



CAN CRIMES OF ECOCIDE COMMITTED DURING THE CONFLICT IN UKRAINE BE LEGALLY PUNISHED?

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ABSTRACT

The conflict in Ukraine is not only taking a heavy toll on human lives but also significantly impacting the environment and wildlife. Many natural areas have suffered extensive damage, and numerous animal species face even greater threats. It is concerning that many ecosystems may never recover their former biodiversity. This environmental disaster, culminating in the destruction of the Kakhovka dam, prompts questions about whether such actions can be denounced as acts of ecocide. This article aims to provide an overview of the ecological and legal landscape regarding allegations of ecocidal acts committed during the Ukrainian War. To this end, the first section of the paper will outline a non-exhaustive list of potential ecocidal crimes that occurred during the conflict in Ukraine. Subsequently, we will examine the opportunities and limitations associated with applying the concept of ecocide as a crime during the war in Ukraine. Finally, we emphasize the necessity for reforming environmental law to incorporate the concept of ecocide as a crime.

INTRODUCTION

“Today, the Russian occupiers have committed the greatest crime of ecocide on Ukrainian territory, not only during this war, but for decades”; Volodymyr Zelensky, following the destruction of the Kakhovka dam.

The war in Ukraine has certainly highlighted the fragility of the environment and its lack of protection in times of war by national and international law. The notion of ecocide, which has been debated for many years, has never been so much at the forefront of international law as it has been since the war in Ukraine.

The term “ecocide” originated in the context of armed conflict during the Vietnam War. During this conflict, the American army used Agent Orange, a defoliant that destroyed the forest, preventing the Vietnamese insurgents from taking refuge there. The massive use of Agent Orange led to the destruction of 20% of the Vietnamese forest, with disastrous health consequences, including cases of cancer and serious malformations in exposed individuals.² The term “ecocide” was first used by American biologist Arthur Galston in 1970.³ He believes that ecocide constitutes a crime against humanity and advocates the establishment of a new international treaty to prohibit ecocide, which he defines as “the deliberate and permanent act of destroying the environment in which a people can exercise its chosen way of life”⁴

A semantic analysis of this concept confirms Arthur Galston’s definition. Indeed, the term “ecocide” is composed of the prefix “eco-”, referring to the house, the habitat (oikos in Greek), and the suffix “-cide”, meaning “to kill” (caedo in Latin). It thus designates the most serious environmental damage resulting in irreversible destruction.

Currently, there is no universally recognized legal definition of ecocide.

According to the proposal for a Directive by the European Parliament and the Council concerning environmental protection through criminal law, which seeks to replace Directive 2008/99/EC, any action that results in “severe and widespread, or severe and long-term, or severe and irreversible damage to the quality of air, the quality of soil or the quality of water, or to biodiversity, to ecosystem services and functions, or to animals or plants”⁵ would qualify as ecocide.

According to the proposal put forth by Stop Ecocide International (SEI) to introduce a fifth crime within the Rome Statute, ecocide can be described 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”⁶

To establish a comprehensive definition for the crime of ecocide, it is feasible to reference the definition of crimes against humanity outlined in Article 7 of the Rome Statute. Accordingly, ecocide could be defined as “any widespread or systematic action included in a list of offences which causes widespread, long-term, and severe damage to the natural environment, committed intentionally and with knowledge of such action”⁷

The war in Ukraine has the potential to serve as a pivotal moment in the global acceptance of this

1 Personal translation from : «Aujourd’hui, les occupants russes ont commis le plus grand crime d’écocide sur le territoire ukrainien, non seulement au cours de cette guerre, mais aussi depuis des décennies», De Thier, V. & Brems, S. (2023). Guerre en Ukraine : Zelensky accuse la Russie d’écocide, à raison ? RTBF. <<https://www.rtf.be/article/guerre-en-ukraine-zelensky-accuse-la-russie-decocide-a-raison-11210126>> [Last accessed: 31.08.2023].

