



INTRODUCTION

1

The second edition of the *World Wildlife Crime Report* takes stock of the present wildlife crime situation with a focus on illicit trafficking of protected species of wild fauna and flora and provides a broad assessment of the nature and extent of the problem at the global level. It includes a quantitative market assessment and a series of in-depth illicit trade case studies. In addition, a discussion of the value chains and illicit financial flows from the trade in ivory and rhino horn is included. The report was conducted in cooperation with ICCWC partners.

This research was conducted in response to the United Nations General Assembly Resolution on Tackling Illicit Trafficking in Wildlife, adopted in 2019. This resolution requested the United Nations Office on Drugs and Crime, in close cooperation and collaboration with Member States, to continue the collection of information on patterns and flows of illicit trafficking in wildlife and to report thereon biennially.¹

If the *2016 World Wildlife Crime Report* represented UNODC's first global assessment of the state of wildlife crime, the 2020 edition of this report represents a first assessment of trends. In several instances, these trends have been dramatic. The poaching of both elephants and rhinoceroses has declined since 2011 and 2015 respectively, as have the prices paid for tusks and horns. In contrast, the amount of pangolin scales seized has increased 10-fold in just five years, and new markets, such as the trafficking of European glass eels, have emerged. For the first time, a consistent pattern of large shipments of unrelated wildlife products – elephant ivory and pangolin scales – has emerged. In addition, organized

criminal groups in broker countries, neither the source nor the destination of the wildlife, have consolidated control of multiple markets. The *2020 World Wildlife Crime Report* tracks and summarizes these trends.

The quantitative analysis is based on the updated World Wildlife Seizure database (World WISE), including the latest seizure data provided to the CITES Secretariat by its Parties through the CITES annual illegal trade reports. These data were circulated to Member States by UNODC for verification. While this database alone is not sufficient to describe the nature and scope of illicit trafficking in wildlife on a global scale, it provides key indicators and a potential early warning mechanism. When maintained and supplemented with a broader programme of research and longitudinal assessments, it provides the international community with the means to better understand and address the state of wildlife crime in the world.

What is wildlife crime?

Providing a global assessment of wildlife crime is challenging, because every country manages and protects its wild terrestrial animals, fish, trees, and other flora in different ways and wildlife, fisheries and forestry regulations evolve as new risks and priorities for countries emerge. There is no universal treaty defining wildlife crime, therefore there is no universally accepted definition of the term. For the purposes of this report, the term “wildlife crime” refers to *harvesting and trade contrary to national law*, particularly, but not exclusively, the national laws implemented in fulfilment of CITES obligations. This includes offences that might not

attract criminal sanctions in some parts of the world.

Wildlife is protected internationally by the *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, known as CITES, which provides a framework to protect certain species against over-exploitation through international trade. It does not define wildlife crime as such, but it strongly influences national legislation on wildlife crime, and provides a means for international cooperation against trafficking. Parties to CITES are required to “penalise” illegal trade, which may include the criminalization of serious offenses. It is an agreement of remarkable power and scope.

CITES is so important because wildlife protection laws are usually situated in broader national environmental legislation. As a result, these laws focus on native species, and they do so in a wide variety of ways. Since wildlife populations are dynamic, most wildlife related legislation leaves it to the executive branch of the government to issue regulations determining when and how wildlife can be harvested. Species can be added and removed from protected species lists, licenses issued allowing the legal taking of wildlife, and quotas established to ensure sustainability. As a result, the domestic legality of any given wildlife product is a matter of considerable complexity.

The national lists of protected species may be limited to native species and there may be no basis in national law to challenge the import or sale of questionable wildlife products that are not covered by national legislation. Even if the law allows the seizure of wildlife taken or exported contrary



to the laws and regulations of other countries, proving this illegality can be challenging. Few countries have the capacity to keep track of the complex and changing world of foreign wildlife regulation, or to gather evidence on offences committed on the other side of the world.

