

PRACTICE AND POLICY

Equity considerations in the proposed wildlife protocol to the Convention against Transnational Organized Crime

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Article impact statement: Integrating equity considerations into the UNTOC environmental crime protocol is vital to ensure conservation efforts are effective.

ABSTRACT

Wildlife trafficking poses a critical threat to global biodiversity, contributes to organized crime, and has disproportionate impacts on underserved and Indigenous communities. Although international legal instruments, such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and institutional collaborations, such as the International Consortium on Combating Wildlife Crime, aim to combat wildlife trafficking, social equity remains insufficiently addressed in global responses. In 2022, a proposed additional protocol to the UN Convention against Transnational Organized Crime sought to explicitly incorporate wildlife trafficking as a serious transnational crime. I examined the conservation implications of such a legal expansion, highlighting the potential for enhanced cross-border cooperation and the risk of exacerbating existing socioenvironmental inequalities. I argue that without explicit safeguards, enforcement mechanisms may marginalize local communities and limit access to culturally significant wildlife resources. To address this, I recommend integrating human rights, social justice, and inclusive development into the proposed protocol's design and implementation. Doing so will help align equitable and locally grounded goals with biodiversity protection and conservation outcomes.

KEYWORDS

conservation crimes, human rights, illegal wildlife trade, social justice, UN Convention against Transnational Organized Crime

INTRODUCTION

The international illegal trafficking of wildlife, which comprises all illicit cross-border transactions of various species, poses a major global threat (t Sas-Rolfes et al., 2019). As part of the larger constellation of conservation crimes as described by Gore and Bennett (2022), wildlife trafficking drives unsustainable extraction, disrupts ecosystems, and accelerates biodiversity loss (Cao Ngoc & Wyatt, 2013; Pires & Moreto, 2011; World Bank, 2019; Morton et al., 2021). It also fuels corruption and organized crime (Duffy, 2016; World Bank, 2019), disproportionately harming underserved and Indigenous communities, especially in developing regions (Roe et al., 2020).

Efforts to address wildlife trafficking operate through a fragmented legal landscape. The Convention on International Trade

in Endangered Species of Wild Fauna and Flora (CITES) regulates legal wildlife trade to prevent species extinction but was not designed to tackle criminal syndicates or the broader harms of illegal trade. In contrast, the United Nations Convention against Transnational Organized Crime (UNTOC) provides a framework for combating serious transnational crimes but currently does not cover environmental offenses or wildlife trafficking explicitly. To bridge this governance gap, collaborative initiatives, such as the International Consortium on Combating Wildlife Crime (ICWC), have emerged linking the enforcement tools of UNTOC with the species-level regulatory mechanisms of CITES.

Much of the legal literature related to wildlife trafficking published in the last 5 years focuses on CITES. After all, CITES is considered the “most important” and “best sup-

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ported” international law instrument on the legal commercial trade of flora and fauna around the world (Fukushima et al., 2021; Harfoot et al., 2018). However, CITES remains primarily a trade treaty (Consalo, 2019; Osorio & Bernaz, 2024). Yet, as recent renewed calls for the criminalization of environmental harms propose, countering organized crime should be considered an integral part of the discussion on the battle against wildlife trafficking (European Commission, 2024; Faure, 2024; ICC, 2024; Moreto & Elligson, 2025; Pannett, 2024; Scanlon, 2025). This shift in framing has placed renewed attention on UNTOC, which, despite its original focus on trafficking in persons, migrant smuggling, and firearms, has been proposed as a vehicle for expanding criminal liability for transnational environmental crimes.

In May 2022, the UN Commission on Crime Prevention and Criminal Justice officially proposed that its member states consider an additional protocol to UNTOC specifically targeting wildlife trafficking (IUCN, 2022; UNODC, 2022). This proposed protocol seeks to boost international cooperation, enhance legal measures to combat wildlife trafficking, and protect endangered species by addressing illegal trade activities and trafficking routes.

Despite UNTOC’s rising relevance, little scholarly attention has been given to the proposed additional protocol, especially on its potential effects on local and Indigenous communities (Osorio & Bernaz, 2024; Prisner-Levyne, 2022; Schloenhardt & Pitman, 2022; Uhm et al., 2021; Yamaguchi, 2023). This reflects a broader pattern in international lawmaking, where high-level treaties and protocols are often developed with limited foresight on how they will be implemented on the ground (Bodansky, 2010; Chayes & Chayes, 1995; Osorio, 2020). By design, such instruments tend to prioritize state cooperation, enforcement mechanisms, and criminalization, often overlooking local realities. This has led to a persistent disconnect between global policy and community-level impacts.

Given that the proposed UNTOC additional protocol is still in the early stages of development, it presents a critical window of opportunity to question not only what should be included but also how it should be framed. Admittedly, the concept of equity is not traditionally within UNTOC’s scope, yet this is precisely the problem. As a criminal justice treaty being extended into the domain of biodiversity governance, UNTOC risks reproducing enforcement-heavy approaches that may inadvertently harm the very communities it seeks to protect from organized crime (Osorio & Bernaz, 2024).

As such, a critical sociological research gap remains: what equity and implementation considerations should inform the design of the proposed UNTOC additional protocol on wildlife trafficking? To address this question, I evaluated existing and proposed wildlife trafficking policy frameworks, drawing on real-world examples, empirical evidence, and insights from case studies from a comprehensive review of the literature. I took the normative position that UNTOC should incorporate social justice, human rights, and inclusive development principles into its wildlife trafficking response. I argue that the proposed protocol, as currently envisioned, does not go far enough in addressing this equity dimension, and offer con-

crete proposals for how such integration could be meaningfully designed.

To support these assertions, I examined UNTOC in greater detail and analyzed the proposed additional protocol on wildlife trafficking. I then considered the implications for conservation rooted in local, underserved, and Indigenous communities and finally devised recommendations on how the additional protocol can be designed with these factors in mind.

