Bridging legal gaps in ecocide prosecution: A hybrid enforcement model

Jamal Hajiyev[*]

A. Introduction

Rapid degradation of ecosystems, collapse in biodiversity, and irreversible environmental damage have unveiled the legal weaknesses of current systems to deal with ecological crimes at large. Ecocide is defined by the Stop Ecocide Foundation's panel of experts as unlawful or wanton acts, committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts.[1]

The International Criminal Court (ICC) has offered limited protection for environmental harm, confined to instances that arise in armed conflict involving the intentional, disproportionate damage to the environment. It does not cover destruction of the environment on a large scale in

* Master of Laws Candidate, Vilnius University, jamal.hajiyevv@gmail.com.

1 Independent Expert Panel, 'Legal Definition of Ecocide' (2021), https://www.stopecocide.earth/legal-definition (last accessed: 30 June 2025).

peacetime, nor does it provide for liability on corporations or corporate executives.

On the domestic level, the legislative reaction to environmental damage reflects defragmentation, symbolism, and political capture or a deficient legal framework. Most common courts use civil or administrative procedures and lack a deterring effect, and do not reflect the actual severity of the environmental disaster. The outcome is an international responsibility gap for structural and interstate ecological damage.

The paper aims to offer a novel enforcement system resting on a three-tier system: domestic courts, Regional Environmental Tribunals (RETs), and an International Tribunal on Ecocide (ITE). It is built in the framework of a treaty based on a complementarity/subsidiarity-based approach and integrates interdisciplinary science, e.g., satellite evidence and forensic ecology, to gain legitimacy and efficacy.

The paper proceeds as follows: Section 2 analyzes the statutory weaknesses of the present international and domestic practice in regard to ecocide. Section 3 forms the concepts of the three-tier enforcement model. In Section 4, the institutional, evidentiary, and political design for implementing the system is discussed. The conclusion reflects on the proposal's feasibility and urgency in light of the global evolution of law.

B. The lack of a binding legal framework for ecocide

I. Under the Rome Statute

Although the damage to the environment is increasingly seen as a worldwide calamity, ecocide has not yet been identified by international criminal law as an independent crime. The Rome Statute, establishing the International Criminal Court, was adopted in 1998, and establishes the Court's jurisprudence over the issues of genocide, crimes against humanity, war crimes, and the crime of aggression. It contains only a few references to the environment, being covered only in Article 8(2)(b)(iv) in cases of warfare resulting in the widespread, long-term, and severe damage to the natural environment. Nevertheless, this is restricted to wartime acts and

also contains a high standard of evidence, which renders it inapplicable to peacetime ecocide.[2]

As discussed in the introduction, the Stop Ecocide Foundation has put together a panel of experts who have proposed a legal definition of ecocide. Although the definition is symbolically significant, it is not legally binding because states have not formally supported it, nor has the amendment procedure under Articles 121 and 123 of the Rome Statute, which govern how amendments to the Statute are proposed and adopted by States Parties, been invoked. Structural capacity is also poor at ICC in terms of the lack of prosecution of legal entities, such as multinational corporations, that perpetrate environmental destruction on a large scale.[3]

One of the main shortcomings of the Rome Statute is that it concerns the criminal responsibility of natural persons only. Article 25(1) specifically does not apply to corporations and other legal entities of the Court.[4] It is a considerable loophole because transnational corporations, especially in extractive sectors, the agribusiness sector on a massive scale, and power generation, cause or intensify most of the worst environmental harms. Whereas some domestic frameworks, including France under the Loi Climat et Résilience (2021), have implemented a corporate liability system in relation to environmental offences, international law has not established this mechanism.[5] Without corporate criminal responsibility in the ICC system, systemic ecocide is virtually beyond the scope of international criminal law.

The ICC cannot enforce the law and thus depends solely on state cooperation, arrest, collection of evidence, and execution of sentences.[6] The absence of major powers, such as the United States, which has not ratified the Rome Statute, undermines the universality of the ICC and weakens its international ability to deal with environmental crimes.[7]

---

2 Rome Statute of the International Criminal Court, 2187 UNTS 90, Art. 8(2)(b)(iv).

3 Armina Savanovic, Corporate Criminal Liability in International Criminal Law "ex nihilo nihil fit" (Master's thesis, Lund University 2017), p. 58.

