but killing of these species is also often driven by human-wildlife conflict motivated by threats to livestock and people. Nevertheless, even in cases where trade was not the prime motivation for killing big cats, carcasses provide a tempting source of potential income if buyers can be found.

Since the early 1990s, there has been a steady increase in interest in development of captive-breeding operations, or farms, oriented in part towards commercial production of both tigers and lions for trade. Investors saw an opportunity because of dwindling supply from wild sources caused by a combination of population declines, hunting bans and increasing restrictions on commercial international trade from wild sources. CITES generally allows commercial international trade in listed species from farming or captive breeding with different regulatory requirements than those applied to trade from the wild, even for species in Appendix I, the strictest level of CITES protection. Furthermore, if breeding operations are in a consumer country, domestic trade is outside the mandate of CITES regulation.

There are CITES-listed species for which legal trade from commercial breeding operations is now the dominant source of supply to international markets. Examples include crocodile and parrot species, many listed in CITES Appendix I, like most big cats. However, CITES parties have consistently agreed a precautionary and restrictive stance on commercial tiger breeding for trade and expressed concern about the risks to wild populations from legalizing end markets. At a national level, policies and legal measures governing development of big cat breeding operations and sales and use of big cat parts vary from country to country.

Several studies have been published in the last few years, particularly under the auspices of CITES, that document the persistence of markets for jaguar parts in South America, for lion parts within Africa, and a diverse range of big cat parts in Asia. These sources show that developments in the market for big cat bones primarily destined for medicinal use in East and South-East Asia are a common concern across all regions. Medicinal demand mainly focuses on the use of tiger bone, but overt or covert substitution of bones from other big cat species is not uncommon, whether simply to bolster supply, to confuse regulators or to diversify the offer to consumers.

From the early 1990s, for over a decade, supply of big cat bone to medicinal trade was increasingly restricted to use of old stocks, sourcing from poaching and, despite some ambiguity about sales restrictions, what is best characterized as leakage from tiger farms in contravention of national law. However, during the 2010s, South Africa permitted the legal export of lion skeletons to South-East Asia sourced from captive populations established by the sport hunting industry. A published analysis of export records from South Africa and reference to more recent CITES trade records indicate that as many as 7,500 lion skeletons, weighing over 80 tons, were legally exported from South Africa to South-East Asia between 2008–2018. Peak exports in 2014 and 2016 were over 10 tons per year, mostly destined for the Lao People’s Democratic Republic and Viet Nam. However, South Africa suspended issuance of export permits in 2019 and the Government of South Africa has since indicated its intention to end the captive lion breeding industry, setting up a ministerial task team to develop exit strategies to negotiate the closure of the industry.

Without greater insights into levels of annual consumption of end products, the extent of market control by pivotal traders, or trends in stockpiling of bone from these legal lion bone imports, it is difficult to assess how big cat bone trafficking incentives might be affected. A UNODC review of market data indicates that wholesale prices for unprocessed tiger and lion bone in one end market country were fairly consistent between 2018–2021. Consumer research in end
markets suggests that various forms of medicinal demand are persistent and almost always gender-differentiated. Unless this changes, potential trafficking developments to watch for include:

**Sustained and diversified sourcing pressure on wild populations:** Long-term analysis of seizure records shows consistent trafficking of wild-sourced tigers and their parts with skins most prevalent, but also for the bone trade. A CITES overview of big cat trade noted incidents of lion and jaguar poaching that may be destined for the bone market. A study of lion poaching and trade in the United Republic of Tanzania and Mozambique concluded that local use predominated in the United Republic of Tanzania, while in Mozambique poaching was assessed to be high with further evidence of domestic, regional, and international trade of lion parts and derivatives found to be occurring. However, for both these species and leopards, seizure records do not confirm high levels of bone trafficking from wild populations. In light of the recent drop in availability of large quantities of lion bone from captive sources there is a risk that this could change.

**Increased leakage of bone stocks held by tiger or lion captive facilities in Asia and Africa:** With over 12,000 tigers in captive facilities worldwide and around 8,000 lions in captivity in South Africa alone there is potential accumulation of carcasses and body parts from deceased animals. Leakage and intentional trade of such parts from tiger farms already contributes to bone trafficking flows and with the cessation of legal lion bone exports, there is a clear risk of similar problems. Twelve boxes of lion bones were seized in South Africa in 2019 reportedly prior to shipping to Malaysia, and there was a significant seizure in Viet Nam in 2021 of 3.1 tons of lion bone from South Africa shipped along with 138 kg of rhinoceros horn. These examples may indicate that farmed stocks stranded at source are being sought by traffickers. An ongoing CITES review of facilities holding Asian big cats includes attention to security measures for the bone trade. A recent regulatory review raised concern about the absence of a lion bone stockpile register in South Africa at either a provincial or national level.

**Shifts in market structure:** At present it appears that most processing of big cat bones into medicinal products takes place in end market countries, with high value placed on demonstrating the authenticity of raw materials. However, there are some early indications of a possible trend to processing closer to source into products that may be easier to traffic, particularly paste or glue, made by boiling bones in hot water and eventually used in crude form or as an ingredient in medical preparations. There is evidence of such processing of lion bone in South Africa according to a 2018 national police report, and jaguar bone in Suriname according to academic research carried out in 2017–2018. It is currently unclear whether such production is primarily for domestic use by locals or expatriates from Asia, or destined for export, but it does represent a potential trafficking innovation to keep under scrutiny.

