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PROTECTION OF THE ENVIRONMENT – INTERNATIONAL HUMAN RIGHTS AND INTERNATIONAL HUMANITARIAN LAW PERSPECTIVES

ABSTRACT

This review essay outlines, examines and compares two approaches to the environment – the international human rights law approach and the international humanitarian law approach. International community is in the middle of a climate emergency, facing societal collapse and the possible extinction of our species in the future. Hence, we might or we should use any legal weapon we can – including international human rights law and international humanitarian law – to confer as much protection on the environment as we can. The main research questions are: Which of these approaches better protects the environment? Which is closer to the idea that the environment should not only be protected but should have its rights? Where the environment is protected for its value for humans and where for its inherent value? The research methods used in the paper are content analysis of the relevant literature and legal analysis of human rights law and international humanitarian law treaties.

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The authors conclude that human rights law approach is more progressive and would offer better protection to the environment, even though it is still anthropocentric. Consequently, a human right to a clean, healthy and sustainable environment has to be anthropocentric. As to international humanitarian law, international policy has a long way to go before the welfare of the whole ecosystem is adequately recognised and protected in armed conflicts. While international humanitarian law is also anthropocentric and generally neglects to safeguard nature, some principles can be inferred to offer nominal protection in times of conflict at all levels: custom, general principles and treaties.

Keywords: environment, international human rights law, international humanitarian law, anthropocentric

1. INTRODUCTION AND THEORETICAL FRAMEWORK

The Russian invasion of Ukraine has stimulated renewed interest in the debate regarding the protection afforded to the environment in an armed conflict. Many important legal questions arose from the issue of the environment being "one of the silent often overlooked victims of modern warfare. One of the key questions is whether it is possible to consider environmental damage as a violation of basic human rights" (The Environment and International Humanitarian Law, nd). This particular conflict has noticeably disrupted the supply of natural resources, such as oil and coal, crucial for the continuous growth of the economy (Bloomberg News, 2022) and food availability, which could lead to a global food crisis with all the political, social and economic consequences it implies (Farrer, 2022).

What is of most concern this time is the high degree of threat of chemical and radiation contamination caused through the conduct of hostilities or associated mismanagement, which are affecting nuclear power plants, refineries and warehouses storing hazardous substances, which include ammonium nitrate and phenol (Ministry of Ecology and Natural Resources of Ukraine, 2022). When the international community was concerned with Zaporizhian Nuclear Power Plant, the devastation caused to the Nova Khakovka dam and hydroelectric power plant can be regarded as a significant catastrophe with humanitarian and environmental ramifications (Tignino, Kebebew and Pellaton, 2023).

There are also proponents of the approach that the environment has its rights. They challenge the finding that the optimum protection of nature focuses on an outdated and unjust legal status quo that considers and treats all nonhuman animals and nature as "objects" or "resources" with no rights. In line with human rights, nonhuman rights and rights of the environment are based on fundamental values and principles of justice, which include at the very least the right to life and liberty. It can be argued that they are entitled to liberty for much of the same reason as concerns the changed status of slaves, women, and children, all of whom were once treated as the property of men. The only effective way to successfully protect human beings' fundamental interests is to recognize their rights. It is the same for nonhuman animals and by extension, the whole of the environment (for an example see the website: Humans are not the only animals entitled to recognition and protection of their fundamental rights). For activists, early successes include building a body of admissible empirical evidence, having the cases actually heard before a judge (instead of having the case dismissed outright), being able to launch an appeal to a higher court, and generally changing the quality of the

legal conversation on the issue (Mitra, 2015). Still, even if we say that the environment has some rights it is only in national laws of some States, not in IHL and IHRL.[1]

The aim of this review essay is to outline, examine and compare two approaches to the environment – the international human rights law (IHRL) approach and the international humanitarian law (IHL) approach. International community is in the middle of a climate emergency, facing societal collapse and the possible extinction of our species in the future. Hence, we might or we should use any legal weapon we can – including IHRL and IHL – to confer as much protection on the environment as we can. The main research questions are: Which of these approaches better protects the environment? Which is closer to the idea that the environment should not only be protected but should have its rights? Where the environment is protected for its value for humans and where for its inherent value?

The research methods used in the paper are content analysis of the relevant literature and legal analysis of human rights law and international humanitarian law treaties.

2. INTERNATIONAL HUMAN RIGHTS LAW PERSPECTIVE

Environmental degradation was not yet a matter of widespread concern at the time that the 1948 Universal Declaration of Human Rights and the subsequent human rights treaties that made individual human beings subjects of international law were drafted. While a number of international agreements pertain to environmental issues – conservation of biological diversity, marine pollution, disposal of hazardous materials, and so on – these do not confer any rights upon individuals and thus do not form part of international human rights law (IHRL). However, the inherent interdependence of human rights and the environment has increasingly come to be recognized by the international community. Starting with Portugal, who in 1976 adopted a constitutional right "to a healthy and ecologically balanced human environment," an increasing number of States came to establish some forms of legal recognition of the right to a healthy environment. As of 2018, 155 States have recognized such rights – together with binding legal obligations to respect, protect and fulfil them – while 36 more declared their support in non-binding international instruments (Knox, 2018).