CITES allows countries to reciprocally protect one another's species against overexploitation according to a common set of rules. The system works through a series of permits and certificates relating to three international protected species lists, the CITES Appendices. International trade in CITES-listed wildlife without the appropriate permits and certificates appears to be the most

commonly detected transnational violation of the Convention, sometimes involving organized crime and serious wildlife offences.

As mentioned, CITES requires Parties to "penalise" violations of the agreement.² CITES violations are punished in different ways and degrees depending on the seriousness of the infraction and the different national legal systems. Some countries are more inclined to sanction with a fine, while in others, offenders can be sentenced to more than four years in prison.

CITES is an agreement that regulates international trade in specimens of species of wild fauna and flora, with conservation aims. CITES defines

the international rules that wildlife traffickers seek to circumvent. While certain species may be afforded different levels of regulation even within the borders of a single country, the CITES appendices contain a list of species for which the international community has agreed common rules and standards to regulate their trade and transboundary movement. CITES does not address all aspects of wildlife crime, but it is the single most coherent approach to a topic of considerable international complexity.

Furthermore, as a multilateral agreement combining trade and wildlife provisions, CITES has a powerful compliance mechanism: compliance measures may be recommended against non-compliant Parties. Depending on the nature of the compliance measures agreed by the governing body of CITES, all other CITES Parties may agree not to trade with the non-compliant Party, either in particular species, or in any CITES-listed species. Since many CITES listings are broad (to cover look-alike species), such trade suspensions can have serious economic consequences.

The scope of CITES is limited to international trade, and purely domestic behaviour is the responsibility of the Parties. States have the sovereign right to manage CITES-listed species within their borders in accordance with the principles of international law, so long as the specimen does not move internationally. This effectively means that access, sourcing, acquisition, possession, transport, poaching and domestic trade (legal or illegal) are matters for national governments to regulate under their national legislation. Because CITES addresses international trade, most CITES-related enforcement takes place at ports of entry, and not in domestic markets. The origin of non-indigenous wildlife sold domestically could always be queried, but proving it was illegally imported would be difficult in some legal systems, especially for species in Appendices II and III for which



The CITES Appendices

CITES works by subjecting international trade in specimens of selected species to certain controls. All import, export, re-export and introduction from the sea of species covered by the Convention has to be authorized through a licensing system. Each Party to the Convention must designate one or more Management Authorities in charge of administering that licensing system and one or more Scientific Authorities to advise them on the effects of trade on the status of the species.

The species covered by CITES are listed in three Appendices, according to the degree of protection they need.

Appendices I and II

Appendix I includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances. Appendix II includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival.

The Conference of the Parties (CoP), which is the supreme decision-making body of the Convention and comprises

all its Parties, has agreed in Resolution Conf. 9.24 (Rev. CoP17) on a set of biological and trade criteria to determine whether a species should be included in Appendix I or II. At each regular meeting of the CoP, Parties submit proposals based on those criteria to amend these two Appendices. Those amendment proposals are discussed and if no consensus can be found, submitted to a vote. The Convention also allows for amendments by a postal procedure between meetings of the CoP (see Article XV, paragraph 2, of the Convention), but this procedure is rarely used.

Appendix III

This Appendix contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade. Changes to Appendix III follow a distinct procedure from changes to Appendices I and II, as each Party is entitled to submit unilateral requests to include or withdraw species from it.^a

^a See the CITES web page "How CITES works" for further information. (Available at: <https://cites.org/eng/disc/how.php>).

trade is allowed. The upshot of all this is that most CITES enforcement occurs when the wildlife is moving between countries, which means that an important part of CITES enforcement is conducted by national customs agents responsible for controlling trade at borders. However, the police, rangers, prosecutors, judiciary and wildlife authorities have a significant role to play before and after the detection of any alleged infraction.