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a. Other cat species, including the clouded leopard, cheetah and puma are also included within some analyses of big cat trade issues, for example CITES, ‘The Legal and Illegal Trade in Big Cats: A Study in Support of Decision 18.246. CITES SC75 Doc. 13 (Rev. 1)’ (Geneva, Switzerland: CITES Secretariat, 13 November 2022), https://cites.org/sites/default/files/documents/E-SC75-13-R1.pdf.


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n. CITES trade database https://trade.cites.org/.


q. UNODC reviewed price observation data for unprocessed tiger and lion bone in Viet Nam provided by Environmental Investigation Agency. There was no major change during 2018–2021, with tiger bone on average offered at a price 15-20 per cent higher than lion bone.


An additional tactical adaption that may occur in response to enforcement pressure is to restructure the trade chain, for example by moving processing upstream so that goods traded illegally across international borders are in forms that may be less easy to detect. Police investigations in South Africa in 2017 discovered small home-based workshops in the country for processing rhinoceros horn beads, bracelets and bags of rhinoceros horn powder, apparently to avoid the risks of shipping unprocessed rhinoceros horn to end markets where such processing was usually carried out.34

Cutting corners

It is notable that seizure records frequently include illegal transactions that appear from the available information to have been possible to carry out within the law. As noted above, there are doubtless cases where those responsible were ignorant of legal restrictions, but others likely reflect misguided expedience. Contributory factors are not well-researched but might include the desire to skip time-consuming administrative processes or to avoid taxes and licence fees. For example, in research for the illegal orchid trade case study in chapter 6 of this report, some of the buyers interviewed said that the costs of taxes, phytosanitary compliance certificates, and CITES documentation could exceed the value of the quantity of plants they wanted to import. They alleged that the orchids were trafficked not because they were from an illegal source, but because the hassle and cost of compliance were deemed too high. There are seizures of species that are cultivated commercially, but which it seems likely were being smuggled simply because this was commercially expedient.

Supporting roles

Involvement of people in the trafficking chain is not restricted to those engaged in buying, transporting and selling wildlife illegally. Other participants may own or be employed in breeding operations: either breeding species in contravention of national law or laundering smuggled wildlife into ostensibly legal supply chains. Additionally, people may own or be employed in processing operations involved in functions such as carving, furniture manufacturing or food processing that use traded wildlife as raw materials, some of which may be illegally sourced.

Like traders, the principal motivation for involvement may be employment and income generation and at this point in the trade chain, their work may be within legal operations. As illustrated by the rosewood case study in the current report, regulatory change can leave large numbers of people with knowledge and skills related to wildlife trade seeking alternative employment, some of whom might be tempted into illegal activity.
Gender norms and roles shape individuals’ participation in wildlife-based economies, both legal and illegal. Men and women have different experiences of and access to wildlife, and notions of masculinity and femininity determine, at least in part, their motivations, willingness, and opportunities for participation in wildlife crime. These gendered realities affect who engages in wildlife crime and their roles within it.

To gain deeper understanding of gender-related dimensions of wildlife trafficking drivers, in 2023 UNODC carried out research in the Amazon regions of Colombia, Ecuador and Peru in South America. Interviews were carried out with wildlife trade participants who made observations at different points along the illegal wildlife trade chain in each country.a

Some of the trade chains in the region encompassed familial structures. The research revealed a clear pattern where the involvement of one family member in illicit wildlife trade extends to others in the family. A common pattern was that the involvement of male poachers was reported frequently to engage in supplementary roles, helping to process, care for, transport, and/or sell the wildlife. Research has shown that women’s engagement in serious organized crime activities is typically initiated or inherited through a relationship with a father or husband involved in these activities. The involvement of male poachers in these activities was often reported to be due to economic necessity and survival, while women’s involvement was more frequently associated with a desire to stay in a relationship.

“Because women in the Amazon do not marry, they only live with the man, and it is a strong part of the culture that women have to do all the things that men need. Women do these things [participate in wildlife crimes], because they want to stay in a relationship. For the woman, the motive is not always to have more money. For the woman it’s, ‘I am going to do anything to be with you’. And men realize that; they know that. For men it is out of necessity and survival and also ambition. For example, transporting a jaguar or these protected plants pays you much better than working a month or even a year, both in the public and private sector.”

Poaching

According to interviewees, poaching in the region is reportedly almost fully perpetrated by men, reiterating the considerable gender disparity observed in global poaching activities. They claimed that gender roles are often imposed due to exclusionary practices rather than being a matter of choice. Hunting is often regarded as a masculine practice typically passed down from fathers to sons, and many women do not learn the skill. Further, the idea that poaching brings a certain level of physical risk was brought up multiple times. A prevalent speculation, primarily among men, was that women do not hunt due to a fear of the forest. Several women agreed with the assertion; however, others attested that women were not scared of the forest, rather, they were scared of the dangers from people in forested areas. One interviewee said:

“No, women don’t go to the forest, but not because they are scared of the animals, it’s the men. The forest is dangerous because of people.”

