

ADVANCING ECOCIDE IN INTERNATIONAL LAW: A POTENTIAL LEGAL TOOL FOR SAFEGUARDING ENDANGERED SPECIES AMIDST CLIMATE CHANGE

ULUSLARARASI HUKUKTA EKOKIRIM KAVRAMININ GELİŞTİRİLMESİ: İKLİM DEĞİŞİKLİĞİ BAĞLAMINDA TEHLİKE ALTINDAKİ TÜRLERİ KORUMAK İÇİN POTANSİYEL HUKUKİ BİR ARAÇ

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Özet

Bu çalışma, günümüz dünyasında biyolojik çeşitlilik krizine neden olan iklim değişikliği bağlamında, uluslararası hukukta ekokırım suçunu düzenleyen bir yasal çerçevenin oluşturulması gerektiğini vurgulamaktadır. Çalışma temel olarak, ekokırım suçunu kapsayacak unsurları içerecek bir tanımın uluslararası düzeyde benimsenmesi gerektiğini savunmaktadır. Bu kapsamda bu çalışmada, Cenevre Sözleşmeleri ve Roma Statüsü gibi mevcut uluslararası hukuk araçları değerlendirilmiş olup, bu araçların çevresel zararları yeterince ele alma konusundaki sınırları mercek altına alınmaktadır. Ekokırımın uluslararası hukukta suç boyutuyla ele alınması, özellikle insan aktiviteleri kaynaklı iklim değişikliği karşısında varoluşsal bir tehlike ile karşı karşıya kalan nesli tükenme tehdidi altındaki türler başta olmak üzere biyolojik çeşitliliğin unsurlarının korunması açısından çok önemli bir işleve sahiptir. Ekokırımın tanımlanması için uluslararası bir çabanın gerekliliği açıktır. Çevrenin haklarını tanıyan yeni bir Jus Cogens kuralının benimsenmesi, doğanın yasal korumasını sağlayacak ve küresel ölçekte sürdürülebilir uygulamaları güçlendirecektir. Bunun gerçekleşebilmesi için çevre hakkını ve daha da genel olarak gezegenin hukuki kişiliğini ve haklarını merkezine alan, ekosentrik bir yaklaşımın benimsenmesi gerektiği konusunda şüphe bulunmamaktadır.

Abstract

This article highlights the need to formalize a legal framework regulating the ecocide crime in international law, within the context of climate change that causes a biological diversity crisis in today's world. Accordingly, this study's main argument is to advocate for a definition to be adopted at international level, which will encompass elements of the ecocide crime. The study evaluates existing international legal instruments as the Geneva Conventions and the Rome Statute, highlighting their limitations in adequately addressing environmental harm. Elaborating ecocide with its criminal dimension in international law has a very crucial function for the protection of the elements of biological diversity, particularly, the endangered species which are currently facing with an existential danger in the face of human-induced climate change. The necessity of an international effort to define ecocide is clear. Adoption of a new Jus Cogens rule recognizing the rights of the environment will ensure the legal protection of nature and reinforce sustainable practices on a global scale. There is no doubt that for this to happen, an ecocentric approach that centers on the right to the environment and, more broadly, the legal personality and rights of the planet must be adopted.

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I. INTRODUCTION

International law lacks the necessary legislation and mechanisms to protect the planet and its ecosystem adequately. In this context, defining ecocide in a criminal context, particularly in the context of international law, would be significant for better protection of the environment at the international level. Such a process for defining and adopting regulation in this scope is easier said than done, and it requires a diligent and solidary approach. Even more critical is the fact that such a solidary approach may only be possible in a legal order constructed over eco-centric approaches where the planet is deemed to have a legal personality, including its self-determination rights¹. The international community should discuss these new-generation approaches and expectations as top priority objectives.

In recent years, ecocide has attracted the public's attention and interest as an urgent and important issue that has been widely discussed. This concept is becoming even more important given that climate change is one of the most important existential threats to the planet today. Indeed, a widespread and acceptable definition of ecocide and its acceptance by the international community emerges as an important goal in this crisis era. This may be achieved through international law, new regulations on ecocide crimes, and the effective operation of these processes.

When we look at international law sources and regulations, it does not seem possible to find a direct regulation on ecocide and ecocide crimes². Nevertheless, some regulations that can be linked to ecocide, which we can call indirect regulations for now, deserve to be examined. It should be emphasized that the beginning of indirect regulations coincides with the international legal order established after 1945, i.e. following the cessation of the Second World War. Beginning of this period did not witness direct regulations on ecocide and ecocide crimes. The provisions and regulations aimed to provide a certain level of environmental protection, with the influence of environmental destruction during the war and its aftermath, naturally considered concepts that can be elaborated as ecocide within the context of war and armed conflicts³.