Domestic wildlife law enforcement is conducted by a wider range of national and local agencies. The topics of logging and fishing in particular are often regulated by distinct bodies of law, with their own enforcement bodies. Environment, health, agriculture, development, and commerce ministries may be involved in regulating use of land and the marketing of wild species products. Responsibility for many forms of environmental enforcement may be devolved to provincial or even municipal authorities. Even on a national basis, communication between these actors may be limited. Finally, many wildlife crimes may be prosecuted under non-specialised legislation, such as laws pertaining to fraud or perjury. Given the diverse ways that the crime can be approached and prosecuted, few countries have the capacity to comprehensively add up all detected wildlife offences.

Thus, CITES provides another useful function: it defines a meaningful sub-set of wildlife offences for analytic purposes. It captures on a global list the species about which, based on international agreement, there is reason to be concerned. Without this agreement, it is impossible to reconcile the national categorisations of protected species.

For these reasons, this report focuses on CITES listed species, although other species are discussed where relevant. As will be explained below, the seminal data source on which it is based are the seizures of wildlife

contraband including those officially reported by CITES Parties in fulfilment of their reporting obligations. Reference is made to other violations of domestic law in specific case studies where appropriate. Although this approach does not encompass all that could be defined as “wildlife crime”, it does highlight those aspects most likely to constitute transnational organized crime, and the areas where international cooperation is most vital.

Wildlife crime as transnational organized crime

In some cases, illegal wildlife trade can be seen as a form of organized crime and the involvement of organized criminal groups in transnational organized wildlife trafficking is evident.³ The United Nations Convention against Transnational Organized Crime defines an “organized criminal group” as:

... a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit...

The Convention goes on to explain that a “serious crime” is a crime punishable by four years or more in prison and that a “structured group” need not have “formally defined roles for its members, continuity of its membership or a developed structure.”

In other words, organized crime is not just about rigid mafia-type groups. Any pattern of profit-motivated, serious criminal activity is considered organized crime, and nearly all transnational wildlife trafficking fulfils these criteria, provided the penalties in the relevant countries are sufficiently high (that is, in excess of four or more years in prison).

In contrast to markets on which there is a complete prohibition, wildlife trafficking may involve goods that can be legal or illegal, depending on when, where, and how they were acquired. Like firearms, pharmaceuticals, or antiquities, the legality of this acquisition is demonstrated through a licensing system. Since an official document can transform millions of dollars of suspected contraband into millions of dollars of legitimate merchandise, a proportion of the “trafficking” of these goods may be laundered and proceed through the front door, with documents provided through fraud, forgery, or corruption.

Aside from evading interdiction, illegally sourced goods laundered using fraudulent documents can be introduced into legitimate commercial channels, availing themselves of legal demand. In this way, illegally sourced timber, fish, and other wildlife products find their way into mainstream retail outlets, and consumers who would never knowingly purchase contraband may nonetheless do so. Transnational trade has grown at a rate greater than the ability of the international community to regulate it, allowing a wide range of illicit merchandise to be laundered through a series of holding companies and offshore accounts. Wildlife products are no different, and the need for strict regulation and supply chain security is key to protecting threatened species.

The World Wildlife Seizures (World WISE) database⁴

To better understand wildlife crime, UNODC established the World WISE Database - a global data repository of wildlife seizure incidents – on the occasion of the first World Wildlife Crime Report. At the time, it was partly based on the existing international mechanism for reporting wildlife seizure data that already existed: the Annual and Biennial Reports submitted by CITES parties.



As member of the International Consortium on Combating Wildlife Crime (ICCCWC), UNODC received these data from the CITES Secretariat to create the World WISE database and to use for research purposes.⁵

In 2016, CITES passed Resolution Conf. 11.17 (Rev. CoP18) on *National Reports* urging “all Parties to submit their annual reports required under the provisions of Article VIII, paragraph 7 (a), by 31 October following the year for which they are due and in accordance with the most recent version of the Guidelines for the preparation and submission of CITES annual reports distributed by the Secretariat, as may be amended with the concurrence of the Standing Committee.”⁶

Since 2016, the Annual Illegal Trade Reports (AITRs) are a crucial source of data for the database.⁷ As ICCWC partners, UNODC has been maintaining these data and including them in the World WISE analysis, when permitted to do so by the relevant CITES Party. For reporting years 2016-2018, UNODC received over 42,600 seizure records⁸ from the Annual Illegal Trade Reports,⁹ involving around 1,500 species in various product formats, from live animals to medicinal products containing animal parts.

