



Consulting Practicum on the International Protection for Common
Heritage in cooperation with the Wildlife Justice Commission



“TOWARDS A 4TH ADDITIONAL
PROTOCOL TO UNTOC TO ENHANCE
INTERNATIONAL COOPERATION IN
THE FIGHT AGAINST CRIMES THAT
AFFECT THE ENVIRONMENT”

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Created By:

Journey Boydon, Chantal Jimenez, Tanvi Joglekar, Jake Kallman,
Kerry Ko, Sumit Kochkar, and Anna Vinals Musquera

Edited By:

Dr. David Donat Cattin



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Authors: Journey Boydon, Chantal Jimenez, Tanvi Joglekar, Jake Kallman, Kerry Ko, Sumit Kochkar and Anna Vinals Musquera
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Supervisor/Editor: Prof. David Donat Cattin, *Consulting Practicum on the International Protection of Common Heritage, NYU Center for Global Affairs*

* N.B.: This paper benefited from input of the Wildlife Justice Commission. The views contained herein cannot be attributed to the Wildlife Justice Commission and do not necessarily reflect the views of the Commission. This practicum’s objective was for students to learn valuable skills on global law enforcement efforts to combat transnational networks engaged in crimes that affect the environment and wildlife, and to take stock of challenges and opportunities for States, intergovernmental organizations and non-governmental organizations.



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I. Executive Summary

Crimes that affect the environment, including wildlife trafficking, are posing a threat to the preservation of nature and its ecosystems, as well as to human habitats and landscapes. These concepts form part of the “natural heritage of humankind”¹ and are protected under customary international law while relevant treaty regimes are insufficient, fragmented, and often not effectively enforced.

Between September and December 2025, the NYU Center for Global Affairs’ *Consulting Practicum on International Protection of Common Heritage* in partnership with the Wildlife Justice Commission (WJC), has engaged with experts and actors playing a role in the ongoing process towards a fourth additional protocol to the United Nations Convention against Transnational Organized Crime (UNTOC).² The purpose of this project was to produce the present Policy Paper, highlighting the imperative for States to negotiate and adopt such a fourth additional protocol, with the view of filling legal gaps in the fight against crimes that affect the environment

The time has come for the International Community to take decisive action against transnational networks threatening the natural world heritage, starting with fauna and flora species that are protected under national or international law, regardless of their risk of extinction. All elements of the natural ecosystems must be protected to safeguard the environment and its biodiversity for present and future generations, in line with the general principle of law of inter-generational equity. The collective responsibility that we have today is to ensure that there will be tomorrow.

II. Background and Scope

Transnational environmental crimes, such as illegal logging, mining, wildlife trafficking, and hazardous waste trafficking, are among the most profitable types of organized crime but are still under-prioritized in governmental and inter-governmental policies and law enforcement efforts.

¹ United Nations Education, Science and Culture Organization (UNESCO), *Convention for the Protection of the World Cultural and Natural Heritage* (1972): <<https://whc.unesco.org/en/conventiontext/>>.

² United Nations General Assembly resolution 55/25 of 15 November 2000, *United Nations Convention against Transnational Organized Crime*: <www.unodc.org/documents/treaties/UNTOC/Publications/TOC%20Convention/TOCebook-e.pdf>.

The Convention has three additional protocols. When this paper refers to a fourth additional protocol (or an additional protocol) on crimes that affect the environment, it does not take a position on whether one or more additional protocols may be adopted by States to fulfil the object and purpose of such protocol(s). Additionally, this paper is alternatively making reference to “crimes that affect the environment”, environmental crime, and crimes against the environment, and does not take a position on the preferred use of terms. For more details on a potential list of definitions of crimes that affect the environment, which could be considered as one of the starting points for future negotiations of an additional protocol, reference is made to Annex C of this Paper.

While the Wildlife Justice Commission (WJC) and other organizations and coalitions, including the Global Initiative to End Wildlife Crime, have widely recognized transnational environmental crimes as serious threats to our planet, its biodiversity, and our human rights, they are still handled in a fragmented way within international law. These crimes may partially fall under regulatory systems governed by treaties such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)³ or the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal⁴; however, a comprehensive legal instrument on criminalization, as a basis for enhanced cooperation and enforcement, is lacking.

The existing framework to combat transnational crime through the UN Convention against Transnational Organized Crime (UNTOC) and its three protocols has not been sufficiently implemented by several States, especially due to their failure to recognize these offenses as “serious crimes” (in the meaning of UNTOC’s Article 2), and the an effective fight against crimes that affect the environment has also suffered from the lack a dedicated instrument that would fill relevant gaps, *inter alia*:

- Defining offenses;
- Protecting victims’ rights; and
- Ensuring more effective cooperation among national jurisdictions and law enforcement agencies.

While cultural heritage is relatively protected under international criminal law,⁵ natural heritage, such as biodiversity and the habitats of threatened species, remains largely unprotected from criminal exploitation under public international law despite facing similar levels of illegal theft, erosion, or even destruction.

In response to growing calls for a unified global approach, the UNTOC Conference of the Parties (COP) Resolution 12/4 (2024)⁶ has opened a new window of opportunity for law-making. This resolution calls upon States Parties to consider options for strengthening international cooperation on environmental crime within the UNTOC framework. Although this resolution does not explicitly indicate the need for a new protocol, it establishes an **Open-ended intergovernmental expert group (IEG)**⁷ mandated to analyze existing gaps in the international legal system, address crimes that affect the environment as well as “the possibility, feasibility and merits of any additional protocol to the Convention”.

Civil Society Organizations (CSOs) have been supporting and proactively following the ongoing work of the IEG, including through the activities of civil society coalitions such as the Alliance of NGOs on Crime Prevention and Criminal Justice’ Working Group on Crimes that affect the Environment.⁸ The WJCs’ expertise in intelligence-led investigations and policy advocacy makes it a key player at this stage. As legal and diplomatic negotiations progress, there is an opportunity to incorporate perspectives gained from field efforts through WJC’s partnerships with local law enforcement agencies to disrupt and dismantle organized criminal networks profiting from wildlife.

³ CITES, *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, (1973) <<https://cites.org/sites/default/files/eng/disc/CITES-Convention-EN.pdf>>.

⁴ UNEP, *Basel convention On the control of transboundary Movements of hazardous wastes And their disposal*, (1992) <<https://www.basel.int/portals/4/basel%20convention/docs/text/baselconventiontext-e.pdf>>.

⁵ According to several commentators, States have proactively domesticated the UNESCO Convention of 1972 in the priority area of the protection of cultural heritage while they have been less proactive in the priority area of the protection of natural heritage.

⁶ United Nations, *Conference of the Parties to the United Nations Convention against Transnational Organized Crime*, Resolution 12/4 (October 2024), <<https://documents.un.org/doc/undoc/ltd/v24/072/89/pdf/v2407289.pdf>>.

⁷ See the UN webpage on the “*Open-ended intergovernmental expert group on crimes that affect the environment falling within the scope of the UN Convention against Transnational Organized Crime*” (accessed Dec. 25): <www.unodc.org/unodc/en/treaties/CTOC/CAE_IEG_2025.html>.

⁸ See the dedicated website of the “*Working group on crimes that affect the environment (CAE) - The Alliance of NGOs on Crime Prevention and Criminal Justice*” (accessed Dec. 25): <<https://crimealliance.org/members/working-groups/env/>>.



III. Problem Definition and Analysis

Starting from a general analysis of the legal bases for the protection of the natural environment *as a whole* in subsection 1, this section III covers:

- 1) the imperative to protect the natural environment as part of the “**common heritage** of humankind”;
- 2) the need to recognize existing **gaps in**, and address, **the fragmented international legal framework** on the phenomenon of “crimes that affect the environment” in connection with Transnational Organized Crime;
- 3) an analysis of the **enforcement gaps and** relevant, potential **remedies**, with a special focus on wildlife trafficking as one of the most profitable and pervasive form of crimes that affect the environment by transnational networks;
- 4) an analysis of the **legal and political ambiguity** of the current international regimes aimed at combating environmental crime;
- 5) an analysis of the position and **rights of victims** of crimes that affect the environment, aimed at putting an end to their marginalization;
- 6) recommendations on **reparations** tailored to the natural environment and the communities affected by environmental offenses, in particular wildlife trafficking;
- 7) recommendations on proportionate **penalties** aimed at effective prevention of this type of criminality;
- 8) analyses, indications, and recommendations on measures of reparative justice through **enhanced international cooperation**, especially among law enforcement agencies entrusted with the mandate to disrupt wildlife trafficking and other forms of financially profitable activities that harm ecosystems and habitats;
- 9) an analysis of the unique role played by INTERPOL as the largest channel of communication of law enforcement agencies.

While all these items are addressed in the perspective of all crimes that affect the environment, most of the examples and the references to concrete cases and situations relate to wildlife trafficking, which is the largest criminal phenomenon amplifying the risks of extinction of entire species and, consequently, irreversible alterations to the natural environment protected under International Law.

1- The Natural Environment as Common Heritage of Humankind

The 1972 UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage⁹ establishes a universal legal duty to safeguard natural heritage of “outstanding universal value,” grounding this obligation in the Preamble and in the Convention’s substantive provisions, especially Articles 1 to 6 and Article 11. These provisions affirm that States Parties bear both individual and collective responsibilities to identify, conserve, and transmit natural heritage to future generations; they also require international assistance where national capacities are insufficient. Crucially, the Convention constructs natural heritage protection not only as a discretionary domestic policy choice but as a shared international obligation rooted in the interest of all humanity.

Although Article 11, paragraphs 1 to 3 of the 1972 UNESCO Convention establishes procedures for the nomination, evaluation, and inscription of World Heritage properties, these ‘technical’ mechanisms do **not** delimit the underlying normative commitment to protect natural heritage. The inscription process determines which sites are formally listed; it does not exhaust or constrain the broader duty recognized in Articles 4 to 6.

⁹ UNESCO, *Convention for the Protection of the World Cultural and Natural Heritage* (1972): See footnote 1.

The universalist character of this duty is reinforced by parallel instruments, most notably the Convention on Biological Diversity,¹⁰ which affirms the conservation and sustainable use of biological diversity as “a common concern of humankind”. Likewise, the doctrine of the common heritage of humankind, reflected in the Preamble and Article 136 of the 1982 United Nations Convention on the Law of the Sea,¹¹ underscores that certain natural assets generate obligations owed towards all, namely, “*erga omnes* obligations” under international law.

Taken together, these instruments form a quasi-constitutional, normative foundation for any future international regime aimed at criminalizing severe environmental harm. If natural heritage constitutes a shared interest of humanity, then acts causing biodiversity loss, ecosystem alteration, wildlife destruction, or unlawful landscape modification threaten a collective legal good. The universal duty articulated in the 1972 UNESCO Convention thus provides the conceptual and legal predicate for developing international criminal prohibitions that protect the ecological conditions necessary for the survival of present and future generations.¹²

2- Fragmented Legal Coverage

(a) Introduction

International legal frameworks that address environmental crime remain spread across a series of treaties, each focused on a narrow sector and aimed more at regulation or trade controls than at criminal law enforcement. Multilateral environmental treaties like CITES, the Basel Convention, the Rotterdam Convention,¹³ and the Stockholm Convention.¹⁴ These treaties do not only identify, but they also regulate certain activities such as the transport of hazardous materials or the trade in certain species. But they do not establish criminal penalties or provide the tools needed for coordinated cross-border investigations.

UNTOC is the only universal treaty with criminal law provisions broad enough to cover environmental offenses that constitute transnational organized crime. Yet, it neither defines them nor includes a dedicated protocol, unlike its instruments on trafficking in human beings,¹⁵ smuggling of migrants,¹⁶ or trafficking in firearms.¹⁷ As a result, national

¹⁰ United Nations, *Convention on Biological Diversity* (1992) <<https://www.cbd.int/doc/legal/cbd-en.pdf>>.

¹¹ United Nations, *United Nations Convention on the Law of the Sea* (1982) <https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf>.

¹² Reference is made to the sources of international legal principles enlisted in the bibliography, starting with the United Nations General Assembly Resolution 37/7 “*World Charter for Nature*” (1982 – UN doc. A/RES/37/7), <<https://ejci.orfaleacenter.ucsb.edu/wp-content/uploads/2018/03/1982-UN-World-Charter-for-Nature-1982.pdf>>.

¹³ United Nations, *Rotterdam convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade* (1998) <https://treaties.un.org/doc/Treaties/1998/09/19980910%2007-22%20PM/Ch_XXVII_14p.pdf>.

¹⁴ United Nations, *Stockholm convention on persistent Organic pollutants* (2001) <https://treaties.un.org/doc/Treaties/2001/05/20010522%2012-55%20PM/Ch_XXVII_15p.pdf>.

¹⁵ United Nations, *Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime* (Resolution 53/111 of 9 December 1998), <https://www.unodc.org/documents/treaties/UNTOC/Publications/Convention/English/ENG_Protocol_to_Prevent_Suppress_and_Punish_Trafficking_in_Persons_Especially_Women_and_Children_UNTOC.pdf>.

¹⁶ United Nations, *Protocol against the Smuggling of Migrants by Land, Sea and Air, supplementing the United Nations Convention against Transnational Organized Crime* (Resolution 54/212 of 22 December 1999), <https://www.unodc.org/documents/treaties/UNTOC/Publications/Convention/English/ENG_Protocol_against_the_Smuggling_of_Migrants_by_Land_Sea_and_Air_UNTOC.pdf>.

¹⁷ United Nations, *Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, supplementing the United Nations Convention against Transnational Organized Crime* (Resolution 55/255 of 31 May 2001), <https://www.unodc.org/documents/treaties/UNTOC/Publications/Convention/English/ENG_Protocol_against_the_Illicit_Manufacturing_of_and_Trafficking_in_Firearms_their_Parts_and_Components_and_Ammunition.pdf>.

laws vary widely, and serious environmental crimes are treated differently from one jurisdiction to another. UNTOC's review mechanism is also too limited to show whether its criminal provisions are being applied in a consistent or meaningful way to crimes that affect the environment. Without a protocol requiring States to treat crimes such as illegal mining, wildlife trafficking, timber smuggling, and hazardous-waste offenses as serious crimes, it is difficult to assess global progress or close the enforcement gaps that persist across borders.

Unlike other prioritized areas of organized crime, there is no single comprehensive instrument that addresses environmental offenses as a unified category. This fragmented landscape allows criminal networks to move their operations to jurisdictions with weaker penalties or gaps in legislation and oversight, undermining collective efforts to curb these activities. Conduct that is prosecuted as a serious offense in one country may be handled as an administrative matter in another, giving offenders ample room to avoid accountability. This lack of coherence also makes international cooperation difficult: authorities may struggle to align investigative and prosecutorial efforts, while organized groups operate easily across borders. Bringing these disparate legal regimes into closer alignment is therefore essential.

As outlined in Annex B, UNTOC's existing protocols provide a clear precedent for using targeted, issue-specific instruments to close gaps that the core convention cannot address on its own. One or more dedicated protocol(s) on crimes that affect the environment would offer the coherence, clarity, and shared standards needed to strengthen a framework that is, at present, too fractured to respond effectively to the scale of environmental crime.

(b) Comparative Analysis of UNTOC Protocols

The first two UNTOC protocols on trafficking in human beings and smuggling of migrants were negotiated and adopted within the same package of the "Palermo Convention" in the year 2000.¹⁸ The third protocol on illicit firearms trade was the result of a separate negotiation process that culminated with its adoption in 2001.¹⁹ These three protocols are the expression of the political will of States to address specific forms of criminality, which required an *ad hoc* approach vis-à-vis the general criminalization framework provided by the Convention against Transnational Organized Crime. They also signaled a strong emphasis on the concept of "human security", which had a certain prevalence in the second half of the 1990s,²⁰ when these legal instruments were negotiated and drafted. A similar logic may apply today to the policy-priority of "environmental security", which has been part of the global narrative in the first decades of this century.²¹

¹⁸ UN, *Protocol against the Smuggling of Migrants by Land, Sea and Air, supplementing the United Nations Convention against Transnational Organized Crime* (UNGA Resolution 55/25 of 15 November 2000), and *Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime* (UNGA Resolution 55/25 of 15 November 2000).

¹⁹ UN, *Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, supplementing the United Nations Convention against Transnational Organized Crime* (UNGA Resolution 55/255 of 31 May 2001).