2 Agent Orange and Cancer Risk. American Cancer Society. <<https://www.cancer.org/cancer/risk-prevention/chemicals/agent-orange-and-cancer.html>> [Last accessed: 31.08.2023].; Agent Orange and birth defects. Birth Defect Research for Children. <<https://birthdefects.org/agent-orange/>> [Last accessed: 31.08.2023].

3 Zierler, D. (2011). The invention of ecocide. University of Georgia Press, p. 15.

4 Personal translation from: «l’acte délibéré et permanent de destruction de l’environnement dans lequel un peuple peut exercer son mode de vie choisi.», Meyer, C. (2022, November 16). Agent orange : l’Histoire cachée d’un écocide. Combat. <<https://combatlemedia.com/2022/11/16/agent-orange-lhistoire-cachee-dun-ecocide/>> [Last accessed: 31.08.2023].

5 cessed: 31.08.2023].

5 Report on the proposal for a directive of the European Parliament and of the Council on the protection of the environment through criminal law and replacing Directive 2008/99/EC. (2023, March 28). <https://www.europarl.europa.eu/doceo/document/A-9-2023-0087_EN.html> [Last accessed: 31.08.2023].

6 Stop Ecocide International (SEI). <<https://www.stopecocide.earth/#>> (consulted on October 31, 2023).

7 Neyret, L. (2014). Pour la reconnaissance du crime d’écocide. *Revue juridique de l’environnement*, 39, 177-193. <<https://www.cairn.info/revue-juridique-de-l-environnement-2014-HS01-page-177.html>> [Last accessed: on October 31.08.2023].

concept, representing a significant advancement for environmental protection. Indeed, numerous environmental crimes have occurred, impacting not only Ukrainian territory but also the Black Sea region.

Therefore, it is essential to examine the legal mechanisms available for holding those accountable for acts of ecocide committed during the Ukrainian conflict.

To accomplish this, we will initially compile a non-exhaustive list of potential ecocidal crimes committed during the war in Ukraine (Section I). We will subsequently assess the legal opportunities and challenges associated with prosecuting such crimes (Section II), and ultimately, concentrate on the legal prospects concerning the crime of ecocide resulting from the war in Ukraine (Section III).

1. A PARTIAL OVERVIEW OF POTENTIAL ECOCIDAL ACTS COMMITTED DURING THE UKRAINIAN CONFLICT

The conflict in Ukraine is causing severe environmental repercussions, with many of the environmental assaults falling within the scope of ecocide. This article examines specific instances illustrating potential ecocidal crimes during the Ukrainian war.

To begin, from a global perspective, as per data from the Ministry of Environmental Protection and Natural Resources of Ukraine in February 2023, nearly 500,000 hectares are under occupation or located in a war-affected area, and 2.4 million hectares of forest have been extensively cleared and require restoration.⁸ Furthermore, ten national parks, eight nature reserves, and two biosphere reserves have also fallen under occupation.⁹ Approximately 600 animal species and 750 plant species face the risk of extinction, including those listed on the Red List.¹⁰

8 Ministry of Environmental Protection and Natural Resources of Ukraine. (2023, February 22), Рік повномасштабного вторгнення рф: серед жертв і українське довкілля. *Державні сайти України*. <<https://www.kmu.gov.ua/news/rik-povnomasshtabnoho-vtorhnennia-rf-sered-zhertv-i-ukrainske-dovkillia>> [Last accessed: 31.08.2023].

9 *Ibid.*

10 *Ibid.*

More specifically, between February and July 2022, a distressing 5,000 dolphins perished in the Black Sea.¹¹ It is worth noting that the International Union for Conservation of Nature (IUCN) categorizes bottlenose dolphins and common dolphins inhabiting these waters as endangered. Noise pollution is believed to be a significant factor contributing to these fatalities. The presence of military vessels and submarines employing sonar for navigation, as well as missile launches and explosions can disrupt the cetaceans' ability to navigate, locate food, and communicate with each other.