The current release of the World WISE Database – which is the basis of this report – includes nearly 180,000 seizures from 149 countries with almost 6,000 species represented in the illegal trade, with seizures dating from 1999 to 2018.¹⁰ Most of the analysis in this report is based on data from 2005 to 2018. The database holds almost 155,000 seizures from 146 countries for this period. Apart from the AITRs, a number of additional data sources (including, among other sources, WCO-CEN, EU-TWIX and USFWS-LEMIS) were used to create a unique collection of data on the illegal wildlife trade.

World WISE’s annual coverage of wildlife seizures is not consistent, however. The first report, launched in May 2016, was based on data through 2014. After the completion of the Report, work on World WISE was suspended until early 2017. At the same time, the CITES Biennial Report had been discontinued and the new Illegal Trade Report, inaugurated in 2016, had not yet been initiated. As a result, the years 2014 and 2015 are relatively data deficient.

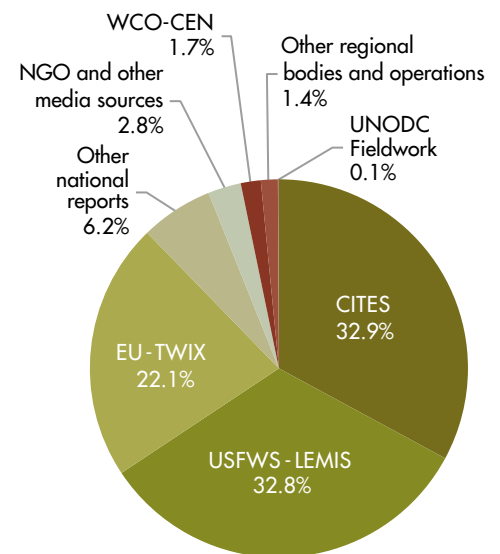
Currently, the seizures included in the database come from the following sources as portrayed in Fig. 1. Where necessary, seizure data from NGO sources, reviewed by Member States, have been added to World WISE to provide a more complete picture. Further information can be found in the methodological annex on the individual data sources for each species.

The data reporting countries represent most of the main source and destination countries for the most valuable and commonly trafficked wildlife, and therefore provide a robust and representative picture of global wildlife trafficking trends. A number of source regions, though, are weak, particularly South America and Africa. The data collection effort required to produce World WISE suggested that many countries lack the capacity to collect national wildlife seizure data, either due to legal issues, lack of communication between government agencies, or federal/state conflicts. These countries may require future technical assistance to fulfil their CITES reporting obligations.

World WISE remains one of the largest official seizure databases available on wildlife crime and the main tool for the Secretariat of the Convention for the International Trade in Endangered Species (CITES) to review the illegal wildlife trade patterns at the global level.

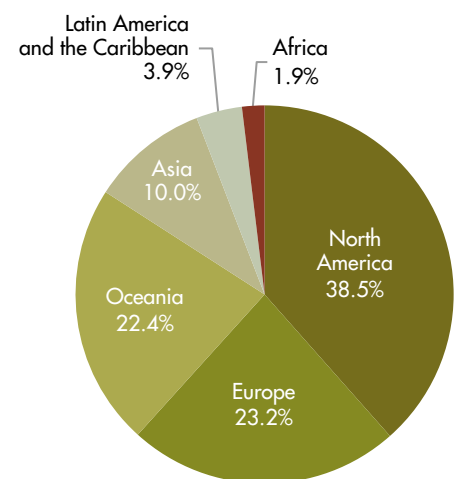
In addition to this quantitative data, the report also relies on qualitative