Above the State level, versions of an autonomous right to a healthy environment can be found in regional human rights treaties drafted since the 1970s. Thus, Article 24 of the 1981 African Charter on Human and People's Rights grants all peoples "the right to a general satisfactory environment, favorable to their development," while Article 18 of its 2003 Protocol

[1] There has already been a limited recognition of aspects of 'nature' as legal persons possessing rights, most notably in New Zealand. For example, by the Te Urewera Act 2014, New Zealand vested interest in Te Urewera (formerly Te Urewera National Park) in itself, with all rights and responsibilities appurtenant to legal personhood. In practice, the exercise of those rights and responsibilities devolves to a board overseeing its management, with the members of that board compelled by the Act to act on behalf of Te Urewera itself, in accordance with traditional Maori principles that emphasize maintaining sustainable relationships between people and their environment. In 2017, New Zealand passed the Te Awa Tupua Act, which recognised the Whanganui River as a living entity. Soon therreafter, the Uttrakhand High Court in India conveyed the same status on the Ganges River Basin (Safi, 2017). In 2019, Bangladesh became the first country in the world to grant all its rivers – some 700 – "legal personhood" (Heaven, 2019, pp. 20–21). The judgement is a response to the inability of the government to protect nature with existing environment regulatory framework (BBC, 2020).

on the Rights of Women in Africa states that they "shall have the right to live in a healthy and sustainable environment." Similar language – proclaiming a right to a healthy, sustainable and/or clean environment – can also be found in Article 11(1) of the 1988 Additional Protocol to the American Convention on Human Rights (San Salvador Protocol); Article 38 of the 2004 Arab Charter on Human Rights; Article 28(f) of the 2012 Human Rights Declaration adopted by the Association of Southeast Asian Nations (ASEAN); and (at least by implication) by Article 1 of the Aarhus Convention (the 1998 Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters).[2] However, it should be noted that several of these instruments – the Arab Charter, the San Salvador Protocol, as well as the ASEAN Declaration – fail to provide the rightholders any compliance or enforcement mechanism with which to address violations of the autonomous right they purport to confer upon them. Little significant jurisprudence can be found elaborating the substantive content of these autonomous rights, save for the African Commission on Human and Peoples' Rights' 2001 opinion in the Ogoni people case. In it, the Commission determined that the Article 24 right to a satisfactory environment required states "to take reasonable and other measures to prevent pollution and ecological degradation, to promote conservation, and to secure an ecologically sustainable development and use of natural resources;" in addition, compliance was held to include

> *ordering or at least permitting independent scientific monitoring of threatened environments, requiring and publicising environmental and social impact studies prior to any major industrial development, undertraining appropriate monitoring and providing information to those communities exposed to hazardous materials and activities and providing meaningful opportunities for individuals to be heard and to participate in the development decisions affecting their communities (Social and Economic Rights Action Center (SERAC) v Nigeria (Communication 155/96) [2001] ACHPR 34 at paras 52–53).*

Unlike the State and regional level, no autonomous, directly justiciable legal right to a healthy environment has ever been articulated in IHRL. None of the international human rights treaties contains an explicitly formulated right to this effect, nor has a crystallization of any customary rule granting a right to a healthy environment been recognized by any international tribunal, despite persistent scholarly argument in favour of its emergence. While, on occasion, international courts referred in their decisions to environmental protection, such references remained relatively vague and no direct ruling on the existence or content of an environmental right ever materialized. Thus, for instance, in their advisory opinion on the Legality of the Threat or Use of Nuclear Weapons in 1996, the International Court of Justice recognized "a general obligation" that States "respect the environment of other States or of areas beyond national control' in conducting the 'activities within their jurisdiction or control." However, that obligation was recognized merely as part of "the corpus of international law relating to the environment," rather than any specific duty to one's citizens or human beings in general (Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996, ICJ Rep. 226, 241–42, paragraph 29). Similarly, in a separate opinion in the 1997 Gabčikovo-

[2] Technically, as a product of a UN body – the United Nations Economic Commission for Europe (UNECE) – the Aarhus Convention is open for ratification to all member states of the UN, and thus an international instrument. However, given UNECE's focus, its operation is confined to Europe.

Nagymaros Project Case, Judge C.G. Weeramantry recognized the entitlement of the people of Hungary and Slovakia "to the preservation of their human right to the protection of their environment," but failed to identify a source of any autonomous right to this effect. To the contrary, his comments make clear that any environmental entitlements in international human rights law are derivative only – *sine qua non*, as he put it, "for numerous human rights such as the right to health and the right to life itself" (The Gabcikovo-Nagymaros Project (Hungary v Slovakia), Judgment, 1997, ICJ Rep. 7, 41, paragraph 90–92).

IHRL nevertheless recognizes the importance of environmental rights in two main ways: (1) through non-binding "soft law" pronouncements contained in declarations and similar instruments that encourage, but do not mandate, the international community to adopt environmental norms; and (2) by deriving legally binding environmental entitlements and obligations from rights already conferred by human rights treaties ('greening' existing human rights, substantive and procedural). While the former appears to have had relatively little impact thus far, the latter achieved more significant success in importing principles of environmental protection into IHRL. Each will now be discussed in turn.