This existing legal gap in the context of ecocide is becoming increasingly relevant, particularly in the protection of biodiversity amid the climate crisis. The intensifying biodiversity crisis, exacerbated by climate change, underscores the crucial need for effective legal mechanisms. In this regard, establishing an international norm with strong enforcement capabilities and rapid implementation is vital, especially for species endangered with extinction. The criminalisation of ecocide offers promising potential in this context. Accordingly, this study will first address ecocide as a concept within the sphere of international law, and then discuss how it can be an effective tool within biodiversity law, particularly in the legal regime for the protection of endangered species.

II. 1949 GENEVA CONVENTIONS

This study scrutinizes the foundational architecture of international law constructed following the Second World War. Accordingly, the Geneva Conventions' (dated 1949) Protocol I (hereinafter referred to as Protocol I), particularly Articles 35 and 36, can be considered the first regulation⁴.

Indeed, Article 35 stipulates, as per paragraph 3, that "it is forbidden to use methods and means of warfare which are intended to cause, or are likely to cause, extensive, permanent and serious damage to the natural environment"⁵. As seen, "the protection of the natural environment" is included with the definition of "intended to cause or predicted to cause widespread, permanent and serious damage to the natural environment". However as seen ensuring a healthy environment was not yet a central or indirect objective in armed conflicts, in the 1950s. Nevertheless, this provision should be recognized as a very important and progressive regulation⁶.

Article 36 includes a heading "New Weapons," stating that

"a High Contracting Party shall be under an obligation to determine whether the use of a new weapon, means or method of warfare is prohibited in all or some circumstances by this Protocol or by any rule of international law binding on the High Contracting Party concerned"⁷.

The provision does not have a direct aim of protecting the environment and ecosystem, but it can be considered that this provision requires an "obligation" to designate prohibitions with regard to new weapons. Accordingly, an indirect interpretation may result in a broad understanding that new weapons, regardless of whether they are currently used or there is an intention to use them, might fall under the obligations of prohibitions outlined in paragraph 3 of Article 35⁸.

Whether or not both articles would provide a legal basis for an ecocide crime can be debated. However, it should be emphasized that there was no debate on ecocide and/or ecocide crimes at the time the

¹ BOZKURT, Kutluhan: "Uluslararası Hukuk ve Ekokırım Suçları Ekseninde Ukrayna-Rusya Savaşına İlişkin Değerlendirmeler", *Yeditepe Üniversitesi Hukuk Fakültesi Dergisi*, 20(2), 2023, p.209-210.

² Today, there is still no direct regulation of ecocide offences. This negative situation should be seen as an important deficiency or inadequacy of international law.

³ BOZKURT, p.215-218.

⁴ For related articles please see BATUR YAMANER, Melike/ÖKTEM, Emre/KURTDARCAN, Bleda/UZUN, Mehmet: 12 Ağustos, 1949. Tarihli Cenevre Sözleşmeleri ve Ek Protokolleri, International Committee of the Red Cross and Galatasaray Üniversitesi Hukuk Fakültesi Publishing, 2009, p.205.

⁵ International Humanitarian Law Databases: "Geneva Convention of 1949, Additional Protocols and Their Commentaries, Article 35-Basic Rules", <https://ihl-databases.icrc.org/en/ihl-treaties/api-1977/article-35>, (Access: 15.08.2024).

⁶ BOZKURT, p.216.

⁷ BATUR YAMANER, Melike/ÖKTEM, Emre/KURTDARCAN, Bleda/UZUN, Mehmet, p.205.

⁸ International Humanitarian Law Databases, Geneva Convention of 1949, Additional Protocols and Their Commentaries, Article 35-Basic Rules, <https://ihl-databases.icrc.org/en/ihl-treaties/api-1977/article-35>, (Access: 15.08.2024).

relevant articles were drafted. Nevertheless, it seems that further studies and international judicial decisions are necessary to elaborate on the relevance of the above-mentioned provisions considering ecocide crimes.

In line with the progress in the context of armed conflicts, war and war techniques in parallel with the developing technology and the acquisition of new qualities and dimensions, new regulations were needed at the international level as well. In 1954, the convention together with its related protocols, regulating the "Protection of Cultural Property in the Event of Armed Conflict,"⁹ which can be considered partly concerning environmental protection, draw attention¹⁰.

This regulation is very limited and narrow in scope in terms of environmental and ecosystem protection. Moreover, this convention focuses only on the cultural heritage and assets protection. However; despite this situation, its scope can be indirectly considered in terms of the protection of cultural assets together with their environment and habitat¹¹. For the aforementioned reason, it can be predicted that this regulation may be viewed as either indirect or very narrowly applicable with regard to the crimes of ecocide.

