

Supplementary online information

Historical overview of the origin of the term ecocide

Ecocide has been a topic of international debate for more than half a century drawing inspiration from international peace treaties, particularly around the concept of genocide. In 1933, Raphael Lemkin, a Polish Jurist, introduced the concept of genocide at the International Conference for Unification of Criminal Law, advocating for a global ban on the destruction of human groups. His proposal extended beyond physical genocide to encompass 'cultural genocide', involving obliteration through non-physically violent means (Lemkin & Finch, 1945). This included environmental crimes that contribute to cultural damage, for example, the destruction of forests due to illegal logging which erodes Indigenous and local communities' deep cultural connections to the forest. American plant biologist Professor Arthur Galston, credited with discovering the defoliating effects of Agent Orange, coined the term 'ecocide' in 1970 at a Conference on War and National Responsibility, noting its disturbing nature, akin to genocide (Curcio Lamas, 2017). Galston drew parallels between environmental damage and harm inflicted on social groups: viewing the environment as a victim of ecocide is comparable to individuals being victims of genocide (Higgins et al., 2013). Two years later, Swedish Prime Minister Olaf Palme, called out mass environmental destruction at the UN's first environment conference. Ecocide can indeed function as a method of genocide when environmental degradation significantly threatens the cultural and physical existence of specific groups (Crook & Short, 2014). Indeed, ecocide resulting from climate change and resource depletion could potentially catalyse genocide on a global scale (Mehta, 2021).

Efforts to establish legal frameworks to criminalise ecocide face obstacles

The idea of criminalising ecocide has faced persistent legal and political hurdles. In 1947, the International Law Commission (ILC) began drafting a code of offences inspired by the Nuremberg Tribunals (Zierler, 2011). In 1973, Richard Falk proposed a convention on ecocide following the environmental devastation of the Vietnam War (Falk, 1973). Although achieving broad support among UN states, the proposal was shelved. Between 1984 and 1996, the ILC revisited Falk's ideas, proposing Article 26 of the Draft Code of Crimes Against the Peace and Security of Mankind which defined ecocide as “*An individual who wilfully causes or orders the causing of widespread, long-term and severe damage to the natural environment shall, on conviction thereof, be sentenced*” (United Nations, 1996a). However, Article 26 faced criticism for its vagueness especially regarding the threshold of “severe damage”. Australia and Belgium argued that using “wilfully” made prosecutions impractical, considering that perpetrators’ motives are frequently profit-driven, rendering intent an unsuitable factor for establishing liability; ecocide is more likely a result of “disregarded risk” (Minkova, 2021). For example, deforestation is generally driven by intentions to sell harvested resources rather than an objective to cut down the forest aiming to cause ecocide (Gauger et al., 2012). In most cases, ecocide can therefore be seen as a by-product of other motives. Rather than revisiting the article, the ILC chose to remove it entirely without a formal vote.

Diverging perspectives within the ILC prompted the formation of a working group in 1996, to reconsider including ecocide in the Rome Statute, the foundational treaty that established the International Criminal Court (ICC) (UN General Assembly, 1998). An amendment to the Rome Statute is required to put an international law like ecocide in place. However, while ecocide had occurred during both war and peace,

most proposals treated it as a war crime with intent, neglecting to establish comparable provisions for peacetime – though arguably more significant (Falk, 1973). Regrettably, no recommendations were adopted and the Chairman of the ILC unilaterally removed the concept of peacetime ecocide altogether (Higgins et al., 2013) influenced by opposition from several governments against inclusion of Article 26 due to its lack of precision and vagueness (Gauger et al., 2012).

The final reference to environmental harm in the Rome Statute appears in Article 8(2)(b)(iv) *“Intentionally launching an attack in the knowledge that such attack will cause widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to military advantage”* (Heller & Lawrence, 2007). Article 8 thus remains the sole provision in international law holding individuals accountable for environmental harms, applicable as a very specific type of war crime. It confines the scope of ecocide to wartime, far from the broader protections originally envisioned (Heller & Lawrence, 2007; Higgins et al., 2013).

Recent initiatives

While previous attempts to criminalise peacetime ecocide faced opposition, recent movements have reignited the notion and established a clearer legal framework. In 2010, environmental lawyer Polly Higgins proposed an amendment to the Rome Statute, defining ecocide as: *“The extensive damage to, destruction of or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished”* (Higgins et al., 2013). The proposal aims to establish a legal duty of care, obligating nations to prevent ecocide and intervene before

widespread harm occurs (Higgins et al., 2013). Though not accepted, it has gained support, notably from figures like Jane Goodall and Greta Thunberg (Stop Ecocide International, 2021). By 2017, increased attention spurred the creation of the NGO Stop Ecocide International (<https://www.stopecocide.earth/>). Collaborating with governments, diplomats and the public, the organisation's legal panel proposed yet another definition of ecocide: *"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"* (Stop Ecocide International, 2021). This would add ecocide as a prosecutable crime along with genocide, crimes against humanity, war crimes and aggression.

Over 150 initiatives now affirm the rights of nature (Putzer et al., 2022). Some of these are seeking to integrate Stop Ecocide International's definition of ecocide into national Penal Codes. These developments underscore the increasing traction and support for the establishment of an international legal framework to address ecocide (Europarle, 2023). The most significant development came on 9 September 2024, when ecocide was formally proposed for inclusion in the Rome Statute by Vanuatu and co-sponsored by Fiji and Samoa. This marks the first formal ICC consideration of ecocide, driven in part by the vulnerability of Small Island Developing States (SIDS). Professor Philippe Sands KC highlighted the significance of this proposal as a crucial update to international law that addresses severe environmental harm. This move reflects growing global support, with a recent survey showing that 72% of people in G20 countries favour criminalising actions that cause major damage to nature and the climate (Stop Ecocide International, 2024).

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