2.1. SOFT LAW

There is a plethora of soft law instruments at the international level that reference something akin to a right to a healthy environment – or at least one of adequate quality to support life. The first significant reference to such a right is generally acknowledged to be contained in Principle 1 the 1972 Stockholm Declaration (endorsed by the United Nations General Assembly in resolution 2398 of 1968), which proclaims that "man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations" (Declaration of the United Nations Conference on the Human Environment, Principle 1, UN Doc A/Conf.48/14/Rev.1, 1972). As far as conferring environmental human rights, the language of this formulation is far from clear: the environment seems to play a subsidiary role in supporting the fundamental rights listed, and the obligation of environmental protection attaches to no one in particular and comes with a mandate to "improve" – a somewhat worrying licence to meddle with nature in pursuit of an uncertain end. Subsequent environmental declarations in many cases maintained a similar ambiguity, as States made gestures at addressing environmental concerns – being pressed upon them with increasing urgency by scientists and the growing environmental movement – while attempting to prevent such concerns from hobbling their ability to exploit the environment for the benefit of developing and maintaining economic growth. For instance, the Rio Declaration of 1992 emphasized the right of States to exploit resources to satisfy economic needs, rejecting the opportunity to include the formulation put forward by the 1987 report of the World Commission on Environment and Development, which proposed that "all human beings have the fundamental right to an environment adequate for their health and well-being" (Bruntland, 1987, p. 235). Instead, the language adopted placed the environment in a distinctly subordinate role:

> *Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.* […] *States have… the sovereign right to exploit their own resources pursuant to their own environment and developmental*

> *policies… [t]he right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations (Rio Declaration on Environment and Development, 1992: principles 1, 2 and 3).*

"Sustainable" development – which entailed pursuing economic activities in a way that did the least harm to the environment – thus became, at least ostensibly, the goal for most governments, subsuming environmental concerns under the demands of economic development. In declarations and preambles to treaties from Rio 1992 onwards, States were seemingly happy to vaguely acknowledge the importance of environmental protection, but resisted conferring any specific rights that would allow their citizens – or the vocal environmental movement – to hold them accountable for their continual failure to prioritize it. However, as the harm caused by environmental degradation and climate change became more and more visible – disproportionately affecting indigenous, minority and other already vulnerable populations – international discourse in the UN and other international bodies arguably shifted towards a somewhat stronger articulation of environmental rights. Thus, for instance, the 1999 Bizkaia Declaration on the Right to the Environment, issued by the International Seminar of Experts on the Right to the Environment under the auspices of the United Nations' Educational, Scientific and Cultural Organization (UNESCO) and the UN High Commissioner for Human Rights, proclaimed that everyone has a right "to enjoy a healthy and ecologically balanced environment" (UNESCO, 1999); while in 2007, the UN General Assembly recognized, in its adoption of the Declaration on the Rights of Indigenous Peoples, the impact that environmental degradation has on indigenous societies, proclaiming their right "to the conservation and protection of the environment" (UN Declaration of the Rights of Indigenous Peoples, 2007).

In March 2012, the Human Rights Council (HRC) appointed its first independent expert (later, special rapporteur) on the relationship between human rights and the environment. The expert's mandate included, *inter alia*, examining the existing multitude of international declarations, agreements, and various other pronouncements to determine what, if any, human rights obligations in relation to the environment exist in international law (United Nations Human Rights Council, 2012). In his preliminary report, John H. Knox, who served in the position from 2012 to 2018, stated outright that no autonomous human right to a healthy environment exists at the international level, noting a number of missed opportunities for the UN to recognize such a right (including that offered by the Rio Declaration, 1992; see further Knox, 2018: paras 14–16). Further, the conclusion set out in his final report was that "[e]xplicit recognition of the human right to a healthy environment' was 'unnecessary for the application of human rights norms to environmental issues" (Knox, 2018: para. 23), given the proliferation of national and regional environmental rights, as well as the "extensive jurisprudence on human rights and the environment" created by "greening" existing human rights (Knox, 2018: para. 12) (see discussion below). Nevertheless, he recommended that the HRC recognize the existence of an autonomous right to a healthy environment in a global instrument, noting that such recognition

> *raises awareness that human rights norms require protection of the environment and highlights that environmental protection is on the same level of importance as other human interests that are fundamental to human dignity, equality and freedom. It also helps to en-*

sure that human rights norms relating to the environment continue to develop in a coherent and integrated manner (Knox, 2018: paras. 14–16).

That recommendation has now been realized. On 8 October 2021, by Resolution 48/13, the HRC recognized access to a clean, healthy and sustainable environment as a human right by 43 votes in favour with 4 abstentions (UNHRC Res. 48/13, The human right to a clean, healthy and sustainable environment, 2021). This marked the first time a universal right to this effect has been explicitly recognized by an international human right body, and the passing of the Resolution was reportedly greeted by applause in the HRC chamber. The reported celebration seems a little premature: while its unambiguous language is certainly a welcome development, it is difficult to evaluate what (if any) real impact the Resolution might have, and in particular what its contribution might be to existing environmental jurisprudence, given that it is still merely a non-binding "soft" law instrument. Knox, in an article written after the conclusion of his appointment,[3] argues that the main advantage of explicit global recognition lies less in any direct legal effect (as international human rights treaties have a rather poor track record when it comes to legal enforcement), and more in how it will influence the development of environmental norms and encourage greater environmental compliance. His list of potential benefits includes: highlighting the importance of the environment to human rights (confirming that the language of rights "applies to environmental issues," conferring a certain moral legitimacy upon those issues); using human rights norms to fill gaps in international environmental law, and in particular, its lack of interest in internal (as opposed to transboundary) harm; strengthening the legal bases for international enforcement, for instance by more consistently raising environmental issues at the Universal Periodic Review (which studies have found to have a positive effect on compliance); and improving environmental performance at the country level, by encouraging more countries to incorporate environmental rights into their constitutions thus allowing their citizens to pursue redress in their local courts (Knox, 2020: 88–91). Moreover, in 2022, the UN General Assembly, a principal UN organ, adopted a resolution recognizing "the human right to a clean, healthy and sustainable environment" (for more details see, AJIL Unbound Symposium on UN Recognition of the Human Right to a Healthy Environment, 2023). To what extent these hopeful predictions will become realized in practice remains to be seen.