²⁰ The human development index and the human development annual reports have been issued by the United Nations Development Programme (UNDP) since 1994. The United Nations' website defines human security as follows: "The UNDP *Human Development Report New Dimensions of Human Security* [1994] coined the term "human security" within the UN system. The report highlighted four characteristics of human security: universal, people-centred, interdependent and early prevention. It further outlined seven interconnected elements of security: economic, food, health, environmental, personal, community and political." Excerpt taken from <<https://www.un.org/humansecurity/human-security-milestones-and-history/>>, accessed on 18 December 2025.

²¹ Environmental security is central to the mandate of the United Nations Environment Programme (UNEP), as evidenced in the dedicated thematic webpage <<https://www.unep.org/topics/disasters-and-conflicts/environment-security>>, accessed. A pivotal report on environmental security was released in 2016 by UNEP and INTERPOL: "*The rise of environmental crime: A growing threat to natural resources peace, development and security*" <<https://wedocs.unep.org/items/f1e192f5-8879-4e06-9d13-92d44392ebb6>>.

The comparative criminal law and criminology literature investigated the relationship between the three Protocols and UNTOC.²² Their conclusions are clear: The UNTOC Protocols (Trafficking in Persons, Smuggling of Migrants, Firearms) add value by deepening cooperation for specific crimes, codifying specific offenses, and providing detailed implementation frameworks beyond the core UNTOC provisions, which focus broadly on transnational organized crime, hence offering stronger mechanisms for mutual legal assistance, extradition, asset confiscation, evidence gathering, victim protection and other tools, significantly closing ‘gaps’ in global anti-crime efforts. The same logic should apply to one or more protocols on crimes that affect the environment.

Additionally, new protocol(s) under UNTOC offer greater legal flexibility and political feasibility than amending the Convention. Amending UNTOC would *de facto* require extensive negotiations among all 194 parties.²³ In contrast, a protocol allows for States to move forward on a legislative-drafting process not requiring any modification to already agreed text. Once the protocol reaches the entry-into-force threshold—typically around 30 to 40 ratifications based on existing UNTOC precedent (See Annex B)—States that support enhanced cooperation on wildlife trafficking and other crimes that affect the environment can begin implementing a new regime without waiting for universal ratification.

The protocol acts as a complementary tool vis-à-vis the existing UNTOC framework while simultaneously creating a forward-looking incremental cooperation regime that expands the operational capacity of UNTOC where States choose to engage. In this way, the protocol signals that parties to UNTOC can go further, faster, and more effectively act against transnational environmental crime by ratifying and domesticating also the new additional protocol.

In effect, protocols provide a practical pathway to rapid and targeted legal reform: they enable UNTOC to respond to emerging crime areas, test innovative approaches, and strengthen operational cooperation. A dedicated environmental crime protocol should, for example, harmonize legal definitions of offenses (e.g., standardized crimes for illicit wildlife trade or timber trafficking), establish shared law enforcement principles, and facilitate cross-border investigation assistance.

This targeted approach would allow the International Community to address specific gaps and develop the legal framework incrementally. Also, it would mirror how UNTOC's existing protocols have been used to address different threats such as migrant smuggling, illicit firearms trade, and trafficking in persons. Those protocols reflect a tailored, focused approach, rather than attempting to overhaul the Convention itself. By pursuing a similar route for crimes that affect the environment, States can pilot new cooperative tools and obligations in a contained legal instrument, which may also attain universal ratification and domestic implementation once proven effective, and may be amended it over time, as appropriate.

Overall, UNTOC protocols demonstrate a pragmatic, adaptable, and politically feasible approach to strengthening the global fight against transnational organized crime: they balance legal innovation with continuity and stability. A new protocol on crimes that affect the environment would follow this proven model. It would mobilize committed States to unify their efforts under a common umbrella, thus raising the costs for environmental offenders and closing enforcement gaps. At the same time, it would leave the core Convention intact and inclusive for all parties. In sum, adopting a protocol provides flexible, coalition-driven paths to addressing crimes against wildlife and the environment, enabling UNTOC to go further, faster, and more effectively against these crimes. This method preserves

²² See, for all (including bibliographic references), SCHLOENHARDT, A., F. CALDERONI, B. WEIBER, AND J. LELLIOTT, UN CONVENTION AGAINST TRANSNATIONAL ORGANISED CRIME: A COMMENTARY (Oxford Commentaries on International Law), 2nd Edition, 2023, Oxford: Oxford University Press <<https://hdl.handle.net/10807/251055>>.

²³ For an updated status of ratification of UNTOC, reference is made to <<https://www.unodc.org/unodc/en/organized-crime/intro/UNTOC.html>> (2025).

consensus where needed, yet provides a mechanism for rapid collective action amongst States, looking into the future solution that balances affordability, national sovereignty, and operational effectiveness in combating transnational environmental crime.

3- Enforcement Gaps and Remedies: *Focus on Wildlife Trafficking*

(a) *Introduction:*

Within the context of crimes that affect the environment, wildlife trafficking is a high-profit, low-risk form of transnational organized crime and deeply integrated into broader criminal ecosystems, sharing routes, financial channels, corruption networks, and logistical infrastructures with drug trafficking, illegal mining, and arms smuggling. Effective law-enforcement and preventative action against wildlife trafficking, as well as other crimes that affect the environment, must reach the high-level offenders, who may include financiers, brokers, and facilitators who profit from these converging markets. Yet, the global response has not caught up.

Many wildlife traffickers' offenses often constitute organized crime and meet the "serious crime" threshold under Article 2(b) of UNTOC, but States' practice is often non-aligned with the UNTOC's Article 2(b) requirement of imposing "a maximum deprivation of liberty of at least four years or a more serious penalty" for the commission of these offenses. Relevant actors face minimal penalties, such as fines and short-term sentences, leaving broader networks untouched. Hence, States' responses to crimes that affect the environment, weakened by the insufficient characterization of them as "serious crimes", are often characterized by the lack of effective measures, such as financial investigations, inter-agency cooperation, and joint investigation teams. These tools are even more necessary when inter-relate with corruption-type offenses, which require special investigative techniques that are usually applied to combat transnational organized crime.

Additionally, an insufficient focus on criminal proceedings on this type of crimes leads to the absence of important steps in conducting fair trials, which should allow the protection of character witnesses and representatives of affected communities, including indigenous people, who are often missing elements in wildlife-crime protection policies, making it harder to investigate and hold powerful offenders accountable. (See Annex A.)

The following section examines some international cooperation gaps in the fight against wildlife trafficking and other crimes that affect the environment.

(b) *Financial Accountability as a Path to Restoration:*

Illegal wildlife trade is one of the most profitable forms of transnational organized crime, generating billions of dollars in illicit revenue each year. For example, according to the United States Government, "*Wildlife trafficking is the fourth-largest funding source for transnational criminal organizations, generating about \$23 billion each year.*"²⁴ Wildlife trafficking

²⁴ US Immigration and Custom Enforcement (ICE), *Wildlife Trafficking* (updated: 08/20/2025) <<https://www.ice.gov/about-ice/hsi/investigate/wildlife-trafficking#:~:text=Wildlife%20trafficking%20is%20the%20fourth,economy%2C%20and%20our%20national%20security>>, accessed on 18 December 2025. Other statistical sources are available through the UNODC website at <<https://www.unodc.org/unodc/en/data-and-analysis/statistical-activities.html>>. Reproducing the text of a previous publication, the same agency of the US Government states: "There are many different estimates of the value of illicit wildlife trafficking worldwide. According to the Wildlife Conservation Society, unreported and unregulated fisheries trade alone are estimated to be between \$4.2 billion and \$9.5 billion per year. Illicit wildlife trafficking is estimated to be between \$7.8 billion and \$10 billion per year, and illegal timber trade is estimated as much as \$7 billion per year." ICE, '*Wildlife Trafficking: Why Battling This Illicit Trade Is Crucial*' (2023) <<https://www.ice.gov/features/wildlife>>, accessed on 18 December 2025.

represents a significant share of the illicit profits generated by organized crime worldwide,²⁵ and is frequently used to finance other criminal operations because it is widely viewed as a high-profit and low-risk enterprise.²⁶ These financial dynamics underscore persistent enforcement gaps under existing UNTOC frameworks and demonstrate why a fourth protocol must explicitly address wildlife-related offenses in order to advance the prioritization by States to combat financial crimes, transnational money laundering and the economic infrastructure enabling environmental offenses.

Wildlife trafficking networks rarely operate in isolation. Instead, they often intersect with broader transnational criminal economies, including counterfeiting, illegal logging, illicit mining and fishing, crude oil theft, organ trafficking, arms and drug smuggling, trafficking in human beings, and cybercrime²⁷. As reported by an official website of the United States Government, “according to the Wildlife Conservation Society, unreported and unregulated fisheries trade alone are estimated to be between \$4.2 billion and \$9.5 billion per year. Illicit wildlife trafficking is estimated to be between \$7.8 billion and \$10 billion per year, and illegal timber trade is estimated as much as \$7 billion per year.”²⁸

Furthermore, the impacts of wildlife trafficking are global, as its effects transcend borders. For example, Brazil’s Institute of Environment and Natural Resources estimates that at least 12 million wild animals are poached in the country each year.²⁹ Ecuador, home to around 1,600 bird species and numerous other exotic animals, is a recognized global hotspot for wildlife trade and trafficking; a recent study identified 117 species there that are targeted for bushmeat or the pet trade.³⁰ In the Congo, wildlife populations declined by more than 25% in just three weeks after a forest was opened by a logging company. Similarly, in Malaysian forests exposed to logging roads for over a year, no large mammals remained.³¹ While data directly linking all of these declines to wildlife trafficking can be scarce, other evidence supports a clear connection to both illegal and legal wildlife trade.

These impacts raise a central question: how do these networks continue to operate so efficiently and remain highly profitable despite growing international attention and enforcement? The convergence of multiple criminal activities also exposes systemic blind spots across jurisdictions, particularly where financial intelligence and environmental crime enforcement remain disconnected.

One explanation lies in the deep social embeddedness of transnational organized crime. Criminal networks integrate themselves into political, economic, and community structures within both source and destination countries,

²⁵ The website of INTERPOL states that: “*The illegal trade in wildlife is estimated to be worth up to USD 20 billion per year (Source: UNEP-INTERPOL Report: The Rise of Environmental Crime)*”, <<https://www.interpol.int/Crimes/Environmental-crime/Wildlife-crime>>, accessed on Dec. 21, 2025; the latter *Report* is cited in footnote 21. In 2025, in respect of a single global operation named “HAECHE VI (April - August 2025), INTERPOL reported the recovery of 342 million dollars in government-backed currencies and approximately 97 million dollars in physical and virtual assets linked to organized criminal groups, hence signaling the extraordinary financial magnitude of transnational crime. See INTERPOL, ‘USD 439 Million Recovered in Global Financial Crime Operation’ (2025) <<https://www.interpol.int/en/News-and-Events/News/2025/USD-439-million-recovered-in-global-financial-crime-operation>>.

²⁶ INTERPOL, ‘*Illicit Goods - the Issues*’ (www.interpol.int) <<https://www.interpol.int/Crimes/Illicit-goods/Illicit-goods-the-issues>>.

²⁷ See, for all, WWF, *Crime convergence: Natural resource exploitation and transnational organized crime*, 2025 <<https://www.worldwildlife.org/our-work/wildlife/wildlife-crime/crime-convergence-natural-resource-exploitation-and-transnational-organized-crime/#:~:text=Illegal%20exploitation%20of%20natural%20resources,being%20illegally%20harvested%20or%20poached.>>.

²⁸ United States Government, Immigration and Customs Enforcement (ICE), ‘*Help Make Wildlife Traffickers an Endangered Species - End Wildlife Trafficking*’, <<https://www.ice.gov/features/wildlife>> (archived content accessed on December 23, 2025).

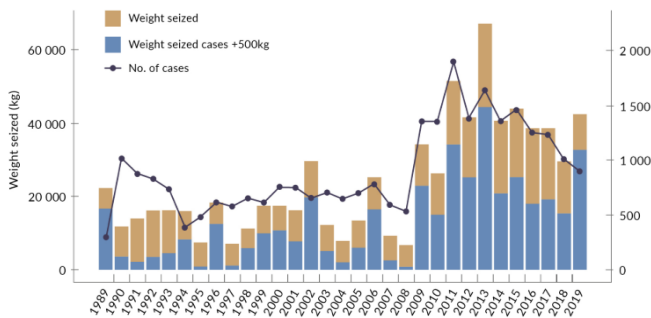
²⁹ *Ibid.* <<https://www.ice.gov/features/wildlife>>: a previous version of this webpage was entitled: ‘*Wildlife Trafficking: Why Battling This Illicit Trade Is Crucial*’ (2023). The same data is reported in Smithsonian Magazine, ‘*Wildlife Trafficking - A reporter follows the lucrative, illicit and heartrending trade in stolen wild animals deep into Ecuador’s rain forest*’ (by Charles Bergman), December 2009, <<https://www.smithsonianmag.com/travel/wildlife-trafficking-149079896/>>.

³⁰ Villalba-Briones R and others, ‘*Synergistic Threats to Wild Fauna in Ecuador: Using a Novel Data Source to Estimate the Impacts of Trafficking and Human-Wildlife Conflict*’ (2024) 16 *Diversity* 490

³¹ ICE, ‘*Wildlife Trafficking: Why Battling This Illicit Trade Is Crucial*’ (2023) <https://www.ice.gov/features/wildlife>.

becoming interwoven with legitimate systems in ways that make detection and disruption extremely difficult. Much of this resilience is sustained through financial secrecy. Shell companies, forged invoices, and complex trade-based money laundering schemes obscure financial flows, disguise trafficking routes, and protect the identities of high-level organizers. This financial concealment not only sustains wildlife trafficking itself but also reinforces the wider architecture of transnational organized crime.³²

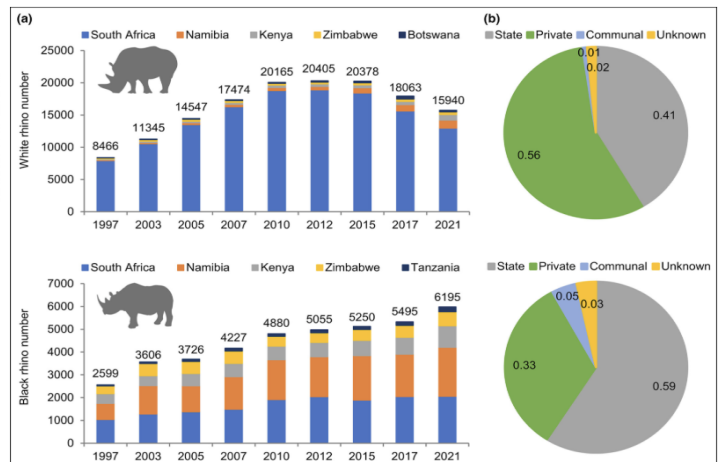
Achieving financial accountability, therefore, remains one of the most significant challenges for law enforcement. Agencies face persistent barriers, including uneven cross-border cooperation, limited access to real-time banking data, slow mutual legal assistance procedures, and inconsistent use of asset freezing and forfeiture mechanisms.³³ These obstacles allow criminal networks to move money across jurisdictions at high speed, often more quickly than authorities can trace or intercept it.



Number of ivory seizure cases and estimated weight of ivory by year, 1989-2019.

NOTE: Data plotted is not bias-adjusted and is likely under-represented due to low reporting for 2018 and 2019. Hence, figures do not provide inference of trends.

SOURCE: Tom Milliken et al., *The Elephant Trade Information System (ETIS) and the illicit trade in ivory*, presented at the 18th meeting of the Conference of the Parties, CoP18 Doc. 69.3 (Rev. 1), Annex 1, 2018. From CITES, *Elephant Trade Information System*, 2020, <https://cites.org/esp/prog/etis>



Case Study: United States v. Moazu Kromah

The case of United States v. Moazu Kromah illustrates how financial investigation can dismantle wildlife trafficking networks and expose their broader criminal connections. Kromah, a Liberian national residing in Uganda, oversaw a trafficking organization responsible for moving millions of dollars in elephant ivory and rhino horn. He was ultimately sentenced to sixty-three months in United States federal prison for conspiring to traffic wildlife products linked to the killing of more than one hundred elephants and more than thirty-five rhinos. The network transported contraband through multiple East African countries before delivering it to buyers in the United States and Southeast Asia. Ivory trafficking generated approximately four million dollars, and rhino horn approximately three million dollars in illicit revenue.³⁴ The case further exposed gaps in cross-border evidence sharing, as many African and Asian enforcement agencies lacked timely access to the American financial intelligence tools that ultimately enabled prosecution.