In 1977, again within the framework of new conditions and developments, 2 protocols were signed as an annex to the 1949 Geneva Conventions. It should be noted that these protocols are for the protection of victims and not for environmental or ecosystem protection.

III. PROTECTING ENVIRONMENT THROUGH CRIMINAL LAW IN EUROPE

It is clear that many direct and indirect conferences have been held for the protection of the environment, and as per the outcome of these conferences, several regulations and texts have been adopted¹². Since this study focuses only on ecocide and ecocide crimes and other international environmental regulations will be elaborated in a separate study, the scope of this study will not include them. However, in this regard, the Council of Europe's "Convention on the Protection of the Environment through Criminal Law"¹³ (CPECL) adopted by the Council of Europe (CoE) should not be ignored¹⁴.

This CoE regulation instrumentalizes criminal law and its principles for environmental protection. However, it has so far been ratified by a handful of parties and constitutes one of the new-generation regulations in terms of environmental protection.

In fact, the European Court of Human Rights (ECtHR) has taken CPECL into account, even though the Republic of Türkiye has not become a party to the latter, in interpreting the ECHR's Article 2 in the Öneriyıldız judgment in an application made for another reason.

Further, the ECtHR has now placed transboundary arrangements at the centre of legal discussions and justified its decision by considering the environment and ecosystems on the axis of this jurisprudence. Finally, due to this decision and similar decisions, it is important to consider the ECtHR's transboundary decisions. However, it is not possible to say that the ECtHR has already established a jurisprudence on ecocide crimes.

IV. ECOCIDE AND THE ROME STATUTE

Developing international regulations based on "environmental law" are crucial to enhance the environmental protection and the conservation of ecosystems. Yet existing regulations such as the Rome Statute have also an undeniable importance to have a better understanding and perspective on the concept of ecocide crimes

Indeed International Criminal Court hinges upon the provisions stipulated in the Rome Statute as adopted at the conference organized in 1998 in Rome under the leadership of the United Nations¹⁵. As per this very important document, the International Criminal Court is tasked with prosecuting the most serious international crimes and offences, and in this context, it is a supreme court complementary to national courts¹⁶. It should be emphasized that the Court is complementary to national courts as stipulated by the first Article of the Statute¹⁷. Articles 8 and 5 of the Statute, which may pertain to ecocide, warrant careful analysis. Specifically, Article 8 enshrines the following provision:

"Launching an attack with the knowledge that it will cause injury or death to civilians or damage to

⁹ UNESCO: "Second Protocol to The Lahey Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict", <https://unesdoc.unesco.org/ark:/48223/pf0000130696#:~:text=1999-.Second%20Protocol%20to%20the%20Hague%20Convention%20of%201954%20for%20the,enhanced%20system%20of%20protection%20for.> (Access: 15.08.2024).

¹⁰ UNESCO: "1954 Hague Convention", <https://www.unesco.org/en/heritage-armed-conflicts/convention-and-protocols/1954-convention.> (Access: 15.08.2024).

¹¹ BOZKURT, p.217.

¹² The rise of environmental regulations has started since 1970. Especially in this Stockholm Conference dated 1972 constituted a significant benchmark. Following this conference, the UN Environment Organisation was established the same year. These texts contributed to international communities' understanding of individuals' right to a healthy environment. More information about this process is available in KABOĞLU, İbrahim/YANCI ÖZALP, Nihan: Çevre Hakkı, 1. Baş, Tekin Yayınları, 2021, p.30; YILMAZ TURGUT, Nükhet: "Giriş: Çevreyi Koruyucu Uluslararası Sözleşmelerin Yadsınmaz Önemi" in Feyizli, Metin (ed.), Uluslararası Çevre Koruma Sözleşmeleri, TBB Yayınları, 2014, p.11-14.

¹³ Council of Europe: "Convention on the Protection of the Environment through Criminal Law dated 4th of November 1998, CETS 172", <https://rm.coe.int/168007f3f4.> (Access: 15.08.2024).

¹⁴ Council of Europe: "Convention on the Protection of the Environment through Criminal Law dated 4th of November 1998, CETS 172", <https://rm.coe.int/168007f3f4.> (Access: 15.08.2024); to read more on the convention, please see ÖZENBAŞ, Nazmiye: 'Çevrenin Ceza Hukuku Yoluyla Korunması Kapsamında Çevrenin Kirletilmesi Suçları' International Conference on Eurasian Economies, 2013, p.924-931.