THE UNTOC AND ITS ADDITIONAL PROTOCOLS

The UNTOC, also known as the Palermo Convention, is the first global, legally binding instrument against transnational organized crime (UNODC, 2004). Adopted by the United Nations General Assembly in 2000 and entering into force on September 29, 2003, the convention reflects the growing international consensus that organized crime has become a significant threat to global security, development, and human rights and represents an important milestone in international lawmaking in the field of international criminal justice (Rose, 2020). The UNTOC’s primary objective is to promote international cooperation in preventing and combating transnational organized crime more effectively. It recognizes that organized crime crosses borders and no single nation can address these challenges alone (Mejia, 2021). Therefore, UNTOC provides a framework for cooperation between states, encouraging them to harmonize their legal frameworks and law enforcement practices.

The convention seeks to address various forms of organized crime, including drug trafficking, human trafficking, money laundering, corruption, and the smuggling of migrants. Although UNTOC was initially designed to address traditional forms of organized crime, its broad framework allows for adaptability to new challenges, such as cybercrime (Girard, 2023) and environmental harms (Esmail et al., 2020; van Uhm & Nijman, 2020). To address these rising challenges, the convention enables the adoption of additional protocols—supplementary agreements that expand its scope and address specific crimes. Through these additional protocols, the international community can formally recognize and address nascent threats within the UNTOC framework, establishing clear legal definitions and obligations for member states for particular thematic issues.

Essentially, additional protocols serve to augment existing international law instruments while still operating within the existing general legal framework. For instance, when the Palermo Protocol was introduced, it helped harmonize antitrafficking laws across borders due to its mandatory and detailed provisions, making international cooperation more effective (OHCHR, 2000; Hyland, 2001). A similar approach tailored to wildlife trafficking could lead to improved coordination between countries, fostering a shared understanding of wildlife trafficking as a serious transnational crime and agreeing on unified mechanisms to combat it. This could serve as a catalyst for enhanced global cooperation on wildlife trafficking and more focused international efforts, including information shar-

ing, joint investigations, and capacity-building initiatives. As an example, the Montreal Protocol on Substances that Deplete the Ozone Layer (United Nations, 1987), an amendment to the Vienna Convention for the Protection of the Ozone Layer, demonstrates how issue-specific legal instruments, backed by clear obligations and cooperative mechanisms, can significantly improve global environmental governance (Stein, 2023). In the context of wildlife trafficking, a similarly focused legal instrument could help standardize national legal frameworks and close jurisdictional gaps for more equitable and effective enforcement strategies.

The introduction of a new protocol could also attract additional resources, both financial and technical, from international organizations and donor countries aimed at tackling the newly recognized crime. Precedents like the Kyoto Protocol's Adaptation Fund show that legal instruments can unlock financial and technical support for implementation. A new protocol on wildlife trafficking could similarly do the same. By formally recognizing wildlife trafficking as a priority transnational crime, this legal recognition can justify the allocation of aid, enable access to specialized funding streams (such as those tied to crime prevention or biodiversity conservation), and provide a structured framework through which capacity-building initiatives, like training, equipment provision, and institutional support, can be coordinated and monitored. This can help countries build the necessary infrastructure and expertise to address the issue effectively.

However, such outcomes are not guaranteed. In a global context where environmental aid and conservation financing are often politically contested and chronically underfunded, the availability of new or sustained funding remains uncertain. Without sufficient financial and institutional support, even a well-designed protocol risks faltering in its implementation, especially in resource-constrained countries. Thus, although the protocol has the potential to mobilize support, its success will also depend on sustained political will and commitments from both donor states and multilateral institutions.

By allowing for the creation of additional protocols, UNTOC remains a relevant and dynamic instrument capable of addressing new and complex forms of transnational crime. This adaptability enables the strengthening of enforcement mechanisms and legal frameworks, making it more difficult for criminal organizations to exploit gaps in international law. A protocol specifically addressing wildlife trafficking could play a similar role—improving harmonization and cooperation through formal channels to counter its threats. Building on this foundation, I analyzed the additional protocol's core features and the potential challenges of its implementation.

THE PROPOSED ADDITIONAL PROTOCOL ON WILDLIFE TRAFFICKING

The preamble of UNTOC features wildlife trafficking, stating:

Strongly convinced that the [UNTOC] will constitute an effective tool and the necessary legal

framework for international cooperation in combating, inter alia, such criminal activities as [...] *illicit trafficking in endangered species of wild flora and fauna* [...] [emphasis added].

In many discussions on the matter, UNTOC is also mentioned (Eisenstein, 2023; Mitsilegas et al., 2022; Schloenhardt & Pitman, 2022; Yamaguchi, 2023). However, authors point out that the convention does not directly address wildlife trafficking; instead, it relies on a patchwork of international instruments, none specifically designed for wildlife trafficking (Cabrejo le Roux, 2015; Prisner-Levune, 2022). This has resulted in a fragmented body of legal rules and regulations against wildlife trafficking (Biegus & Bueger, 2017; Chitov, 2019; Elliot, 2017; Jiao et al., 2021; Lopes et al., 2018; Wilkins, 2014). The proposed additional protocol seeks to set wildlife trafficking within the general legal framework of UNTOC through legislative criminalization and other means (Article 5(1)). Figure 1 provides an overview of the UNTOC and its additional protocols.

Salient provisions of the proposed additional protocol

In May 2021, Costa Rica and Gabon called for a new international agreement to prevent and combat wildlife trafficking. This call to action was joined by Angola, Malawi, and the European Union, with other countries from all 5 UN regional groups eventually joining as cosponsors (European Parliament, 2021; EWC, 2021a, 2021b; IUCN, 2022; Mtawali, 2022). In May 2022, the UN Commission on Crime Prevention and Criminal Justice issued Resolution 31/1, which called for member states to provide the UN Office on Drugs and Crime (UNODC) with their views on the potential for the additional protocol on illicit trafficking in wildlife. As of July 2025, the proposed additional protocol is being positioned to expand its scope to encompass “crimes against the environment,” while retaining wildlife trafficking as a core focus of the discussion (Tennant et al., 2025; UNODC, 2025).