This comprehensive list of the environmental impacts stemming from the war in Ukraine underscores the pressing need for a more environmentally conscious approach in executing military operations, challenging the practices observed in past conflicts. It is crucial to contemplate the inclusion of combat operations carried out within conservation areas, like national parks, in the category of condemnable acts falling under ecocide, given their potential to inflict significant and enduring harm to the ecosystem.

Additionally, even though the intent of the conflict parties may not be to deliberately cause environmental damage within national parks, they are undeniably aware of the adverse consequences their actions have on nature. On the other hand, understanding the severe repercussions for marine wildlife, such as dolphin mortality resulting from submarine sonar, remains less clear. These distinctions warrant further examination in the context of potentially establishing ecocidal crimes.

Historically, international law conventions and norms did not safeguard civilians during wartime. However, the contemporary consensus acknowledges that these safeguards have evolved into an established norm, enforced through legal penalties for attacks on civilians. It is essential that a similar consideration be applied to the realm of environmental protection.

While this perspective may appear idealistic at present, much like the protection of civilians in the

11 Ripert, L., (2023, July 26), Guerre en Ukraine. Des milliers de dauphins tués en mer Noire, les opérations navales dans le viseur, *Ouest France*, <<https://www.ouest-france.fr/monde/guerre-en-ukraine/guerre-en-ukraine-des-milliers-de-dauphins-tues-en-mer-noire-bf591dac-08d5-11ed-809f-9e7ceb27185e>> [Last accessed: 31.08.2023].

past, it is foreseeable that this approach will gradually gain widespread acceptance.

Secondly, the demolition of the Kakhovka hydroelectric dam on June 6, 2023, stands as the most conspicuous instance of ecocidal actions during the war in Ukraine. This destruction will lead to catastrophic and irreversible environmental repercussions, to the extent that Ostap Semerak, the former Ukrainian Minister of Ecology, has likened the situation to the most severe ecological catastrophe since Chernobyl.¹² The dam's breach inundated farms, infrastructure, and land, carrying pesticides, chemicals, oil, sewage, deceased animals, and fish, along with debris from cemeteries.¹³ Additionally, toxic materials from at least two animal burial sites potentially contaminated with anthrax may be in motion.¹⁴ This disaster resulted in the demise of numerous animals, the disappearance of many individuals, and the potential displacement of over 100,000 residents.¹⁵

After the submersion of the Kakhovka hydroelectric turbines, approximately 150 tons of oil intended for the dam's motors were carried away,¹⁶ leading to water contamination. About 300 tons of

lubricants¹⁷ remain within the facility, potentially causing severe harm to the Black Sea's flora and fauna, which, as described by Ukrainian authorities, is rapidly becoming a "garbage dump and animal cemetery".¹⁸

This contamination of the sea, which was already one of the most polluted in Europe, will impact neighboring countries such as Romania, Bulgaria, Turkey, and Georgia, which are both economically and ecologically reliant on the Black Sea.

Reconstruction will require several years, and some damage may be irreversible. The flooded farmland may never regain its former productivity, and the recovery of affected plant and animal populations will also be time-consuming, with certain species facing potential extinction.

Furthermore, the destruction of the Kakhovka hydroelectric dam has amplified the nuclear threat in Ukraine. While Ukraine's Zaporijia nuclear power plant has kept its six reactors offline for months, it is crucial to maintain continuous cooling to prevent a potential accident. However, following the Kakhovka dam's destruction, the primary cooling basin, supplied by the Kakhovka reservoir, has fallen below the required 12.7 meters (11.27 meters in June 2023).¹⁹ Although there are backup basins with sufficient reserves for several months, the risk of an accident looms if Russian-Ukrainian cooperation on water supply to the site were to cease.²⁰

This concise and non-comprehensive report illustrates the scale of environmental harm resulting from the conflict in Ukraine and the numerous

12 Watts, J. (2023, June 7). Dam breach could be Ukraine's 'worst ecological disaster since Chernobyl'. *The Guardian*.

<<https://www.theguardian.com/world/2023/jun/06/dam-breach-could-be-ukraines-worst-ecological-disaster-since-chnobyl>> [Last accessed: 31.08.2023].