2.2. "GREENING" OF ESTABLISHED HUMAN RIGHTS

In light of the near-total absence from international human rights treaties of any references to environmental rights, the incorporation of environmental principles into IHRL jurisprudence took a more indirect route, proceeding primarily through the so-called "greening" of existing rights (Knox, 2020: 84): the increasing recognition by human rights tribunals that environmental degradation may adversely affect the fulfillment of internationally established human rights, amounting to potential violations. Given that all human rights can be said to rely, to a greater or lesser extent, on the existence of a supportive environment for their fulfillment, claimants have been quite successful in arguing that "environmental harm interferes with the full enjoyment of a wide range of human rights and that states have failed to meet their obligations to protect against such interference" (Knox, 2020).

[3] David R. Boyd is now special rapporteur, appointed by the HRC in 2018.

The European Court of Human Rights and the Inter-American Court of Human Rights have both engaged in developing jurisprudence to this effect. Thus, for instance, in the first ECHR case in which the "greening" approach can be seen, *López Ostra v Spain* (1994), the Court held that environmental pollution that does not pose a serious threat to health can nevertheless amount to a violation of Article 8 (right to respect for private and family life) when it affects a person's well-being and enjoyment of their home to the point of adversely impacting their private and family life. In subsequent cases, the Court derived a number of important procedural duties from Article 8, including the obligation "that states assess the environmental effects of proposed activities, make environmental information public and provide access to judicial remedies" (Knox, 2020: 84; ECHR jurisprudence on environment-related violations of Article 8 include for instance Guerra v Italy, No.14967/89, Eur.Ct.H.R, 1998; Moreno Gómez v Spain, 4143/02, Eur.Ct.H.R, 2004; Taskin v Turkey, No.46117/99, Eur.Ct.H.R, 2004; Fadeyeva v Russia, No. 55723/00, Eur.Ct.H.R, 2005; and Tatar v Romania, No. 67021/01, Eur.Ct.H.R, 2009). Further, under Article 2 (right to life) the Court established that States are required to develop a legal framework to protect against environmental harms, holding in *Öneryildiz v Turkey* (2004), that "[t]he positive obligation to take all appropriate steps to safeguard life for the purposes of Article 2 entails above all a primary duty on the State to put in place a legislative and administrative system framework designed to provide effective deterrence against threats to the right to life."

The Inter-American Court's jurisprudence in this area focused primarily on upholding the rights of indigenous peoples against industrial encroachment upon their lands. To that end, the Court developed strict consultation duties, requiring States not to proceed with any activities affecting indigenous lands and resources without first engaging in a consultation with the affected community. The process must be free of bribery and intimidation, take place prior to the decision, and those consulted must be adequately informed of the nature and impacts of proposed activities. Accordingly, in *Saramaka People v Suriname* (2007, para. 133), the State was found to have "a duty to actively consult with [the] community according to their customs and traditions […]. This duty requires the State to both accept and disseminate information, and entails constant communication between the parties. These consultations must be in good faith, through culturally appropriate procedures and with the objective of reaching an agreement." Further, the Court's jurisprudence broadly interprets the right to the use and enjoyment of property (Article 21) to include "due consideration of principles relating to the protection of traditional forms of ownership and cultural survival and rights to land, territory and resources" (Maya Indigenous Community of the Toledo District v Belize, Judgment (Merits), Inter-American Court of Human Rights, 2004: para. 115) thus, allowing indigenous peoples to assert their collective rights to traditional territories to which they hold no formal title, in an attempt to fend off environmentally destructive commercial exploitation (see for instance, Mayagna (Sumo) Awas Tingni Community v Nicaragua, Judgment (Merits, Reparations and Costs), 2001).

The relatively well-developed "greening" jurisprudence of these regional tribunals has not yet been matched by jurisprudence on the international level: Knox (2020: 85) notes that, thus far, there has been only one relevant decided case by an international treaty body. The Human Rights Committee in *Portillo Cáceres v Paraguay* held for the first time that the right to life pursuant to Article 6 of the International Covenant on Civil and Political Rights (ICCPR) was violated when Paraguay failed to protect individuals from injury and death resulting from fumigation of toxic chemicals on agricultural fields; and that the government

"had an obligation to investigate and sanction those responsible, provide full reparation to the victims, and take measures to prevent similar violations in the future." Of the two further claims that Knox notes as pending at the time of his article, one has now been dismissed: on 8 October 2021, the UN Committee on the Rights of the Child (UNCRC) rejected on procedural grounds (failure to exhaust domestic remedies) the petition brought by, *inter alia,* Greta Thunberg against several countries for their alleged failure to prevent and mitigate the consequences of climate change (Sacchi et al. v Argentina et al., CRC/C/88/D/104/2019). The decision on the petition brought by the Torres Strait Islanders against Australia before the Human Rights Committee remains pending.