Although an official draft protocol has not yet been released, ongoing discussions have been informed by a model draft developed by the Global Initiative to End Wildlife Crime (EWC, 2023). This proposal draws on a wide range of legal sources, including the 3 UNTOC protocols, the UNODC Guide on Drafting Legislation to Combat Wildlife Crime, the domestic criminal codes of Mexico, Mozambique, and Viet Nam, and wildlife and biodiversity laws of Australia, Canada, and the EU, among others. This provides a comparative foundation for harmonizing the international legal framework against wildlife trafficking (Schloenhardt & Pitman, 2022).

The current version of the proposed protocol looks at the illegal trafficking of wild animals and plants and their derivatives and products (Article 2). This includes the “import, export, transport, sale (including by electronic means), introduction from the sea, acquisition, possession, purchase, delivery, movement or transfer” of species that are protected not only under international law (e.g., CITES) but also under domestic law



FIGURE 1 United Nations Convention against Transnational Organized Crime and its additional protocols.

(Article 3; Article 5[1]). This definition emphasizes the transnational nature of wildlife trafficking (Article 4). Criminal liability would attach to the direct perpetrators (e.g., traffickers), those who finance, facilitate, or profit from these crimes, and those who aid and abet their commission (Article 5[1–3]).

The protocol would facilitate the exchange of information among countries, helping to track and disrupt transnational wildlife trafficking networks (Article 8). This includes sharing intelligence on trafficking routes, methods used by criminals, and legislative experiences and practices to prevent, combat, and eradicate wildlife trafficking. Recognizing that many countries affected by wildlife trafficking lack the resources to combat it effectively, the draft protocol encourages joint operations and cross-border enforcement initiatives to combat wildlife trafficking networks that operate across multiple jurisdictions. It emphasizes the need for specialized training and technical assistance (Article 10), a provision directly adapted from Article 14 of the Firearms Protocol (UNODC, 2001). Although the wording is not explicit, these trainings could pertain to law enforcement, prosecutors, and judicial authorities on how to deal with the unique challenges of wildlife trafficking. This includes training in investigation techniques, forensic analysis of wildlife products, and understanding the legal frameworks governing wildlife protection.

The draft protocol calls for stronger national and international regulatory frameworks to monitor and control the exploitation of wildlife, including improved border controls (Article 9), enhanced monitoring of legal wildlife trade to prevent laundering of illegal products (Article 11), and procedural cooperation in criminal matters, such as extradition (Article 16), mutual legal assistance (Article 18), and joint investigations (Article 19). The protocol aims to standardize these processes to ensure that wildlife traffickers face justice, regardless of where

they operate. Although the protocol remains at the proposal stage, it reflects growing international recognition that wildlife trafficking is not just an environmental concern but a complex transnational crime.

Advantages and potential pitfalls

Including wildlife trafficking under the ambit of UNTOC can be ideal for several reasons. The nature, scale, and impact of wildlife trafficking make it a fitting subject for inclusion within the UNTOC framework, which is designed to address complex, transnational criminal activities. Advantages include a coordinated international response, legal standardization, improved asset confiscation procedures, and sharing of information and intelligence, among others.

For one, as the UNODC (2017) declares, wildlife trafficking is inherently transnational, involving sophisticated criminal networks that operate across borders. These networks engage in the illegal poaching, trafficking, and sale of wildlife and wildlife products, often exploiting weak enforcement and legal inconsistencies between countries (Nožina, 2019). Anagnostou and Doberstein (2022) highlight that the effects of wildlife trafficking are not confined to one country or region. Because UNTOC is specifically designed to address transnational organized crime, it provides the necessary legal and cooperative framework to combat these cross-border activities and consequences. Including wildlife trafficking under UNTOC allows for a coordinated international response, which is essential for addressing the transnational scope of the problem.

Wildlife trafficking is also often linked to other forms of organized crime, such as drug trafficking, arms smuggling, and money laundering (Mozer & Prost, 2023). Criminal organiza-

tions involved in wildlife trafficking frequently use the same networks, routes, and methods as those involved in these other illicit activities (Shelley, 2017). By including wildlife trafficking under UNTOC, law enforcement agencies can tackle these interconnected criminal activities more effectively. Further, UNTOC mechanisms addressing the interrelated aspects of these organized criminal activities, including the confiscation of criminal assets, can also be crucial in dismantling the financial foundations of wildlife trafficking syndicates (Osorio, 2024).

Being one of the most lucrative forms of transnational organized crime, including wildlife trafficking under UNTOC could catalyze the international community to formally acknowledge the severity of wildlife trafficking and commit to addressing it with the same urgency and resources as other major transnational crimes. The UNTOC's inclusion of wildlife trafficking could attract international attention and resources and thus lead to enhanced capacity-building efforts. Countries, particularly those in the Global South, often lack the resources and expertise to combat wildlife trafficking effectively. The UNTOC could facilitate technical assistance, training, and funding to improve these capabilities.

Many countries have already demonstrated a commitment to combat wildlife trafficking through various international agreements, such as CITES, which at the time of writing includes 183 states and the European Union. Including wildlife trafficking under UNTOC can build on these existing commitments and ensure that they are supported by robust enforcement and cooperation mechanisms. The UNTOC provides a platform for holding states accountable to their international obligations. By bringing wildlife trafficking into this framework, it would increase the pressure on governments to take meaningful action against wildlife traffickers and ensure that international commitments translate into domestic enforcement. At the same time, UNTOC encourages countries to harmonize their legal frameworks to combat transnational organized crime effectively. By incorporating wildlife trafficking into UNTOC, member states would be prompted to create or strengthen national legislation that criminalizes wildlife trafficking and related offenses. This legal standardization is vital for facilitating international cooperation, extradition, and joint investigations.