13 Kramer, A. E., Varenikova, M., & Lima, M. (2023, June 7). Ukraine flood deepens misery in war zone. *The New York Times*. <<https://www.nytimes.com/2023/06/07/world/europe/ukraine-kherson-flooding.html>> [Last accessed: 31.08.2023].

14 Borger, J. (2023, June 9). Dam collapse a global problem as waters may poison the Black Sea, Zelenskiy says. *The Guardian*. <<https://www.theguardian.com/world/2023/jun/08/dam-collapse-global-problem-waters-may-poison-black-sea-zelenskiy>> [Last accessed: 31.08.2023].

15 Pahwa, N. (2023, June 16). La destruction du barrage de Kakhovka est une catastrophe pour le monde entier. *Slate.fr*. <<https://www.slate.fr/story/248393/destruction-barrage-kakhovka-catastrophe-ecologique-mondiale-environnement-ukraine-guerre-russie#:~:text=Un%20d%C3%A9sastre%20environnemental%2C%20C3%A9conomique%20et%20agricole&text=Volodymyr%20Zelensky%20a%20annonc%C3%A9%20la,qu'elles%20ne%20traversent%20Kheron>> [Last accessed: 31.08.2023].

16 AFP. (2023, June 6). 150 tonnes d'huile à moteur déversées dans le fleuve Dniepr, selon Kyiv. *Le Journal De Montréal*. <<https://www.journaldemontreal.com/2023/06/06/150-tonnes-dhuile-moteur-deversees-dans-le-fleuve-selon-kyiv>> [Last accessed: 31.08.2023].

17 Pahwa, N. (2023, June 16). La destruction du barrage de Kakhovka est une catastrophe pour le monde entier, *Slate.fr*. op.cit.

18 Knight, M. (2023, June 11). Kakhovka dam collapse has made Black Sea a 'garbage dump and animal cemetery', Ukraine warns. *CNN*. <<https://edition.cnn.com/2023/06/11/europe/kakhovka-dam-collapse-swimming-banned-intl-hnk/index.html>> [Last accessed: 31.08.2023].

19 Update 165 – IAEA Director General Statement on Situation in Ukraine. IAEA. (2023, June 2023) <<https://www.iaea.org/newscenter/pressreleases/update-165-iaea-director-general-statement-on-situation-in-ukraine>> [Last accessed: 31.08.2023].

20 For more on the science behind this threat, see: Mayer, N. (2023, July 7) La centrale nucléaire de Zaporijia pourrait-elle «exploser» et quelles seraient les conséquences ? *Futura*. <<https://www.futura-sciences.com/planete/actualites/environnement-centrale-nucleaire-zaporijia-pourrait-elle-exploser-seraient-consequences-97124/>> [Last accessed: 31.08.2023].

instances of ecocidal acts being committed. Additional damage is anticipated in the foreseeable future. These transgressions necessitate an adequate legal response.

2. EXAMINING THE LEGAL OPPORTUNITIES AND CHALLENGES IN IMPLEMENTING THE CONCEPT OF ECOCIDAL CRIMES

Several impediments hinder the efficiency of the justice system in addressing ecocidal crimes, thereby limiting a comprehensive approach to their adjudication. Both domestic law (A) and international law (B) have inherent constraints when combating ecocidal crimes.

2.1. The challenge lies in harnessing the existing domestic legal framework comprehensively to address ecocidal crimes

The concept of ecocide has not yet achieved global acceptance. However, certain nations have incorporated it into their legal systems. Vietnam, in 1990, became the first country to incorporate this concept into its criminal code, providing the following definition: “Those who, in peace time or war time, commit [...]. acts of ecocide or destroying the natural environment, shall be sentenced to between ten years and twenty years of imprisonment, life imprisonment or capital punishment”.²¹ Since that time, approximately a dozen states have embraced this concept, particularly countries in the former USSR, including Armenia,²² Georgia,²³

21 Penal Code of Vietnam, Article 342. – Crimes against mankind. <https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=56207> [Last accessed: 31.08.2023].