4 Rome Statute of the International Criminal Court, 17 July 1998, 2187, UNTS 90, Art. 25(1).

5 Code de l'environnement, Loi n° 2021–1104 du 22 août 2021 portant lutte contre le dérèglement climatique et renforcement de la résilience face à ses effets [Climate and Resilience Law], Art. L.231 – 3.

6 Rome Statute, Art. 103.

7 David Bosco, Rough Justice, (2014), pp.108–12.

These weaknesses, absence of jurisdiction, the lack of rules addressing corporate accountability, and dependency on state enforcement, amount to a legal vacuum in the international arena. According to the legal theorist McDonnell-Elmetri, this shows a defect in its structural design: international criminal law was ideally suited to crimes against humanity and war crimes, not ecologically generated crimes.[8] The current ICC is inappropriate, without some serious systemic adjustment, to combat the nature, magnitude, and cause of ecocide.

II. Fragmented domestic approaches

The national responses toward ecocide have usually been dissimilar and largely symbolic. In 2021, France introduced the offence of ecocide by the Loi Climat et Résilience [Climate and Resilience Law], which integrated Article L.231-3 into the Environment Code, stipulating that ecocide is defined as the intentional execution of certain grave environmental offences which cause "serious and irreversible damage" to health, flora, fauna, and natural resources.[9] The provision was criticized as having imprecise thresholds, being administration-oriented, and being ambiguous to prosecutors.[10] Similar measures can also be found elsewhere: in 2001, Ukraine added a criminalisation of ecocide to its Criminal Code under Article 441[11], and Bolivia also adopted legislation discussing ecocide[12], but in both instances, the implementation, especially of corporations and state organs, is uneven.[13]

8 Zahra McDonnell-Elmetri, The Crime of Ecocide: The Answer to Our Environmental Emergency? (LLB (Hons) thesis, University of Otago, 2020), p. 45.

9 Code de l'environnement, Art. L.231 – 3 (introduced by Loi n° 2021–1104 du 22 août 2021 portant lutte contre le dérèglement climatique et renforcement de la résilience face à ses effets [Climate and Resilience Law].

10 Clifford Chance, 'The Environmental Crime Directive' (8 June 2024). https://www.cliffordchance.com/content/dam/cliffordchance/briefings/2024/06/the-environmental-crime-directive-a-game-changer-for-ecosystem-protection.pdf (last accessed: 1 July 2025).

11 Кримінальний кодекс України [Criminal Code of Ukraine], Law No. 2341-III of 5 April 2001, Art. 441.

12 Ley de Derechos de la Madre Tierra [Law of the Rights of Mother Earth], Law No. 071 of 21 December 2010, Art. 7.

13 Li Wei/Mariana Oliveira/Camila Rodríguez, Prosecuting Ecological Destruction: Comparative Legal Perspectives on the Crime of Ecocide (2025), 4 Interdisciplinary Studies in Society, Law, and Politics, pp. 281–282.

Institutional barriers are experienced in national systems as well. Where legal systems are highly politicised and vulnerable to executive interference, ecocide laws are at risk of political capture and non-prosecution. Many resource-dependent low- and middle-income countries (LMICs) have legal systems constrained by their extractive sector's economic dependency. It has also been noted that courts are influenced to balance economic investment over environmental liability, especially when jurisdictions have no dedicated environmental benches. Conversely, where independent environmental courts are present, litigation risk is greater for companies, which may make them comply rather than have unfettered development.[14]

This situation is aggravated by the fact that there is no standard legislation or implementation procedures. Although some jurisdictions, such as Ecuador, constitutionally recognise 'Rights of Nature' under Articles 71–74 of the 2008 Constitution, ecosystems in most countries are still regarded as property, rather than legal subjects.[15] This leads to a legal patchwork where regulatory arbitrage and forum shopping by polluters are possible.