However, although including wildlife trafficking under the ambit of UNTOC could bring significant benefits, there are also potential disadvantages and challenges that need to be considered. These include issues related to legal, operational, and political complexities that could arise from such an inclusion. Negotiating a new international protocol is a time- and resource-intensive process that requires broad political consensus, often hindered by divergent national interests and enforcement capacities (Pouw et al., 2022). However, integrating social justice considerations from the outset may help secure broader buy-in, particularly from states concerned about fairness. For instance, Morgera (2024) highlights how the inclusion of benefit-sharing provisions in international treaties helped gain support from many biodiversity-rich developing countries.

Many countries, especially developing ones, already struggle with limited resources for law enforcement and judicial pro-

cesses (Roe et al., 2020; World Bank, 2019). Adding wildlife trafficking to the UNTOC framework could strain these resources further, particularly if new laws, training, and infrastructure are required to meet the convention's obligations. These burdens could disproportionately fall on Indigenous and marginalized communities, especially if implementation leads to overpolicing or the criminalization of customary practices without adequate consultation or legal safeguards. The same can be said for the UNODC (formerly the UN Centre for International Crime Prevention), which serves as the Secretariat for the UNTOC Conference of the Parties (preamble [11]). Including wildlife trafficking under UNTOC would require additional administrative efforts, including the creation of new operational procedures, guidelines, and monitoring mechanisms. If this is not coupled with additional institutional and financial support, adding a new protocol to UNTOC could overburden the UN ODC and member states, potentially slowing down the convention's response to other crimes. Corollary, UNTOC was originally designed to address human trafficking, migrant smuggling, and firearms trafficking—crimes directly related to human security and organized crime. Expanding the convention to include wildlife trafficking could dilute its focus, potentially weakening the overall effectiveness of UNTOC in combating its primary concerns.

Another argument against its inclusion is that wildlife trafficking is also already addressed under other international agreements, such as CITES. Adding it to UNTOC might create overlaps and redundancies, complicating enforcement efforts and leading to jurisdictional disputes over which framework takes precedence. The existence of multiple international frameworks dealing with similar issues could create confusion among law enforcement agencies, policy-makers, and other stakeholders. Duplication of efforts could lead to inefficiencies and a lack of clear direction in combating wildlife trafficking.

From an international law perspective, although there are strong arguments for including wildlife trafficking under UNTOC, there are also significant disadvantages and challenges that must be carefully weighed. At the same time, although the protocol would be implemented through national legal systems, its real-world effects will be felt at the local level—particularly in rural and Indigenous communities, where wildlife trafficking occurs and enforcement actions are applied. Without careful attention to these local dynamics, national implementation risks reproducing top-down approaches that may inadvertently harm these communities (Osorio, 2020).

IMPLICATIONS OF UNTOC ADDITIONAL PROTOCOL FOR CONSERVATION

The inclusion of a protocol addressing wildlife trafficking under the UNTOC marks a significant global commitment to tackling the problem. It could also be expected that acceding to the protocol can catalyze states to criminalize various activities associated with wildlife crime, such as poaching, illegal logging, and the sale and consumption of wildlife products. In addition, although UNTOC provides a robust criminal justice

framework, its implementation intersects with other international legal regimes, including human rights law, particularly covering Indigenous peoples' rights (Osorio & Bernaz, 2024), and environmental treaties (e.g., the Convention on Biological Diversity and the Nagoya Protocol). Recognizing areas of overlap and fostering coherence between these international agreements can enhance the legitimacy, equity, and effectiveness of global wildlife governance. This development could lead to broader consequences for local, underserved, and Indigenous communities. As Cung (2017) emphasizes, these communities often rely on natural resources for their livelihoods, and the potential for positive and negative impacts must be considered, particularly when viewed through the lens of socioeconomic inequality and human rights.

Indeed, by addressing wildlife trafficking within the UNTOC framework, there could also be positive impacts on communities through the reduction of the influence of organized crime in vulnerable regions. Organized criminal groups involved in wildlife trafficking often exploit local communities, and stronger international action could help protect these communities from such exploitation (UNODC, 2016). The proposed additional protocol and its domestic cascading could strengthen the rule of law in countries where wildlife trafficking is rampant, promoting justice and accountability. This could lead to broader human rights benefits because improved governance and legal frameworks can enhance the protection of all rights.

However, one of the major challenges in implementing stringent wildlife trafficking laws is the unintended consequences they may have, particularly on the various rights that they can impinge on, especially those pertaining to local, underserved, and Indigenous communities (Osorio & Bernaz, 2024). In other words, although the aim of these laws is to protect wildlife, they may inadvertently harm those who depend on wildlife for survival. Strict enforcement of these laws in particular could lead to conflicts between law enforcement and local communities, particularly in rural or Indigenous areas where wildlife resources form a critical part of daily life. In many cases, these communities already face significant socioeconomic challenges, and criminalizing their traditional practices, such as hunting, fishing, or trade, could exacerbate poverty and social tensions. Such a shift could also lead to cultural conflicts if local or Indigenous communities resist the imposition of laws that disregard their historical relationship with nature. This could not only create friction with authorities but also undermine local cooperation, making enforcement of these conservation initiatives at the grassroots level even more difficult (Cooney et al., 2017).

Moreover, the enforcement of these new regulations may widen the gap between wealthy and poor communities (Osorio & Bernaz, 2024). Wealthier individuals or corporations might continue to exploit natural resources through legal loopholes or illicit means, whereas marginalized communities face the brunt of enforcement. As a result, the already stark socioeconomic divide between regions could become even more pronounced, creating a cycle of inequality.

The exclusion of local and Indigenous voices from international policy-making processes further marginalizes these communities. The right to self-determination is a cornerstone of international human rights law, particularly for Indigenous peoples (UN General Assembly, 2013). It encompasses the right of communities to freely determine their political status and pursue their economic, social, and cultural development. Including wildlife trafficking under UNTOC, although commendable for environmental protection, could lead to the imposition of external regulations that undermine Indigenous sovereignty, especially if these communities are not meaningfully consulted or involved in the decision-making process. The invisibility of their needs and rights in the design and implementation of such protocols could lead to the failure of these policies.