22 Penal Code of Armenia, Article 394: “Ecocide. Mass destruction of flora or fauna, poisoning the environment, the soils or water resources, as well as implementation of other actions causing an ecological catastrophe, is punished with imprisonment for the term of 10 to 15 years.” <<http://www.parliament.am/legislation.php?sel=show&ID=1349&lang=eng>> [Last accessed: 31.08.2023].

23 Penal Code of Georgia, Article 409: “Ecocide. 1. Ecocide i.e. contamination of the atmosphere, soil, water resourc-

es, mass destruction of fauna or flora, or any other act that could have led to an ecological disaster, – shall be punished by imprisonment for a term of twelve to twenty years.
2. The same act committed during armed conflicts, – shall be punished by imprisonment for a term of fourteen to twenty years or by life imprisonment.” <<https://matsne.gov.ge/en/document/view/16426?publication=253>> [Last accessed: 31.08.2023].

24 Criminal Code of the Republic of Belarus, Article 131: “Экоцид Умышленнае массавое уничтожение растительного или животного мира, либо отравление атмосферного воздуха или водных ресурсов, либо совершение иных умышленных действий, способных вызвать экологическую катастрофу (экоцид), наказываются лишением свободы на срок от десяти до пятнадцати лет”.
Personnal translation: «Ecocide. Intentional mass destruction of flora or fauna, or poisoning of atmospheric air or water resources, or committing other intentional acts capable of causing an ecological disaster (ecocide) shall be punishable by imprisonment for a term of ten to fifteen years.» <https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=54631> [Last accessed: 31.08.2023].

25 Criminal Code of the Russian Federation, Article 358. <chromeextension://efaidnbnmnibpcjpcglclefindmkaj/https://www.imolin.org/doc/amlid/Russian_Federation_Criminal_Code.pdf> (consulted on October 31, 2023).

26 Criminal Code of the Republic of Ukraine, Article 441. <chromeextension://efaidnbnmnibpcjpcglclefindmkaj/https://sherloc.unodc.org/cld/uploads/res/document/ukr/2001/criminal-code-of-the-republic-of-ukraine-en.html/Ukraine_Criminal_Code_as_of_2010_EN.pdf> [Last accessed: 31.08.2023].

However, it is essential to recognize that this crime is not acknowledged in European Union member states. While the European Parliament has recently put forth a proposal to incorporate

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<<https://matsne.gov.ge/en/document/view/16426?publication=253>> [Last accessed: 31.08.2023].

24 Criminal Code of the Republic of Belarus, Article 131: “Экоцид Умышленнае массавое уничтожение растительного или животного мира, либо отравление атмосферного воздуха или водных ресурсов, либо совершение иных умышленных действий, способных вызвать экологическую катастрофу (экоцид), наказываются лишением свободы на срок от десяти до пятнадцати лет”.

Personnal translation: «Ecocide. Intentional mass destruction of flora or fauna, or poisoning of atmospheric air or water resources, or committing other intentional acts capable of causing an ecological disaster (ecocide) shall be punishable by imprisonment for a term of ten to fifteen years.» <https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=54631> [Last accessed: 31.08.2023].

25 Criminal Code of the Russian Federation, Article 358. <chromeextension://efaidnbnmnibpcjpcglclefindmkaj/https://www.imolin.org/doc/amlid/Russian_Federation_Criminal_Code.pdf> (consulted on October 31, 2023).