Transportation

Women were notably more engaged in the transport of illegally sourced wildlife. It was reported that women and children are used in transporting illicit wildlife on roads and rivers coming from the Amazon region because they are seen as less conspicuous. According to one interviewee:

“I’ve seen women and children on the rivers, taking and bringing [illegal wildlife]. They are starting to use children more, I think.”

This tactic leverages societal perceptions of gender and age, revealing a calculated driver behind the roles assigned within the illegal wildlife trade. Other regional studies have also shown women having pronounced involvement in transportation of illegal wildlife in the Congo and Viet Nam.f, g

Processing, preparation, storage

Processing and preparation of wildlife products was seen as a role mainly for women, but this was not consistent across all trade chains. For instance, medicinal products derived from wildlife (e.g. oils, salves, creams) were reported to be processed in the forest by men and brought into the markets already packaged and ready to sell. However, women were identified as being the main processors for wild meat markets and tourist/artisan markets. This could be attributed to various factors such as cultural traditions, skill sets, and economic opportunities that have historically
positioned women to excel in these roles more frequently than men. Further, it was found that women assume the primary caretaker roles in the live animal trade, responsible for looking after animals prior to sale or before the animals are moved on to other intermediaries. One of those interviewed said:

“For small mammals, [men] do not often take care of them—the women take care of [the animals]. I’ve seen more than once, women that have had a baby, a human baby, they also breastfeed the baby monkeys as well as other mammals before they sell them.”

**Selling**

The most dominant finding across all three surveyed areas was that women are the primary market sellers of wildlife products. Similarly, in local markets in Central Africa, women have reportedly been primary actors involved in the sale of wild meat and other wildlife products. This reflects a gendered division of labour that is characteristic of small-scale informal enterprises in many places; men’s labour is often frontloaded at the beginning of production chains, while women play roles as the vendors or traders.

**Consumption**

Although drivers of consumption are diverse and intricate, examples of gendered consumerism could be observed in the studied area. For instance, the practice of keeping wildlife as pets is prevalent, with demand coming from both men and women. However, it was widely perceived that women exhibited a greater interest in adopting wildlife as pets for companionship. One interviewee said:

"Women are often the ones most responsible for having [illegal] wildlife in homes... they create more emotional bonds with the animals.”

This theme came up in many conversations and interviews, where women overall were said to be more interested in owning or caring for wildlife as pets because their social roles kept them tied to home and wildlife offered them companionship. It is unclear whether women themselves were enthusiastic about acquiring pets.

Lastly, the study revealed a pattern where international tourists sought wildlife souvenirs, driving the demand for illicit wildlife trade. Keepsakes crafted to attract tourists drive a market for products made from parts of the flagship species of the Amazon region (e.g. jaguar, otter, bear). Teeth, bones, feathers and skins are some of the most utilized wildlife specimens in souvenirs. Most of the artisans and sellers of these products are women, often from indigenous communities. The involvement of indigenous women places them at a complex intersection of tradition, survival, and the broader implications with their participation in illicit wildlife trade. The tourism demand has led to exploitative practices and the potential alteration of traditional cultural practices. According to one interviewee:

“There are a lot of indigenous people near here selling artisan [handicrafts] containing illegal wildlife, but this is the thing: that this is not a part of their culture. They are acting that way to attract more tourism. Because the communities further away—the real [indigenous nation omitted for anonymity] communities—they don’t do that. It just shows you how impactful tourism dollars are; it changes culture, changes what people would do.”

Preliminary insights suggest gender differences in the demand for these products. Women were found to be more likely consumers of wildlife products that are fashioned into jewellery and trinkets (e.g. purses and earrings made from jaguar pelts), a finding supported by studies in other geographies.

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a. UNODC field research Colombia, Ecuador and Peru, 2023. in preparation for publication.
c. Interview I26
   d. Interview S9
   e. Interview I32


h. Interview I8


j. Mbete et al., ‘Household Bushmeat Consumption in Brazzaville, the Republic of the Congo’.


o. Interview I43

p. Interview I6
Drivers of demand

Context

At the end market there are many distinct wildlife use clusters with specific demand characteristics driving both legal and illegal trade flows. Wildlife is in demand for its use as food, medicine, in fashion, for ornamental purposes, investment pieces and as pets, for example. Each of these demand clusters has its own trends and dynamics, and some operate in isolation from the others. For example, the factors that affect demand for python skins, such as fashion trends, are distinct from those that affect demand for python meat or demand for live pythons as pets. Preventing the illegal trade in pythons requires an understanding of these different sources of demand and why, in some cases, they favour illegal rather than legal sources of wildlife.

In the first edition of the World Wildlife Crime Report, the discussion centred on species in demand in several different types of markets. The table below lays out a modified version of these demand clusters, with adjustments based on more recent trends and market insights (Figure 4.3). The typology of market clusters is not exhaustive, and it would be difficult to come up with a comprehensive set of categories. Furthermore, it is important to recognize that wildlife trafficking flows for some species may supply more than one of these market segments, an example being rhinoceros horn used both as medicine and for carving into decorative items. Some additional demand clusters not included here are unique to a narrow range of species, such as the demand for primates for medical testing.35

The table also summarizes information on the nature of the use of the commodities traded in each demand cluster, because this provides some basic insights into forces that shape supply. For example, non-perishable products can be stockpiled, opening these products to speculative procurement binges. In contrast, perishable products such as meat or fish must be consumed within a short period of time after harvesting if kept fresh, and even after smoking or freezing viable storage times are limited. Products that are completely consumed, such as foodstuffs, may have a continuous source of demand, while end markets for non-perishable goods, such as specialized collectable items may involve one-off purchases. Additionally, the table includes a crude expression of the scale of demand for each cluster, distinguishing goods for which demand is for bulk quantities of consistent quality from those for which niche demand seeks novelty and exclusivity.