The network operated through social connections, document fraud, and the infiltration of legitimate businesses. Timber exporters, jewelry firms, beverage distributors, courier companies, and charitable organizations served as

³² DEA, *Members of African Criminal Enterprise Charged with Large-Scale Trafficking of Rhinoceros Horns and Elephant Ivory and Heroin Distribution* (2019) <<https://www.dea.gov/press-releases/2019/06/14/members-african-criminal-enterprise-charged-large-scale-trafficking>>.

³³ See, for all, the recent statement issued by the Basel Institute for Governance: “*Building follow-the-money skills and networks to target environmental crime syndicates*” (May 24, 2024), <<https://baselgovernance.org/news/building-follow-money-skills-and-networks-target-environmental-crime-syndicates>>, accessed on Dec. 21, 2025.

³⁴ Biase NB, *Wildlife Trafficker from Uganda Sentenced to 63 Months for Large-Scale Trafficking of Rhinoceros Horns and Elephant Ivory* (2022) <<https://www.justice.gov/usao-sdny/pr/wildlife-trafficker-uganda-sentenced-63-months-large-scale-trafficking-rhinoceros-horns>>.

fronts or intermediaries. Ivory was crushed and hidden inside vases and jewelry, while larger shipments were concealed in containers falsely labeled as fish or artifacts. Other consignments were moved by air using methods designed to avoid inspection. Criminal proceeds were laundered through United States financial institutions, wire transfers, cash exchanges, and front companies that obscured the origin and destination of funds³⁵. These strategies enabled the network to integrate illicit profits into the formal economy and operate across multiple jurisdictions with relative impunity.³⁶

Against the background of this complex criminal transactions' scheme, the Crime Convergence Theory provides a valuable framework for understanding the Kromah network. The theory emphasizes how seemingly distinct criminal markets intersect and reinforce one another. Empirical data from the WJC report shows that INTERPOL and UNEP found that 84% of surveyed countries observed links between environmental crime and other serious offences such as drug trafficking and cyber-enabled fraud.³⁷ Similar studies have shown that wildlife trafficking networks often benefited from shared supply chains, transport routes, corruption networks, and laundering infrastructure. Financial records revealed that the logistical pathways used to move ivory and rhino horn also facilitated the movement of narcotics and weapons, demonstrating that wildlife trafficking constituted only one facet of a much larger criminal infrastructure. Another key point in understanding how to tackle these organized crime groups is the financial aspect.

(c) Financial Crime as an Enforcement Entry Point

Money laundering offenses create important entry points for legal action and international cooperation under frameworks such as the UNTOC. These offenses reveal the white-collar nature of wildlife trafficking, since high-level organizers often act as financiers or brokers rather than poachers, as was highlighted in the case study above. In this case, the investigation led to a series of trials for money laundering through shell companies and banks. Where the defendants from the Krumah's case received and deposited payments from foreign customers sent as international wire transfers, some of which were processed through U.S. financial institutions, and paid in cash.³⁸ Another example is Canada, as it has a large illegal wildlife market of bears (particularly black, grizzly, and polar bears), cougars, and geese, which supply approximately USD 20 billion in criminal proceeds each year.³⁹

(d) Legal Gaps and Enforcement Challenges

The fight against environmental crimes, including wildlife trafficking, depends on the existence and application of effective laws, as well as the availability of effective procedures and institutions. Globally, countries are taking the necessary steps to combat wildlife trafficking as well as conserving their natural habitat. For example, the United States not only investigates but also criminalizes environmental crimes through instruments like the Lacey Act and the U.S. Fish and Wildlife Service (USFWS). Other countries demonstrate this commitment also through cooperation

³⁵ DEA, *Members of African Criminal Enterprise Charged with Large-Scale Trafficking of Rhinoceros Horns and Elephant Ivory and Heroin Distribution* (2019) <<https://www.dea.gov/press-releases/2019/06/14/members-african-criminal-enterprise-charged-large-scale-trafficking>>.

³⁶ UNODC, *World Wildlife Crime Report 2024: Trafficking in Protected Species* (2024), <[www.unodc.org/cofrb/uploads/documents/ECOS/World Wildlife Crime Report 2024.pdf](http://www.unodc.org/cofrb/uploads/documents/ECOS/World_Wildlife_Crime_Report_2024.pdf)>.

³⁷ WJC, *Convergence of wildlife crime with other forms of organised crime* (2021) <<https://wildlifejustice.org/investigation/convergence-of-wildlife-crime/>>.

³⁸ DEA, *Members of African Criminal Enterprise Charged with Large-Scale Trafficking of Rhinoceros Horns and Elephant Ivory and Heroin Distribution* (2019) <<https://www.dea.gov/press-releases/2019/06/14/members-african-criminal-enterprise-charged-large-scale-trafficking>>.

³⁹ CITES, *Laundering the Proceeds of Crime from Illegal Wildlife Trade* <https://cites.org/sites/default/files/EST/EN-FINTRAC%20Operational%20alert%20Laundering%20the%20proceeds%20of%20crime%20from%20illegal%20wildlife%20trade_0.pdf>.

offered by local law enforcement agencies, including: the Department of Wildlife and National Parks Peninsular Malaysia (PERHILITAN), the Environmental Police Department of Laos, the Royal Thai Police Natural Resources and Environmental Crime Suppression Division (RTP NED), the Vietnamese Department of Environmental Police, India Wildlife Crime Control Bureau (WCCB), Mozambique National Criminal Investigation Service (SERNIC), Nigeria Customs Service (NCS), South African Police Service (SAPS), Malaysian Anti-Corruption Commission (MACC), Indonesian National Police (INP), all of which have been instrumental allies in the fight against wildlife trafficking.

While these agencies contributed to major successes at domestic level, some limitations in international cooperation appear to persist, including in respect of:

- Asset seizure, financial intelligence sharing, and proceeds of crime recovery in environmental cases;
- Absence of extradition cooperation for transnational environmental crime-related offences; and
- Weak interagency coordination across the environmental, financial, and law enforcement sectors.⁴⁰

These weaknesses are exacerbated by the insufficiency of international cooperation due to the absence of binding instruments explicitly aimed at addressing environmental crime in current international law. These weaknesses also derive from the failure of many States to characterize international wildlife trafficking as a “serious crime” in the meaning of Article 2(b) of UNTOC, which in turn is weakening the current legal response to this transnational phenomenon.

If crimes that affect the environment were recognized as punishable offenses under a dedicated protocol, Articles 6, 7, 12, and 13 of UNTOC would automatically apply, enabling mutual legal assistance and international cooperation on extradition, financial investigations, intelligence-sharing, cross-border tracing of illicit proceeds, freezing orders, and confiscation mechanisms. Currently, the absence of a unified criminalization framework prevents these powerful tools from being used more systematically. Additionally, corporate liability⁴¹ remains limited in many jurisdictions, despite the fact that transportation companies, logistics brokers, exporters, and financial service providers play essential roles in enabling environmental trafficking networks. The UNODC highlights that legal persons can be held liable for serious offenses though liability or by failing to prevent offences committed by persons acting on their behalf.⁴² Strengthening the corporate liability framework is essential to disrupting wildlife crime supply chains.

Corruption is another big issue that also hinders further advancement in addressing these organizations, affecting cooperation among law enforcement agencies, which is often impeded by the corruptive practices of elected officials. The higher the corruption goes, the more difficult it is to combat and deter these behaviors. Wildlife trafficking networks succeed when faced with government weakness within institutional structures, as prevailing corruptive practices generate lack of institutional knowledge and limited enforcement capacity to detect and dismantle the operations that enable criminal networks to operate with impunity.⁴³

⁴⁰ UNODC, *Strengthening the international legal framework for international cooperation to prevent and combat illicit trafficking in wildlife (2023)* https://www.unodc.org/documents/commissions/CCPCJ/CCPCJ_Sessions/CCPCJ_32/CRPs/ECN152023_CRP3_e.pdf: This conference room paper, submitted to the Commission on Crime Prevention and Criminal Justice at its thirty second session by member states, identifies gaps in the international legal framework to prevent and combat illicit trafficking in wildlife.

⁴¹ Article 10, paragraph 1, of UNTOC requires that each State Party: “adopt such measures as may be necessary, consistent with its legal principles, to establish the liability of legal persons for participation in serious crimes involving an organized criminal group and for the offences established in accordance with the Convention itself.” Article 10, paragraph 2, of UNTOC provides that “subject to the legal principles of the State Party, the liability of legal persons may be criminal, civil or administrative”.

⁴² UNODC, *Guide of Drafting Legislation to Combat Wildlife Crime (2018)*, <https://www.unodc.org/documents/organized-crime/tools_and_publications/Wildlife_Crime_ebook.pdf>.

⁴³ The relationship between transnational organized crime and corruption in the case of “mafia” in Italy is described in the reports on “ecomafias” issued by the organization LegaAmbiente: see, for all, “Rapporto Ecomafia 2025 - Le storie e i numeri della criminalità ambientale”, at

Although there have been successful cases and significant accomplishments, like in the *United States v. Moazu Kromah* case, there are still gaps that need to be addressed. While legal progress has been made through environmental legislation, common heritage protections, financial crime laws, and the application of UNTOC provisions on criminalization, money laundering, and confiscation, substantial enforcement gaps remain. These gaps exist due to the lack of harmonized definitions of wildlife crime offenses, the absence of proportionate sentencing, and the insufficiency of focus on financial investigations and due diligence obligations.

Another gap regards sentencing disparities, one of the most persistent problems in the fight against crimes that affect the environment, as wildlife trafficking is often not treated as a serious crime resulting in unavailable or ineffective remedies⁴⁴. Additionally, due to insufficient penal frameworks in this area, high-level financiers and corporate facilitators frequently avoid meaningful penalties even when evidence of involvement and responsibility is strong. This imbalance undermines deterrence and perpetuates cycles of exploitation. Additionally, the light sentences of high level wildlife traffickers de-emphasize the impact they have on the society in which they apply (from host to destination). As wildlife trafficking is regarded as a low-risk and high-reward occupation for these offenders, this negatively impacts on deterrence and reparation enforcement, starting with restitution.

Relevant sanctions must also apply to legal entities,⁴⁵ but obstacles to address crimes that affect the environment may be exacerbated by limitations that national legal systems may have on corporate accountability.⁴⁶ In order to address legal and enforcement challenges, corporations need to be held accountable for the negligence of their governing organs and their contributions to the activities of individual perpetrators, who are associated with transnational organized crime groups. Transportation companies, shipping brokers, exporters, and financial institutions often provide either intentional or negligent support to trafficking networks. For instance, in 2010, Wachovia was fined \$160 million in the United States for having laundered more than \$380 billion on behalf of various Mexican drug cartels over the course of years. Similarly, in 2020, an Australian bank named Westpac was found to have failed to adequately report on over \$19 million foreign transactions, which resulted in some of those funds being directly linked to cases of child exploitation and numerous high-risk overseas banks.⁴⁷ Few jurisdictions impose substantial consequences on these entities, which weakens global prevention efforts. This is why a fourth protocol to UNTOC would be important, as it should not only serve as a global agreement on what constitutes environmental crime and wildlife trafficking and how to tackle these law enforcement gaps, but also act as a harmonized normative standard that States should implement in their domestic legal orders, providing – as appropriate – tools to reinforce their commitments under other treaty regimes such as CITES and Anti-Money Laundering (AML) agreements as well as existing national instruments criminalizing arms trafficking or environmental harm, such as the “Lacey Act” (18 U.S.C. § 42), which prohibits illegal trade in wildlife and plants in respect of the US, and other national laws, including those domesticating “Regional Wildlife Agreements” (Uganda, Kenya, Tanzania, and Mozambique).

<<https://www.legambiente.it/attivita-scientifiche/rapporto-ecomafia>>. According to a recent study, “a theoretical and empirical analysis [...] shows how corruption can be a ‘green grease’ that facilitates both environmental crimes and money laundering. Corruption can be an accelerator that amplifies the multiplier effect on illegal revenues.” Cf. Barone, R., and Masciandaro, D., ‘*Green Grease: Environmental Crime, Corruption and Money Laundering*’ in *Kyklos – International Review for Social Sciences*, 2025 (abstract, available at <<https://onlinelibrary.wiley.com/doi/10.1111/kykl.12455>>, accessed on Dec. 21, 2025).

⁴⁴ WJC, *From poaching to prosecution: New WJC report examines whether wildlife trafficking is treated as serious crime* (2025) =

< <https://wildlifejustice.org/from-poaching-to-prosecution-new-wjc-report-examines-whether-wildlife-trafficking-is-treated-as-serious-crime/> >

⁴⁵ See above footnote 41.

⁴⁶ See, for all, Morgera, Elisa, *CORPORATE ENVIRONMENTAL ACCOUNTABILITY IN INTERNATIONAL LAW*. Second edition., Oxford University Press, 2020.

⁴⁷ Redflagalert.com, ‘*Biggest Money Laundering Cases of All Time*’ (2018) <<https://www.redflagalert.com/articles/biggest-money-laundering-cases-of-all-time>>.

The bottom line is that transnational organized groups like the Moazu network will continue to adapt and evolve. As these groups become more sophisticated and complex, law enforcement efforts become increasingly difficult due to persistent issues such as legal gaps and a fragmented international legal framework,⁴⁸ further hindering the effective combat of transnational organized crime offenders.

4- Legal and Political Ambiguities

Despite broad acknowledgment that environmental crimes now function as serious forms of transnational organized crime, the legal framework to address them remains uneven and unclear. UNTOC does not explicitly refer to environmental offenses, and no protocol dedicated to these crimes exists. In principle, UNTOC could apply when States classify environmental offenses as “serious crimes”, attributable to the responsibility of a transnational and organized crime group (or at least three persons), meaning offenses punishable by at least four years’ imprisonment (Article 2(b)). This would allow the use of tools such as extradition and mutual legal assistance. In practice, however, many jurisdictions impose only modest penalties or rely on administrative sanctions for offenses like wildlife trafficking or illegal logging.⁴⁹ As a result, these crimes often fall below the UNTOC threshold and do not trigger the cooperation mechanisms intended for organized crime cases.

The absence of national prioritization of the fight against “environmental crime” compounds the problem. Countries emphasize different issues in their legislation, such as wildlife trade, illegal mining, timber trafficking and pollution, depending on domestic priorities, producing a patchwork of laws rather than a coherent national regime based on internationally uniform or, at least, harmonized concepts. This lack of clarity and coordination creates predictable enforcement gaps: certain activities are criminalized in one jurisdiction, but barely regulated in another, allowing organized networks to route operations through countries with the weakest rules.⁵⁰ Groups involved in these crimes understand these inconsistencies and take advantage of them.⁵¹

Implementation challenges make these legal gaps even more pronounced. Even where domestic laws exist, enforcement is frequently undermined by limited institutional capacity, fragmented mandates, and corruption. Environmental investigations typically require close cooperation between wildlife management and monitoring authorities, police, customs officials, and financial intelligence units: coordination that many States struggle to sustain. Compared to trafficking in drugs or persons, crimes involving wildlife, timber, or minerals have historically received less attention and fewer resources.⁵² Consequently, enforcement often targets low-level offenders while the brokers, financiers, and corporate actors behind these operations remain untouched.

International cooperation faces similar obstacles. Without a dedicated protocol or binding instrument, extradition and mutual legal assistance for crimes that affect the environment depend on general or bilateral agreements, which are

⁴⁸ “Intelligence gathering on crime networks” is mentioned twice by UNODC, World Wildlife Crime Report (Summary, conclusions & policy implications), 2024, available at < https://www.unodc.org/documents/data-and-analysis/wildlife/2024/Wildlife2024_Final.pdf>, however, the sensitive, but crucial, activity of intelligence sharing among States’ agencies is not mentioned. Overall, inter-state agencies’ cooperation appears not to be adequately addressed, probably due to the absence of a dedicated protocol. The report makes references to the need to improve international cooperation in general, as well as cooperation on evidence gathering in particular (evidence gathering is described, at page 149 of the said report, as a “topic worthy of greater investment”).

⁴⁹ See, for all, the seminal report of the Wildlife Justice Commission (2025), *Is wildlife trafficking being treated as serious crime?*, available at <<https://wildlifejustice.org/publications/is-wildlife-trafficking-being-treated-as-serious-crime/>>, accessed on Dec. 18, 2025.