26 Criminal Code of the Republic of Ukraine, Article 441. <chromeextension://efaidnbnmnibpcjpcglclefindmkaj/https://sherloc.unodc.org/cld/uploads/res/document/ukr/2001/criminal-code-of-the-republic-of-ukraine-en.html/Ukraine_Criminal_Code_as_of_2010_EN.pdf> [Last accessed: 31.08.2023].

ecocide as a crime in European legislation,²⁷ this proposal is anticipated to encounter various challenges when presented before the Council of the European Union, as some member states are reluctant to acknowledge such a crime.²⁸ A notable example is France, which has declined to recognize ecocide as a crime, downgrading it to a mere ecological offense lacking substantial legal standing.²⁹

However, the mere inclusion of the concept of ecocide within a country's legal framework does not automatically guarantee its comprehensive application.

Even though Article 441 of the Ukrainian Criminal Code categorizes ecocidal acts as crimes against peace and global security, the international aspect of the conflict and the challenges associated with collecting on-site evidence introduce complexity into legal proceedings within national courts.

The same holds true for the nations neighboring the conflict, especially those along the Black Sea, which could face unparalleled environmental and economic harm due to the Kakhovka dam's destruction. Therefore, even if Georgia acknowledges ecocide as a crime during times of peace or war,³⁰ there is a lack of evidence to pinpoint the culprits, as both sides accuse each other.

Hence, turning to international criminal justice appears to be an essential and indispensable course of action.

2.2. International Law provides only partial avenues for adjudicating ecocidal crimes

While there exist multiple options for prosecuting Russia or Ukraine by applying specific provisions of International Law, the absence of global acknowledgement of the crime of ecocide presents a hindrance to the comprehensive prosecution of such crimes.

First and foremost, within the realm of international criminal law, there is a possibility to prosecute Russia or Ukraine for war crimes under the Rome Statute of the International Criminal Court (ICC). It is worth noting that Russia and Ukraine have never ratified the Rome Statute, thus barring the ICC from prosecuting individuals within Russia or Ukraine. Nevertheless, these individuals may face arrest if they are present on the territory of a state recognizing the ICC's jurisdiction. However, Ukraine has submitted a declaration acknowledging the ICC's jurisdiction, as per Article 12, paragraph 3 of the Rome Statute, for an indefinite period. This declaration pertains to punishing crimes that have been ongoing across its territory since February 20, 2014.³¹ Consequently, Russian nationals within Ukrainian territory could potentially face arrest and conviction.

According to the Rome Statute of the International Criminal Court, article 8, 2. (b) (iv), it constitutes a war crime to: "*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 the concrete and direct overall military advantage anticipated*".

The requirement of "*clearly excessive*" damage inherently demands a subjective evaluation of the resulting harm. Applying this article to most instances of environmental destruction in Ukraine may prove challenging, with the notable exception being the destruction of the Kakhovka dam. This dam was constructed with the ability to withstand

27 For further information: Le Parlement européen reconnaît l'écocide. (2023, April 6). *Éditions Législatives*. <<https://www.editions-legislatives.fr/actualite/le-parlement-europeen-reconnait-lecocide/#:~:text=Le%2029%20mars%202023%2C%20dans,%C3%A9cocide%20dans%20le%20droit%20europ%C3%A9en>> [Last accessed: 31.08.2023].

28 Radisson, L. (2023, March 30). Le Parlement européen se positionne en faveur du crime d'écocide. *Actu-Environnement*. <<https://www.actu-environnement.com/ae/news/ecocide-crime-resolution-parlement-proposition-directive-droit-penal-environnement-41477.php4>> [Last accessed: 31.08.2023].

29 *Ibid.*

30 Criminal Code of Georgia, Article 409 – "*Ecocide. 1. Ecocide i.e. contamination of the atmosphere, soil, water resources, mass destruction of fauna or flora, or any other act that could have led to an ecological disaster, – shall be punished by imprisonment for a term of twelve to twenty years. 2. The same act committed during armed conflicts, – shall be punished by imprisonment for a term of fourteen to twenty years or by life imprisonment*". <<https://matsne.gov.ge/en/document/view/16426?publication=253>> [Last accessed: 31.08.2023].