¹⁵ International Criminal Court: "Full Text of the Rome Statute of the International Criminal Court", <https://www.icc-cpi.int/sites/default/files/2024-05/Rome-Statute-eng.pdf.> (Access: 10.08.2024).

¹⁶ International Criminal Court: "Full Text of the Rome Statute of the International Criminal Court", <https://www.icc-cpi.int/sites/default/files/2024-05/Rome-Statute-eng.pdf.> (Access: 10.08.2024).

¹⁷ International Criminal Court: "Full Text of the Rome Statute of the International Criminal Court", <https://www.icc-cpi.int/sites/default/files/2024-05/Rome-Statute-eng.pdf.> (Access: 10.08.2024).

civilian objects, and that it will cause widespread, long-term and severe damage to the natural environment, which is excessive compared to the concrete and direct military advantages anticipated."¹⁸

Indeed the provision mentions actions taken "with the awareness that it will harm the natural environment," this provision is clearly insufficient to encompass or address the environmental disasters and severe ecosystem destruction that occur during armed conflicts. Furthermore, it is clear that there is no explicit definition of ecocide within the scope of this provision. The Statute includes a heading titled "Crimes falling within the jurisdiction of the Court," listing the categories of: "(a) The crime of genocide; (b) Crimes against humanity; (c) War crimes; (d) The crime of aggression."¹⁹ One may indeed characterize destructions and attacks as ecocide hinging upon the categories of "crimes against humanity" and "war crimes." Nonetheless, attempting to classify environmental, nature, and ecosystem-related attacks and crimes within these categories may not be made as a straightforward interpretation. This is because these criminal regulations' and legal protections' purpose is distinct from the relevant articles specifically addressing different types of crimes.

In fact, another possibility that needs to be discussed is whether it would be possible to create a new *Jus Cogens*²⁰ rule within the framework of *Jus Cogens* peremptory rules that define ecocide crimes²¹ directed against the environment, and ecosystem²². At this point, it seems to be the most practical and effective solution option in terms of international law to create a new peremptory norm that is ultimately linked to ecocide crimes, including even the environmental degradation caused by the human-induced climate crisis.

The creation of such a peremptory norm directly correlates with the imperative of preserving biodiversity. This connection is more than just theoretical; it is a practical necessity in the face of the Anthropocene. Specifically, concerns about protecting endangered species have become even more pressing in the face of escalating environmental disasters due to the changing climate. Considering all these factors, exploring the potential role of criminalizing ecocide in protecting the intricate web of life that is increasingly threatened by environmental degradation may be considered a crucial contemporary question.

V. PATH TOWARDS SAVING BIODIVERSITY IN THE TIMES OF CLIMATE CHANGE: CRIMINALIZATION OF ECOCIDE

A. Understanding the Concept and Importance of Biodiversity

We are facing an undeniable reality in our current era: the biodiversity crisis. In the Anthropocene, where some species have already become extinct and others are rapidly approaching extinction, one of the most crucial issues is the preservation of biodiversity. Although the protection of biodiversity has been emphasised internationally over the last 50 years, especially in conjunction with the climate crisis, the mass extinction of species has been a topic since the 19th century.

There is no doubt that in this context, the most important and relevant international instrument is the CBD. Article 2 of the latter defines biological diversity as

"the variability among living organisms from all sources including, inter alia, terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems"²³.

The biodiversity concept introduced by the Convention is comprehensive, encompassing all species without discrimination between animal species, plants, or habitats. In this respect, the Convention differs from other international mechanisms aimed at protecting nature's components. For instance, while the Ramsar Convention offers protection only to the ecosystems qualified as wetlands²⁴ defined under Article 1, the UNESCO World Heritage Convention, under Article 2, designates areas with outstanding universal value²⁵ from certain perspectives as natural heritage to be protected. Additionally, the 1972 Stockholm Declaration has a specific focus on wildlife protection and emphasises humanity's responsibility to protect wildlife and its habitat²⁶. Among these distinctions or limited definitions, CBD has an extensive scope for

¹⁸ The original English text of the relevant regulation is as follows: "(iv) Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated;" see International Criminal Court, "Rome Statute of the International Criminal Court".

¹⁹ International Criminal Court: "Full Text of the Rome Statute of the International Criminal Court", <https://www.icc-cpi.int/sites/default/files/2024-05/Rome-Statute-eng.pdf>, (Access: 10.08.2024).

²⁰ The relevant provisions concerning *Jus Cogens* rules in international law may be found in the Vienna Convention on the Law of Treaties, dated 1969. See Article 53 of this Convention.