The dynamics of each of these demand clusters is discussed in turn below. In each case the analysis begins by considering factors that drive and shape demand for the cluster as a whole, whether legally or illegally supplied. Then for each cluster the specific features of demand linked specifically to illegal supply is elaborated. This approach is adopted because in all cases drivers related to illegal trade are grounded in factors shaping demand generally in the demand cluster.

Food

Data from FAO and other sources summarized in the 2022 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) thematic assessment on sustainable use of wild species indicated that at least 10,000 wildlife species are used for food, including those from fisheries, hunting of terrestrial animals and harvest of wild plants and fungi.36 Although much attention to use of wild foods has focused on tropical and subtropical areas,37 use of wild animals and plants for food is common globally. For example, estimates of the quantities of wild meat, mushrooms, and berries marketed annually in the European Union reach into the hundreds of millions of kilograms; it was estimated that 65 million European Union citizens were gathering and 100 million consuming wild food in the early 2010s.38

Demand factors range from the need for basic nutrition through to the preferential choice for speciality food items, such as sturgeon caviar. Since some species are valued for their associated health benefits, there can be some overlap with factors driving medicinal demand for wildlife. Species in demand are often locally accessible, but there are others for which long-distance supply chains have become established from rural to urban areas within source countries, internationally and between continents. Some wild species in demand are now supplied from captive production or farming.39 Preference for wild food may be a novel
**FIG. 4.3** Demand clusters, nature of commodities and scale of demand for species affected by illegal wildlife trade

<table>
<thead>
<tr>
<th>Source of demand</th>
<th>Nature of commodities</th>
<th>Scale of demand</th>
<th>Examples of species in seizures used in this sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food</strong></td>
<td>Perishable and consumed</td>
<td>Mostly sought in bulk demand, some niche markets</td>
<td>Shark fins, pangolins, eels, sturgeons, abalone, orchid tubers</td>
</tr>
<tr>
<td><strong>Medicine</strong></td>
<td>Often dried or processed into less perishable form and then consumed</td>
<td>Mostly sought in bulk</td>
<td>Pangolins, seahorses, big cat bones, costus root</td>
</tr>
<tr>
<td><strong>Mass market pets and ornamental plants</strong></td>
<td>Live animals and plants dependent on care</td>
<td>Generally sought in bulk</td>
<td>African grey parrots, iguanas, cacti and orchids</td>
</tr>
<tr>
<td><strong>Specialist market for live animals and plants</strong></td>
<td>Live animals and plants dependent on care</td>
<td>Rarity is at a premium</td>
<td>Orchids and succulents, reptiles, amphibians</td>
</tr>
<tr>
<td><strong>Exclusive market in goods for adornment, display and demonstration of status</strong></td>
<td>Non-perishable and not consumed. Sometimes processed into manufactured goods</td>
<td>Rarity is often a selling point, but some sought in bulk for manufacture of high-value exclusive goods</td>
<td>Elephant ivory, rhinoceros horns, shahtoosh (wool from Tibetan antelopes), rosewoods</td>
</tr>
</tbody>
</table>

lifestyle choice, but often it is retained culturally as people move from rural to urban areas or migrate internationally.40,41 For people using wild species for basic nutrition a major factor in consumption choice is the availability and comparative price of alternative foods.42

Concerns about overexploitation of wildlife species used for food and other risk factors has led to adoption of legal restrictions on hunting, harvest and trade in many countries and some species involved are subject to regulation of international trade under CITES. Populations of some species in demand may also be increasingly confined to protected areas where hunting and collection is not permitted.43 Both local and international harvest and trade regulations may allow for some conditional sourcing and trade, for example through seasonal restrictions or licensing. However, significant trade flows for some species continue illegally, knowingly or unknowingly in contravention of applicable law in many countries.44

Research into specific consumption motivations for illegal wildlife used for food is typically geographically restricted or focused on particular species. As for the legal segment of this cluster, some purchasers seeking basic nutrition likely have limited alternative choices, while other consumers may be motivated by cultural tradition, taste preferences, price or niche interest.45 Some research has shown peer pressure to influence consumption choices, though generally it is likely to be an individual decision.46 In end markets, whether local or remote from sourcing areas, the legality of wildlife-derived foods may be difficult for consumers to discern and in some circumstances for speciality foods, demand may even be attracted by the illicit nature of the meal.47

**Medicines**

Wild animal and plant species are widely traded for medicinal and associated health-related uses. The
global trade in wild plants involves as many as 30,000 species, mostly wild-collected and used for modern and traditional medicines, in health supplements, cosmetics and as food ingredients. The diversity of animal species used for modern and traditional medicinal purposes is less comprehensively documented. Although traditional medicinal use of products such as pangolin scales, rhinoceros horn, bear bile or tiger bone gain significant attention in commentary on wildlife trade issues, there are many other species used in this demand cluster. Less well-known examples include horseshoe crabs used for vaccine production, and medicinal leeches used for surgical and therapeutical purposes.