⁵⁰ United Nations Office on Drugs and Crime, *Working Group on International Cooperation: Contribution on environmental crimes* (Vienna, 2002).

⁵¹ United Nations Environment Programme & INTERPOL. *The rise of environmental crime* (Nairobi, 2016).

⁵² United Nations Office on Drugs and Crime. (2020). *Enhancing the detection, investigation and disruption of illicit trafficking in wildlife and forest products*. Vienna: UNODC.

not always in place. Many States do not list “environmental crimes” as extraditable offenses, nor do they routinely share intelligence on these cases. Financial investigations, essential for dismantling organized criminal networks, are rarely used in environmental cases, largely because the legal basis for applying anti–money laundering and asset recovery measures is inconsistent or weak. Although certain countries, such as the United States, have developed tools with extraterritorial reach (for example, the “Lacey Act”), these remain exceptions. Most jurisdictions lack comparable legislation, leaving major offenders able to relocate profits or operations to more permissive environments.

Political will has also lagged behind the scale of the problem. For many years, environmental crimes were seen primarily as conservation or regulatory issues rather than as organized crime threats. As a result, governments were reluctant to dedicate significant resources or to adopt strong criminal penalties, particularly where enforcement might be perceived as limiting economic development or trade. States rich in biodiversity or natural resources, especially in Latin America, Africa, and Southeast Asia, have increasingly pushed for stronger international responses as the security, economic, and social consequences of this type of crimes have become more visible. Others, however, remain hesitant to elevate environmental crime to the same level as other UNTOC offenses.

These differing priorities have shaped the slow pace of multilateral action. As a result of a process that started in 2022 at the 31st Session of the UN Commission on Crime Prevention and Criminal Justice (CCPCJ) with “Resolution 31/1” entitled “*Strengthening the international legal framework for international cooperation to prevent and combat illicit trafficking in wildlife*”, in 2024 the Conference of the Parties to UNTOC formally acknowledged the potential need for a new protocol, through a resolution led by Peru, France, and Brazil that calls for an expert examination of the “possibility, feasibility, and merits” of such an instrument.⁵³ While the consensus adoption of this resolution marks an important shift, it also reflects ongoing uncertainty. States remain divided over the scope of potential offenses, the balance of responsibilities between developed and developing countries, and how a protocol would interact with existing multilateral environmental agreements. Broader geopolitical tensions and differing economic interests appear to further complicate negotiations and agreements.⁵⁴

Overall, the International Community remains in a transitional phase: momentum toward clearer and stronger legal frameworks is building, but significant ambiguities in both law and political commitment seem to persist. Resolving these contradictions and addressing the implementation and cooperation challenges that accompany them will be central to any credible effort to treat environmental crime as a serious transnational offense and to mobilize the level of cooperation and punishment required for an effective global response.

5- Marginalization of Victims

UNTOC and its existing protocols are centered on providing legal protection against trafficking in persons, smuggling of migrants, and other forms of (violent) organized crime, regarding which the position of human beings as victims is evident.

However, there is currently no definition for what constitutes “victimhood” and “victim/s” of transnational organized crimes that affect the environment under the UNTOC, despite there being a definition for “organized criminal groups” under Article 2(a). Because of this status quo, the seriousness of an offence is determined by objective thresholds such as transnationality, relative penalty levels of the committed offence, or the level of involvement of an organized criminal group. This undervalues and shifts focus away from the level of harm caused to individual and

⁵³ United Nations Office on Drugs and Crime. (2024). *Resolution 12/4: Enhancing measures to prevent and combat crimes that affect the environment falling within the scope of UNODC*. Vienna: Conference of the Parties to UNTOC.

⁵⁴ Muggah, R. (2025). The world needs a new UN protocol to fight environmental crime. *Mongabay*, < <https://news.mongabay.com/2025/05/the-world-needs-a-new-un-protocol-to-fight-environmental-crime-commentary/> >.

collective victims unless they are explicitly referenced in sentencing frameworks and international legal frameworks, hence inducing the international practitioner to make use of the notions of victim and victimhood crystallized in other international legal instruments.⁵⁵

Yet, transnational organized crimes combined with crimes that affect the environment⁵⁶ generate a broader landscape of victimhood, in which the following legal entities are affected:

- **The natural environment**, which suffers degradation through deforestation, mining, logging, waste dumping, and wildlife poaching and trafficking, amongst others. (See Annex A)
- **Ecosystems and habitats**, which are destroyed or altered as natural resources are depleted and undergo biodiversity loss.⁵⁷ (See Annex A)
- **Wildlife species**, which experience widespread extinction or endangerment, including in situations of individual species' poaching and wildlife trafficking, endangering over 40,000 plant and animal species protected under CITES globally⁵⁸. (See Annex A)
- **Individuals**, who form part of present and future generations and who have the right to access the “natural heritage of humankind” as part of their human rights, especially the right to culture,⁵⁹ which is at risk from crimes that affect the environment, *particularly* for individuals whose culture encompasses spiritual relationships with the natural environment as common heritage⁶⁰ of humankind. (See Annex)
- **Human communities**, whose subsistence and livelihoods are dependent on the customary use of the environment, but are instead victimized by environmental destruction or degradation and biodiversity loss.
 - In particular **Indigenous Peoples**, whose “knowledge, culture and traditional practices” are dependent on the “sustainable and equitable development and proper management of the environment”.⁶¹ (See Annex A)
- **Present and future generations** as such,⁶² which will inherit diminished or destroyed ecosystems that cannot be restored.

⁵⁵ See United Nations General Assembly, *Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power* (1985) <<https://www.ohchr.org/en/instruments-mechanisms/instruments/declaration-basic-principles-justice-victims-crime-and-abuse>> and other sources of definition reproduced in Annex A.

⁵⁶ United Nations Office on Drugs and Crime, *Crimes that Affect the Environment*: <<https://www.unodc.org/unodc/en/environment-climate/>>.

⁵⁷ The notions of ecosystem and habitat are defined in Article 2 of the UN Convention on Biological Diversity (Biodiversity Convention) of 1992: <<https://www.cbd.int/doc/legal/cbd-en.pdf>>.

⁵⁸ CITES, *The CITES species*: <<https://cites.org/eng/disc/species.php>>.

⁵⁹ The human right to culture entails the right to access the natural environment. Inter alia, in 2020, the UN Special Rapporteur on cultural rights, Karima Bennouna, presented a report to the UN General Assembly in which she noted the existential threat posed by climate change and sea-level rise to the cultural survival of entire populations, such as those of small island States including the Maldives and Tuvalu, and the special threat to Indigenous peoples at-risk of having to move from their ancestral lands. She concluded that “*the universality of human rights, including cultural rights, has no meaning today without a liveable environment in which they can be enjoyed.*” See para.2, UNGA, Report of the Special Rapporteur in the field of cultural rights, Karima Bennouna, 2020, available at <<https://docs.un.org/en/A/75/298>>, accessed on December 18, 2025.

⁶⁰ UN General Assembly, *United Nations Convention on the Law of the Sea* (Article 136 on ‘principles governing the area’ - “*The Area and its resources are the common heritage of mankind*”) (1994) <www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf>, and UN General Assembly, *World Charter for Nature* (1982), <<https://ejc.orfaleacenter.ucsb.edu/wp-content/uploads/2018/03/1982.-UN-World-Charter-for-Nature-1982.pdf>>.

⁶¹ United Nations General Assembly, *United Nations Declaration on the Rights of Indigenous Peoples* (2007) <https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf>.

⁶² Albeit not forming part yet of customary international law, this category of human rights has been summarized in *The Maastricht Principles on the Human Rights of Future Generations* (2023) by a group of eminent jurists and practitioners – See <<https://www.rightsoffuturegenerations.org/the-principles>>, accessed on December 18, 2025. The interpreter may deduct that the rights of future generations, as such, exist in light of the principle of intergenerational equity, as reaffirmed by the International Court of Justice at

Crimes that affect the environment do not only endanger biodiversity, but also the cultural identity and intergenerational practices of human communities. UNTOC should not continue to marginalize the human right to culture as well as the right to a clean, healthy, and sustainable environment (as “common heritage of humankind”) for those most affected by conduct that harm the environment, until the layered and multifaceted dimensions of victimhood are rendered visible.

A Fourth Protocol on crimes that affect the environment by UNTOC could close normative gaps that occur from the absence of adequate recognition of victimhood, and the immense biodiversity and cultural loss that result from this lack of recognition. Should such a normative recognition be entailed in this new instrument, that addresses the question of victimhood directly, it would also provide a foundation for other future mechanisms that address crimes against the environment.

6- Reparations

A fourth additional protocol to the UNTOC on crimes that affect the environment should ensure that the most appropriate modalities of reparations are included to address the consequences of environmental harm and destruction, especially for the benefit of victims who are affected by, and vulnerable to, environmental harm.

Therefore, it is imperative that the first, well as subsequent (as applicable), steps toward *reparative justice* are built on restitution and other restorative forms of reparation – meaning, wherein the proceeds of the crime were derived from wildlife species obtained from local and/or ancestral land, such *proceeds* must be returned to the affected communities as *reparation*.

Moreover, in cases where proceeds were derived from wildlife species outside of Indigenous communities, proceeds shall equally be returned as a form of *in-kind support* to the affected local communities, park managers, local councils or other competent governmental authorities.

Incorporating this component in a fourth additional protocol will not only materialize the 12/2 Resolution and recommendations made by Working Group of Government Experts on Technical Assistance⁶³ (see Annex A), but will also ensure that the profits derived from crimes against the environment are redirected to compensate the same victims, who suffer from species’ loss and endangerment, as well as cultural, environmental and economic loss as a result of crimes that harm the environment in which they live.

In this respect, measures aimed at repairing the natural environment are central to the healing and resilience of the ecosystems and habitats that have been affected by crimes against the environment. This recognition entails an obligation for States Parties to an additional protocol to UNTOC to ensure the realization of relevant programs for the restoration of the ecosystems of victims (encompassing humans, flora and fauna) that suffered environmental loss or damage as a result of crimes that affect the environment. Perpetrators of such crimes shall be held liable - under

paragraphs 155 to 157 of the Advisory Opinion on “Obligations of States in respect of Climate Change”, 23 July 2025, available at <<https://www.icj-cij.org/case/187>>. In particular, the ICJ stated that “156. Intergenerational equity is an expression of the idea that present generations are trustees of humanity tasked with preserving dignified living conditions and transmitting them to future generations.”

⁶³ Cf. United Nations Office on Drugs and Crime, *Resolution 12/2 “Implementation of the provisions on technical assistance of the United Nations”*, section C: “*using such proceeds, in a transparent manner, to restore the damage caused to the environment and to victims, in accordance with their domestic law*” under ‘*Annex II, Recommendations on the criminalization of crimes that affect the environment*’ (2024)”. Full text of the resolution is available at: <https://www.unodc.org/documents/treaties/COP12/Resolutions/E/Resolution_12_2.pdf>.

the national law of the territorial State implementing the protocol – for the costs of these programs.⁶⁴ As a subsidiary method to remedy the victims, the territorial State should consider establishing a framework for the application of the principle of *subsidiary State responsibility* in case the proceeds of crimes of the convicted persons and the assets of transnational criminal organizations would be insufficient to ensure that victims exercise their right to an available, effective and enforceable remedy, in fulfillment of their “right to justice” as defined in Article 8 of the Universal Declaration of Human Rights (UDHR) of 1948 and Article 2(3) of the International Covenant on Civil and Political Rights (ICCPR) of 1966.⁶⁵

Within this proposed legal framework, States may fulfil these obligations, for example, by implementing or endorsing “Rewilding Projects”, wherein State Parties reintroduce wildlife species to terrestrial and aquatic lands suffering species loss from wildlife crimes, allowing for the restoration of wetland, forestland ecosystems and habitats. This has already taken place from 2021 in Patagonia Park, Chile.⁶⁶ In this situation, pumas, condors and several native wildlife species were reintroduced to rewild the affected park following species loss from illegal hunting and wildlife trade.⁶⁷ Similarly, in 1995, wolves were reintroduced in the Yellowstone Park, United States, to limit overgrazing by elk, rewilding the area and restoring the park’s ecosystem.⁶⁸ (See Annex A.)

In addition to rewilding projects, States can also practice habitat renewal mechanisms. This consists of the reforestation of wetlands and terrestrial habitats by replanting native trees in affected forests, and replanting seagrass meadows and other native vegetation in wetlands to protect marine species like dugongs⁶⁹, hence restoring habitats for other endangered species. (See Annex A.)

In order to repair cultural loss suffered by human victims of crimes that affect the environment, often from indigenous backgrounds, State Parties of the UNTOC who will ratify a fourth additional protocol, should also support and

⁶⁴ States’ action in support of the fulfilment of victims’ rights stems from the consideration that victims should not wait to have access to adequate reparations until the time the perpetrators of the crimes that affected them and their natural environment will be found liable for reparations by a competent jurisdiction. In fact, under Section A.2 of the Declaration on victims’ rights, unanimously adopted by the UN Crime Congress and the UN General Assembly in 1985, “2. **A person may be considered a victim**, under this Declaration, **regardless of whether the perpetrator is identified, apprehended, prosecuted or convicted** and regardless of the familial relationship between the perpetrator and the victim. The term “victim” also includes, where appropriate, the immediate family or dependants of the direct victim and persons who have suffered harm in intervening to assist victims in distress or to prevent victimization.” Cf. UNGA, *Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power* (Resolution 40/34 of 29 November 1985), <www.ohchr.org/en/instruments-mechanisms/instruments/declaration-basic-principles-justice-victims-crime-and-abuse>.

⁶⁵ According to the UN guide on the ICCPR: “*Article 8 of the UDHR underlines the sweeping customary requirement that everyone has the right to an effective remedy at law for acts violating the “[...] fundamental rights granted him by the law and the Constitution.” The ICCPR restricts in article 2 (3) the right to an effective remedy at law to a redress only of the rights and freedoms recognised by the Covenant itself. But this text legitimately requires direct observance of its provisions without regard to national laws or constitutions. Article 14 also recognizes the customary right of access to courts, as supplemented by the Human Rights Committee’s General Comments.*” See UN, *International Norms and Standards Relating to Disability* [Part II. International Human Rights System. 2. The International Covenant on Civil and Political Rights]: <<https://www.un.org/esa/socdev/enable/comp202.htm#:~:text=The%20ICCPR%20restricts%20in%20article,Human%20Rights%20Committee's%20General%20Comments>>.

⁶⁶ See Rewilding Chile: ‘*Releasing Condors in Patagonia National Park*’, available at <<https://www.rewildingchile.org/en/projects/releasing-condors-in-patagonia-national-park/>> as well as other examples of rewilding projects in Annex A.

⁶⁷ Fundación Rewilding Argentina, *Patagonia Project* (2024), <<https://rewildingargentina.org/patagonia-project/>>, as well as Fundación Rewilding Chile, *Releasing Condors in Patagonia National Park* (2025), <<https://www.rewildingchile.org/en/projects/releasing-condors-in-patagonia-national-park/>>.

⁶⁸ National Geographic, *Wolves of Yellowstone*, <<https://education.nationalgeographic.org/resource/wolves-yellowstone/>>.

⁶⁹ Dugong, *Seagrass: Essential to Migratory Species and to Climate Change Mitigation*, <<https://dugong.cms.int/news/seagrass-essential-migratory-species-and-climate-change-mitigation>>.

promote rehabilitation measures such as youth camps and language revitalization programs to preserve and restore cultural identities, knowledge, beliefs, and practices that are tied to the environment and the species that inhabit it. Such cultural preservation initiatives are typically delivered by, and for, local and/or indigenous communities to restore their surrounding environments. Revitalized cultural burning, for instance, is practiced among the Karuk and Yurok Tribes in the United States to restore forest health and promote traditional knowledge in Northern California.⁷⁰

Additional forms of cultural reparations, to be implemented by States in contexts where poaching and other wildlife crimes harm wildlife species that are sacred to Indigenous communities or that occur on ancestral land, include *returning the affected ancestral lands to indigenous communities, enabling co-management of environmental properties for conservation and promoting Traditional Ecological Knowledge*, to restore ecological and cultural relationships. This is seen in the indigenous ownership and co-management of Booderee National Park by the Government and members of the Yuin Nation in Australia.⁷¹

7- Penalties: *Punishment/Retribution & General and Special Prevention of Environmental Crimes Offenders*

As reported in September 2025 in a seminal publication by the Wildlife Justice Commission⁷²:

“the United Nations Office on Drugs and Crime (UNODC) conducted a global analysis of how Member States have criminalised actions that harm the environment and whether penalties conform to the UNTOC definition of serious crime. It found that wildlife trafficking had the highest levels of criminalisation of all the environmental crime types, with 169 out of 193 Member States (87%) having criminalised offences against wildlife in their national legislation.⁷³ However, less than half (48%) provided maximum penalties of four years or more in prison, in line with the UNTOC definition of serious crime.⁷⁴ The analysis concluded that further research was needed to understand how legislation is being implemented and whether the penalties imposed were effective in preventing and deterring offending.”⁷⁵

A fourth additional protocol to UNTOC should provide essential guidance to States in ensuring that proportionate penalties are applied to relevant crimes, reflecting the gravity of the criminal conduct affecting the environment and its impact, as well as the individual circumstances and whereabouts of the offenders.