²¹ It is important to highlight that there is no universally accepted ecocide definition. Under the current circumstances it is difficult to give a legal answer to the question of which elements may constitute an ecocide offence. Conceptualization of ecocide is inevitable and it is highly likely that the next generations will indeed witness the evolution of this concept especially with the influence of the developing discourse through climate activism and it is highly likely that the next generations will indeed witness the evolution of this concept. See, BOZKURT, Kutluhan: "Uluslararası Hukuk Bağlamında İklim Aktivizmi" (Uluslararası Hukuk Bağlamında İklim Aktivizmi) in Tahmazoğlu Üzeltürk, Sultan/ Bozkurt, Kutluhan/ Kulaç, Duygu (ed.), İklim Krizi ve Hukuk, Legal Yayınevi, İstanbul 2022, p.179.

²² BOZKURT, Uluslararası Hukuk Bağlamında İklim Aktivizmi, p.179.

²³ United Nations: "Full Text of the Convention "The Convention on Biological Diversity", <http://tiny.cc/y23hzz>, (Access: 09.08.2024).

²⁴ United Nations: "Convention on Wetlands of International Importance especially as Waterfowl Habitat", <http://tiny.cc/233hzz>, (Access: 09.08.2024).

²⁵ United Nations: "Convention Concerning the Protection of the World Cultural and Natural Heritage", <http://tiny.cc/533hzz>, (Access: 09.08.2024).

²⁶ United Nations: "United Nations Conference on the Human Environment", <http://tiny.cc/733hzz>, (Access: 09.08.2024).

the conservation of the elements of biological diversity²⁷.

Biodiversity protection is not solely about preserving the variety of genes within a species but also generally aiming to protect the diversity of ecosystems. Ecosystems comprise living components ranging from various microorganisms, animals, plants, fungi, and non-living elements. Habitats within ecosystems serve as homes to different species. In these habitats, living components interact with each other and engage with surrounding non-living elements. Changes in these non-living elements subsequently affect the entire ecosystem. Rainforests and coral reefs are among the ecosystems with the highest level of diversity²⁸. However, these areas are particularly threatened by biodiversity loss due to climate change that is human induced.

Biological diversity is indeed threatened by various drivers, most of which are caused by human actions²⁹. Urbanisation causes habitat loss and fragmentation. The intensified farming and agriculture, fertiliser, and chemical use harm certain species. Mining activities cause soil and water contamination, and the exploitation of minerals affects the habitats of wildlife and leads to changes in the landscape. Deforestation constitutes another pressure factor on biodiversity. Air pollution caused by human activities negatively impacts biodiversity, specifically animal well-being and behaviours. The water and soil pollution caused by anthropogenic activity constitutes a great threat towards the components of ecosystems. The introduction of non-native species in ecosystems is another threat to the persistence of biological diversity, and it affects the balance of the habitats as much as the over-exploitation of the ecosystem components by human beings, such as overhunting and exploitative fishing³⁰.

It is worth noting that natural disasters may also cause threats to biodiversity³¹. Indeed, disasters such as volcano eruptions, storms, floods or tsunamis may severely affect habitats, and some of these events are not connected with anthropogenic activities. Be that as it may, human-induced climate change today is rapidly altering nature and causing an erosion in biodiversity at a speed that has never been recorded before. The main drivers causing the biodiversity loss in the Anthropocene are human-induced.

As highlighted above, the planet's climate is undergoing unprecedented rapid changes, posing a significant threat to biodiversity conservation³². With the pressure from these climate changes, many species are endangered; thus, protecting these species is urgent to maintain the possibility of having a healthy ecosystem balance³³. In this context, it is essential to take necessary measures for the adaptation of species to the changing climate and to establish the required legal framework, nationally or internationally. Undoubtedly, climate crisis is the “greatest species protection threat”³⁴. Hence, the question is whether the available legal tools at hand are fit for the purpose of saving the species that are faced with the threat of extinction, if not, whether recognition of ecocide as a peremptory norm could provide an insightful legal reinforcement in the fight against biodiversity loss and extinction.

B. Endangered Species Protection and Climate Change in Light of the Current Legal Framework

Conservation of endangered species has necessitated the development of various protection regimes, both nationally and internationally. Since the 19th century, a broader focus has been placed on a wider range of species through international law instruments³⁵.

The extinction of species is not merely an environmental crisis emerging from climate change. Even before climate change found a legal basis, significant mechanisms were developed in regional and international law to protect endangered (mostly due to human-induced reasons) species. One such example is the Agreement on the Conservation of Polar Bears³⁶, signed on November 15, 1973. This agreement highlighted polar bears as a “vital resource” for the Arctic region, necessitating coordinated national measures for their protection. It included provisions like Article 1, which prohibited the hunting, killing, and capture of polar bears, and Article 2, where each contracting party committed to protecting the ecosystems where polar bears live.