31 Ministry for foreign affairs of Ukraine. (2015, September 8). Declaration on the recognition of the jurisdiction of the International Criminal Court. <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.icccpi.int/sites/default/files/iccdocs/other/Ukraine_Art_12-3_declaration_08092015.pdf> [Last accessed: 31.08.2023].

missile strikes. Consequently, the explosion likely occurred within the Russian-occupied Kakhovka power plant³², implicating Russia in this act of destruction. Thus, if Russia is found responsible for the Kakhovka dam's demolition, it could be argued that the environmental damage is conspicuously excessive, considering the extent of the damage in comparison to the anticipated military advantage – namely, obstructing the Ukrainian army's progress on Ukrainian territory by creating extensive marshland across tens of thousands of hectares.

Consequently, if substantial evidence is presented to establish Russian culpability in the Kakhovka dam's destruction, Article 8, 2(b)(iv) of the Rome Statute may be invoked before the ICC. However, it should be noted that if the investigation reveals Ukraine's responsibility instead of Russia's, the same article will apply similarly.

Another potential approach that could be considered involves incorporating environmental damage in Ukraine as a factor contributing to the definition of the broader crimes outlined in the Rome Statute.³³

From this perspective, environmental harm could serve as a basis for prosecuting war crimes, which encompass various actions, including attacks on civilian populations, assaults on civilian infrastructure, extensive property destruction, and the intentional initiation of attacks with the awareness that they will result in harm or casualties among civilians.

Additionally, environmental damage could be utilized for the prosecution of crimes against humanity, encompassing inhumane actions carried out as part of a widespread or systematic assault on any civilian population. It is worth noting that in 2010, the Pre-Trial Chamber of the International Criminal Court determined that the destruction, pollution, and contamination of wells by Sudanese government forces aligned with a genocidal

policy targeting civilian populations in the Darfur region.³⁴ This ruling warranted the issuance of an arrest warrant for President Omar Al-Bashir.

Nonetheless, this human-centered approach fails to acknowledge the right to environmental protection, as sanctions are imposed not based on the harm inflicted on the environment but rather on exploiting the environment to harm human beings. Hence, it appears imperative that the conflict in Ukraine should serve as a catalyst for the international adoption of the crime of ecocide to provide effective environmental protection.

3. THE NECESSITY FOR ENVIRONMENTAL LAW REFORM TO ENCOMPASS THE CRIME OF ECOCIDE

To establish a robust legal framework for prosecuting ecocidal crimes, there is a requirement for legislative enhancements on three fronts.

First and foremost, at the national level, the objective is to advocate for integrating the concept of the "crime of ecocide" into the domestic laws of states, all the while embracing the principle of universal jurisdiction.³⁵ This shift would assign the national judicial system the duty of addressing the international crime of ecocide, consequently limiting the avenues for individuals accountable for this crime to seek shelter in other countries, a situation already applicable to crimes against humanity.

Secondly, on the European level, the scope of the European Public Prosecutor's Office should be expanded by establishing a "European Green

32 Enderlin, S. (2023, August 15). Qui a détruit le barrage de Kakhovka? Petite leçon de journalisme par un grand historien. *Heidi.news*. <<https://www.heidi.news/monde/qui-a-detruit-le-barrage-de-kakhovka-petite-lecon-de-journalisme-par-un-grand-historien>> [Last accessed: 31.08.2023].

33 R. Killean. (2022, March 7). Legal accountability for environmental destruction in Ukraine. *Conflict and Environment Observatory*. <<https://ceobs.org/legal-accountability-for-environmental-destruction-in-ukraine>> [Last accessed: 31.08.2023].

34 Al Bashir Case. The Prosecutor c. Omar Hassan Ahmad Al Bashir. ICC-02/05-01/09. <<https://www.icc-cpi.int/darfur/albashir>> [Last accessed: 31.08.2023].