In particular, the new instrument should ensure that:

1. State Parties apply longer and proportionate sentencing (**terms of imprisonment**) for high level offenders against the environment, including wildlife traffickers. Law enforcement effectiveness may be limited when legal frameworks impose inadequate penalties, and “special prevention” (i.e., preventing the reiteration of the

⁷⁰ Marks-Block, T., Lake, F.K., Bliege Bird, R. *et al. Revitalized Karuk and Yurok cultural burning to enhance California hazelnut for basketweaving in northwestern California* (2021), <<https://link.springer.com/article/10.1186/s42408-021-00092-6#citeas>>.

⁷¹ Farrier, David & Adams, Michael, *Indigenous -Government Co-Management of Protected Areas: Booderee National Park and the National Framework in Australia* (2011), <www.researchgate.net/publication/267711783_Indigenous_-_Government_Co-Management_of_Protected_Areas_Booderee_National_Park_and_the_National_Framework_in_Australia>.

⁷² WJC, *Is wildlife trafficking being treated as serious crime? A review of criminal offences, penalties, and implementation of the United Nations Convention against Transnational Organized Crime Discussion Paper*, September 2025: <<https://wildlifejustice.org/wp-content/uploads/2025/10/is-wildlife-trafficking-being-treated-as-serious-crime-v5.pdf>>.

⁷³ UNODC, *Global Analysis on Crimes that Affect the Environment – Part 1: The Landscape of Criminalization* (2025), p.30: <https://css.unodc.org/documents/data-and-analysis/Crimes%20on%20Environment/ECR_1.Legislative_Review.pdf> (accessed on Dec. 21, 2025).

⁷⁴ Ibid, p.31.

⁷⁵ Ibid. p. 37.



crime by the convicted person) may fail due to the prevalence of recidivism. Only the effective application of penalties can help deter high-level traffickers and signal the seriousness of wildlife crime (in terms of “general prevention” or deterrence). Additionally, for direct perpetrators at the bottom of the chain of command in a criminal network (e.g., subsistence poachers recruited in a wildlife trafficking scheme), **community services** may be an appropriate re-educational regime aimed at reintegrating convicted persons in society.

2. Through the imposition of appropriate **financial fines** and **asset confiscation schemes**, State Parties may redirect illicit profits generated by environmental crimes toward ecosystem recovery, biodiversity protection, and – more generally – reparations for affected communities, hence creating a direct financial link between accountability and healing, given that seized and forfeited assets from wildlife trafficking networks represent an essential opportunity for environmental and community restoration.⁷⁶
3. To address Government officials, a Fourth Protocol to UNTOC on crimes that affect the environment could allocate capacity building resources to States whose GDP is insufficient to tackle large organizations, bearing in mind that capacity building/technical assistance programs should ideally target all relevant stakeholders. It could also stipulate that any State or government official found to support wildlife trafficking should be appropriately sanctioned also through mandatory training accompanied by (voluntary) engagement in reconciliatory and reparative initiatives as a form of rehabilitation.
4. In so far as the frozen and confiscated assets of transnational criminal entities and individual perpetrators, the repurposing of their fines and of confiscated assets for reparations’ purposes is an important component of national measures aimed at dismantling transnational organized crime groups while providing a “measure of satisfaction” to the victims and affected community, who are given access to confiscated buildings and other assets for the benefit of individuals and communities living in territories formerly dominated by transnational crime cartels or mafia-type entities.⁷⁷

To address corporate complicity, a fourth additional protocol to UNTOC could incorporate explicit corporate liability provisions imposing administrative, civil, and – if applicable – criminal sanctions on entities that enable wildlife trafficking networks. To pursue this objective, the protocol should promote the domestic incorporation of effective asset-freezing procedures, accompanied by provisions on seizure and confiscation. More generally, the new instrument should encompass measures to strengthen financial investigations and, as applicable, intelligence-sharing capabilities, as means to properly assess the financial capabilities of traffickers and provide essential information to relevant national authorities aimed at disrupting the traffickers’ business models via corporations and other legal entities.

With respect to Government officials, such a fourth Protocol could allocate adequate capacity-building resources to countries whose national resources/GDPs are insufficient to tackle the threat posed by large transnational crime organizations. These capacity-building (or technical assistance) efforts may provide instrumental to more effective international cooperation among States in the fight against crimes that affect the environment, by strengthening and supporting national institutions in countries with limited resources. An enhanced cooperation in combating crime may translate into enhanced deterrence or “general prevention”.

⁷⁶ United Nations, *Conference of the Parties to the United Nations Convention against Transnational Organized Crime*, Resolution 12/4 (COP12, 18 October 2024), <<https://documents.un.org/doc/undoc/ltd/v24/072/89/pdf/v2407289.pdf>>, which explicitly refers to “habitat restoration for damage caused to the environment and to victims” at its operational paragraph 2. Regarding forms of reparations, reference is made to Section III.6 of this Paper, which tries to translate into the environmental context the essential norms contained in the “*van Boven-Bassiouni Principles on Reparations*” formally known as the *Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law* adopted by the UN General Assembly in 2005 through Resolution 60/147: <<https://www.ohchr.org/sites/default/files/2021-08/N0549642.pdf>> (accessed on December 21, 2025).

⁷⁷ An exemplary national practice in this domain is provided by Italy’s effective application of anti-mafia legislation: For a summary report of all relevant statistical analyses and criminological studies, see LIBERA, *The Practises of Social Resue of Confiscated Assets from Mafias - Numbers, Experiences, and Proposals*, 2024, available at <https://www.libera.it/documenti/schede/raccontiamo_il_bene Pubbl_en.pdf>.

Transnational organizations operate across different borders and their detection or identification can be rather difficult. Therefore, it would be essential for a new instrument on crimes that affect the environment to include provisions on the promotion of public education programs aimed at sensitizing the general public on these phenomena. A protocol's section devoted to this priority would *not only* reinforce the prohibitions contained in UNTOC, including the importance of national awareness campaigns against money laundering and other transnational crimes, *but also* explain the key characteristics and patterns of environmental crimes. Criminal groups engaged in these activities are constantly changing and adapting, so the law and public education programs must be adaptable to anticipate future developments and alert the populations and relevant stakeholders on risks.

8- Making the UNTOC Cooperation Obligations applicable to Crimes that Affect the Environment

International cooperation is essential in the fight against transnational organized crime, which is characterized by cross-border activities that no single State on its own can effectively tackle. An additional protocol to UNTOC on crimes that affect the environment will reaffirm the application of all the modalities of international cooperation reflected in UNTOC to this category of offenses while possibly adding some specific provisions aimed at targeting the specificities of these offenses.

Applying systematically UNTOC's cooperation framework to environmental crimes under a new protocol will entail an expanded focus by States that will decide to ratify and domesticate the additional protocol, if adopted, on the following areas:

1. Cooperation and Mutual Legal Assistance (MLA) in investigation and prosecution: Standardizing and prioritizing requests related to environmental offences;
2. Extradition and Arrest Warrants: Facilitating the execution of arrest warrants and the extradition of suspects, in line with the principle of dual criminality due to the inclusion of crimes that affect the environment in the additional protocol(s) to UNTOC;
3. Legal Assistance on Evidence: Providing assistance in gathering evidence and preserving crime-related objects and crime scenes; and
4. Joint Investigative Teams (JITs): Creating specialized JITs for environmental crimes, as supported by UNTOC's framework (Article 19).

(a) Priority Measures for the additional protocol

In addition, the protocol should explicitly facilitate international cooperation and MLA on these priority items and techniques:

1. Establish a "Green Channel" for Asset Freezing: Modelled on counter-terrorist financing systems, create a standardized, rapid-response mutual legal assistance mechanism that obliges States to prioritize requests to identify, trace, and freeze assets linked to environmental crime, drawing on the asset-recovery cooperation obligations in Article 54 of the United Nations Convention against Corruption⁷⁸ and the mutual legal assistance standards on freezing and confiscation set out in Recommendation 38⁷⁹ of the FATF Recommendations.

⁷⁸ United Nations, *United Nations Convention against Corruption* (2004) <https://www.unodc.org/documents/brussels/UN_Convention_Against_Corruption.pdf>.

⁷⁹ FATF, *International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation. the FATF Recommendations* <<https://www.fatf-gafi.org/content/dam/fatf-gafi/recommendations/FATF%20Recommendations%202012.pdf.coredownload.inline.pdf?nocache=true>>.

2. Cross-border use of ‘Unexplained Wealth Orders’ (UWOs): Explicitly empower States to use UWOs⁸⁰ as a model taken from United Kingdom’s Criminal Finances Act 2017—where the defendant must explain the legal origin of assets—against suspects of environmental crimes, using MLA to gather supporting evidence from other jurisdictions.
3. Mandate "Environmental Crime Victim Funds": Request States to establish dedicated national funds, resourced through confiscated assets and fines from environmental crime cases, to finance rapid compensation and ecosystem-restoration projects for victims, Indigenous peoples, and local communities. Building on the GFAR⁸¹ principles for the disposition and transfer of confiscated assets—which call for returned proceeds under UNCAC Article 57 to be used in a transparent way for the benefit of populations harmed by corruption—these funds would mirror existing practice where confiscated assets are socially re-used for community projects and victim-compensation schemes, as documented in UNICRI’s⁸² work on social re-use of seized assets and OVC-type⁸³ crime-victim funds.
4. Prioritize Environmental Restoration Orders: Obligate States to seek, and courts to impose, “Environmental Restoration Orders” as a primary sentencing outcome, requiring offenders to restore damaged ecosystems, drawing on models such as Canada’s Environmental Damages Fund,⁸⁴ which channels fines and court-ordered payments into concrete restoration projects with Indigenous and local community involvement, and the EU Environmental Liability Directive (ELD),⁸⁵ which operationalizes the “polluter pays” principle by obliging operators to undertake primary, complementary, and compensatory remediation.
5. Form a Roster of International Experts: Mandate UNODC and INTERPOL to maintain a roster of recognized experts (e.g., forensic accountants, wildlife geneticists) to assist national courts as independent advisors or witnesses.

(b) Strengthening Law Enforcement Tools

To put these new frameworks into practice, law enforcement agencies must also enhance their operational capabilities. In order to do so, States should adopt the following practical measures:

1. Strengthen Cross-Border Intelligence Sharing

Wildlife trafficking networks operate transnationally, so information must move just as quickly. Law enforcement agencies should expand real-time intelligence sharing through platforms like INTERPOL’s Environmental Security Programme, regional task forces, and secure joint databases. The intelligence sharing includes sharing data on trafficking routes, concealment techniques, fraudulent permits, and high-risk transport hubs.

2. Establish and/or Expand Specialized Wildlife Crime Units

⁸⁰ Shalchi A, *Unexplained Wealth Orders* (2021) <<https://commonslibrary.parliament.uk/research-briefings/cbp-9098/>>.

⁸¹ Global Forum on Asset Recovery, *GFAR Principles for Disposition and Transfer of Confiscated Stolen Assets in Corruption Cases*’ <<https://star.worldbank.org/sites/star/files/the-gfar-principles.pdf>>, accessed on Dec. 16, 2025.

⁸² UNICRI, *The Social Re-use of Seized and Confiscated Assets: Good Policies and Practices* (2025), <<https://unicri.org/sites/default/files/2025-10/Social-Reuse-of-Seized-and-Confiscated-Assets-Good-Policies-and-Practices-Oct--2025.pdf>>, accessed on Dec. 16, 2025.

⁸³ US Department of Justice, Office for Victims of Crime (OVC), *Crime Victims Fund* (2020) <<https://ovc.ojp.gov/about/crime-victims-fund>>, accessed on Dec. 16, 2025.

⁸⁴ Environment and Climate Change Canada, *Canada’s Environmental Damages Fund marks 30 years with funding for 23 new nature conservation and restoration projects*, (2025) <<https://www.canada.ca/en/environment-climate-change/news/2025/12/canadas-environmental-damages-fund-marks-30-years-with-funding-for-23-new-nature-conservation-and-restoration-projects.html>>.

⁸⁵ European Commission, *Environmental liability*, (2021) <https://environment.ec.europa.eu/law-and-governance/environmental-compliance-assurance/environmental-liability_en>, accessed on Dec. 16, 2025.

Generalized police forces often lack the training or resources to identify sophisticated trafficking operations. Countries should develop or strengthen specialized environmental crime units staffed with investigators trained in wildlife forensics, financial tracking, and cyber-enabled trafficking investigations, and establish specialized environmental courts so that judges and specialized prosecutors are environmentally literate and able to consistently apply serious-crime tools, as suggested by the WJC⁸⁶ in its Report on treating wildlife trafficking as a serious crime and employ national resources to combat it comparable to the ones invested against other forms of transnational criminality.

3. Enhance Financial Investigation Capabilities

Wildlife trafficking is profit-driven, so "following the money" is often more effective than focusing solely on seizures. Law enforcement should enhance collaboration and create joint task forces with anti-corruption and financial intelligence units (FIUs) and train officers to identify suspicious financial patterns, shell companies, trade-based laundering, and cryptocurrency use.

4. Increase Use of Advanced Technology

Agencies should adopt tools such as:

- DNA analysis to identify species and trace geographic origins
- Satellite and drone surveillance for detecting poaching activity
- Digital forensics to investigate online trafficking markets.
- Risk-assessment algorithms at border checkpoints.

These technologies improve detection while reducing the demand on human resources.

5. Strengthen Chain-of-Custody and Evidence Collection

Weak evidence is one of the most significant barriers to successful international prosecutions. Standardized global guidelines for evidence handling—especially for perishable wildlife products—would ensure that cases remain prosecutable even across borders.

6. Build Joint Enforcement Task Forces

Countries along trafficking routes should establish permanent joint task forces. These partnerships must aim at combining **traditional enforcement bodies** (customs, police, environmental authorities, and financial crime investigators) with **community-based actors** to increase in effectiveness, reflecting a multistakeholder approach. By including civil society organizations and Indigenous rangers, these task forces can leverage vital local intelligence and build essential trust, closing critical jurisdictional and information gaps. This integrated approach improves large-scale operations, such as simultaneous cross-border raids.

7. Incorporate **Community Protocols**: The work of the above-mentioned task forces must be guided by community consultation. This includes obtaining **Free, Prior, and Informed Consent (FPIC)** for investigations on Indigenous lands and seeking community input when deliberating penalties for crimes that affect Indigenous species and peoples.

8. Increase Training on Organized Crime Tactics

⁸⁶ WJC, *Is Wildlife Trafficking Being Treated as Serious Crime?* (2025), cited in footnote 72.

Wildlife traffickers use methods similar to those tracking in drugs, arms, and persons. Therefore, it would be appropriate for the additional protocol to indicate that law enforcement agents should receive relevant training, including on methods used by traffickers in targeting of most vulnerable communities for the purpose of recruitment into criminal networks

Training will prepare officers to treat wildlife trafficking as organized crime, not a minor environmental offense.

9. Promote Anti-Corruption Safeguards

Corruption is one of the biggest enablers of trafficking.⁸⁷ To improve integrity, law enforcement personnel should implement, *inter alia*, the following measures:⁸⁸

- Mandatory disclosure of conflicts of interest;
- Rotation of officers at high-risk posts;
- Anonymous whistleblower channels and relevant protective measures; and
- Regular integrity audits.

Such safeguards would be designed to reduce opportunities for collusion with traffickers.

(e) Joint Investigative Teams (JITs)

UNTOC promotes the formation of Joint Investigations Teams in Article 19, but leaves their creation to *ad hoc* bilateral or multilateral agreements, which should shift to a more proactive model with standardized protocols, mandatory expertise, and a focus on corporate enablers and technology misuse.