Proximity enforcement needs national laws, but cannot be achieved through them alone. Domestic jurisdictions are still fragmented, with inconsistent definitions of environmental offences, varying penalties, and a variable degree of judicial independence. Further, many states lack the technical capacity, money, or political will to bring powerful corporate or state-linked polluters to justice. Enforcement is particularly constrained in the case of transboundary harm, whether it is deforestation, cross-border river pollution, or atmospheric damage, which cannot be effectively regulated by any state. This set of limitations makes it clear that reliance on national systems alone is insufficient and that a wider coordinated approach is required.

C. A three-tiered model for ecocide enforcement

This article suggests a three-tiered approach to filling this enforcement gap in the face of significant environmental harm. At the lowest level of adjudication, domestic courts would continue to be the principal fora for

14 Lianchao Yu/Haobin Sha/Qiang Liu/Guowan Yan 'Environmental Judicial Independence and Corporate Investment Efficiency: Evidence from a Quasi-Natural Experiment in China' (2024), 96 International Review of Economics & Finance, pp. 12–15.

15 Constitución de la República del Ecuador [Constitution of the Republic of Ecuador], 2008, Arts. 71–74.

the prosecution of environmental crimes. Above these, Regional Environmental Tribunals (RETs) would be available to adjudicate cases having a regional element, where ecosystems and harms are transboundary. Finally, in those cases of greatest transboundary and large-scale ecological devastation, an International Tribunal on Ecocide (ITE) would be the final arbiter of accountability.

Although the aspects of this model have been addressed individually, this particular article embarks on creating a combined, manageable structure of enforcement. The framework envisages a future Ecocide Treaty that would bring definitions, jurisdiction, and standards of proof into alignment. Cases would be distributed in accordance with the principle of subsidiarity and the proximity rule, in view of institutional capacity and the magnitude of the environmental harm.

I. Domestic jurisdiction and legal reform

The first venue for prosecuting an ecocide-type of environmental crime is national courts.[16] They have, however, a number of structural and systemic obstacles to their effectiveness.

In most jurisdictions, environmental damage is managed via civil or administrative proceedings or through fragmented criminal provisions. In the United States, to illustrate, large-scale pollution is frequently prosecuted under the Clean Water Act[17] or Clean Air Act[18] using administrative penalties instead of criminal penalties. In India, environmental crimes are usually pursued through the National Green Tribunal, which may impose civil penalties under the National Green Tribunal Act, but cannot impose criminal penalties.[19] In the cases of criminal laws, these are frequently constrained, applied inconsistently, or subordinated to financial interests.[20]

16 E. Roberts/J. Dobbins, ´The Role of the Citizen in Environmental Enforcement´(ELI 2016), p. 2, https://www.eli.org/sites/default/files/eli-pubs/57aa3700d853b-themetheroleofcitizensinenvironmental-full.pdf (last accessed: 3 February 2026); see also Rakova and Winter, 'Leveraging Traditional Ecological Knowledge' (2020) https://arxiv.org/abs/2006.12387 (last accessed: 1 July 2025), p. 4.

17 Clean Water Act, 33 U.S.C. § 1251 et seq. (1972).

18 Clean Air Act, 42 U.S.C. § 7401 et seq. (1970).

19 National Green Tribunal Act, 2010, No. 19 of 2010 (India).

20 Michael Faure, 'Revolution in Environmental Criminal Law' (2017), 35 Virginia Environmental Law Journal, p. 327, 330.

As the European Law Institute (ELI) has noted, in most jurisdictions, penalties are available against individual acts of ecocide, such as pollution or destroying a habitat, but these partial measures do not reflect the holistic and systemic nature of ecocide.[21]

In addition, political or economic influence is experienced in some states and the courts. The governments rich in resources or development-centric might coerce them to commit more towards investments and less towards environmental responsibility.[22] Prosecutors can be afraid of retribution, lack judicial independence, or lack technical capacity.[23] This risk, in my opinion, is especially acute in jurisdictions that have limited independence of the judiciary or in which environmental law is under-enforced because of the lack of technical capacity.