Despite these challenges, the implementation of a wildlife trafficking protocol could also offer positive outcomes, particularly if designed with sensitivity to local needs and human rights in mind. In line with this, I devised recommendations for legislative consideration.

Considerations in the additional protocol design

Despite the 2013 CITES recommendation to integrate the perspective of a rights-based approach in battling wildlife trafficking, there is a lack of human rights discourse in international wildlife trafficking law (Osorio & Bernaz, 2024). At the same time, despite Indigenous peoples playing an important role in wildlife preservation and environmental management, they are not mentioned in CITES and are only marginally referred to in the CITES Conference of the Parties (e.g., CITES Strategic Vision: 2021–2030). In practice, this means that enforcement policies often overlook the rights of Indigenous peoples and local communities who depend on wildlife for their livelihoods or cultural practices. For example, antipoaching laws have, in some cases, led to forced evictions or criminalization of subsistence hunting without meaningful consultation or compensation. Legal frameworks tend to prioritize species protection and enforcement over participation, land rights, or benefit sharing.

I propose some modifications to the draft of the UNTOC additional protocol as an avenue to correct such lapses, considering how it seeks to address an issue straddling both environmental law and criminal justice. The draft protocol, in Article 12, does mention international human rights law. However, from a reading of the draft protocol, the integration of human rights remains superficial, lacking concrete provisions that would operationalize rights-based safeguards in its enforcement and implementation mechanisms.

Although criminalization is important and is the main focus of UNTOC, the protocol should also highlight positive duties for governments to conduct. In particular, Article 7 of the proposed protocol, as it stands, could include more focus on the role of the communities. Thus far, it is couched in very general terms:

1. States Parties shall establish comprehensive policies, programs, and other measures to prevent and combat the illicit trafficking in specimens.
2. States Parties shall endeavor to undertake measures such as research, information, and mass media campaigns and social and economic initiatives to prevent and combat trafficking in specimens. Each State Party shall take measures to ensure that it provides or strengthens information programs to increase public awareness of the fact that the conduct set forth in Article 5 of this protocol is criminal activity.

Article 7(3) requires “cooperation with non-governmental organizations, other relevant organizations and other elements of civil society,” both of which are also found in the anti-human trafficking and antimigrant smuggling protocols. In this regard, highlighting the role of local communities and Indigenous peoples could help cement their contribution to conservation. As Bates and Trakansuphakon (2021) note, many Indigenous communities have historically served as stewards of their environment, possessing extensive knowledge of wildlife management and sustainable practices. By formally involving these groups in the implementation and enforcement of wildlife protection measures, states could strengthen the effectiveness of conservation efforts. Such inclusion is also consistent with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which calls for the right to free, prior, and informed consent (FPIC) in decisions affecting Indigenous lands, resources, and cultures. Furthermore, recognizing and utilizing the expertise of local communities would empower these populations, transforming them from potential adversaries into key allies in combating wildlife trafficking (additional examples in Osorio and Bernaz [2024]). This approach would also help mitigate the risk of human rights abuses by ensuring that enforcement actions do not infringe upon the livelihoods and traditional practices of these communities.

The protocol should also emphasize sustainable, inclusive development. Protecting biodiversity through criminal law cannot be a standalone solution; long-term success depends on integrating wildlife conservation into broader socioeconomic strategies that address poverty and ensure equitable access to resources. States should promote alternative livelihoods for communities that reduce reliance on consumptive wildlife exploitation. This includes supporting local ecotourism initiatives, sustainable agriculture, and small-scale enterprises. Equally important is the establishment of benefit-sharing mechanisms, especially for Indigenous communities whose territories contain much of the world's biodiversity (Morgan et al., 2022). Ensuring that local populations share in the economic gains of conservation projects, such as art and cultural heritage, ecotourism, or the sustainable harvesting of natural resources, can incentivize community participation in antiwildlife trafficking initiatives (Osorio, 2025). Although inclusive development and equitable benefit sharing may appear peripheral to a crime-focused treaty, they are in fact crucial to its effectiveness. Organized criminal networks often exploit conditions of poverty, marginalization, and weak governance in biodiverse

regions to recruit local actors or operate with impunity. Without addressing the structural inequalities and lack of alternatives that make communities vulnerable to exploitation, enforcement efforts alone will remain short-sighted and ultimately ineffective. Mentioning these concepts in the protocol, however briefly, can provide essential guidance for implementation, especially given that, according to the Vienna Convention on the Law of Treaties Article 31(3)(c), treaties are not interpreted in isolation but in harmony with one another (United Nations, 1969). Acknowledging sustainable development and equity principles, even at the protocol level, signals that enforcement must be aligned with broader legal commitments and normative frameworks across human rights, environmental law, and development.

Taking these 2 proposals together, the third recommendation would be to establish formal consultation mechanisms that include Indigenous peoples and local communities in the drafting and implementation phases of the protocol. This can ensure that their perspectives, rights, and cultural practices are fully considered. Such mechanisms could take the form of regional advisory bodies or national consultative frameworks, where representatives from Indigenous and rural communities engage in dialogue with government officials and international organizations. By institutionalizing this form of participation, the protocol would not only fulfill the right to self-determination but also enhance the legitimacy and effectiveness of its measures.

Although these are seemingly minor, programmatic, or merely surface modifications to the proposed draft and the process entailed to create it, these proposals reflect important concepts that should be integrated into wildlife trafficking laws, particularly future iterations of the proposed UNTOC protocol. By taking the wording of the proposed protocol from just within the ambit of criminal justice to the domain of both human rights and sustainable development, it situates wildlife trafficking as an issue that intersects these fields. This could help garner more attention to the matter from different viewpoints and, in turn, bring greater social and institutional support for conservation initiatives.