²⁷ EKARDT, Felix/GÜNTHER, Philipp/HAGEMANN, Katharina/GARSKÉ, Beatrice/HEYL, Katharine/WEYLAND, Raphael: “Legally Binding and Ambitious Biodiversity Protection Under the CBD, the Global Biodiversity Framework, and Human Rights Law”, *Environmental Sciences Europe*, 35(1), 2023, p.80.

²⁸ CONNELL, Joseph: “Diversity in Tropical Rain Forest and Coral Reefs”, *New Series*, 199(4335), 1978, p.1302-1304.

²⁹ Chatham House: “Threats to Biodiversity”, <https://www.chathamhouse.org/2023/04/threats-biodiversityhatham>, (Access:04.09.2024).

³⁰ For further elaboration on threats towards biodiversity see BELLARD, Céline/MARINO, Clara/COURCHAMP, Franck: “Ranking Threats to Biodiversity and Why It Doesn't Matter”, *Nature Communications*, 13(1), 2022, p.2616.

³¹ See for instance THOMSEN, Mads/MONDARDINI, Luca/THORAL, François/GERBER, Derek/MONTIE, Shinae/SOUTH, Paul M./TAIT, Leigh/ORCHARD, Shane/ALESTRA, Tommaso/SCHIEL, David: “Cascading Impacts of Earthquakes and Extreme Heatwaves Have Destroyed Populations of an Iconic Marine Foundation Species”, *Diversity and Distributions*, 27(12), 2021, p.2369-2375.

³² IPCC: “Climate Change Widespread, Rapid, and Intensifying”, <http://tiny.cc/i23hzz>, (Access: 10.08.2024).

³³ THOMAS, Chris/CAMERON, Alison/GREEN, Rhys/BAKKENES, Michel/BEAUMONT, Linda/COLLINGHAM, Yvonne/ERASMUS, Barend/FERRERIA DE SIQUEIRA, Marinez/GRAINGER, Alan/HANNAH, Lee/HUGHES, Lesley/HUNTLEY, Brian/VAN JAARSVELD, Albert/MIDGLEY, Guy/MILES, Lera/ORTEGA-HUERTA, Miguel/PETERSON, A. Townsend/PHILLIPS, Oliver/WILLIAMS, Stephen.: “Extinction Risk from Climate Change”, *Nature*, 427(6970), 2004, p.145-148.

³⁴ Environmental, Natural Resources, & Energy Law Blog: “The Endangered Species Act's Next 50 Years: Updating the Nation's Hallmark Species Protection Law for an Era of Climate Change”, <https://law.lclark.edu/live/blogs/239-the-endangered-species-acts-next-50-years-updating>, (Access:09.08.2024).

³⁵ SANDS, Philippe/PEEL, Jacqueline: “Principles of International Environmental Law”, 3rd Edition, Cambridge University Press, Cambridge 2012, p.384-388.

³⁶ Arctic Portal Library: “Agreement on the Conservation of Polar Bears”, <http://library.arcticportal.org/1867/1/Agreement-on-the-conservation-of-polar-bears.pdf>, (Access: 09.08.2024).

Similarly, international law developed instruments for conserving the living resources in vulnerable regions such as Antarctic and aimed to ensure the protection of all living marine organisms³⁷.

In the European Union, comprehensive regulations have been implemented for species conservation. The Twin Directives, i.e. the Birds Directive³⁸ and Habitats Directive³⁹ are fundamental to the conservation regime in Europe, focusing on biodiversity protection. The EU LIFE Natura project, operating under this framework has an important role in combating wildlife crime in the EU⁴⁰. This project has implemented initiatives targeting the poisoning of protected species, raising awareness about illegal hunting, trapping, poaching, and illegal trafficking. Moreover, within the European environmental law regime the Bern Convention aims to protect habitats and, therefore, species⁴¹. It emphasises the importance of giving special attention to endangered species, and migratory species.