I present a series of reforms to enhance the legal response to ecocide. First, the terms 'widespread', 'long-term', and 'severe harm' should be defined more precisely, and ecocide should be the subject of a discrete crime. Second, the procedural role of the affected communities and NGOs should be acknowledged, and they should be afforded legal personality and access to remedy. Third, prosecutions should be systematically informed by scientific knowledge, based on ecological assessment and environmental forensics. Finally, special ombudspersons and international support networks need to be established in order to help investigators and prosecutors in sensitive prosecutions.

There are legal developments that provide guidance. In 2008, the Constitution of Ecuador gave nature a status of rights, which means that citizens can bring legal actions on behalf of ecosystems, with mixed success.[24] In Europe, the Aarhus Convention enhanced the public's access to environmental justice, the most prominent of them being Article 9, which asserts

21 ELI, Manual for a National Criminalisation of Ecocide (2025), pp. 10–12.

22 Yu et al. (2024), p. 13.

23 David M. Uhlmann, 'Prosecutorial Discretion and Environmental Crime' (2014), 38 Harvard Environmental Law Review 159, pp. 162–164. https://journals.law.harvard.edu/elr/wp-content/uploads/sites/79/2014/04/Uhlmann_Print1.pdf (last accessed:1 July 2025).

24 Craig. M. Kauffman/Pamela L. Martin, 'How Ecuador's courts are giving form and force to rights of nature norms' (2023), Transnational Environmental Law 12(2), pp. 366–395.

that Parties should provide access to judicial and administrative remedies in environmental law.[25]

Finally, the concept of ecological justice cannot be imagined without national enforcement as its basis. National courts are the first line of accountability, as they are closest to the harm, the victims, and the evidence. However, as pointed out, many national systems lack the institutional design, resources, or independence necessary to effectively prosecute ecocide. They then need to restructure themselves internally, for instance, by boosting the powers of environmental courts, clarifying substantive offences, or enhancing prosecutorial capacity. At the same time, they also need external strengthening, in the form of integration into a wider hybrid structure. International and regional mechanisms can serve as overseers, harmonizers of definitions, and as backstops when states neither want nor can prosecute. Ecological justice is therefore built on a foundation: strong national implementation within a coordinated regional and global framework.

II. Regional Environmental Tribunals (RETs)

This article proposes Regional Environmental Tribunals (RETs) as a geographical enforcement institution, capable of holding the potential of covering persistent gaps in the international legal repression of ecological damages and implications on a large scale. Being modelled after regional human rights courts like the European Court of Human Rights (ECtHR), the African Commission on Human and Peoples' Rights (ACHPR), and the Inter-American Court of Human Rights (IACtHR), the RETs would be special to environmental justice in that they would trade in transboundary or systemic ecological damage.[26] RETs aspire to provide a judicial, policy-sensitive means of responding to ecocide where the state or corporate immunity exists. Both the local and international mechanisms of enforcement have been inadequately reactive. As discussed above, the ICC has limited jurisdiction, depends on the cooperation of states, and lacks the liability of corporations, while national courts are often not independent, experienced,

25 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), 25 June 1998, 2161, UNTS 447, Art. 9.

26 Don McCrimmon, Regional Human Rights Regimes and Environmental Protection (PhD Diss, Dalhousie Univ 2017).

or equipped with procedural capacity to do justice to complex transnational environmental damage.[27] In such a vacuum, the RETs may be an option on a credible regional instrument with specific legal capacity to respond to the destruction of the environment that lies between sovereign and global legal regimes.

An important precedent is the Advisory Opinion No. OC-23/17 of the IACtHR, which states that the violation of human rights can be caused by environmental damage, and such violations can bind even countries that are far away.[28] RETs have the capability of taking this rights-based approach to enforce ecocide liability. Their proximity to affected ecosystems and communities helps them to collect evidence better and be sensitive to their local context. Further, their exposure to common ecological systems provides them with greater legitimacy to deal with transboundary harms. Drawing on pluralism within the law, RETs may bring together regional treaties and domestic legal traditions, and thus offer a more accessible and contextualised forum for enforcement than distant international courts.