Despite this seeming lacuna in international jurisprudence, the "greening" of human rights at the international level is considered relatively well established, not least because of the many links between environmental degradation and its effect on particular human rights articulated in General Comments, as well as the reports of the independent experts and special rapporteurs appointed by the HRC (and its predecessor, the Human Rights Commission) (Knox, 2020: 85–86). Given the broad congruence on the subject between the opinions of UN human rights experts and the jurisprudence of regional human rights tribunals, it seems difficult to argue with the position adopted by the former Special Rapporteur on human rights and the environment, that human rights obligations relating to the environment are now well-established as being included within the scope of rights, both substantive and procedural, conferred by binding international treaties. On the basis of his review of global and regional sources, the Special Rapporteur was able to put forward a framework of 16 principles that together purport to summarize already existing State obligations relating to human rights and the environment in international law (Knox, 2018).

What little there is of international jurisprudence on the subject appears to concur with his assessment, at least thus far. In the *Portillo Cáceres v Paraguay* decision, the Committee had no trouble in finding, by reference to its General Comment 36 (2018), that States' obligation to protect the right to life includes taking all appropriate measures to address conditions – including environmental pollution – that might threaten that right and its enjoyment by individuals (Human Rights Committee, Comm. No.2751/2016, Portillo Cáceres v Paraguay, UN Doc CCPR/C/126/D/2751/2016 at para 7.3; Human Rights Committee, General Comment 36, 30 October 2018, UN Doc. No.CCPR/C/GC/36). Further, the UNCRC decision in the Thunberg et al. case, though otherwise disappointing, nevertheless also adopted the test for jurisdiction in cases of transboundary environmental harm (articulated by the Inter-American Court of Human Rights in its Advisory Opinion on the Environment and Human Rights, 2017) that gives standing to victims outside the territorial jurisdiction of the country in which the harmful emissions originated (UNCRC, Comm. No. 104/2019, Sacchi et al., 2019: para. 10.7.) indicating a promising willingness to rely upon and accept the more developed regional jurisprudence on environmental norms in this area of human rights law.

3. INTERNATIONAL HUMANITARIAN LAW PERSPECTIVE

International humanitarian law (IHL) regulates the conduct of parties to an armed conflict. It limits the means and methods of warfare and provides rules that protect the victims of war such as civilians and prisoners of war. It is clear nowadays that another factor which should be included in such consideration is the natural environment of the conflict locations (Titze,

2021). Modern warfare methods can not only cause death and suffering of humans, destroy homes or displace populations but also significantly damage and degrade the environment. This last effect can be particularly pernicious as it can spread far beyond the conflict area and continue to negatively influence the lives and livelihoods of populations inhabiting such locations for a long time after the cessation of armed struggle (The Environment and International Humanitarian Law, nd; Bothe et al., 2010: 570). Consequently, human rights of people affected by environmental damage may also be threatened. The World Charter for Nature (1982: principle 5) states that "Nature shall be secured against degradation caused by warfare or other hostile activities."

The general rule of IHL is that the use of methods and means of warfare the purpose of which is to cause widespread, long-lasting and serious damage to the environment or which can be expected to cause such damage shall be prohibited. Before delving into legal details, it is worth adding that in 1994 the first series of guidelines comprising the summary of the currently applicable international rules on the protection of natural environment during armed conflicts was issued by the International Committee of the Red Cross (ICRC). In 2020, the Guidelines were developed further (The Environment and International Humanitarian Law, nd).

The IHL distinguishes between international and non-international armed conflicts, which makes it markedly more difficult to apply and enforce IHL with regard to protecting the environment. Another problem is that the bulk of IHL was developed to deal with conflicts between states, while today most of conflicts around the world are intrastate ones. This renders a number of laws inapplicable, while some of the others are significantly less restrictive in this context. Yet, as a recent study suggests, in the last six decades at least two-fifths of the internal conflicts were in some way linked to natural resources, which makes the question of regulating the matters of environmental protection during such conflicts a vital issue. This section will review first the law applicable to international armed conflicts, and the law applicable to non-international armed conflicts will be analyzed at the end of this section. This by no means exhausts the relevant IHL provisions, but due to the scarcity of place the authors decided to indicate only the most important ones.[4]

Attacks on legitimate military targets should take the environment into account and assess the proportionality of losses to the military benefits (this was also stated by the International Court of Justice in its 1996 advisory opinion on the legality of the use or threat of using nuclear weapons in paras. 30 and 42 – see also Bothe et al., 2010: 577–578). Even in the absence of civilian losses, an attack may become illegal due to too much damage to the environment. Similar rules exist in customary international law, but treaty norms can provide wider protection for the natural environment.

In this context, two treaties are important: the so-called ENMOD Convention of 1976, i.e. the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques and Additional Protocol I to the Geneva Conventions of 1977 Relating to the Protection of Victims of International Armed Conflicts (in the latter, Arts. 35(3) and 55(1) are relevant).

[4] For more details the reader should see: United Nations Environment Programme, 2009; Bodansky, 2003; Austin & Bruch, 2000.

3.1. ENMOD CONVENTION

The Convention provides in Art. I that "Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party. 2. Each State Party to this Convention undertakes not to assist, encourage or induce any State, group of States or international organization to engage in activities contrary to the provisions of paragraph 1 of this article." Art. II explains that within the meaning of Art. I the term "environmental modification techniques" means any measure aimed, by deliberately directing natural processes, to alter the dynamics, composition or structure of the Earth, including its biosphere, lithosphere, hydrosphere, atmosphere and outer space.