Amongst the tools developed with consideration of endangered species, the most important and functional international mechanism is the “Convention on International Trade in Endangered Species of Wild Fauna and Flora”, also known as the CITES or the Washington Convention. This convention plays a critical role as it stipulates very important provisions to protect endangered species from certain commercial activities, and it establishes a certain monitoring system⁴². CITES has a system with the consideration of the level of endangerment of certain species. Accordingly, Appendix I includes a list of species that are threatened with extinction and their international trade is strictly prohibited. Yet if the purpose is non-commercial, there might be some exceptional circumstances, such as a need for scientific research, where such trade may be allowed under the CITES regime. Whereas Appendix II species are not threatened, controlled trade serves to prevent their endangerment. Lastly, Appendix III species are the ones that are protected in at least one country. In case this country has called for international assistance to manage the trade of these species then such species benefit as well from the protection ensured by the CITES regime. The Conference of the Parties, which is the decision making body of CITES, periodically reviews and amends these Appendices using specific biological and trade criteria. Be that as it may, CITES is a convention that still focuses on the use of species from an anthropocentric point of view. One may conclude that it does not fully address to the eco-centric protection of species. Indeed, an aim to strengthen the protection of the elements of biodiversity may be found in this regime, but anthropocentrism hampers these efforts⁴³. Therefore, it is hardly unexpected that the existing international frameworks fall short of offering adequate safeguarding measures for species facing the threat of extinction. This gap underscores the pressing need for a more robust perception to protect biodiversity, particularly the earth's most vulnerable fauna and flora. Accordingly, the solution may be possible with an ecocide definition that positions humans not as a controller of the environment but as an inseparable and equal element of nature⁴⁴.

C. Ecocide Crimes: A More Robust Legal Tool for Endangered Species Protection in The Times of Climate Change

Both international and regional instruments have indeed recognised the concern regarding endangered species. Yet, as in many international instruments, enforcement constitutes a crucial problem. Moreover, all these instruments were concluded in a context where climate crisis was not a central concern. Therefore, they are not very considerate of the fact that climate crisis creates immediate threats that need to be considered particularly in terms of the endangered species. Therefore, the question is how international law can develop a more robust protection regime for endangered species in the context of the sixth mass extinction due to climate change. This study posits that recognising ecocide crimes as a peremptory norm within international law could significantly contribute to addressing the urgent challenges of the climate crisis. With its strong enforcement capabilities, such a legal instrument is uniquely positioned to exert pressure on actors, compelling them to protect species facing extinction, especially those further threatened by climate change. A robust legal framework that directly responds to the escalating environmental emergencies of our time may be possible by establishing ecocide as a peremptory international norm. Currently, the international legal framework lacks such normative infrastructure and there is an urgent need for the implementation of effective legal tools to dissuade natural and legal persons from imperilling the planet.

One may argue that at the national level, harms against the environment, causing industrial pollution, are already criminalized, and sanctions are provided for such acts. Yet it is obvious that these legal tools are not sufficient to provide effective legal protection for nature, especially given the climate crisis that we are facing today. This crisis determines the new rules of the game in social, political, and legal contexts. Increasing interest in climate litigation cases and the concern of international organisations, such as the

³⁷ See for instance CCAMLR: “CCAMLR Convention”, <https://www.ccamlr.org>, (Access: 09.08.2024).

³⁸ European Parliament and the Council: “Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (Codified version)”, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009L0147>, (Access: 09.08.2024).

³⁹ Council of the European Union: “Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora”, <https://eur-lex.europa.eu/eli/dir/1992/43/oj>, (Access: 09.08.2024).

⁴⁰ SILVA, João Pedro: LIFE & Wildlife Crime, European Commission, 2018, p.40.

⁴¹ The Council of Europe: “Convention on the Conservation of European Wildlife and Natural Habitats”, (Access: 09.08.2024).

⁴² CITES: “Convention on International Trade in Endangered Species of Wild Fauna and Flora”, <https://cites.org>, (Access: 09.08.2024).

⁴³ GEORGIEVA MINKOVA Liana: “Ecocide, Sustainable Development and Critical Environmental Law Insights”, *Journal of International Criminal Justice*, 22(1), 2024, p.8.

⁴⁴ HAMILTON Rebecca J.: “Criminalizing Ecocide”, *Harvard Human Rights Journal*, 38(1) (Forthcoming), 2025, p.44.

United Nations, of the liabilities of the countries due to the consequences of their policies are explicit indicators of this situation⁴⁵. For this reason, not surprisingly, ecocide has already started finding a place in national laws. France, for instance, is the first country in the European Union to criminalized actions constituting ecocide. Accordingly, as of the second half of 2021, those causing “serious and lasting damage to health, flora, fauna or the quality of the air, soil or water” shall be punished with up to 10 years of imprisonment⁴⁶. Nevertheless, the scope of the article is limited to the actions in France and not international.

As elaborated above, currently, ecocide is a potential concept that is generally treated in the context of war crimes. The threshold sought to implement such a norm is very high. Therefore, it is not very likely to be instrumentalised in the effective protection of species and, in general, biodiversity. In this context, defining 'ecocide' and understanding how this definition is formulated is of great importance. Polly Higgins defined ecocide as

“the extensive damage, destruction to or loss of ecosystems 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”⁴⁷.