Further, indigenous and traditional ecological knowledge is an important asset for the conservation of biodiversity. Grounded in long-term stewardship and place-based management, it provides context-specific knowledge about sustainable land use, species conservation, and ecosystem resilience. Regional courts are better suited to include such knowledge than global institutions, not least because they sit closer to the communities involved, and because they can identify local ecological practices within their adjudication.[29] For instance, the Inter-American Court of Human Rights in *Saramaka People v Suriname* (2007)[30] and the African Commission on Human and Peoples' Rights in *Endorois Welfare Council v Kenya* (2010)[31] both recognised the value of indigenous ecological knowledge and land-based identities for ecosystem protection. RETs could also use such jurisprudence to articulate ecologically based norms of ecological injustice and harms based on the areas in which they operate.

27 Francisco Durand, Extractive Industries and Political Capture (Oxfam 2018), pp. 22–25.

28 IACtHR, Advisory Opinion OC-23/17, paras. 49–60.

29 Fikret Berkes, Sacred Ecology (3rd edn, Routledge 2018), pp. 223–26.

30 IACtHR, 28 November 2007 – Series C No. 172 – *Saramaka People v Suriname*.

31 Centre for Minority Rights Development (Kenya) and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya, Communication No. 276/2003, 4 February 2010.

Furthermore, standing is one of the most problematic issues in environmental litigation. RETs could be designed to include standing for local communities, NGOs, activists, and affected individuals, thus overcoming the restrictive rules of admissibility, which often work against environmental defenders.[32] They ought to be enabled to award diverse solutions, including injunctive relief and damages through ecosystem restoration orders, as well as criminal sanctions. Ecocide cases should be adjudged in time and meaningfully, with such flexibility of processes, more so when traditional courts can be resource-constrained, protracted in their procedures, or even compromised by political influence.[33]

Last but not least, RETs may be incorporated in current regional legal-political institutions that are legitimized, like the African Union (AU), Association of Southeast Asian Nations (ASEAN), or Southern Common Market (Mercosur).[34] For instance, in Commission v France (C-239/03, 2004), the CJEU held that France had violated EU environmental law on bathing water quality, and showed that regional courts can assert their authority over the states in environmental regulation. This precedent helps reinforce that RETs are a viable model.[35] RETs may also be used as permanent adjudicatory bodies and future models of developing jurisprudence and the liability of international environmental crimes.

In conclusion, RETs can help to bridge enforcement gaps in ecocide law by working closer to the affected community, relying on regional and indigenous knowledge, and providing flexible remedies. Their integration into local institutions would also enable them to develop coherent jurisprudence while enhancing accountability for environmental crimes.

III. International Tribunal for Ecocide (ITE)

Finally, a permanent, treaty-based international tribunal, the International Tribunal for Ecocide (ITE), can be established to try major transboundary environmental criminals. Although the idea of an ecocide court has been

32 Lisa Vanhala, 'Legal Opportunity Structures and Environmental Mobilization in the UK' (2012), 46 Law and Society Review, pp. 530–31.

33 Alan Boyle/Catherine Redgwell, Birnie, Boyle, and Redgwell's International Law and the Environment (3rd edn, OUP 2009) pp. 267–68.

34 Geert van Calster, EU Environmental Law (2nd edn, Edward Elgar 2017), pp. 202–04.

35 CJEU, 7 October 2004 – C-239/03, ECLI:EU:C:2004:598, para. 30 – *Commission v France*.

discussed in scholarly and activist circles, it remains outside of enforcement networks.[36] Therefore, the paper proposes a novel contribution to the current analysis by incorporating the ITE into the top of a three-tier accountability framework, in addition to the domestic systems and the Regional Environmental Tribunals (RETs). This approach transforms the one-sided enforcement into a de facto multi-level system.

Building on earlier scholarly discussions about establishing an ecocide treaty,[37] this paper proposes this treaty as the legal basis for a permanent ITE within a three-tier enforcement system. Inspired by the Rome Statute, which established the ICC, this model is intended to address the institutional and jurisdictional limitations of the ICC's treaty-based design.[38] As discussed above, the ITE would extend to individuals and corporations, eliminating the gap that has existed between international crimes and corporations.[39]

This tribunal would operate based on the principle of complementarity, meaning it would not exercise jurisdiction where national or regional bodies have effective remedies, but rather where states are reluctant or unable to act.[40] This avoids sovereignty issues and addresses inaction, regulatory capture, and politicisation. It could allow communities, indigenous peoples, and non-governmental organisations to submit evidence, amicus briefs, and requests for inquiries.[41]