- The additional protocol on crimes that affect the environment should require that any JIT established for protocol-listed crime includes a financial analyst and other relevant experts, when appropriate. This may be supported by a model JIT agreement template that standardizes protocols for evidence sharing, the use of Special Investigative Techniques (SITs), and funding, as we have seen in the example of the 'Five eyes intelligence sharing'.⁸⁹
- Creating a "Corporate Liability & Due Diligence" model to investigate corporate facilitators (e.g., shipping companies, banks, e-commerce platforms) for negligence or complicity providing power to audit corporate due diligence procedures and share findings across jurisdiction for cross-border accountability on enablers. The EU's Corporate Sustainability Due Diligence Directive (CSDDD)⁹⁰ could serve as an example that could be translated from regional into global standards, with appropriate modifications.
- Establishing a Framework to Combat the Misuse of Technology: States must include an annex on dual-use technologies (e.g., drones, satellite imagery) and mandate Joint Investigation Teams to oversee their illicit use and investigate their illicit diversion to traffickers. This includes promoting licensing regimes, tamper-proof audit trails, and information-sharing on suspicious procurement. A similar initiative was addressed at the

⁸⁷ See Wildlife Justice Commission, *Dirty Money: The Role of Corruption in Enabling Wildlife Crime* (2023): <<https://wildlifejustice.org/wp-content/uploads/2023/07/corruption-report-2023-SPREADS-V12.pdf>>, accessed on December 18, 2025.

⁸⁸ See, as an exemplary practical tool in this area, EUROPEAN COMMISSION, HANDBOOK OF GOOD PRACTICES IN THE FIGHT AGAINST CORRUPTION (by Oksana Huss, Mike Beke, Jan Wynarski, Brigitte Slot), Brussels, 15 February 2023, at <<https://op.europa.eu/publication-detail/-/publication/df1a5278-ac18-11ed-b508-01aa75ed71a1>>.

⁸⁹ National Counterintelligence and Security Center, *Five Eyes Intelligence Oversight and Review Council (FIORC)* (2024) <<https://www.dni.gov/index.php/ncsc-how-we-work/217-about/organization/icig-pages/2660-icig-fiorc>>.

⁹⁰ European Commission, *Corporate Sustainability Due Diligence Directive* (2024) <<https://eur-lex.europa.eu/eli/dir/2024/1760/oj>>.

CITES COP20⁹¹ in Samarkand, which discussed the deployment of AI and drones in wildlife enforcement, and it may be partially found in the EU's dual-use export-control regime under Regulation EU regulation⁹² 2021/821.

- Mandating States to consider adopting laws or regulations that allow for the admissibility of evidence obtained through legally sanctioned 'undercover' online operations, balancing investigative efficacy with human rights protections necessary for JITs.
- Creating and/or contributing to a standing roster of cyber-investigation experts within INTERPOL and UNODC who can be rapidly deployed to support national JITs since the dark web and encrypted platforms are increasingly used for wildlife trafficking.

(f) Review and Monitoring Mechanism

As per Article 32, UNTOC, States can review implementation of treaty provisions: This is a general mechanism without a specific focus on environmental crimes or reparative justice for such crimes, and there is no systematic assessment of whether States are effectively providing reparations to victims or restoring damaged ecosystems. Hence, an additional protocol to UNTOC on crimes that affect the environment may call upon a review mechanism that may act as a mechanism to monitor the effectiveness of the protocol itself, including through the facilitation of technical audits, focusing on the practical implementation of restorative justice and the disruption of criminal finances, also with the view of improving effectiveness and impact of national implementing legislation and other measures to domesticate the said protocol. Here are some suggested mechanisms for States, enlisted in a non-exhaustive way:

- Creation of a "**Reparative Outcome Indicator**" System: This mechanism would use quantitative and qualitative indicators to assess a State's performance on delivering justice. Metrics that could be included are: the percentage of confiscated assets allocated to community-managed restoration funds; the number of cross-border restitution orders successfully enforced; and the amount of funds disbursed from "Environmental Crime Victim Funds" to Indigenous and other local communities. This proposal is inspired by the UN-Sustainable Development Goals (SDGs) global indicator⁹³ framework, particularly indicators under SDG 16.4 on illicit financial flows, which uses harmonized quantitative and qualitative metadata to assess national performance on asset recovery and related financial-crime objectives.
- Peer to Peer Forum for **Technical and Operational Review Mechanism**: This would formally establish a "Network of National Focal Points on Environmental Crime Restoration and Cooperation" that could serve as a community of practitioners—not just diplomats, but also park rangers, forensic experts, financial investigators, and restitution specialists who would help in restoration according to the local custodian laws and affected States would assist each other in utilizing available resource.
- **Mandate a Public Corporate Convictions Register and Proactive Audits**: To ensure transparency and systemic prevention, States Parties shall be required to: 1) maintain a public register of all final convictions of legal persons for protocol-listed crimes, and 2) empower national regulators to conduct proactive, risk-based audits of companies in high-risk sectors to verify the adequacy of their due diligence procedures, independent of a specific investigation.⁹⁴

⁹¹ Euronews (Dilbar Primova), *AI and drones lead global fight for wildlife in Samarkand talks* (Dec. 2, 2025) www.euronews.com/green/2025/12/02/ai-and-drones-lead-global-fight-for-wildlife-in-samarkand-talks, accessed on Dec. 21, 2025.

⁹² Regulation (EU) 2021/821 of the European Parliament OJ L206/1 <<https://eur-lex.europa.eu/eli/reg/2021/821/oj>> .

⁹³ United Nations, *SDG Indicator Metadata (n.d.)* <<https://unstats.un.org/sdgs/metadata/files/Metadata-16-04-01.pdf>>.

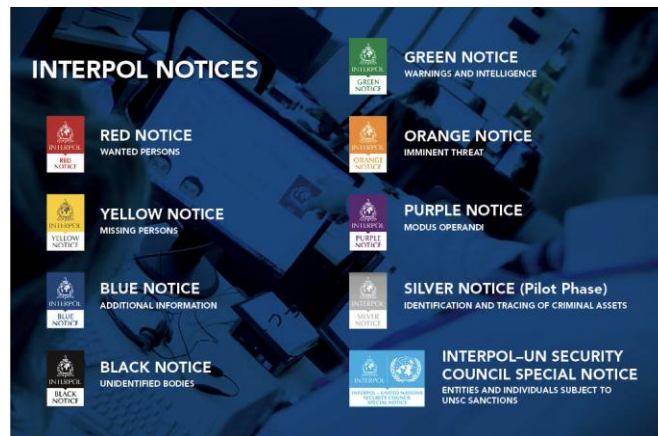
⁹⁴ A public register of corporate convictions (for illegal activities connected to Organized Crime), coupled with a proactive corporate audits strategy, are considered effective tools to counter organized crime by enhancing transparency, deterrence, and early detection of illicit activities. These measures work by increasing the risk of exposure and providing data-driven insights for prevention and enforcement efforts. See European Parliament, Directorate General for Internal Policies: *Study: 'How does organised crime misuse EU funds?'* (2021), <[www.europarl.europa.eu/RegData/etudes/etudes/join/2011/453225/IPOL-JOIN_ET\(2011\)453225_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/join/2011/453225/IPOL-JOIN_ET(2011)453225_EN.pdf)>, accessed on Dec. 21, 2025.

- **Peer Review Panel on "Financial Disruption & Asset Recovery"** including financial crime experts to conduct in-depth reviews of States' effectiveness in tracing, freezing, and confiscating the proceeds of environmental crime, using a peer-review model similar to the Financial Action Task Force (FATF) practices under Asset Recovery Inter-Agency Networks (ARINs)⁹⁵, which already facilitate cross-border cooperation on asset tracing and confiscation.

A combination of some or all the above indicated measures may make a difference also in the fight against crimes that affect the environment, when perpetrated by Transnational Organized Criminal Organizations that are motivated by the generation of illicit revenues and are applying sophisticated methods to hide their transactions and assets.

9. The role of INTERPOL

Building on a variety of legal instruments aimed at fighting crime within and across borders, the International Criminal Police Organization (INTERPOL) plays a critical role in supporting international cooperation against crime serving as the largest channel of communication and facilitating avenues for collaboration among national Law Enforcement agencies. Currently reliance on voluntary mechanisms or regional frameworks concerning crimes that affect the environment limits effectiveness. A dedicated UNTOC protocol combating crimes that affect the environment could serve as a universal, binding, international standard, hence closing cooperation gaps among States, and facilitating the work of relevant international organizations, starting with INTERPOL, which already has a significant focus and expertise in the area of “environmental crime”.



INTERPOL's color-coded notices facilitate global alerts and cooperation (see illustration below). Red Notices (for wanted persons) and Purple Notices (for sharing criminal concealment techniques) are essential for international tracking and operational intelligence. In January 2025, INTERPOL launched a Silver Notice, a new and innovative tool designed to help countries cooperate in locating and recovering proceeds of crime, such as real estate, shell companies, and financial accounts linked to environmental crime, at the request of Italy's *Guardia di Finanza*.⁹⁶ The Silver notice puts asset flow disruption at the heart of enforcement, shifting from prosecuting low-level offenders to targeting the financial infrastructure of entire trafficking networks.

⁹⁵ FATF, *Recovering the International Proceeds of Crime through Inter-Agency Networks* (2023) <<https://www.fatf-gafi.org/content/dam/fatf-gafi/reports/Recovering-Proceeds-Crime-Inter-Agency-Networks.pdf.coredownload.inline.pdf>>, accessed on Dec. 21, 2025.

⁹⁶ INTERPOL, *INTERPOL Publishes First Silver Notice Targeting Criminal Assets*, (2025) <<https://www.interpol.int/en/News-and-Events/News/2025/INTERPOL-publishes-first-Silver-Notice-targeting-criminal-assets>>.

Italy, which chairs INTERPOL's Expert Working Group on Asset Recovery, led the development of Silver Notice. This notice, issued by Palermo investigators, demonstrates how financial policing can enhance environmental justice and use the goals of the UNTOC.⁹⁷

In 2023, Operation Thunder, a joint INTERPOL-World Customs Organization investigation, resulted in over 20,000 seizures of endangered species and timber across 130 countries, illustrating the scale and complexity of wildlife trafficking networks.⁹⁸ These joint actions show that INTERPOL has the operational infrastructure and political legitimacy to scale enforcement. Yet, such operations rely on voluntary compliance and lack the enforcement power that a binding legal framework could provide.

INTERPOL's Environmental Security Program offers a holistic approach to combating strategic intelligence and operational support to help countries combat pollution, illegal logging, and wildlife trafficking.⁹⁹ However, without integration into treaty-based frameworks like the proposed UNTOC's additional protocol, these initiatives risk fragmentation.

A 2024 paper from the UNODC Working Group on International Cooperation acknowledges the persistent obstacle to asset recovery and cross-border enforcement, emphasizing the need for better coordination tools.¹⁰⁰ Integrating INTERPOL's mechanisms, especially Silver Notice, into the UNTOC protocol would directly address these gaps in formalizing cooperation on environmental crime intelligence and criminal asset tracing.

As a way to give effect to the fourth additional protocol, INTERPOL could establish a mechanism to consult regularly with UNODC to *oversee reports* from State Parties and *establish (or reinforce) a safe database* that stores and publishes reports on wildlife crimes, with support from civil society organizations like the Wildlife Justice Commission and Indigenous councils as observers. The discrete goals of this new or expanded database should be to:

1. Ensure that the protection, anonymity, and support of “whistleblowers”, particularly from local and indigenous communities victimized by crimes that affect the environment, are upheld.
2. Ensure benefit-sharing for the (local) communities who cooperate in producing reports for State Parties.

IV. Conclusions and Recommendations

Environmental crimes, such as wildlife trafficking, are not merely regulatory breaches with penal law relevance, they are serious transnational crimes. These offenses degrade ecosystems, threaten biodiversity, fund organized crime, and violate the rights of both individuals and communities as well as relevant habitats and ecosystems. Current treaty frameworks are fragmented and under-enforced. A fourth additional protocol to UNTOC is needed to fill this legal vacuum and provide a coherent, binding framework for coordinated international action.

Key Recommendations:

⁹⁷ Ibid.

⁹⁸ INTERPOL, *Focus: Wildlife Crime*, (2024) <<https://www.interpol.int/en/Resources/INTERPOL-Spotlight/Issue-1-Organized-Crime/Focus-Wildlife-crime>>.

⁹⁹ INTERPOL, *Environmental Security Programme Strengthening Law Enforcement Cooperation against Pollution Crime*, 2022 (this document is available on the website <www.interpol.int/en/Crimes/Environmental-crime/Pollution-crime>, accessed on December 21, 2025)

¹⁰⁰ United Nations, Conference of the Parties to the UNTOC, *Report on the meeting of the open-ended intergovernmental expert group on crimes that affect the environment falling within the scope of the United Nations Convention against Transnational Organized Crime and related offences covered by the Convention held in Vienna from 30 June to 2 July 2025* (2025) <https://www.unodc.org/documents/treaties/CAE_IEG/3/CTOC_COP_WG.11_2025_3_E.pdf>.



(i) The absence of an international instrument to fight against crimes that affect the environment generates fragmentation in criminal policies by States, which, in turn, is *de facto* weakening the tools of international cooperation at the disposal of the International Community under the UNTOC, adopted in Palermo, Italy, 25 years ago. An additional protocol to the said Convention, based on the success of the three existing protocols highlighting specific forms of transnational criminality, will be the way forward to close the impunity gap on environmental crimes for State Parties, which are currently engaged in the Intergovernmental Expert Group set up by the UNTOC COP to analyze this subject-matter and recommend the next steps.

(ii) One (or more) additional protocol(s) to UNTOC on crimes that affect the environment will represent a unique opportunity for State Parties to: (a) define these crimes;¹⁰¹ (b) impose proportionate penalties and adequate reparations for victims of such crimes; and (c) advance effective means of international cooperation and domestic enforcement, regarding which this Paper at its section 8 has presented many proposals, particularly to improve action against illegal wildlife trade (wildlife trafficking). Such proposals could be considered by experts engaged in the current discussions in, and around, Vienna's UN Headquarters.

(iii) One (or more) additional protocol(s) to UNTOC should reframe crimes that affect the environment, and define them as crimes causing harm to victims, which should cease to be marginalized in domestic legal systems, hence fulfilling the principles of International Law applicable to victims and affected communities, with special reference to Indigenous peoples living in a unison with their natural environment in the fulfilment of their fundamental human rights, including the right to culture.¹⁰²

(iv) The new international instrument on environmental crime should ensure that the business model of wildlife traffickers and other criminal networks profiting from activities that degrade and erode the natural environment and generate biodiversity loss is eradicated through the effective freezing, seizure, and confiscation of proceeds of crimes and assets of transnational criminal entities (legal persons) and individuals. Such financial means, including those stemming from fines against convicted persons or legal entities, must be placed at the disposal of reparative (restoration) programs for ecosystems (including the wildlife species illegally removed from their environment) and habitats as well as the individuals and their communities, including the Indigenous peoples, whose rights have been violated by such crimes.

(v) Criminal justice goals of deterrence (general prevention) and non-repetition (special prevention) must be attained by the effective imposition of proportionate sentences of imprisonment for those who are planning and controlling criminal organizations that are destroying or otherwise provoking damages to the environment, while those who are recruited by these organizations and are executing orders should be included in rehabilitation programs aimed at removing them from the sphere of influence of transnational organized crime. These efforts shall be realized in partnership with their local communities.

¹⁰¹ See the *Annex C* to this Paper for a proposal concerning a list of crimes that affect the environment and their definitions.

¹⁰² See Annex A on victimhood in transnational environment crimes alongside Sections III.5 and III.6 of this Paper.

V. Annexes A, B, and C

A. VICTIMHOOD IN TRANSNATIONAL ENVIRONMENTAL CRIMES

1. United Nations General Assembly, *Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power* (1985): www.ohchr.org/en/instruments-mechanisms/instruments/declaration-basic-principles-justice-victims-crime-and-abuse (accessed on December 1, 2025).¹⁰³

Definition of Victims of Crime

a. Victims of crime

“**“Victims”** means **persons who, individually or collectively, have suffered harm, including physical or mental injury, emotional suffering, economic loss or substantial impairment of their fundamental rights**, through acts or omissions that are in violation of criminal laws operative within Member States, including those laws proscribing criminal abuse of power.”