Traditional medicine systems continue to be used by large shares of the population in many parts of the world. A recent WHO overview noted that 170 countries reported traditional medicinal practices to be in current use by their population, including a wide range of medicinal systems, such as herbal medicine, traditional Chinese medicine, indigenous traditional medicine and ayurvedic medicine. One recent meta-study estimated an average traditional medicine use prevalence in 58 per cent of the total population in sub-Saharan Africa, although rates between studies varied substantially. A study in Viet Nam found a mean frequency of use of traditional medicine to be six times per year, with over 90 per cent of respondents reporting an improvement in health as a result.

Wildlife parts used for medicine may appear in end markets in unprocessed form, particularly as dried ingredients such as seahorses, deer antlers, vulture skulls or ginseng roots. They are sometimes purchased directly by consumers from retail outlets, but also commonly prescribed and dispensed by traditional medicinal practitioners at the point of sale. Other medicinal ingredients from wild animals and plants are processed into packaged medicinal products and it can be difficult for users or regulators to ascertain which species are included.

Complementary medicine use, including practices employing wildlife ingredients, is motivated by concern about health and includes treatment of illness, alleviation of symptoms and prevention of disease. A review of evidence on why complementary medicine is chosen indicates a range of motivations, from affordability to desire to avoid the side effects of modern pharmaceuticals. The distinction between medicines chosen individually by end users and those for which prescription decisions are made by medical professionals is important for design of any intervention aimed to influence decision-makers driving demand.

As in the case of wild meat, medicinal uses typically demand large quantities of wildlife ingredients and the sourcing and trade of many of the species is now subject to national regulation and for some, international trade control under CITES. Again, there remain conditional trade options for many wildlife products used in medicine, though some, such as rhinoceros horn and tiger bone, as explained elsewhere in this report, are subject to comprehensive trade prohibitions. Research into consumer motivations to continue use of prohibited wildlife ingredients for medicinal use indicates a diversity of attitudes on the balance between health concerns and associated environmental harms or illegality.

Mass market pets and ornamental plants

Some wild animals and plants are traded in large numbers to be kept and nurtured alive by hobbyists as pets or ornamental plants. The mass market trade in “exotic” pets has a long history, particularly the keeping of wild birds and aquarium fish, and more recently reptiles, amphibians and other species. This growing market has increasingly global reach. Wild-sourced supply is supplemented by commercial captive breeding and hobbyists may themselves become breeders, sometimes using the proceeds of sales to support their own further purchases.

The legal international trade in live wild animal pets is large and diverse. The proportion of this business subject to CITES trade controls involved 5 million birds, 41 million reptiles and 0.5 million amphibians during the period 2011–2020. Trade volumes for species not covered by CITES are difficult to estimate as many countries do not keep or publish relevant statistics. Patterns of supply and consumption are complicated and evolving over time in response to regulation and emerging demand trends. Similarly, the trade in ornamental wild plants for private keeping involves a wide range of species, some of which are subject to trade regulation. CITES legal trade data for 2011–2021 included movements of over 180 million snowdrops
and almost 5 million cyclamens, all reportedly wild-sourced.\textsuperscript{66}

Unlike specialized collection demand described separately below, the pet and mainstream ornamental plant trade is characterized by bulk supply to satisfy demand for animals and plants that are reasonably easy to keep, with aesthetic or interesting features. Consumer research indicates that the exotic pet market demand cluster is not typically motivated by rarity or wild provenance and that captive bred animals and artificially propagated plants may be preferentially sought.\textsuperscript{67}

Nevertheless, some of the species in demand for this cluster have become subject to national sourcing and trade restrictions and in some cases to international regulation under CITES. Where illegal trade occurs in connection with these market clusters, it typically involves species that were commonly traded legally before introduction of trade restrictions. High volume demand targeting popular parrot species in the pet trade persists despite national trade bans and CITES interventions. One species involved is the African grey parrot, for decades popular as a pet bird and now listed in CITES Appendix I. Despite the availability of a legal captive-bred supply, illegal trade in this and other parrot species competes to supply some markets through direct smuggling from source countries and falsification of captive breeding claims to launder wild-caught birds.\textsuperscript{68}

It is typical in this demand cluster for legal supply to continue from commercial or hobbyist captive breeding of animals or artificial propagation of plants. The motivations for continued illegal sourcing and trade from wild sources are not well-researched but could include imbalance between the continuing demand being in excess of legal supply or that illegal supply has a price advantage.