Environment-affecting actions include the violation of ecological balance in the region, as well as causing the following: earthquakes or tsunami; changes in the weather; change in climate patterns; changes to ocean currents; changes in the ozone layer and changes in the ionosphere (Dinstein, 2004: 178). Examples of specific techniques can be "cloud-seeding to produce rainfall and floods, as attempted by US forces in Vietnam, and exploding a nuclear device in the oceans to direct a tsunami at the enemy" (Hulme, 2007: 235). However, as Yoram Dinstein (2004: 178–179) notes, according to ENMOD Convention, not all use of environmental modification techniques is prohibited. The effect of Art. I and II is that several conditions have to be fulfilled:

1. only the use of such techniques for military or any other hostile purposes is prohibited (no matter whether for offensive or defensive purposes). According to Art. III, the provisions of the Convention do not prevent the use of environmental modification techniques for peaceful purposes and do not change "the generally recognized principles and applicable rules of international law concerning such use";
2. the prohibited activity must involve the manipulation of natural processes in the environment, i.e. making the environment an instrument manipulated to cause destruction;
3. the prohibited behavior must be deliberate, i.e. the destruction of the environment is intentional and not only collateral damage in an attack against another target. For example, an attack on a chemical industry factory leading to air pollution does not fall within the scope of ENMOD Convention;
4. forbidden behavior must have 'widespread, long-lasting or severe' environmental effects. Without such effects, the use of environmental modification techniques, even for military or other hostile purposes, is not prohibited;
5. the prohibited behavior must cause destruction, damage or injury to the environment. It should be noted here that:
    a. not every use of environmental modification techniques for military purposes or any other hostile purposes causes destruction, damage or injury to the environment, e.g. generating fog using environmental modification techniques in order to facilitate harming the enemy does not cause any harm to the environment;
    b. even if destruction, damage or injury occurs, the victim of environmental modification techniques does not necessarily have to be the environment (although such an effect is most likely). If man could cause an earthquake or tsunami, the likely targets would be major industrial centers or similar non-environmental targets;

   c. destruction, damage or injury must of course be caused by a deliberate manipulation of natural processes; however, it may so happen that these effects go beyond what was intended or anticipated. These circumstances do not matter as long as there is a causal link between the intended action and its effects (i.e. the party is also responsible for the unforeseen consequences).
6. destruction, damage or injury to the environment must be perpetrated on another state – the ENMOD Convention party. It does not matter whether the state is a party to an armed conflict or whether it is a neutral state. Such destruction, damage or injury does not fall within the scope of ENMOD Convention application if it only affects:
   a. the territory of the state causing such destruction, damage or injury (i.e. the state hits its own population and the environment);
   b. the territory of a state that is not a party to ENMOD Convention. Opposing proposals failed.
   c. areas beyond the jurisdiction of any state, e.g. international waters, provided of course that such destructive activity does not affect the shipping of the ENMOD Convention state parties.
7. ENMOD Convention only applies to state parties. This means that the Convention is an innovation, and it does not reflect customary law. According to most international lawyers, this is still the case today (Dinstein, 2004: 178–179).

Taking into account all the conditions enumerated above, the use of the mentioned techniques in most cases would not necessarily lead to damage or destruction of the environment. Thus the ENMOD Convention was intended rather as a tool to prevent developing new means of warfare that would utilize environmental forces (Hulme, 2007: 235). It seems to focus on causing dramatic events such as man-triggered earthquakes, while failing to fully prohibit the less showy techniques of environmental modification, which nevertheless are more likely to be used in modern armed conflicts (e.g. strategic cloud seeding) (Wyatt, 2010: 620). As indicated by Michael Bothe et al., the negotiators working on the Convention did not consider that those provisions would significantly limit the use of conventional warfare; however, this may have left openings for stretching the Convention to cover also biological and chemical warfare (Bothe et al., 2010: 573).

3.2. ADDITIONAL PROTOCOL I OF 1977

In the context of methods and means of conducting military operations, Art. 35(3) of Protocol I (1977) provides that "[i]t is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment." This is the first instance of an IHL provision focused on directly protecting the environment from intentional as well as collateral damage. What is significant is the inclusion of unintended (but foreseeable) damage (The Environment and International Humanitarian Law, nd).

Art. 55, which directly concerns the protection of the natural environment, adds that "[c]are shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population." Additionally attacks against the environment by way of reprisals are forbidden.

Art. 55 thus seems to limit the protection of the environment by adding the words "thereby," which means that the natural environment is protected as long as its destruction may threaten the health or survival of the population. This provision is an expression of a compromise between those who believed that environmental protection was an end in itself and those who believed that protection is only intended to ensure the survival and health of the population. However, it is best to read this provision in such a way that not only is such environmental damage prohibited but that it constitutes a category of a broader prohibition of the use of methods or means of combat that cause widespread, long-term and severe damage to the environment (Dinstein, 2004: 182). What both Articles focus on is prohibiting the use of means of warfare leading to "widespread, long-term and severe damage to the natural environment," and their scope seems to be extensive, at least at first perusal (The Environment and International Humanitarian Law, nd).