Nonetheless, the establishment of such a tribunal assumes the acceptance of ecocide as a global criminal offense. Currently, no universally binding norm criminalises ecocide for all actors. The suggested ecocide treaty would then offer the requisite normative basis by establishing ecocide as a crime under international law. Enforcement by an International Tribunal

36 See, for example, Alexandria M. Hanna, 'Killing Our Home: The Case for Creating an International Crime of Ecocide' (2023), 6 Willamette Law Review Online, p. 1, discussing the need for ecocide courts.

37 Richard Falk, 'Environmental Warfare and Ecocide' (1973), 9(1) RBDI 1 annex, pp. 21–24.

38 Matthew Gillett, 'Ecocide and Framework Integration at the ICC' (2024) 29(6) International Journal of Human Rights pp. 1009–1045.

39 Joanna Kyriakakis, Corporations and the International Criminal Court: The Complementarity Objection Stripped Bare (June 1, 2007), Criminal Law Forum, 2008, Vol 19, Issue 1, pp. 115–151., available at SSRN: https://ssrn.com/abstract=2309162 (last accessed: 3 February 2026).

40 Willliam A. Schabas, An Introduction to the ICC (5th edn, CUP 2017), pp. 91–93.

41 Dinah Shelton, 'NGO Participation in International Judicial Proceedings' (1994), 88(4) American Journal of International Law pp. 611–42.

for Ecocide (ITE) can only be both legally and politically possible once this norm is established.

Last but not least, the legitimacy of the tribunal should not depend on universal ratification. Based on the successful models of the Extraordinary Chambers in the Courts of Cambodia (ECCC) and the Special Tribunal for Lebanon, the ITE could be established through a plurilateral mechanism provided by like-minded states, even when global consensus is absent.[42] Both tribunals were established in cooperation between governments and the United Nations, and despite their limited jurisdiction, their jurisprudence evolved into the creation of international criminal law. Analogously, an ITE supported by a coalition of willing states could begin to generate normative standards through its decisions, much as regional human rights courts have shaped international norms, despite lacking universal ratification. Even when the ratification rate is not high, its decisions have the potential to become a global norm, as with regional human rights courts.

In balancing normative ambition with legal feasibility, the ITE is an important element of the three-tier model proposed in this paper as a comprehensive solution to the problem of ecocide. It will be based on both domestic and regional initiatives and reinforce ecocide as an international criminal offence.

D. Ecocide enforcement: institutions, evidence, and integration

I. Treaty-based institutionalization

Several academic, civil society, and other expert organisations, including the Stop Ecocide Foundation and the 2021 Independent Expert Panel, have suggested an ecocide treaty.[43] This treaty could form the normative and institutional basis for the three-level implementation model proposed in this article. The treaty would establish the legal framework for a permanent International Tribunal on Ecocide, operating alongside Regional Environmental Tribunals (RETs) and national jurisdictions.

42 Sarah Williams, Hybrid and Internationalised Criminal Tribunals (Hart 2012), pp. 54–63.

43 Philippe Sands/Dior Fall Sow, Legal Definition of Ecocide (Stop Ecocide Foundation 2021), https://www.stopecocide.earth/legal-definition (last accessed: 1 July 2025).

The treaty would expand the already given definition of ecocide by the Independent Expert Panel.[44] It is a realistic formula in legal identification and ecological lucidity. In order to provide a multilateral enforcement basis, it should be perfected in more profound conversations with industry experts, states, Indigenous peoples, and researchers. Certainty on the levels of harm required and the mental element will be of vital essence in operationalizing the definition in the court practice.[45]

The treaty must establish judicial and prosecutorial agencies, and also feature an interdisciplinary advisory body of experts in environmental science, forensic ecology, climate risk and socioecological injury. The treaty needs to have such agencies take binding decisions and coordinate across the levels. It should involve a complementarity clause to grant ITE jurisdiction where states or regional courts have neither the means nor the willingness to act.