Despite this demand cluster being typified by large volume trade in popular species, there are niche markets within the pet trade that target threatened and protected species. This is not a new phenomenon: the keeping of exotic animals has a long history among wealthy elites in various parts of the world.\textsuperscript{69} However a new dimension, particularly over the past decade, is the emergence of illegal markets for species such as otters, apes, cheetahs and other high value novel pets, inspired through exposure on social media channels, sometimes by high profile celebrities or influencers.\textsuperscript{70,71}

Although the significance of the scale of demand is difficult to judge, it often focuses on juvenile animals, the acquisition of which may have wider collateral impact on wild populations.\textsuperscript{72,73}

**Specialist market for live animals and plants**

Some pet and ornamental plant owners turned hobbyist breeders may transition to the world of specialist collectors, people who dedicate enormous amounts of time and money to curating collections of objects for their personal enjoyment and for sharing with other admirers. The desire to create these collections is both ancient and commonplace. The collection instinct has even been tied to specific areas of the human brain.\textsuperscript{74}

In the modern world, there is a community aspect to collecting, with those fascinated by certain objects forming clubs or societies, building expertise, comparing their collections with others, trading objects, and vying for status among their peers. The internet has brought collectors of rare objects closer together, reinforcing their behaviour and providing an international market to those who can source popular collectables.\textsuperscript{75}

Specialist collectors of wildlife specimens—such as rare birds, reptiles (Box 4.3), or orchids—are potentially driven by a desire for a complete and balanced collection. Rare specimens are particularly prized.\textsuperscript{76} Since the natural world has been incompletely catalogued, the discovery of new species provides perpetual novelty to wildlife collectors. Once acquired, the challenges of keeping lesser-known species and being among the first to breed or propagate a species in captivity are additional motivations. The compulsion to acquire can become so great that the legality of the specimen may become a secondary consideration. Insofar as illegality creates scarcity, it may even add to the attraction.

Demand motivations for specialist collectors of live wildlife specimens are very different from others who keep exotic pets or ornamental plants. Research has shown exotic pet owners prefer species that are captive-bred, common in the wild, and abundant in the market. Collectors, in contrast, prefer almost exactly the opposite, wild species that no one else has.\textsuperscript{77} As described in the orchid case study in chapter
6 of this report, some specialist collectors may see themselves as unofficial conservators, rescuing species from the wild before habitat loss leads to their extinction.

**Exclusive market in goods for adornment, display and demonstration of status**

A wide range of wildlife commodities fall within this demand cluster, including elephant ivory, tiger skins and precious woods. Some are valued in unprocessed form, while the value of others may be enhanced through manufacture into items such as ivory carvings or rosewood furniture.

Although legal trade remains a source of supply for some components of this demand cluster, such as the use of reptile skins for manufacture of fashion goods, for others there is limited or no legal supply. As documented in previous editions of the *World Wildlife Crime Report* some of these goods, such as elephant ivory, have long histories of overexploitation and many are subject to strict trade regulation at national level and under CITES.

Demand for goods in this demand cluster may have some attributes in common with niche components of the food and medicine clusters, such as sturgeon caviar consumption or use of rhinoceros horn as a tonic cure for hangovers. Consumers may be motivated as much by the opportunity to follow cultural traditions or project status and wealth as they are by the intrinsic properties of the goods they desire. For some goods, such as rosewood or reptile skins, manufacturers and retailers may have strong influence on sourcing choices, while for others such decisions lie principally with individual consumers.

When legal supply to markets in this market cluster is restricted or unavailable, there can be strong incentives for illegal trade, with the combination of restricted supply and wealth-driven demand potentially leading to the situation seen with other “luxury” goods where high prices themselves become an added motivation for further purchasing.

At least one researcher has argued that rosewood, used for the manufacture of high status furniture, has become the object of speculation, with buyers accumulating stocks in anticipation of price increases. Previous editions of the *World Wildlife Crime Report* made a similar argument about elephant ivory market incentives in the 2010s. Speculation could also explain rapid rises in detected illegal trade in a wildlife product but no indications of a corresponding increase in end markets sales, as with pangolin scales, although no concrete evidence has been produced so far.

Considering other markets, alternative investments, such as antiques, artworks and rare books, are valued as potential means to hedge against inflation, currency devaluation and other factors when local mainstream investments are deemed unreliable. The attraction of these investments increases when their purchase becomes a status symbol, a marker of cultural sophistication. For example, fine art has become an attractive investment vehicle in a number of developing economies.

Once a wildlife commodity has achieved the qualities of a status symbol, it may be displayed as home decoration or worn as jewellery. This same quality makes them appropriate for gifting, a social obligation that may border on corruption. Such gifting can be difficult to distinguish from bribery in some contexts.

**Corruption and wildlife crime**

Public and private sector actors as well as individuals may be lured into corrupt behaviour to facilitate wildlife crime as they can obtain high profits at a low risk of being caught. Factors enabling corruption to flourish in the wildlife trade include, among others, the absence of effective sanctions, a lack of transparency in the public administration and other agencies, unclear accountability structures, and a lack of public disclosure of key documents. Criminals thrive on the existence of corruption as it enables them to commit, conceal and avoid conviction for their crimes. Corruption may take various forms and may evolve over time. The United Nations Convention against Corruption (UNCAC), the only global legally binding international instrument against corruption, does not provide a definition of corruption but instead identifies a series of corrupt acts that should be criminalized. Most of the corrupt acts listed in
There is a large international market for reptiles as pets as well as a community of hobbyists who breed reptiles to supply this market. Researchers have found that 75 per cent of this trade is in species that are not covered by CITES and approximately half of all traded reptiles are captured from the wild. As with orchids, there is a segment of this community that collects rare and protected species and sourcing and trade in many of those not subject to CITES trade regulation are nonetheless subject to national restrictions. These collectors compete to acquire newly described species as well as severely threatened and protected species.