3.3. NON-INTERNATIONAL ARMED CONFLICTS

Additional Protocol II Relating to the Protection of Victims of Non-International Armed Conflicts (1977) does not contain provisions similar to the Additional Protocol I. Nevertheless, the ICRC Study on Customary International Humanitarian Law (2005) contains the following rules which in a simplified way declare the provisions of Additional Protocol I to reflect customary international law:

Rule 43: "The general principles on the conduct of hostilities apply to the natural environment:

A. No part of the natural environment may be attacked, unless it is a military objective.
B. Destruction of any part of the natural environment is prohibited, unless required by imperative military necessity.
C. Launching an attack against a military objective which may be expected to cause incidental damage to the environment which would be excessive in relation to the concrete and direct military advantage anticipated is prohibited";

Rule 44, which states that "[m]ethods and means of warfare must be employed with due regard to the protection and preservation of the natural environment. In the conduct of military operations, all feasible precautions must be taken to avoid, and in any event to minimize, incidental damage to the environment. Lack of scientific certainty as to the effects on the environment of certain military operations does not absolve a party to the conflict from taking such precautions";

Rule 45 on causing serious damage to the natural environment:

> *The use of methods or means of warfare that are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment is prohibited. Destruction of the natural environment may not be used as a weapon (see also Hulme, 2007: 204–327).*

According to the ICRC Study of 2005, "state practice establishes [rules 43 and 44 as norms] of customary international law applicable in international, and arguably also in non-international, armed conflicts while rule 45 reflects a norm of customary international law applicable in international, and arguably also in non-international, armed conflicts" (Henckaerts and Doswald-Beck, 2005; Henckaerts, 2000: 13–19).

3.4. OTHER IMPORTANT INTERNATIONAL LEGAL INSTRUMENTS

Protocol III on Incendiary Weapons to the Conventional Weapons Convention (1980) is relevant for the protection of the environment as it prohibits the use of such weapons with respect to forests and plant cover, unless they serve as a coverage or camouflage for combatants and other military targets (in which case they can be attacked). It was adopted mainly in reaction to American actions during the Vietnam war. According to the estimates, the US military forces used in Vietnam more than 100,000 tonnes of napalm. It was a part of the strategy of devastation, which involved incendiary air bombardments, destruction of rice fields, defoliation of plantations and forests, and razing whole areas with the use of explosives and heavy demolition equipment. This environmental warfare resulted in devastation of tens of thousands of square kilometers of cultivated land and wild vegetation, yet ultimately turned to be less effective than expected as in the humid tropical climate fires do not spread easily (Antoine, 1992: 529; Dam de-Jong, 2015: 214).

The Chemical Weapons Convention (1993) prohibits the use of herbicides (preamble). Although they are not classified as chemical weapons, the preamble states that their use is prohibited under the current treaties, yet without specifying which ones. At the time of writing, the Convention may have just referred to the ENMOD Convention and the Additional Protocol I. Today, the ban also reflects customary international law as herbicides can damage the environment (Dinstein, 2004: 188). These two treaties apply to both types of armed conflicts.

Finally, the Statute of the International Criminal Court (ICC) (1998) in Art. 8(2) (b) (iv) lists the following as a war crime, but only if committed in international armed conflicts: "[i]ntentionally 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 also Bothe et al., 2010: 574). Hence, the ICC Statute contains provisions enabling prosecution and trial of perpetrators of environmental war crimes. So far, there has been no such case brought before the ICC.

Most of the IHL provisions examined above directly address the issue of environmental protection. Some of the core principles of IHL can also be applied to environmental protection, and there are provisions that can be read as providing indirect protection to the environment in times of armed conflict (The Environment and International Humanitarian Law, nd; Antoine, 1992: 532). The general principles include those of distinction, military necessity, humanity and proportionality. Indirect protection is offered by provisions prohibiting, for example, the use of certain weapons as their lists include means of warfare that potentially can do serious and lasting harm to the environment, such as chemical or nuclear weapons. Thus bans or limitations of the use of such weapons serve as indirect protection of the environment during conflicts. Limiting the development and use of these weapons can therefore indirectly protect the environment during armed conflict (The Environment and International Humanitarian Law, nd). However, a detailed analysis of these principles deserves a separate study.

The above examination reveals some crucial issues within the current body of relevant IHL regulations. Most importantly, in Additional Protocol I the wording defining when the environmental damage becomes impermissible is simultaneously vague and very restrictive: the threshold of "widespread, long-term and severe" damage is unclear and difficult to meet in practice (Bothe et al., 2010: 570, 576, 578; Bruch, 2000: 43). To eliminate these weak-

nesses, it would be necessary to identify realistic, universally acceptable criteria of environmental damage, which in turn would allow shifting the focus of considerations regarding the environmental law on armed conflict from providing the evidence to applying the law to the facts (Schmitt, 2000: 134).

In the IHL legal framework the environment is treated as a victim, something that has to be protected (Additional Protocol I) or a tool/weapon (ENMOD Convention). Clearly, taking into account the binding law examined above, the protection of the environment or the need to protect it is perceived through the anthropocentric lens of population's health and survival. Hence, the environment should be protected as a value per se; nevertheless, one should keep in mind the fact that the environment may also be treated as indispensable to human survival and protected as such. On the conceptual level, these two approaches to valuation of the environment are very distinct, with the utilitarian, anthropocentric one being most common. Its primary considerations are the ways and scope of the environmental impact on human well-being in matters such as provision of food and water, fuel, clothing, protection against elements and broadly understood quality of life. The other approach focuses on the value of the environment itself, without considering its use for the population. IHL seems to have adopted a mixed approach (Art. 35(3) operates without any anthropocentric connections while Art. 55 does have such connections). Nonetheless, provisions ensuring protection of the environment in such extreme circumstances as war contribute to and strengthen the recognition of a human right to a healthy environment. Even though IHL framework does not allow speaking about the environment in terms of a subjective right to the environment, and even more so, in terms of the environment or any of its elements having any legal personality, it still recognizes the need to protect the environment and pass it on to future generations.