Fig. 1 Share of data sources in World WISE, 2008-2018



Source: UNODC World WISE Database

Fig. 2 Share of regional sources of seizures in World WISE

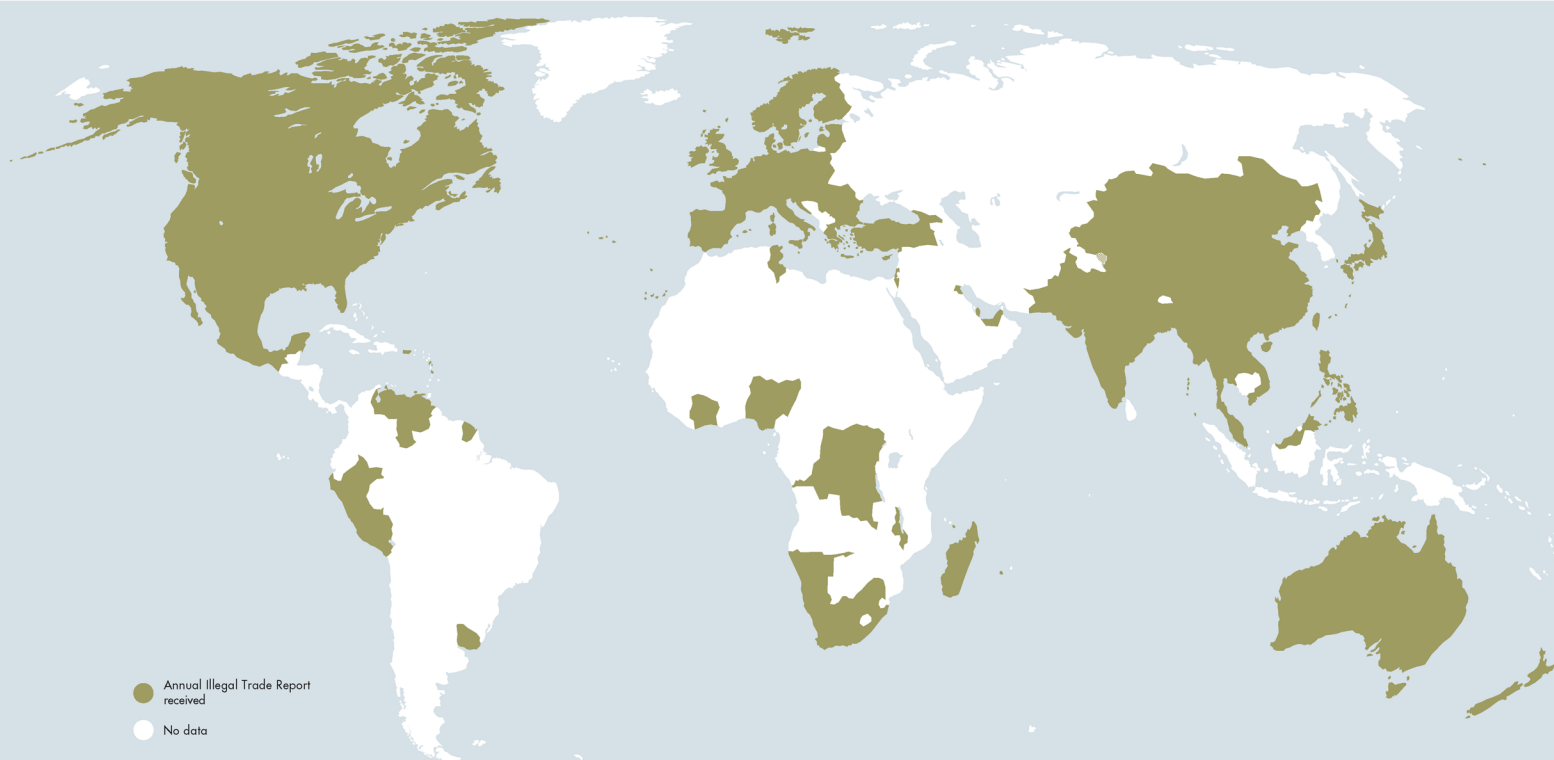


Source: UNODC World WISE Database

data from fieldwork to put those numbers in context based on the situation on the ground where these poaching and seizure incidents are taking place. This sort of “on the ground” research is key to helping law enforcement respond to wildlife threats in real-time and adjust their approach as new wildlife crime trends that emerge and are sometimes yet to be seen in the large-scale seizure