According to a series of 20 interviews with traders and experts conducted for the World Wildlife Crime Report 2020, many collectors start out when children after keeping one of the “gateway species” (e.g. bearded dragons, crested geckos, leopard geckos and ball pythons) as pets. Through the internet, they are exposed to owners of rarer species and learn how easy these species are to acquire. Like orchids, many reptile species are amenable to being transported by post, and specialized shipping companies have emerged to facilitate the trade. Soon they too are online showing off their acquisitions to gain status among fellow collectors.

With reptiles, even general demand can pose an extinction risk. This is because, unlike orchids, many reptile species are relatively difficult to breed in captivity, sustaining the demand for wild-caught specimens. As national or international trade restrictions are introduced to address overcollection for this trade, persistent market demand drives illegal trade and also creates demand for similar species not yet subject to regulation, which in turn may be negatively affected.

According to the interviewees, social media communications were driving demand and one good photo of a novel species can prompt exponential sharing and market interest. Global social media platforms and specialized trading forums are key to the market. Where direct sales are not allowed, prices are often listed in the comments. Those hesitant to do business online can buy protected species under the counter at reptile shows.

New collectors may initially buy their reptiles through one of the many brokers online, but they soon learn that through the internet they can commission collectors to find any desired specimen, irrespective of legality. Customs clearance specialists are hired in the source countries to ensure the order arrives. Hobbyists often import surplus animals and use the proceeds from onward sales to fund their own purchases. In a similar manner to user-dealers with illicit drugs, hobbyist breeders are a key source of supply in both the licit and illicit side of the reptile market.

Like collector demand for ornamental orchids explored in the case study in chapter 6 of this report, published research on the exotic pet trade indicates that novelty and scarcity are among the key factors that attract specialist demand and higher values. Species that are only found in a limited geographic range, particularly island endemic species, are inherently scarce and so in demand from traders. Additionally, endemism allows for collectors to know exactly where to find a species. As trade diminishes supplies, the prices increase. Such patterns have been observed for several species groups in demand for the pet trade, including chameleons, iguanas and freshwater turtles. It may also incentivize greater effort to establish captive-bred supply, but this can take some time to be established at significant levels.


e. Marshall, Strine, and Hughes, ‘Thousands of Reptile Species Threatened by Under-Regulated Global Trade’.

Between November 2022 and April 2023, UNODC undertook interviews with selected experts involved in law enforcement, criminal justice or related research or capacity building in government and non-governmental organizations. Among 17 respondents interviewed, only six were able to speak about specific examples of which they had first-hand knowledge. The survey was organized to establish a baseline understanding of the nature of corrupt relationships that facilitate the illegal import/export of wildlife through points of entry and to identify research gaps, opportunities, and directions for future work.

The types of corruption incidents (e.g. through bribery, trading in influence, abuse of functions) that were discussed by respondents when describing specific cases involved the following:

- Bribed to turn a blind eye and not inspect shipments at checkpoints.
- Provided access to information (e.g. patrol schedules for coastguard).
- Paid bribe to avoid arrest following detection by authorities.
- Abused functions by providing falsified documents (e.g. CITES permits).
- Abused functions by reselling confiscated wildlife.
- Bribed a public official to provide direct assistance physically to move the product through checkpoints.

Government officials involved in the schemes ranged from entry-level to senior management and higher-level government officials were suspected to be involved in some instances. Functions included: coast guards, customs, police and environmental agencies. In some cases, a government official was directly involved or leading the transnational shipment of wildlife. In terms of rewards, the government officials in all the described incidents received monetary gains for their participation in corrupt activities.

Establishment of corrupt relationships:
- Through collaboration with family or friends.
- An employment position had provided the opportunity to meet and connect with people involved in trade and access resources to facilitate illegal trade.
- Social networks had exposed officials to potential corruption by traffickers.
- Some corruption was reactive, a response to being detected.

Maintenance of corrupt relationships:
- Relationships generally continue because they are mutually beneficial.
- Some get locked into relationships through coercion (e.g. threats of violence).
- Some relationships can last for long periods of time (years).
- Some participants hide schemes through concealment methods, but some do not hide them because there is nothing to stop them continuing (systemic issues).

Breakdown of relationships:
- A conflict between the parties had emerged, perhaps related to a loss of trust although details were not clear.
- Some relationships were no longer beneficial although this raises questions about how suitable alternatives are found or if services are no longer needed (e.g. no one checks at the border regardless of whether bribes were on offer).
- There was little knowledge of what happens to corrupt relationships when they are detected—whether this causes the corruption to stop or be displaced to other people.
the Convention are employed by public officials who facilitate wildlife crime perpetrators who may offer bribes to officials for information on the movement of wildlife or patrols, to obtain licences or permits, to allow illegal specimens to pass through controls and borders, or to ensure that illegal shipments are not inspected or seized, as well as money-laundering to conceal the proceeds of crime.84,85 Corruption is an enabling element of wildlife crime at all stages of the trade chain. In source countries, first line wildlife defenders are an obvious target for traffickers as they are often poorly paid for what can be dangerous work. One study found that in just one section in the south of Kruger National Park in South Africa, 14 of its 20 rangers have been linked to poaching networks, many recruited with a combination of promises and threats.86 In some cases, the rangers may become poachers or traffickers themselves. A ranger in Zimbabwe was recently arrested alongside a police officer and a retired police officer in a sting in which they offered to sell almost 30 kg of ivory to undercover officers.87 When active rangers cannot be corrupted, former ones may be the next option as they have first-hand knowledge of the enforcement mechanisms that must be circumvented. Operation Blood Orange in South Africa implicated two former park rangers who, “Provided tactical information to rhino poaching syndicates in exchange for substantial sums of money.”88 An overview of how corruption impacts wildlife ranger work highlighted weak governance systems as a critical vulnerability.89