4. CONCLUDING REMARKS

As recognized by the UNHRC in its resolution of 13 October 2021, the enjoyment of all human rights is negatively impacted by the environmental crisis, climate change and loss of biodiversity. The document acknowledges that human rights are interlinked with the environment, stating that protection of the latter is conducive to "the enjoyment of human rights, including the rights to life, to the enjoyment of the highest attainable standard of physical and mental health, to an adequate standard of living, to adequate food, to housing, to safe drinking water and sanitation and to participation in cultural life, for present and future generations." Although not a legally binding document that would give rise to regulatory measures implemented and enforced at State level, this resolution is a milestone. The recognition of the right of everyone to live in a safe, healthy and sustainable environment at the UN level serves as a powerful message (Tigre, 2021). Moreover, in 2022, the UN General Assembly adopted a resolution recognizing "the human right to a clean, healthy and sustainable environment."

Whatever legal and/or theoretical progress might have been achieved in the application of human rights to environmental issues – whether through "greening" of existing rights or the recognition of a free-standing right to a healthy environment – there are at least two interrelated problems that stand in the way of IHRL's contribution to environmental protection being significantly useful in securing a healthy environment for all. The first is naturally

the well-known problem of enforcement, which plagues all international human rights law (and international law overall). A substantial part of that problem is finding an international forum willing to hear a case of human rights violations without undue, and perhaps politically motivated, delay. A number of procedural hurdles can stand in the way of progress. For instance, in most cases, both international and regional tribunals require the petitioners or claimants to have exhausted all of their domestic remedies, unless none exist or doing so would be futile. That default requirement to go through the local courts in the first instance furnishes tribunals with a ready-made excuse not to hear politically sensitive or troublesome cases. The recent dismissal by the UNCRC of the *Sacchi* petition brought by 16 children and youths from various countries seemingly provides an illustrative example. The children's complaint alleged that by failing to prevent and mitigate the consequences of climate change, the five respondent States violated their rights to life, health, and culture, failing in their duty to act in the best interest of the child. The UNCRC dismissed the petition on the ground of failure to exhaust domestic remedies, despite the fact that – as the authors of the petition pointed out – it could take them years to overcome the complex litigation hurdles of the various countries in question, so that the harm that they are seeking to prevent will have already occurred. In response to the latter argument, the Committee offered up a recitation of each respondent State's purported domestic remedies and dismissed the authors' concerns about the prolonged nature of domestic proceedings as lacking substantiation. This seems a rather disingenuous conclusion, given that the complexity of the matter alone (involving, as it does claimants from multiple jurisdictions and transboundary harm) would virtually guarantee that any domestic litigation that was not dismissed outright would take years to resolve. It is difficult to believe that the Committee was not aware of the fact that the whole exercise would be rendered all but pointless by the delay, given the now looming urgency of serious and probably irreversible consequences of climate change already descending upon us.

The second, and related, problem is one of standing. In cases concerning environmental damage, in addition to finding a claimant with the stamina to endure years of procedural setbacks, one must also find someone whose rights have been (or will foreseeably be) demonstrably affected. This may not exactly be straightforward, particularly in cases where environmental destruction carries consequences that unfold slowly and may not become apparent for years, decades, or generations. As we have seen in the case of climate change, that slow unfolding means that it might be difficult to find sufficiently persuasive evidence to convince political or judicial authorities of the necessity for urgent action. This is particularly so where there are competing concerns, such as short- to medium-term rewards of economic development, which tend to be prioritized by both government policy and corporate interests. One needs only to recall the language of the Rio Declaration, which – in the face of mounting evidence of the consequences of environmental damage caused by increased human economic activity – made it clear that exploiting the natural environment for its resources remains "the sovereign right" of pall States, while failing to provide any mechanism for redress if States failed in their promise to keep said exploitation "sustainable" (as they all inevitably did).

As to IHL, international policy has a long way to go before the welfare of the whole ecosystem is adequately recognised and protected in armed conflicts. While IHL is substantially anthropocentric and generally neglects to safeguard nature, some principles can be inferred to offer nominal protection in times of conflict at all levels: custom, general principles and treaties (Hemptinne, 2017). Even though IHL adopts mixed approach, as Art. 35(3) of Additional Protocol I operates without any anthropocentric connections while Art. 55 does have

such connections, the conclusion may be the same namely that IHL is also anthropocentric. Moreover, the threshold for application of Art. 35(3) and 55 ("widespread, long-lasting and serious damage to the environment") is very high, hence difficult to meet. Moreover, the environment is usually a silent victim of war (suffice to look at what is happening in Ukraine now). Existing international humanitarian law offers some protection for nature under customary law. Wide environmental protection may be inferred from the general protection of the civilian population and property. This is based on the elementary rule that armed activities by States should be limited to the objective of weakening the military force of the enemy.

As to IHRL approach, human rights law are by definition anthropocentric so a human right to a clean, healthy and sustainable environment has to be anthropocentric. Environment is protected within the human rights law framework but has no rights. To change this we would have to talk about the rights of the environment and/or personhood which goes beyond the scope of this article. Human Rights Council's and then General Assembly's resolution give reasons for cautious optimism in this regard. It gives advocates of the right to a clean, healthy and sustainable environment an instrument that can be used in litigation. It can also stimulate drafting new legislation at the national and regional levels. Even though the resolution constitutes soft law it influences binding international law from the inside, in other words international and national decision-making processes. Human rights law approach is more progressive and would offer better protection to the environment, even though it is still anthropocentric.

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