Map 1

Countries for which AITRs have been received by UNODC from CITES (2016-2018)*



Source: UNODC World WISE Database

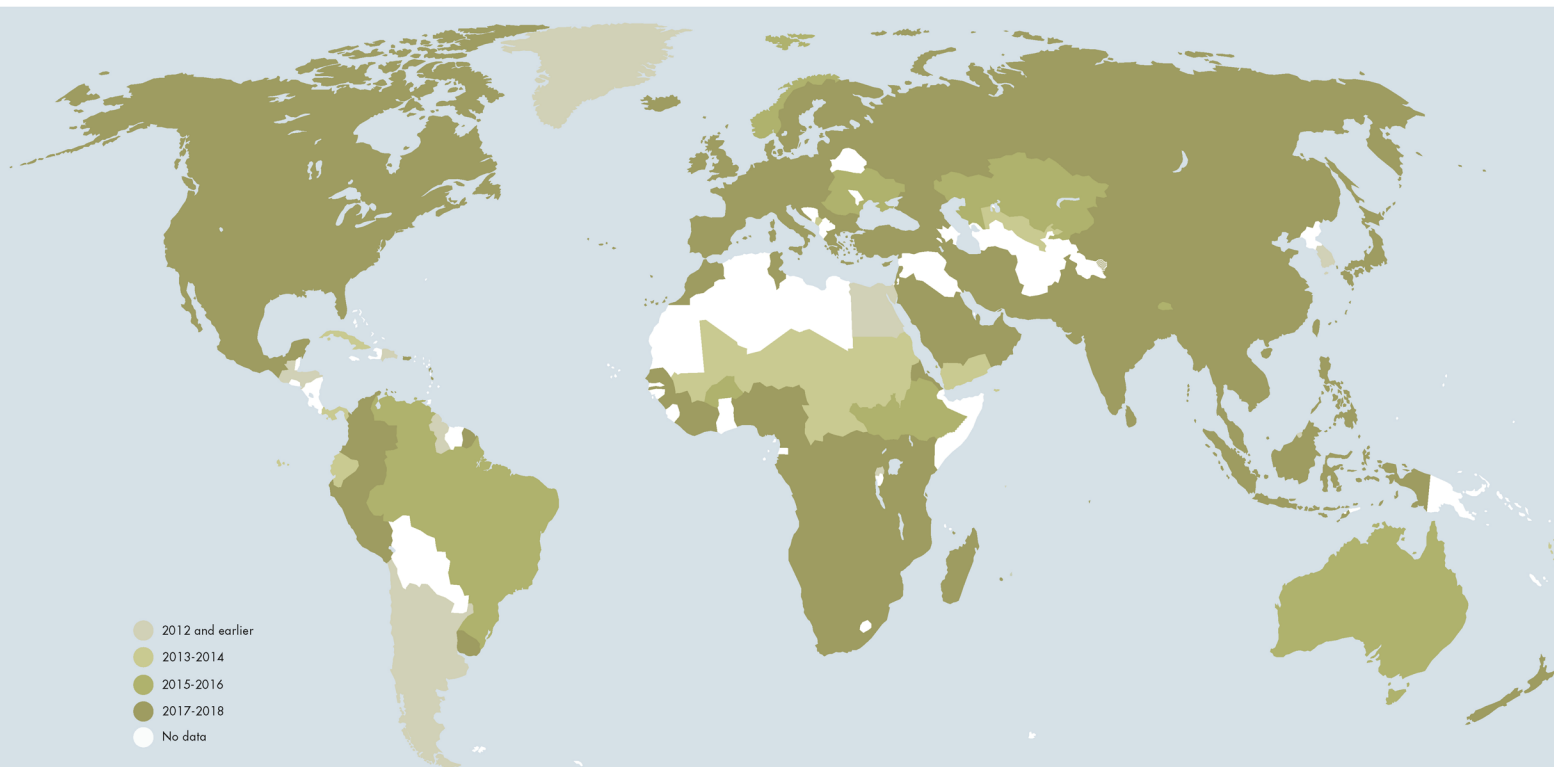
* Includes only countries for which Annual Illegal Trade Report (AITR) data have been received and included in the database by October 2019. The year 2018 is based on partial data.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Map 2