In some countries the revenues related to wildlife trafficking are apparently attractive enough to extend corruption to senior levels of government. For example, in 2023 the Government of the United States barred entry by three senior government officials responsible for wildlife trade regulation in the Democratic Republic of the Congo, for allegedly, “Trafficking chimpanzees, gorillas, okapi, and other protected wildlife ... using falsified permits, in return for bribes.”90 This is not the first time this particular management authority has been implicated: a 2018 international investigation into an attempt to export African manatees resulted in the arrest of a staff member from the CITES Management Authority in the Democratic Republic of the Congo.91 Reviews of evidence on corruption links to wildlife trafficking have highlighted arrests and conviction of senior government officials in a range of countries in Africa, Asia and Latin America.92,93,94

Another point of vulnerability is government stockpiles. In 2018, a customs official in Viet Nam was reportedly sentenced to 16 years in prison for stealing ivory and rhino horn from government stockpiles.95 A similar case emerged in 2023 in Malaysia involving pangolin scales.96 A series of ivory seizures have been connected through inventory markings and isotope analysis to Burundi stockpiles,97 and a similar situation pertains to the rosewood stockpiles of Madagascar.98 Other forms of corrupt acts could well be applicable to these cases, such as diversion of property, embezzlement, trading in influence and abuse of functions, all of which are listed in UNCAC.

The role of corruption as a facilitator of wildlife crime is receiving increased attention and research effort in recent years. This issue was specifically flagged as a growing concern and focus for action in a 2016 CITES resolution,99 and the urgent necessity to address environmental crime and corruption was the subject of a 2019 resolution of the UNCAC Conference of the States Parties.100 A range of analyses has been published on the role of corruption in enabling illegal wildlife trade flows generally or with respect to specific commodities, including rhinoceros horn and sturgeon caviar.101,102,103 Available evidence also reveals that women and men experience, participate in, profit from and lose from corruption differently.104

To gain a deeper understanding of the underlying mechanisms of corruption linked to wildlife crime, UNODC organized a review of case examples for which corrupt acts were directly addressed by prosecution rather than referred to indirectly in cases typically tried under wildlife legislation. However, limited source data was found to be available. Such information could be of high value for the identification of possible points of intervention and to gain an understanding of why prosecution under laws directly addressing corruption is apparently uncommon, despite potentially higher penalties. To try and address this evidence gap, a consultation was carried out by UNODC in 2022–2023 to seek insights from experts with case-level experience about how corrupt relationships that facilitate the illegal wildlife trade are established, structured and maintained (Box 4.4). These findings are summarized in Figure 4.4.
Insights from the expert interviews and case studies for the current report illustrate that wildlife crime-related corruption has much in common with corruption affecting other legal and illegal economic sectors. Participants bribed to facilitate illegal wildlife trade at transport checkpoints and borders provide the same services in relation to other forms of contraband, while the road checkpoint corruption described in the rosewood case study in chapter 6 of this report is clearly a liability for passage of legal goods too. For wildlife crime, specific vulnerabilities are likely for specialized public sector roles such as harvest and trade permit issuance, animal health and phytosanitary inspection, and control of specialized retail outlets. However, the evidence base for specific points of vulnerability and the effectiveness of risk mitigation responses for such roles remains weak.
Endnotes


2 Other harms do of course occur along the trade chain after sourcing, as elaborated in chapter 2 of this report, including negative environmental, social, economic and governance impacts of wildlife trafficking and associated crime.

3 Such interdictions may of course have other benefits in reducing harms along the trade chain, including prevention of the use of proceeds from crime.


14 IRA-005
15 CAL-002
16 BLP-001


21 The rosewood case study provides further explanation of the reasons why legal exports of rosewood form Nigeria stopped and related CITES mechanisms.


30 See case study on ivory in chapter 6 below.

31 Sum of seizures made in each country and seizures made elsewhere for which these countries were named as country of shipment.


39 Nasi et al., ‘Wild Meat’.

40 IPBES, ‘Thematic Assessment of the Sustainable Use of Wild Species of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services’.


43 Ibid.

44 Ibid.

45 Ibid.


77 Hausmann et al., ‘Assessing Preferences and Motivations for Owning Exotic Pets’.


83 Hausmann et al., ‘Assessing Preferences and Motivations for Owning Exotic Pets’.


98 See, for example, CITES Notification to Parties 2022/005: https://cites.org/sites/default/files/notifications/E-Notif-2022-005.pdf.


100 UNCAC CoSP Resolution 8/12 on Preventing and combating corruption as it relates to crimes that have an impact on the environment, https://www.unodc.org/unodc/en/corruption/COSP/session8-resolutions.html.