Commentary: This source demonstrates that the existing UN victim definition of victims focus exclusively on human harm. While UNTOC does not define “victims,” other UN instruments—such as the 1985 Declaration—do provide a definition, but it is limited to ‘human victims’, reflecting a human-centered approach that excludes environmental harms from being recognized as victimization.

2. United Nations Office on Drugs and Crime (UNODC), *Crimes that affect the environment*: <https://www.unodc.org/unodc/en/environment-climate/index.html> (accessed on Dec. 10, 2025)

Addressing the triple planetary crisis of biodiversity loss, climate change and pollution

“The **Global Programme on Crimes that Affect the Environment (GPCAE)** supports Member States to prevent and respond to **serious organized crime targeting natural resources and ecosystems**.

These crimes have far-reaching impacts on economies, security, the environment and human health, and contribute to **biodiversity loss and climate change**. The Programme’s objective is to strengthen the capacity of Member States and their competent authorities to prevent, detect, investigate and prosecute crimes that affect the environment, while improving coordination along source, transit and destination countries. **GPCAE focuses on wildlife crime, forest crime, crimes in the fisheries sector, minerals crime, and waste crime.**”

Commentary: This operational source from the UNODC demonstrates an active policy-recognition of crimes that affect the environment under international law, specifically through the Global Programme on Crimes that Affect the Environment (GPCAE), which focuses on wildlife crime, forest crime, mineral crimes, waste crime and crime in the fisheries sector. UNODC recognises crimes against the environment to have “far-reaching impacts” on biodiversity loss and climate change, as well as human health, economies and security, highlighting components of the environment and human society that are victimized by crimes against the environment.

3. Convention on International Trade in Endangered Species of Wild Fauna and Flora, *CITES-listed species database*: <https://cites.org/eng/disc/species.php> (accessed on December 10, 2025)

“**Over 40,900 species – including roughly 6,610 species of animals and 34,310 species of plants – are protected by CITES against over-exploitation through international trade**. They are listed in the three **CITES Appendices**. The species are grouped in the Appendices according to how threatened they are by international trade. They include some whole groups, such as primates, cetaceans (whales, dolphins and porpoises), sea turtles, parrots, corals, cacti, and

¹⁰³ For the history of this declaration of principles, see: <https://legal.un.org/avl/ha/dbpjvcap/dbpjvcap.html>.



orchids. But in some cases only a subspecies or geographically separate population of a species (for example the population of just one country) is listed.”

Commentary: This extract from the CITES website demonstrates the high number of species, both animals and plants, that are subject to victimization from crimes against the environment and recognised under international legal frameworks such as CITES. The data that follows on the CITES website legitimises the status of animal and plant species as victims of crimes against the environment, further validating the need for an additional protocol to the UNTOC that protects these entities from environmental harm.

4. United Nations, *United Nations Convention on the Law of the Sea (UNCLOS) (1982)*: www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf (accessed on Dec. 2, 2025).

SECTION 2. PRINCIPLES GOVERNING THE AREA

Article 136

Common heritage of mankind

“The **Area** and its resources are the **common heritage of mankind.**”

Commentary: UNCLOS establishes that the deep seabed and its resources form part of the “common heritage of mankind,” affirming that these resources must be managed for the collective benefits of all peoples and States, and not exploited unilaterally, grounding environmental protection in an international legal principle of shared responsibilities.

5. United Nations General Assembly, *World Charter for Nature (1982)*: <https://ejci.orfaleacenter.ucsb.edu/wp-content/uploads/2018/03/1982.-UN-World-Charter-for-Nature-1982.pdf> (accessed on Dec. 2, 2025).

“Conscious of the spirit and terms of its resolutions 35/7 and 36/6, in which it solemnly invited Member States, in the exercise of their permanent sovereignty over their natural resources, to conduct their activities in recognition of the supreme **importance of protecting natural systems, maintaining the balance and quality of nature and conserving natural resources, in the interests of present and future generations,**” [...]

Commentary: The World Charter for Nature affirms that States, while exercising sovereignty over natural resources, must conduct all activities with recognition of the supreme importance of protecting natural systems and conserving nature for present and future generations, grounding environmental protections as an international legal obligation tied to intergenerational responsibility.

6. United Nations, *United Nations Declaration on the Rights of Indigenous Peoples (2007)*: https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf (accessed on Dec. 2, 2025).

UNDRIP, Annex, Page 4:

“Recognizing that **respect for indigenous knowledge, cultures and traditional practices** contributes to **sustainable and equitable development and proper management of the environment,**” [...]

Commentary: UNDRIP affirms that Indigenous peoples are recognized under international law as rights-holders whose knowledge, cultures, and traditional practices are essential to sustainable development and environmental stewardship, acknowledging that their participation and protection are necessary for the proper management of ecosystems.

Reparations



1. United Nations Office on Drugs and Crime (UNODC) - *Implementation of the provisions on technical assistance of the United Nations Convention against Transnational Organized Crime: Resolution 12/2 (2024)*

Resolution 12/2

Annex II

Recommendations adopted by the Working Group of Government Experts on Technical Assistance at its fifteenth meeting, held on 3 and 4 June 2024

The Working Group of Government Experts on Technical Assistance adopted the following recommendations for endorsement by the Conference of the Parties to the United Nations Convention against Transnational Organized Crime

“Recommendations on the criminalization of crimes that affect the environment

(b) As crimes that affect the environment are not victimless crimes and may cause damage to ecosystems, Indigenous Peoples, local communities and individuals, parties are encouraged to consider:

[a] identifying victims of crimes that affect the environment and providing appropriate and effective assistance and protection to such victims, as well as to witnesses and reporting persons, in accordance with their domestic law, the United Nations Convention against Transnational Organized Crime and the United Nations Convention against Corruption;

[b] adopting appropriate measures within their jurisdiction for the seizure and confiscation of **proceeds of crimes that affect the environment**; and

[c] using such proceeds, in a transparent manner, to restore the damage caused to the environment and to victims, in accordance with their domestic law;” [...]

Commentary: This source demonstrates an existing recommendation from the UNODC for Member States to use proceeds from crimes against the environment to restore damages caused to the environment and victims. This evidence directly supports the recommendations made in Section “6. Reparations”, particularly on compensation for damages from crimes affecting the environment and how compensation can be used by using fiscal profits generated from environmental crimes to restore damages caused on its victims.

2. Rewilding Argentina, *Patagonia Project*: <https://rewildingargentina.org/patagonia-project/> (accessed on Dec. 2, 2025)

“Rewilding Patagonia Park, Argentina

Background:

The Patagonian Steppe of Santa Cruz, which today is protected in part by Patagonia Park, Argentina, is not immune to the extinction of species and population reductions seen in the rest of Argentina. **The huemul and southern river otter disappeared regionally, while the Wolffsohn’s viscacha, coypu, and austral rail suffered local extinction, reducing their numbers and negatively impacting population connectivity.** Other species such as the puma, guanaco, lesser rhea, and Andean condor, the greatest examples of land-based wildlife in Patagonia, have also suffered **drastic population reductions.**

As a result, **key ecological processes such as depredation and migrations have been altered, leading to profound negative impacts on the environment.**

Our **rewilding** team works to **eliminate the threats that have caused the decline in population numbers in Patagonia Park, increase its numbers, and generate source populations that will be utilized to reintroduce the species to other sites where it has been eliminated.”**

By 2022, our team working in Patagonia Park, Argentina, has fitted thirteen lesser rheas with GPS collars that provide important information about the spatial ecology of the species. In Patagonia Park, Argentina, we are working to learn about and value the ecological role of some of the most effective predators for the regulation of rodent populations.”

Commentary: This source describes Rewilding Argentina’s Patagonia Project, which restores the Patagonian Steppe by reintroducing locally extinct species and recovering degraded ecosystems. This project contributes to solutions by rebuilding ecological processes—such as predation, migration, and habitat function—through species reintroduction, threat mitigation, and biological research at El Unco Biological Station. These efforts serve a reparative role by reversing human-driven declines, restoring native wildlife populations, and re-establishing the ecological integrity of Patagonia’s steppe environment.

3. **Rewilding Chile (n.d.) ‘Releasing Condors in Patagonia National Park’:** www.rewildingchile.org/en/projects/releasing-condors-in-patagonia-national-park/ (accessed on Dec. 2, 2025).

“Rewilding Andean Condors in Patagonia Park, Argentina

Thanks to a partnership with the Chilean Ornithologist Union (UNORCH, after its Spanish acronym) and the Livestock and Agriculture Service (SAG, after its Spanish acronym), we’ve been collaborating on efforts to conserve the **condor** in Patagonia since 2014. **We began by working with our partners to release three condors in the Chacabuco Valley area of what is now Patagonia National Park.** The birds were rescued in Las Torres Lake and transported to the Raptor Rehabilitation Center in Talagante. **With the help of various park neighbors, we were able to not only return the birds to their natural habitat, but also increase community awareness about the condor’s importance in the local ecosystem.**

We’re also currently **collaborating with Aves Chile to reinforce condor populations through species monitoring, the release of rehabilitated condors, community events, and more.**



Andean Condor

The **Andean condor is the largest scavenger bird. Its role as a scavenger makes it a vital part of the ecosystem,** helping in decomposition processes by feeding on carrion that other animals can no longer eat due to its fungal or bacterial content. This lowers the health risks caused by the presence of cadavers. **In addition to its ecological importance, the condor is a symbol of the Andes Mountains, long venerated by indigenous peoples.**

The population of the Andean condor has decreased significantly in the northern Andes. The populations in Chile and Argentina are more numerous, but also show some signs of decline. Almost all threats to the condor are of human origin. This includes **illegal hunting, lead poisoning, illegal wildlife trade,** use as pets, collisions with electrical infrastructure, a decline in food sources, and increased use of poison to control predator pressure on domestic livestock.”

Commentary: This source describes Rewilding Chile’s efforts to conserve and reintroduce Andean condors in Patagonia National Park through partnerships, rehabilitation, species monitoring, and community engagement. These initiatives contribute to solutions by restoring

condor populations, raising local awareness of the species' ecological importance, and reducing human-driven threats. As a reparative effort, the project helps reverse declines caused by illegal hunting, poisoning, and habitat pressures, while reestablishing the condor's vital ecological role and cultural significance in the Andes.

4. **National Geographic Society, *Wolves of Yellowstone [United States]*:** <https://education.nationalgeographic.org/resource/wolves-yellowstone/> (accessed on Dec. 10, 2025).

“Gray wolves were reintroduced into Yellowstone National Park in 1995, resulting in a trophic cascade through the entire ecosystem. After the wolves were driven extinct in the region nearly 100 years ago, scientists began to fully understand their role in the food web as a keystone species.”

“Now, with as many as 100 gray wolves in Yellowstone National Park, their reintroduction is having an effect that even surprised scientists. Wolves have contributed to bringing elk numbers down from 17,000 in 1995 to just 4,000 today. Since only the healthiest of elk survived, the population is much more robust”

“Grizzly bear numbers have increased, too. The grizzlies benefit from the wolves' elk kills, and less elk also means more berries, and just the elk's fear of wolves gives the riverbank trees, like aspen and willow, a chance to regenerate. They can grow to five times their original size in just six years. The songbirds are returning, too, and the bigger trees along the rivers means greater root structures, which means stronger riverbanks and less erosion.”

Commentary: The 1995 case in Yellowstone Park provides an effective example of rewilding projects. The reintroduction of wolves, which were once extinct, to the affected park, proved to restore ecological balance by bringing down elk populations and overgrazing, allowing riverbank trees and other plant species to grow and provide a healthy environment for other mammal species like grizzly bears and songbirds who each depended on an ecologically balanced environment for survival.

5. **Convention on Migratory Species (CMS) - Dugong, Seagrass: Essential to Migratory Species and to Climate Change Mitigation:** <https://dugong.cms.int/news/seagrass-essential-migratory-species-and-climate-change-mitigation>

“From the tropics to the Arctic circle, seagrasses are amongst the most widespread coastal habitats on the planet, existing in 159 countries. They are essential both for many migratory species of wild animals, as well as for climate change mitigation.”

“Along with its partners, the CMS Secretariat and its coordinating unit for the CMS Memorandum of Understanding for the Conservation and Management of Dugongs and their Habitats ([CMS Dugong MoU](#)) have been leading several projects dedicated to seagrasses”

“[The Dugong & Seagrass Hub](#) has established a community portal for practitioners, researchers, and coastal communities. The online platform, launched in 2021, shares tools, experiences, and lessons-learned while working to conserve seagrass ecosystems in dugong range state.”

Commentary: The following source provides an example of habitat rehabilitation through seagrass meadows, endorsed under the Memorandum of Understanding on the Conservation and Management of Dugongs (*Dugong dugon*) and their Habitats throughout their Range, and widely supported by actors in the international legal system like the UNEP for their environmental benefits to dugongs and other migratory marine species.

6. Literature: Marks-Block, T., Lake, F.K., Bliege Bird, R. et al.: *Revitalized Karuk and Yurok cultural burning to enhance California hazelnut for basketweaving in northwestern California* (2021): <https://link.springer.com/article/10.1186/s42408-021-00092-6#citeas>

“Karuk and Yurok tribes in northwestern California, USA, are revitalizing the practice of cultural burning, which is the use of prescribed burns to enhance culturally important species. These cultural burns are critical to the livelihoods of indigenous peoples, and were widespread prior to the establishment of fire exclusion policies. One of the major objectives of cultural burning is to enhance California hazelnut (*Corylus cornuta* Marsh var. *californica*) basketry stem production for Karuk and Yurok basketweavers.”

Commentary: *The article by Marks-Block et al. provides an evaluation of cultural burning, a spiritual and cultural practice of the Karuk and Yurok tribes, as an ecological practice for sustainable forestry and the abundant production of hazelnut shrubs in California. The article highlights the socio-cultural importance of cultural burning for Indigenous communities and livelihoods, who use hazelnuts for basketweaving while also highlighting the role of traditional ecological knowledge in fostering and thriving environment. This demonstrates the importance of cultural preservation and the use of traditional ecological knowledge as a reparative practice for Indigenous communities, whose cultural and spiritual relations with the environment are vulnerable to loss and harm from crimes against the environment.*

- Literature: Farrier, D. & Adams, M.: ‘*Indigenous–Government Co-Management of Protected Areas: Booderee National Park and the National Framework in Australia*’, in B. Lausche (ed.) *Guidelines for Protected Area Legislation*, IUCN: Gland, Switzerland (2011), pp. 1–40: <https://ro.uow.edu.au/scipapers/1008> (accessed on Dec. 2, 2025).

Indigenous Co-Management of Booderee National Park in Australia
The Australian National Reserve System and Booderee National Park, pp. 6-7

“Australia has a federal system of government in which legislative power is divided between the Commonwealth (federal) government, and six state and two territory governments... Commonwealth public land was confined to a number of territories, including the Northern Territory (where two Commonwealth co-managed terrestrial national parks, Kakadu and Uluru-Kata Tjuta, are located) and the Australian Capital Territory, the only two territories that have significant levels of self-government. Booderee National Park, on what was once Commonwealth public land before it was handed back to the local Aboriginal community, is located in the Jervis Bay Territory (Figure 1). The Commonwealth Parliament has the power to enact legislation in relation to Australia’s territories, and Booderee National Park continues to be managed as a ‘reserve’ under the provisions of the current Commonwealth legislation, the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).”

Commentary: *This source outlines the legal and institutional framework for indigenous-government co-management of Australia’s protected areas, focusing on Booderee National Park within the federal-territorial system. It shows how returning Commonwealth land to the local Aboriginal community and establishing co-management structures serve as mechanisms to restore Indigenous authority over traditionally owned land. This model illustrates how legal frameworks, such as the EPBC Act of Australia, can function as reparative tools by embedding Indigenous decision-making into long-term environmental governance.*

B. Comparative Analysis of UNTOC Protocols

COMPARATIVE ANALYSIS OF UNTOC PROTOCOLS			
Criteria	Trafficking in Persons Protocol (TIP)	Firearms Protocol	Proposed Environmental/Wildlife Framework
Definition of the Offense	Yes (Article 3)	Yes (illicit manufacturing trafficking)	No dedicated protocol. Major Gap
In Relation to Transnational Organized Crime	Yes (Organized Crime Article 4)	Yes	Same model under UNTOC
Victim Protection	Yes (Article 6-8)	No	Need to include community harm and ecosystems
Enforcement Standards	Mandatory	Mandatory	Fragmented and need a global approach
Political Buy In (States)	High (Majority Ratifies)	High	Resolutions: COP 10/6, 11/3, 12/4

The table above shows a comparison of how the existing UNTOC protocols on the Trafficking in Persons and Illegal Firearms address key elements relevant to crimes that affect the environment. This visual comparison highlights the legal and ongoing features already in place within the UNTOC framework and the gaps that remain.