Country coverage in the World WISE Database by latest available year – all available data sources*



Source: UNODC World WISE Database

* The World WISE Database also includes some seizures from 2019, but this year is not shown here given the very limited amount of 2019 data included. The year 2018 is based on partial data.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).



Wildlife trafficking and COVID-19

Given the extensive impact of the COVID-19 pandemic on human health, the global economy and national security, understanding the nature of zoonotic diseases and the risks they pose – and how to prevent them – has become one of the most critical questions facing governments today. The data collection and analysis for this report was completed prior to the COVID-19 pandemic. While the patterns and trends depicted in the report reflect only those pre-pandemic, they offer an overview of the seriousness of wildlife crime and suggest implications for policy and programmatic response that reflect the importance of addressing and preventing wildlife trafficking as important avenues to reducing the risk of future zoonotic pandemics.

The COVID-19 pandemic and the vast subsequent harms to human and economic well-being have starkly illustrated the potential global impact of zoonotic diseases, for which wildlife trade – both legal and illegal – is a potential vector. UNODC and its partners are dedicated to understanding the nexus between wildlife trafficking and risks associated with zoonotic diseases, while recognizing that there remain substantial uncertainties relating to this area.

According to the World Health Organization, around 75 per cent of new or emerging infectious diseases that have affected humans over the past three decades originate in animals.^a While the understanding of both the disease and the origin of the virus that causes it are evolving rapidly, COVID-19 is likely linked to a pathogen found in wild bats that is suspected to have passed to humans, possibly via an intermediary.

While there are many factors that have contributed to the spread of zoonotic diseases, including social, environmental and economic developments such as urbanization, increasing human population density, climate change, and the increase in speed of trade and travel, large-scale wildlife trafficking and deforestation are among these key factors. More frequent human-wildlife interactions increase the probability of transmission of animal-borne pathogens to human beings, and illegally sourced wildlife, traded in a clandestine way, escapes any sanitary control and exposes humans to the transmission of new viruses and other pathogens. Without human interference through capturing, slaughtering, selling, trafficking, trading and consuming of wildlife, the evolution and transmission of the coronavirus that causes COVID-19 would have been highly unlikely.

The impacts of the COVID-19 pandemic on practices of poaching, wildlife trafficking and wildlife consumption are not yet clear. While global travel restrictions and other factors will have an impact on the scale, transportation methods and overall mode of operations of organized criminal groups plying this trade, it is highly likely that wildlife trafficking will not have substantially decreased. While there may be some short-term disruptions, buyers and sellers will likely reorganize and increase focus on online trade channels and related mechanisms. In addition, increased poaching due to declines in tourism and its associated revenue and increases in subsistence poaching are realistic risks. Park and protected area closures and a decrease in patrols by rangers have already con-

tributed to increased poaching activities in some countries. Further, wildlife products may be touted as ‘cures’ for COVID-19, notably bear bile^b and various plant species^c used in Traditional Chinese Medicine.

It is still too early to observe clear trends and changes related to wildlife trafficking due to the pandemic, but lockdown measures taken by governments have forced organized criminal groups to adapt and quickly change their dynamics. Those changes might result in illicit markets going even deeper underground, additional risks for corruption, and shifts in market and transportation methodologies in the longer term.

UNODC, alongside its partners, will focus on analysing trends in wildlife trafficking and providing Member States with tools to address demand; to strengthen their law enforcement and judicial response to address wildlife forest and fisheries crime; and to create sustainable alternative livelihoods for those involved in poaching and the illegal trade.