At the same time, it is essential that these concepts be explicitly mentioned in the UNTOC additional protocol because wildlife trafficking is a complex, multidimensional issue. Simply referring to these concepts in separate laws or frameworks does not ensure their integration into the practical and enforceable measures against wildlife trafficking. By embedding human rights, sustainable development, and Indigenous and community participation directly in the UNTOC protocol, it ensures that these principles are not sidelined or treated as secondary considerations. These elements are crucial to the success of efforts to address the root causes of wildlife trafficking—poverty, inequality, and marginalization—that make communities vulnerable to exploitation by organized criminal groups. Without a clear mandate in the protocol itself, there is a risk that enforcement will focus only on punitive actions, overlooking the broader social and economic factors that fuel the illegal trade in wildlife.

CONCLUSION

The inclusion of wildlife trafficking under the UNTOC framework has complex implications. As Gore (2011) asserts, from a conservation policy perspective, there are indeed potential benefits in strengthening the criminal justice framework against wildlife trafficking. However, its effectiveness will depend not only on enforcement mechanisms but also on whether it meaningfully addresses equity, participation, and local implementation realities.

We argue that embedding principles of inclusive development, human rights, and formal consultation mechanisms is not peripheral but essential to achieving long-term conservation goals. Organized crime thrives in contexts of marginalization and weak governance; addressing these structural conditions through integrated policy design can enhance legitimacy, improve outcomes, and avoid reinforcing harmful power imbalances. Including even brief references to these principles in the protocol's text can help guide its interpretation and application in line with broader international law commitments, including those under human rights and environmental treaties.

Ultimately, the protocol's success will hinge on its ability to bridge global enforcement priorities with the lived realities of communities on the ground. Doing so would not only strengthen legal coherence across regimes but also lay the foundation for a more just and effective approach to transnational environmental crime.

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REFERENCES

- Anagnostou, M., & Doberstein, B. (2022). Illegal wildlife trade and other organised crime: A scoping review. *Ambio*, 51(7), 1615–1631.
- Bates, P., & Trakansuphakon, P. (2021). *Indigenous peoples: Informed custodians of biodiversity*. UNESCO. <https://courier.unesco.org/en/articles/indigenous-peoples-informed-custodians-biodiversity>
- Biegus, O., & Bueger, C. (2017). Poachers and pirates: Improving coordination of the global response to wildlife crime. *South African Crime Quarterly*, 60, 29–31.
- Bodansky, D. (2010). *The art and craft of international environmental law*. Harvard University Press.
- Cabrejo le Roux, A. (2015). *Tightening the net: Toward a global legal framework on transnational organized environmental crime*. World Wildlife Fund and Global Initiative Against Transnational Organized Crime. https://www.unodc.org/documents/congress/background-information/NGO/GIATOC-Blackfish/GIATOC_-_Tightening_the_Net.pdf
- Cao Ngoc, A., & Wyatt, T. (2013). A green criminological exploration of illegal wildlife trade in Vietnam. *Asian Journal of Criminology*, 8(2), 129–142.
- Chayes, A., & Chayes, A. H. (1995). *The new sovereignty: Compliance with international regulatory agreements*. Harvard University Press.
- Chitov, A. (2019). International law and criminalizing illegal trade in endangered species (from the Far Eastern perspective). *Asia Pacific Journal of Environmental Law*, 22(2), 207–227.
- Consalo, K. Z. (2019). Fighting back from the brink: International efforts to prevent illegal trafficking in endangered species. *Environ: Environmental Law and Policy Journal*, 43, 67–118.
- Cooney, R., Roe, D., Dublin, H., Phelps, J., Wilkie, D., Keane, A., Travers, H., Skinner, D., Challender, D. W. S., Allan, J. R., & Biggs, D. (2017). From poachers to protectors: Engaging local communities in solutions to illegal wildlife trade. *Conservation Letters*, 10, 367–374.
- Cung, A. (2017). *Wild life, wild livelihoods: Involving communities in sustainable wildlife management and combating illegal wildlife trade*. Convention on Biological Diversity. <https://doi.org/10.13140/RG.2.2.11770.85449>
- Duffy, R. (2016). The illegal wildlife trade in global perspective. In L. Elliott & W. H. Schaedla (Eds.), *Handbook of transnational environmental crime* (pp. 109–128). Edward Elgar.
- Eisenstein, Y. (2023). CITES: 50 years later. *International Law News*, 50, 18.
- Elliott, L. (2017). Cooperation on transnational environmental crime: Institutional complexity matters. *Review of European Comparative and International Environmental Law*, 26(2), 107–117.
- Esmail, N., Wintle, B. C., 't Sas-Rolfes, M. T., Athanas, A., Beale, C. M., Bending, Z., Dai, R., Fabinyi, M., Gluszek, S., Haenlein, C., Harrington, L. A., Hinsley, A., Kariuki, K., Lam, J., Markus, M., Paudel, K., Shukhova, S., Sutherland, W. J., ... Milner-Gulland, E. J. (2020). Emerging illegal wildlife trade issues: A global horizon scan. *Conservation Letters*, 13(4), Article e12715.
- European Commission (EC). (2024). *Environmental Crime Directive*. https://environment.ec.europa.eu/law-and-governance/environmental-compliance-assurance/environmental-crime-directive_en
- European Parliament. (2021). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: EU strategy to tackle organised crime 2021–2025* (COM 2021 170 final). Author.
- Faure, M. G. (2024). The EU Environmental Crime Directive 2024: A revolution in EU environmental criminal law? *Journal of Environmental Law*, 27(2), 135–144.
- Fukushima, C. S., Tricorache, P., Toomes, A., Stringham, O. C., Rivera-Téllez, E., Ripple, W. J., Peters, G., Orenstein, R. I., Morcatty, T. Q., Longhorn, S. J., Lee, C., Kumschick, S., de Freitas, M. A., Duffy, R. V., Davies, A., Cheung, H., Cheyne, S. M., Bouhuys, J., Barreiros, J. P., ... Cardoso, P. (2021). Challenges and perspectives on tackling illegal or unsustainable wildlife trade. *Biological Conservation*, 263, Article 109342.
- Girard, R. B. (2023). The honeypot stings back: Entrapment in the age of cyber-crime and a proposed pathway forward. *Chicago Journal of International Law*, 24(1), 187–221.
- Global Initiative to End Wildlife Crime (EWC). (2021a). *Angola joins call for a new global agreement to prevent and combat wildlife crime*. <https://endwildlifecrime.org/wp-content/uploads/2021/09/28.09.21-EWC-Angola-Press-Release.pdf>
- Global Initiative to End Wildlife Crime (EWC). (2021b). *Joint statement: Gabon and Costa Rica call for a new global agreement to prevent and combat wildlife crime*. <https://endwildlifecrime.org/wp-content/uploads/2021/05/Gabon-and-Costa-Rica-Joint-Statement-on-Wildlife-Crime-Press-Release-and-Statements-May-2021-.pdf>
- Global Initiative to End Wildlife Crime (EWC). (2023). *Proposed UNTOC protocol on the illicit trafficking of wildlife*. <https://endwildlifecrime.org/untoc-wildlife-protocol/>
- Gore, M. L. (2011). The science of conservation crime. *Conservation Biology*, 25(4), 659–661.