As discussed above, one of the key innovations of the proposed treaty would be the incorporation of corporate criminal liability, closing a major gap left by the Rome Statute. In regard to the political instability, the agreement must have steps of cooperation, namely, binding evidence/arrest implementation, and rewards such as technical assistance and green financing.[46] Procedural accessibility can positively improve trust and legitimacy for the amici curiae, victims, and groups who are impacted.

II. Evidence and Adjudication for Ecocide

The main distinction between my proposed model and existing criminal systems would be the scope of evidence. Existing criminal tribunals rely on witness testimony, victim statements, and physical evidence to detect gradual or cumulative ecological damage. The solution is for the ITE and RETs to embrace a wide range of evidence, including scientific, interdisciplinary, and digital elements.

---

44 Ibid.

45 Oscar van den Heede, 'Ecocide and the Rome Statute' (2023), 55 NYU Journal of International Law and Politics, pp. 436–41.

46 Adil Najam/Mihaela Papa/Nadaa Taiyab, Global Environmental Governance: A Reform Agenda (International Institute for Sustainable Development, 2006), pp. 29 et seqq., https://www.iisd.org/system/files?file=publications/geg.pdf (last accessed: 3 February 2026).

This article particularly suggests the use of forensic ecology, satellite imaging, environmental modelling, and AI as the main tools for building cases and adjudicating.[47] These tools would help identify any ecological damage in terms of time and space, even in areas that are inaccessible or politically unstable. These methods have been proven to be useful in climate attribution studies and environmental monitoring by agencies such as the European Space Agency.[48]

The ITE would comprise Trial and Appeals Chambers, a Prosecutor, and a Scientific-Ecological Adviser, who would contribute expertise in interdisciplinary areas such as forensic ecology, satellite tracking, and conservation biology. A 2012 study by the London Institute of Space Policy and Law, commissioned by the European Space Agency, illustrates that the use of data on satellite-derived earth-observation (EO) can be an admissible piece of evidence in court and administrative cases, especially where such evidence may be the sole or most cost-effective source of evidence available.[49] I suggest these approaches might be modified to allow EO-based evidence of ecological harm to be presented and considered in the ITE. The ITE would also receive evidence of ecological damage, such as cumulative or gradual damage, which tends to be excluded from atrocity paradigms. This would be particularly important for measuring the widespread destruction of ecosystems, the loss of biodiversity, and the irreversible tipping points of the climate.

Complicated data should be interpreted by panels comprising ecologists, hydrologists, climatologists, Indigenous experts, and digital forensics experts. These panels should operate at both the pre-trial and trial stages to ensure that technical evidence is robust, relevant, and clear.[50]

Furthermore, the notion of admissibility should be less strict and based on criminal standards. A hybrid type of evidence would enable tribunals to consider environmental indicators, ecosystem baselines, and longitudinal

47 Nabil Ahmed, 'Proof of Ecocide: A Forensic Practice' (2019), 5 Forensic Approaches to Ecocide Studies, pp. 144–45.

48 Heinz Ginzky, 'Satellite Images as Evidence in Legal Proceedings relating to the Environment – A US Perspective' (2000), 25(3) Air and Space Law, pp. 129–138.

49 Clore Centre/IALS, Evidence from Space (2012), pp. 9–10, https://www.space-institute.org/app/uploads/1342722048_Evidence_from_Space_25_June_2012_-_No_Cover_zip.pdf, (last accessed: 24 September 2025).

50 UNEP, Environmental Courts and Tribunals: Guide for Policy Makers (2016), pp. III–IV and 40–42.

information alongside the facts of a case. This would allow for a broader, temporally just approach to systemic ecocide.

III. Integration of the proposed model into existing legal and political systems

The ecocide enforcement scheme is required to complement the current legal and political systems. ITEs and RETs should conform to the jurisdictional and procedural frameworks of the pre-existing bodies such as the ICC, the UN Human Rights Council, and regional human rights courts, for example, the European Court of Human Rights (ECtHR) or the Inter-American Court of Human Rights (IACtHR), rather than operating in isolation.[51] At the domestic level, the framework should not replace national systems. This is especially relevant where environmental law is poorly enforced or the judiciary has reduced independence, as international or regional supervision may offer requisite protection.