- a World Health Organization. Zoonotic disease: emerging public health threats in the Region. (Available at: <http://www.emro.who.int/about-who/rc61/zoonotic-diseases.html>).
- b Fobar, R. (March 25, 2020). China promotes bear bile as coronavirus treatment, alarming wildlife advocates. *National Geographic*. (Available at: <https://www.nationalgeographic.com/animals/2020/03/chinese-government-promotes-bear-bile-as-coronavirus-covid19-treatment/>).
- c TRAFFIC. (April 7, 2020). COVID-19 - The role of wild plants in health treatment and why sustainability of their trade matters. (Available at: <https://www.traffic.org/news/covid-19-the-role-of-wild-plants-in-health-treatment/>).

data. Further details on the specific fieldwork conducted and the qualitative data collected can be found in the species chapters as well as in the methodological annex.

Combining national reports and other data sources from 149 countries and territories presented a number of methodological challenges, which are discussed in the online methodological supplement to this report. One issue that deserves discussion is the need to convert seizures to common units, at least within specific markets. For example, timber seizures may be reported in terms of log or container counts, weight, or volume. They may also involve different sorts of commodities, including logs, sawn wood, and other products. For each species, the academic and trade literature were consulted to provide conversion formulas. These conversions are discussed further in the case study chapters that comprise the bulk of this report.

By analysing the records submitted, it is possible to determine the sorts of information parties gather in the normal course of business. For example, most of the seizures reported contained information about the source of the shipment (71 per cent) and the destination of the shipment (76 per cent). Much less often, however, did the seizure data include information on the countries transited before the seizure (3 per cent). Many countries gave more detailed information as to the exact location where the seizure was made – this information could be used to create maps of vulnerable locations – but since this information was available for less than half the seizures, it is not fully utilised in this report.

For further information on the World WISE database, please refer to the first edition of the *World Wildlife Crime Report* published by UNODC in 2016.

Endnotes

- 1 A/RES/73/343.
- 2 The CITES agreement requires (Article VIII, Section 1) “The Parties shall take appropriate measures to enforce the provisions of the present Convention and to prohibit trade in specimens in violation thereof. These shall include measures: (a) to penalize trade in, or possession of, such specimens, or both; and (b) to provide for the confiscation or return to the State of export of such specimens.” <https://www.cites.org/eng/disc/text.php>.
- 3 See the cases on wildlife, forest and fisheries crime combined with participation in an organized criminal group in the UNODC SHERLOC Case Law Database, <https://sherloc.unodc.org/cld/v3/sherloc/cldb/#/crime-type>.
- 4 For a complete description of the database and its creation, please refer to the first edition of the World Wildlife Crime Report published in 2016 (<https://www.unodc.org/unodc/en/data-and-analysis/wildlife.html>).
- 5 This cooperation is in line with the ICCWC Strategic Mission 2014-2016 and the ICCWC Strategic Programme 2016-2020. See <https://cites.org/eng/prog/iccwc.php/Strategy>.
- 6 Conf. 11.17 (Rev. CoP18).
- 7 The AITR requirement was introduced at CoP17, and to date reports covering data for 2016-2018 were due. Some Parties however also provided data from previous years in their submissions so AITR data included in World WISE covers years 2013-2018 depending on the country.
- 8 In order to produce a comprehensive and valid database, data collected from different sources have been processed to avoid the inclusion of duplicate records. When the same seizure event was reported by more than one source, only one iteration has been retained in World WISE. For this reason, not all AITR seizure records have been incorporated in the World WISE Database and for some countries (for example EU Member States), alternative official data sources (like EU-TWIX) have been used.
- 9 This release of World WISE does not include all 2018 AITRs received because the data collection for 2018 was not complete when the data processing for the World WISE dataset had to be closed to complete the analysis for the current report.
- 10 As of November 2019, the time at which analysis for this report was initiated.