- Gore, M. L., & Bennett, A. (2022). Importance of deepening integration of crime and conservation science. *Conservation Biology*, 36, Article e13710.
- Harfoot, M., Glaser, S. A. M., Tittensor, D. P., Britten, G. L., McLardy, C., Malsch, K., & Burgess, N. D. (2018). Unveiling the patterns and trends in 40 years of global trade in CITES-listed wildlife. *Biological Conservation*, 223, 47–57.
- Hyland, K. E. (2001). The impact of the protocol to prevent, suppress and punish trafficking in persons, especially women and children. *Human Rights Brief*, 8(2), 30–31,38.
- International Criminal Court (ICC). (2024). *The office of the prosecutor launches public consultation on a new policy initiative to advance accountability for environmental crimes under the Rome Statute*. <https://www.icc-cpi.int/news/office-prosecutor-launches-public-consultation-new-policy-initiative-advance-accountability-0>
- International Union for Conservation of Nature (IUCN). (2022). *Progress towards a new international agreement to combat trafficking in wildlife*. <https://iucn.org/story/202208/progress-towards-new-international-agreement-combat-trafficking-wildlife>
- Jiao, Y., Yeophantong, P., & Lee, T. M. (2021). Strengthening international legal cooperation to combat the illegal wildlife trade between Southeast Asia and China. *Frontiers in Ecology and Evolution*, 9, Article 645427.
- Lopes, R. J., Ferreira, J. M., & Moraes-Barros, N. (2018). Bolder steps to fight global wildlife illegal trade. *Conservation Biology*, 33(1), 7–8.
- Mejia, T. B. (2021). The United Nations Convention against Transnational Organized Crime 20 years from its adoption: Strengths, achievements, and challenges ahead. *Brill Research Perspectives in Transnational Crime*, 3, 3–21.
- Mitsilegas, V., Fasoli, E., Giuffrida, F., & Fitzmaurice, M. (2022). Environmental crime at the international level. In V. Mitsilegas, E. Fasoli, F. Giuffrida, & M. Fitzmaurice (Eds.), *The legal regulation of environmental crime* (pp. 55–94). Brill.
- Moreto, W. D., & Elligson, R. L. (2025). Integrating criminology, criminal justice, and crime science in conservation science and practice. *Conservation Biology*, 39(2), Article e70006.
- Morgan, E. A., Buckwell, A., Guidi, C., Garcia, B., Rimmer, L., Cadman, T., & Mackey, B. (2022). Capturing multiple forest ecosystem services for just benefit sharing: The basket of benefits approach. *Ecosystem Services*, 55, Article 101416.
- Morgera, E. (2024). *Fair and equitable benefit-sharing in international law*. Oxford University Press.
- Morton, O., Scheffers, B. R., Haugaasen, T., & Edwards, D. P. (2021). Impacts of wildlife trade on terrestrial biodiversity. *Nature Ecology & Evolution*, 5(4), 540–548.
- Mozer, A., & Prost, S. (2023). An introduction to illegal wildlife trade and its effects on biodiversity and society. *Forensic Science International: Animals and Environments*, 3, Article 100064.
- Mtwali, W. (2022). *Malawi supports UNTOC Protocol on combating illicit wildlife trafficking*. Nyasa Times. <https://www.nyasatimes.com/malawi-supports-untoc-protocol-on-combating-illicit-wildlife-trafficking/>
- Nožina, M. (2019). The fate and future of the wildlife trade regulatory regimes: The case of CITES and rhino horn trafficking. In N. Hynek, O. Ditrych, & V. Stritecky (Eds.), *Regulating global security: Insights from conventional and unconventional regimes* (pp. 245–269). Springer.
- Office of the United Nations High Commissioner for Human Rights (OHCHR). (2000). *Protocol to prevent, suppress and punish trafficking in persons especially women and children, supplementing the United Nations Convention against Transnational Organized Crime* (Palermo Protocol A/RES/55/25). United Nations.
- Osorio, C. P. (2020). Enhancing the ASEAN way: Integrating international law into local initiatives in the ASEAN. In H. Susetyo, P. R. Waagstein, & A. B. Cahyono (Eds.), *Advancing rule of law in a global context* (pp. 189–195). Routledge.
- Osorio, C. P. (2024). Battling the illegal wildlife trade through regulatory finance: The Southeast Asian context. *Journal of Academic Stand Against Poverty*, 5(1), 44–74.
- Osorio, C. P. (2025). *The intersection of art law and transnational wildlife crime: Exploring the Southeast Asian context*. Harvard International Law Journal. <https://journals.law.harvard.edu/ilj/2025/02/the-intersection-of-art-law-and-transnational-wildlife-crime-exploring-the-southeast-asian-context/>
- Osorio, C. P., & Bernaz, N. (2024). Addressing the international illegal wildlife trade through a human rights approach. *Review of European, Comparative & International Environmental Law*, 33(3), 507–520.
- Pannett, R. (2024). *What is ecocide and could it become an international crime like genocide?* The Washington Post. <https://www.washingtonpost.com/climate-environment/2024/09/10/ecocide-law-crime-genocide-icc/>
- Pires, S., & Moreto, W. D. (2011). Preventing wildlife crimes: Solutions that can overcome the “tragedy of the commons”. *European Journal on Criminal Policy and Research*, 17, 101–123.
- Pouw, N. R. M., Weikard, H. P., & Howarth, R. B. (2022). Economic analysis of international environmental agreements: Lessons learnt 2000–2020. *International Environmental Agreements: Politics, Law and Economics*, 22, 279–294.
- Prisner-Levyne, Y. (2022). Wildlife crime: Story of an international law lacuna. *Max Planck Yearbook of United Nations Law*, 25(1), 498–552.
- Roe, D., Dickman, A., Kock, R., Milner-Gulland, E. J., Rihoy, E., & 't Sas-Rolfes, M. (2020). Beyond banning wildlife trade: COVID-19, conservation and development. *World Development*, 136, Article 105121.
- Rose, C. (2023). The creation of a review mechanism for the UN Convention against Transnational Organized Crime and its protocols. *American Journal of International Law*, 114(1), 51–67.
- Scanlon, J. E. (2025). *Form and content of a possible protocol on the illicit trafficking of wildlife*. Global Initiative to End Wildlife Crime. <https://endwildlifecrime.org/wp-content/uploads/2020/11/Possible-UNTOC-Protocol-Eng-2.pdf>
- Schloenhardt, A., & Pitman, M. (2022). A new international instrument against wildlife trafficking?: An appraisal of current proposals. *Melbourne Journal of International Law*, 23(2), 333.
- Shelley, L. (2017). Illicit trade. In K. A. Reinert (Ed.), *Handbook of globalisation and development* (pp. 100–114). Edward Elgar Publishing.
- Stein, T. (2023). *Montreal Protocol emerges as a powerful climate treaty*. National Oceanic Atmospheric Administration. <https://www.noaa.gov/news-release/montreal-protocol-emerges-as-powerful-climate-treaty>
- Tennant, I., Haysom, S., & Chapeau, T. (2025). *A New Protocol for the UNTOC?* <https://globalinitiative.net/wp-content/uploads/2025/06/Ian-Tennant-Simone-Haysom-Tiphaine-Chapeau-A-new-protocol-for-the-UNTOC-GI-TOC-June-2025.v2.pdf>
- 't Sas-Rolfes, M., Challender, D. W. S., Hinsley, A., Verissimo, D., & Milner-Gulland, E. J. (2019). Illegal wildlife trade: Scale, processes, and governance. *Annual Review of Environment and Resources*, 44, 201–228.
- UN General Assembly (UNGA). (2013). *Self-determination integral to basic human rights, fundamental freedoms, third committee told as it concludes general discussion* (GA/SHC/4085). <https://press.un.org/en/2013/gashe4085.doc.htm>
- United Nations Environment Programme (UNEP). (2024). *Adaptation Fund*. <https://www.unep.org/about-un-environment-programme/funding-and-partnerships/adaptation-fund>
- United Nations Office on Drugs and Crime (UNODC). (2001). *Protocol against the illicit manufacturing of and trafficking in firearms, their parts and components and ammunition* (Firearms Protocol A/RES/55/255). United Nations.
- United Nations Office on Drugs and Crime (UNODC). (2004). *United Nations Convention against Transnational Organized Crime and the protocols thereto*. <https://www.unodc.org/unodc/en/organized-crime/intro/UNTOC.html>
- United Nations Office on Drugs and Crime (UNODC). (2016). *Annual report 2015*. https://www.unodc.org/documents/AnnualReport2015/Annual_Report_2016_WEB.pdf
- United Nations Office on Drugs and Crime (UNODC). (2017). *Annual report 2016*. https://www.unodc.org/documents/AnnualReport2016/2016_UNODC_Annual_Report.pdf
- United Nations Office on Drugs and Crime (UNODC). (2022). *Strengthening the international legal framework for international cooperation to prevent and combat illicit trafficking in wildlife*. https://www.unodc.org/documents/commissions/CCPCJ/CCPCJ_Sessions/CCPCJ_32/CRPs/ECN152023_CRP3_e.pdf
- United Nations Office on Drugs and Crime (UNODC). (2025). *First 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*. https://www.unodc.org/unodc/en/treaties/CTOC/CAE_IEG_2025.html