The comparison between the Trafficking in Persons Protocol and the Firearms Protocol demonstrates how UNTOC uses issue-specific protocols to fill gaps that the core Convention cannot address alone. Each protocol introduced specialized definitions, obligations, and cooperation tools tailored to a particular form of organized crime. This precedent shows that UNTOC is structurally designed to expand through new protocols when new forms of transnational crime emerge. Environmental crimes—characterized by global supply chains, complex trafficking networks, and cross-border ecological harm—fit this same pattern, making a dedicated protocol the most coherent legal pathway.

For example, in the context of the Intergovernmental Experts Group on crimes that affect the environment created by UNTOC’s Conference of Parties, some States have shown openness to negotiations on an additional protocol on environmental crimes. During the COP session, Brazil, France, and Peru were among the States that referenced the “possibility, feasibility, and merits of any additional protocol to the Convention and identified any gaps”.¹⁰⁴

¹⁰⁴ See United Nations, *Resolution 12/4 Enhancing Measures to Prevent and Combat Crimes That Affect the Environment Falling within the Scope of the United Nations Convention against Transnational Organized Crime* <https://www.unodc.org/documents/treaties/COP12/Resolutions/E/Resolution_12_4.pdf?>, accessed on Nov. 21, 2025, as well as the commentary by Ana Motamayor, ‘UNTOC COP12: Preventing and Combatting Crimes That Affect the Environment’, ADM Capital Foundation (ADMCF), 2024 <<https://www.admcf.org/untoc-cop12-strengthens-international-cooperation-to-prevent-and-combat-crimes-that-affect-the-environment/?>>.

The Trafficking in Persons Protocol illustrates how UNTOC can incorporate victim-centered frameworks, while the Firearms Protocol demonstrates its ability to adopt technical, regulatory, and enforcement standards. Environmental and wildlife crimes share characteristics of both: they involve identifiable victims (communities, species, and ecosystems) and require technical enforcement mechanisms such as traceability, forensic methods, and supply-chain monitoring. That's why a dedicated protocol's value isn't only "naming the crime" but operationalizing enforcement through cooperation tools by building shared minimum standards (common definitions and interoperable information exchange) and formal channels for cross-border coordination. Shared standards can also strengthen chain-of-custody and data comparability across jurisdictions, making it harder for traffickers to exploit uneven enforcement capacity or procedural loopholes. In addition, it reduces jurisdictional gaps that traffickers exploit and makes investigations easier to run jointly from seizure to source and to financial/organizational linkage. The comparative analysis, therefore, reveals that both models already exist within the UNTOC system and can be adapted to crimes that affect the environment by combining victim recognition with practical cooperation and technical enforcement tools.

Neither the Trafficking in Persons Protocol nor the Firearms Protocol addresses environmental harm, the protection of ecosystems, or the restoration of habitats damaged by organized criminal activities. No existing UNTOC instrument defines environmental crimes or recognizes their transboundary nature. A new protocol would fill these gaps by introducing definitions, remedies, obligations, and cooperation mechanisms specifically tailored to the environmental context.

C. Model Definitions of Crimes that Affect the Environment

The Consulting Practicum on *International Protection of Common Heritage* benefited from input of the Wildlife Justice Commission (WJC)¹⁰⁵ and included a study/analysis of INTERPOL's 'Environmental Crime'.¹⁰⁶ The overall goal of the Practicum was to contribute to enhancing the International Community's efforts against transnational environmental crime.

The Practicum had a special focus on the *UN Open-ended Intergovernmental Expert Group on Crimes Against the Environment and Biodiversity*, mandated to consider drafting an additional protocol to the United Nations Convention Against Transnational Organized Crime (UNTOC, also known as the "Palermo Convention").

"At its twelfth session (2024), the Conference of the Parties (COP) to the UNTOC adopted resolution 12/4, entitled *Enhancing measures to prevent and combat crimes that affect the environment falling within the scope of the United Nations Convention against Transnational Organized Crime*. The resolution requests that the United Nations Office on Drugs and Crime (UNODC) convene an open-ended intergovernmental expert group on crimes that affect the environment falling within the scope of the United Nations Convention against Transnational Organized Crime and related offenses covered by the Convention, with interpretation into all official languages of the UN, with a mandate:

- (a) First, to take stock of the application and collective implementation of the Convention in addressing such crimes;
- (b) Second, to identify any gaps that may exist in the international legal framework and that could be addressed under the Convention to prevent and combat such crimes;
- (c) Third, to consider possible responses relevant to those gaps, including the possibility, feasibility, and merits of any additional protocol to the Organized Crime Convention."¹⁰⁷

The Consulting Practicum analyzed the outcomes of the first meeting of the above-mentioned intergovernmental group of experts, which met in Vienna in June-July 2025, and tailored their research towards an output that could assist WJC and, as appropriate, other entities for their institutional input to the second meeting of the intergovernmental group of experts scheduled for February 2026. In doing so, the Practicum strove to take into account the official report of the group released at the end of October 2025,¹⁰⁸ followed by a joint statement containing recommendations by a group of relevant NGOs, namely: Amazon Watch, the Environmental Investigation Agency UK, the Global Initiative to End Wildlife Crime, the Global Initiative against Transnational Organized Crime, the Wildlife Conservation Society, and the Wildlife Justice Commission itself. The document in question is entitled "*Joint summary recommendations 2nd meeting of the Open-ended Intergovernmental Expert Group on Crimes that Affect the Environment - 27 October 2025.*"

With a view to having an impact on the decision-making process within the UN towards a new binding instrument to improve the fight against transnational environmental crime, the Practicum decided to develop this Annex C to give effect to the following Mid-Term Recommendations contained in the above cited Civil Society Organizations' document:

Negotiate and adopt one or more protocols to the UNTOC.

¹⁰⁵ See <<https://wildlifejustice.org/>> In October 2024, WJC Executive Director Olivia Swaak-Goldman addressed a side event to the "Climate Change and Human Rights" course of Dr. Donat Cattin at NYU-CGA.

¹⁰⁶ See <www.interpol.int/en/Crimes/Environmental-crime>

¹⁰⁷ The above text is excerpted from the UNODC's official website of the IEG (2025): [Open-ended intergovernmental expert group on crimes that affect the environment falling within the scope of the United Nations Convention against Transnational Organized Crime 2025](https://www.unodc.org/unodc/en/treaties/CTOC/CAE_IEG_2025.html) <https://www.unodc.org/unodc/en/treaties/CTOC/CAE_IEG_2025.html>.

¹⁰⁸ See <<https://docs.un.org/en/CTOC/COP/WG.11/2025/3>>



1. We encourage the 13th UNTOC COP to initiate negotiations of one or more legally binding protocols to the Convention.
2. We encourage the IEG to consider strengthening some of the sub-points as follows: [...]

We strongly support this and underscore that such definitions should include, at a minimum,

- (a) trafficking in wildlife, including, inter alia, terrestrial, marine and timber species and products, in hazardous wastes and other wastes, and in precious metals, stones and other minerals,
- (b) crimes in the fisheries sector, and
- (c) crimes that pollute land, atmospheric, marine, and freshwater environments.

Importantly, definitions should cover criminal activities along the entire supply chain, from source to transit and destination countries.

The overarching term “CAE” does not require a definition [...]

It is essential that any new protocol remain relevant in the future. Future-proofing can be achieved by including a general provision enabling the instrument to address new and emerging forms of CAE, as well as evolving criminal methodologies and technological developments.

Common Definitions of key terms and offences

An additional protocol to UNTOC on crimes that affect the environment should serve as a useful tool to harmonize national laws aimed at combating these offenses when committed in the context of, or in relation to, transnational organized crime.

Without prejudice to existing domestic laws on crimes that affect the environment, as illustrated by UNODC in its useful documents entitled (i) *Guide on Drafting Legislation to Combat Wildlife Crime*, (ii) *Combating Waste Trafficking: A Guide to Good Legislative Practices*, (iii) *Responding to Illegal Mining and Trafficking in Metals and Minerals: A Guide to Good Legislative Practices*, and (iv) *Combating Crimes in the Fisheries Sector: A Guide to Good Legislative Practices*,¹⁰⁹ the most recent treaty-based framework adopted by a regional organization is hereby proposed as potential starting point for the inclusion of definitions of environmental crimes in a fourth additional protocol to UNTOC, namely, the *Council of Europe Convention on the Protection of the Environment through Criminal Law*,¹¹⁰ adopted in May 2025 and not yet entered into force.

Last, but not least, it is understood that, according to the principle of substantive criminalization (regardless of the *nomen juris*), States that will agree to be bound by a fourth protocol on environmental crimes will need to compare their existing domestic incriminations with the offenses defined in the Protocol and ensure that all the elements of the criminal conduct and the protected interests covered by the Protocol definitions are effectively covered by their national law, which may—of course—go beyond the standard agreed at the multilateral level.

Article 1 – Definitions

For the purposes of this Protocol:

- a. The term “unlawful” shall mean infringing a domestic law, a regulation, an administrative provision, or a decision taken by a competent authority aimed at protecting the environment. The conduct shall be unlawful even if it is carried out under the authorisation of a competent authority of a Party when the authorisation was obtained fraudulently or by corruption, extortion, or coercion;
- b. The term “water” shall mean all surface water categories, including rivers, lakes, transitional waters, coastal waters, all groundwater bodies, and all marine waters, including oceans and seas;

¹⁰⁹ All these UNODC guides are available at <<https://www.unodc.org/unodc/organized-crime/intro/implementing-untoc/legislation-against-crimes-that-affect-the-environment.html>>

¹¹⁰ The text of the Convention is available at <<https://www.coe.int/en/web/cdpc/convention-on-the-protection-of-the-environment-through-criminal-law>>



- c. The term “ecosystem” shall mean a dynamic complex of plant, fungi, animal, and microorganism communities and their non-living environment, which interact as a functional unit. It includes habitat types, habitats of species, and species populations;
- d. The term “waste” shall mean any substance or object that the holder discards, intends to discard, or is required to discard.

Section 2 – Biodiversity, Nature, and Wildlife

Article 2 – Offences related to the unlawful killing, destruction, taking, and possession of protected wild fauna or flora

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the killing, destruction, taking, or possession of a specimen or specimens of protected wild fauna or flora species, including the taking or possession of parts or derivatives of specimens, taking into account, where relevant, the conservation status of the species.

Article 3 – Offences related to the unlawful trading in protected wild fauna or flora

1. Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the sale or offering for sale of a specimen or specimens of protected wild fauna or flora species, or parts or derivatives thereof, taking into account, where relevant, the conservation status of the species.
2. Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the transboundary trading in specimens of protected wild fauna or flora species, or parts or derivatives thereof, taking into account, where relevant, the conservation status of the species.

Article 4 – Offences related to the unlawful deterioration of habitats within a protected site

1. Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the causing of deterioration of a habitat within a protected site or the disturbance of protected animal species within a protected site, as defined under domestic law, when this deterioration or disturbance is significant.
2. Parties may identify habitats within a protected site and protected animal species that they decide to make subject to paragraph 1 of this article and notify them to the Secretariat.

Article 5 – Offences related to invasive alien species

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the bringing into the national territory, placing on the market, keeping, breeding, transporting, using, exchanging, permitting to reproduce, growing or cultivating, releasing into the environment, or spreading of invasive alien species, which are defined in domestic law as species of concern for the environment, when such conduct causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil, or the quality of water, or to animals or plants.

Section 3 – Natural resources

Article 6 – Offences related to the unlawful abstraction of surface water or groundwater [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the abstraction of surface water or groundwater that causes or is likely to

cause substantial damage to the ecological status or potential of surface water bodies or to the quantitative status of groundwater bodies.

Article 7 – Offences related to trade in unlawfully harvested timber [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the placing on the market of unlawfully harvested timber or of products derived from such timber.

Article 8 – Offences related to unlawful mining [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, mining activities that require an environmental impact assessment or an equivalent environmental procedure under domestic law, when they are undertaken without a legally required development consent concerning environmental aspects established under domestic law, and when they cause or are likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil, or the quality of water, or to animals or plants.

Section 4 – Waste

Article 9 – Offences related to the unlawful collection, treatment, transport, recovery, disposal or shipment of waste [when committed by, or with the complicity of, transnational criminal organizations]

1. Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the collection, treatment, transport, recovery, or disposal of waste; the supervision of such operations; and the aftercare of disposal sites, including action taken as a dealer or a broker (waste management), when such conduct:
 - a. concerns hazardous waste as defined in accordance with domestic law, and when it involves a non-negligible quantity; or
 - b. concerns other waste than that referred to in paragraph 1.a of this article and causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil, or the quality of water, or to animals or plants.
2. Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the transboundary shipment of waste when such shipment is undertaken in a non-negligible quantity, whether executed in a single shipment or in several shipments that appear to be linked.

Section 5 – Installations

Article 10 – Offences related to the unlawful operation or closure of an installation in which a dangerous activity is carried out [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the operation or closure of an installation in which a dangerous activity is carried out, when such conduct causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil, or the quality of water, or to animals or plants.



Article 11 – Offences related to the unlawful operation or closure of an installation that involves dangerous substances [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the operation or closure of an installation in which dangerous substances or mixtures are stored or used, when such conduct causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil, or the quality of water, or to animals or plants.

Section 6 – Ships

Article 12 – Offences related to the unlawful recycling of ships [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the failure of the owner of a ship to comply with the applicable requirements that impose the recycling of a ship at ship recycling facilities that meet the required environmental standards.

Article 13 – Offences related to the ship-source discharges of polluting substances [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the ship-source discharges of polluting substances, when such conduct causes or is likely to cause deterioration in the quality of water or damage to the marine environment.

Section 7 – Pollution, products and substances

Article 14 – Offences related to unlawful pollution [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the discharge, emission, or introduction of a quantity of materials or substances, energy, or ionizing radiation into air, soil, or water, which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil, or the quality of water, or to animals or plants.

Article 15 – Offences related to the placing on the market of products in breach of environmental requirements [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the placing on the market, in breach of a prohibition or another requirement aimed at protecting the environment, of a product, the use of which results in the discharge, emission or introduction of a quantity of materials or substances, energy or ionising radiation into air, soil or water, which causes or is likely to cause death or serious injury to any person or substantial damage to air, water or soil quality, or to animals or plants as a result of the product's use on a larger scale, namely the use of the product by several users, regardless of their number.

Article 16 – Offences related to chemical substances [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the manufacture, placing or making available on the market, import, export, or use of regulated chemical substances, whether on their own, in mixtures, or in



articles, including their incorporation into articles, when such conduct is prohibited according to the domestic law aimed at protecting the environment and which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil, or the quality of water, or to animals or plants.

Article 17 – Offences related to radioactive material or substances [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the manufacture, production, processing, handling, use, holding, storage, transport, import, export, or disposal of radioactive material or substances, when such conduct causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil, or the quality of water, or to animals or plants.

Article 18 – Offences related to mercury [when committed by, or with the complicity of, transnational criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the manufacture, use, storage, import, or export of mercury, mercury compounds, and mixtures of mercury and mercury-added products, when such conduct causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil, or the quality of water, or to animals or plants.

Article 19 – Offences related to ozone-depleting substances [when committed by, or with the complicity of, criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the production, placing on the market, import, export, use, or release of ozone-depleting substances, or the production, placing on the market, import, or export of products and equipment containing or relying on such substances.

Article 20 – Offences related to fluorinated greenhouse gases [when committed by, or with the complicity of, criminal organizations]

Parties shall take the necessary legislative measures to establish as a criminal offense under their domestic law, when committed unlawfully and intentionally, the production, placing on the market, import, export, use, or release of fluorinated greenhouse gases, or the placing on the market or import of products and equipment containing or relying on such gases.

Article 21 – Other crimes against the environment

Parties shall take the necessary legislative measures to establish as a serious offense any other conduct not specified in this Protocol that, when committed intentionally or with gross negligence [by members of transnational criminal organizations], may cause degradation or erosion to an ecosystem, or to a habitat within a protected site, or to the quality of air, soil, or water.

N.B.: The last provision (Article 21) has been added in order to ensure that the additional protocol will contain a residual clause covering crimes causing environmental damage that are not expressly covered by the previous provisions. This provision can also ensure adaptation to future needs and requirements for the protection of the environment.



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