35 Résolution sur la responsabilité des entreprises dans les dommages causés à l'environnement, point 33. (2021, May 20). *Journal officiel de l'Union européenne*. <<chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://eur-lex.europa.eu/legal-content/FR/TXT/PDF/?uri=CELEX:52021IP0259&from=ET>> [Last accessed: 31.08.2023]. Molins, F. (2022, Décembre). Le traitement pénal du contentieux de l'environnement. *Rapport du groupe de travail relatif au droit pénal de l'environnement*. <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.courdecassation.fr/files/files/Parquet%20g%C3%A9n%C3%A9ral/Rapport_PG_envir.pdf> [Last accessed: 31.08.2023].

Public Prosecutor's Office" to address severe environmental infractions. This would necessitate enacting a European directive that precisely enumerates the crimes in question. The realization of this "European Green Prosecutor's Office" might be achieved by revising the November 19, 2008, directive on environmental crime,³⁶ in which the European Union Parliament endorsed the incorporation of ecocide into European legislation. However, as mentioned at the outset of this article, the process of adopting this concept is still beset by challenges and could be protracted.

Finally, from a global perspective, establishing an international criminal entity tasked with addressing cases of ecocidal crimes would complement national judicial systems, particularly in cases where these systems are reluctant or unable to conduct trials independently. This responsibility could be entrusted to the International Criminal Court or an independent judiciary.

The Rome Statute of the International Criminal Court currently encompasses four crimes: genocide, crimes against humanity, war crimes, and the crime of aggression.³⁷ Numerous legal experts and environmental organizations are actively working towards securing recognition of ecocide as the fifth crime subject to prosecution by the ICC.

For ecocide to attain recognition as an international crime, four distinct conditions must be met.³⁸ Firstly, one of the 123 States that have ratified the Rome Statute must initiate a proposal for such an amendment. Second, a majority at the annual assembly of the International Criminal Court must endorse the consideration of the amendment. Subsequently, for the amendment to be adopted, a two-thirds majority of ICC States Parties must vote in favor of it. Lastly, each country must ratify

the modified statute. Consequently, ecocide would become a crime in those nations where it has been ratified, along with the principle of universal jurisdiction, enabling any ratifying nation to apprehend a foreign national who has committed an ecocidal crime abroad on its territory. This mechanism would facilitate the prosecution of those responsible for ecocidal crimes during the war in Ukraine.

CONCLUSION

The crimes of ecocide committed during the war in Ukraine are numerous and have resulted in significant and irreversible environmental harm. Existing domestic and international legal provisions are insufficient to offer a comprehensive legal response to all instances of ecocide committed within the context of this conflict. Challenges in evidence collection and the international nature of the conflict make the enforcement of ecocide laws that are already in place in certain local legislations difficult.

A substantial overhaul of the body of international legal norms is necessary to provide genuine environmental protection. Only the addition of a fifth crime to the Rome Statute can lay the groundwork for effectively addressing ecocidal acts on a global scale. This would grant the capacity to prosecute individuals responsible for such actions committed within the Ukrainian conflict, thereby deterring future belligerent conduct that harms the environment.

Just as the Nuremberg Tribunal established the concept of "crimes against humanity" seven decades ago to adjudicate the atrocities committed by Nazi Germany, the war in Ukraine has the potential to pave the way for the legal recognition of the crime of ecocide on an international level.

36 Directive 2008/99/CE, relative à la protection de l'environnement par le droit pénal. (2008, November 19th). European Parliament and of the Council. OJ L 328, 6.12.2008, p. 28–37 <<https://eur-lex.europa.eu/legal-content/FR/TXT/?uri=celex%3A32008L0099>> [Last accessed: 31.08.2023].

37 Rome Statute of the International Criminal Court, Article 5. <<chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.icc-cpi.int/sites/default/files/RS-Eng.pdf>> [Last accessed: 31.08.2023].

38 Rome Statute of the International Criminal Court, Article 121. <<chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.icc-cpi.int/sites/default/files/RS-Eng.pdf>> [Last accessed: 31.08.2023].

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