- United Nations. (1969). Vienna Convention on the Law of Treaties. *Treaty Series*, 1155, 331.
- United Nations. (1987). Montreal Protocol on Substances that Deplete the Ozone Layer. *Treaty Series*, 1522, 3. <https://treaties.un.org/doc/publication/unts/volume%201522/volume-1522-i-26369-english.pdf>
- United Nations. (2000). United Nations Convention against Transnational Organized Crime. *Treaty Series*, 2225, 209.
- van Uhm, D. P., & Nijman, C. C. (2020). The convergence of environmental crime with other serious crimes: Subtypes within the environmental crime continuum. *European Journal of Criminology*, 19(4), 542–561.
- van Uhm, D. P., South, N., & Wyatt, T. (2021). Connections between trades and trafficking in wildlife and drugs. *Trends in Organized Crime*, 24(4), 425–446.
- Wilkins, H. S. (2014). Linking environment with peace and security: Decisions on sanctions on illicit wildlife trafficking. *Environmental Policy and Law*, 44(3), 277.
- World Bank. (2019). *Illegal logging, fishing, and wildlife trade: The costs and how to combat it*. <https://thedocs.worldbank.org/en/doc/482771571323560234-0120022019/original/WBGReport1017Digital.pdf>
- Yamaguchi, S. (2023). *The nexus between illegal trade and environmental crime*. Trade and Environment Working Paper 2023/02. Organisation for Economic Co-operation and Development.

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