This requires referral, subsidiarity, and complementary mechanisms, in the same way international jurisdiction is created in the Rome Statute of the International Criminal Court, where national jurisdiction is applied only when domestic courts are unwilling or unable to act.[52] RETs can be politically supported by regional organizations (e.g., African Union (AU), Association of Southeast Asian Nations (ASEAN), Organization of American States (OAS)), which would assist in embedding them into the frameworks of existing institutions. Such localized structures might be used to coordinate the enforcement of ecocide with development objectives, including the Sustainable Development Goals (SDGs)[53], climate strategies under the Paris Agreement[54], and present-day international environmental agreements such as the Convention on Biological Diversity (CBD)[55] and the United Nations Framework Convention on Climate Change.[56]

Furthermore, the integration cannot be based solely on top-down legal harmonization. Significant implementation and oversight stakeholders

51 Carsten Stahn, The Law and Practice of the ICC (OUP 2015), pp. 303–305.
52 ICC, Policy on Environmental Crimes under the Rome Statute (Dec 2024), pp. 12–13.
53 United Nations General Assembly, Transforming our World: the 2030 Agenda for Sustainable Development, UN Doc A/RES/70/1 (21 October 2015).
54 Paris Agreement, 12 December 2015, 3156 UNTS 177, Arts. 2–4.
55 Convention on Biological Diversity, 5 June 1992, 1760, UNTS 79, Arts. 1 and 8.
56 United Nations Framework Convention on Climate Change, 9 May 1992, 1771, UNTS 107, Arts. 2–4.

must comprise native peoples, civil society, and government at the local levels. They are needed to collect evidence and contextualize harm, guarantee locally oriented justice, and rebuild processes. The framework acquires political and economic momentum by launching the enforcement of ecocide into trade agreements, environmental investments, and green finance. Such a multi-scaled integration provides a guarantee that the implementation of ecocide is not only juridically sound but politically founded and universally appealing.

IV. Roadmap for implementation and next steps

In order to turn the proposed enforcement architecture into reality, it must be implemented in phases and in a politically realistic manner. A coalition of willing states with strong environmental and human rights records could launch treaty negotiations under a UN or plurilateral regime to establish a legal basis for the International Tribunal for Ecocide (ITE) and Regional Environmental Tribunals (RETs). Drafting model laws that countries could adopt and incorporate at the domestic level could also enhance normative harmonisation and make the subsidiarity of enforcement feasible.

Pilot RETs could be integrated into existing regional courts or treaty systems (e.g., the Inter-American Court of Human Rights or the African Commission on Human and Peoples' Rights) to evolve such institutions. These tribunals could subsequently evolve into independent bodies with environmental competencies and procedural innovations.

E. Conclusion

This paper has suggested that international and national systems are structurally inadequate for prosecuting ecocide. The Rome Statute is limited to the destruction of the environment in wartime, does not hold corporate responsibility, and is largely dependent on the cooperation of states. Domestic strategies are fragmented and unequal, and thresholds of liability differ, with poor judicial independence and a low level of enforcement against transnational actors.

To address this enforcement gap, the paper has offered a three-tiered complementary model comprising national courts as the initial point of responsibility, Regional Environmental Tribunals (RETs) to adjudicate trans-

boundary harms with reference to regional knowledge and jurisprudence, and a permanent International Tribunal for Ecocide (ITE) to adjudicate the most serious cases of global concern. This system is based on a treaty that recognises ecocide as an international crime and supplies the normative basis that seals the loophole left by the Rome Statute, and extends the risk to both individuals and corporations.

The model also incorporates new evidence-based practices, such as forensic ecology, satellite tracking, and interdisciplinary panels of experts to ensure capture of cumulative and systemic environmental damage. It also enhances access to justice by allowing local communities, Indigenous Peoples, and NGOs to have a role in proceedings.

Although ambitious, the proposal is legally and politically feasible. Based on the experience of hybrid tribunals and regional courts, it provides a viable way of institutionalizing ecocide in the international law of crime. By doing so, it shifts the argumentative mode of rhetorical advocacy into the actual institutional framework, which is a timely but urgently needed response to the growing ecological crisis of the twenty-first century.