Indeed, such definition which comprises a holistic approach towards nature may also serve for conservation purposes and may be instrumentalized for biodiversity crisis aggravated by climate change.

Recently, the European Law Institute (ELI) developed Model Rules for an EU Directive on Ecocide. In their proposal, the ELI defines ecocide as deliberate actions that could result in, or significantly contribute to, causing severe, long-term harm, or extensive, irreversible damage to an ecosystem or multiple ecosystems⁴⁸. Examples include excessive pollution, irresponsible farming, illegal waste dumping, and the release of radioactive materials. Yet the key term in the proposal is “intent”; therefore, the norm requires actors’ knowledge on their engagement in harmful actions to ecosystems. Evidently, the challenge lies in determining the threshold for ecosystem damage, especially in relation to climate change⁴⁹. Would a public or a private actor who is aware of their obligations under related climate frameworks be prosecuted and punished if they knowingly contribute to climate change? These questions remain unanswered, yet there is no doubt that recognition of ecocide as a peremptory norm would pierce the anthropocentric bias towards biodiversity protection, and by way of prioritising the intrinsic value of nature, ecocide would conceptually diverge from the other normative tools.

Given the rapid pace of change, there is a threat that species may not adapt and ultimately face extinction. In this regard, the failure of actors to fulfil their obligations in terms of mitigation and climate adaptation and an inability to enhance the adaptability of endangered species raises the question: Could the extinction of a species under these circumstances be considered ecocide?

In our opinion, the definition of ecocide as it stands does not necessarily imply extensive environmental harm to hundreds of species or a vast ecosystem. When an endangered species is involved, causing harm to these species should also be considered extensive environmental damage. Therefore, defining ecocide as a crime, especially an international crime, is crucial. Such a classification can create pre-emptive pressure on actors, compelling them to take necessary measures and having a deterrent effect. Similarly, criminalising such actions and assuming responsibility will significantly contribute to achieving environmental justice.

V. CONCLUSION

Overall, it is obvious that current international law falls short of safeguarding our planet and its ecosystems. Addressing this inadequacy through defining and establishing "Ecocide Crimes" is crucial. The progressive idea of granting legal personality to our planet, recognising its self-determination right, and proposing a "Universal Declaration of Planetary Rights." is also a prerequisite to functionalizing such a normative framework. The growing interest in ecocide, especially as a tool for climate crisis management, underscores the urgency of adopting a universally accepted definition and incorporating it into international law. Despite the absence of direct regulations on ecocide in existing international law, indirect regulations post-World War II, particularly those related to environmental protection during armed conflicts, lay a foundational precedent. This study highlights the growing relevance of this legal gap, particularly for biodiversity conservation in the climate crisis era.

Indeed, the state of biodiversity in the Anthropocene epoch requires urgent action. Current international biodiversity conservation instruments have laid a foundational framework for future survival of species. Yet, while significant, these measures are not sufficient given the aggravated situation with the climate crisis, especially considering the conditions for endangered species. The measures have an anthropocentric rationale. In this context, the criminalisation of ecocide is a potential legal tool to address the acts causing severe and irreversible harm to ecosystems. The integration of ecocide into international law could finally favour the intrinsic value of nature and enhance the legal mechanisms to safeguard biodiversity,

⁴⁵ Human Rights Watch: “UN General Assembly Seeks World Court Ruling on Climate Change”, <https://www.hrw.org>, (Access: 09.08.2024).

⁴⁶ Stop Ecocide International: “France Writes Ecocide into Law, in 2 Ways”, <https://www.stopecocide.earth/press-releases-summary/france-writes-ecocide-into-law-in-two-ways>, (Access: 09.08.2024).

⁴⁷ HIGGINS, Polly/SHORT, Damien/SOUTH, Nigel: “Protecting the Planet: A Proposal for a Law of Ecocide Special Issue: Green Criminology”, *Crime Law and Social Change*, 59(3), 2013, p.257.

⁴⁸ European Law Institute: “ELI Report on Ecocide: Model Rules for an EU Directive and a Council Decision”, <https://www.europeanlawinstitute.eu>, (Access: 08.08.2024).

⁴⁹ Forbes: “Ecocide: Criminalizing Climate Change”, <https://www.forbes.com/sites/jonmcgowan/2023/04/26/ecocide-criminalizing-climate-change>, (Access: 08.08.2024).

particularly endangered species. This paradigm shift towards an eco-centric perspective may provide a more effective and deterrent biodiversity conservation regime against environmentally harmful acts. Undeniably, the environmental challenges of our time necessitate a strengthened legal framework, taking into account the urgency of existential climate change threat.

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