
ENVIRONMENTAL PROTECTION IN ARMED CONFLICT: AN INTERNATIONAL LAW PERSPECTIVE

Pavithra D, Assistant Professor, PRIST Deemed to be University,
School of Law, Vallam, Thanjavur¹

ABSTRACT

A right to protect the environment in times of armed conflict has become a central and developing concern in international law. The paper focuses on the legal frameworks that regulate the protection of the environment during a war, and on the contributions of the UN and ICRC, of international treaties like the Geneva Conventions Additional Protocol I and the Convention on the Modification of the International Law Applicable to Armies (ENMOD) and of customary international law for the protection of the environment during wars. The validity of key legal provisions are examined in detail, such as the Geneva Conventions and their Additional Protocols, the Rome Statute of the International Criminal Court and the UN General Assembly Resolutions, including GA Res. 56/4 (2001) and 77/104 (2022). These instruments are all foundational to managing environmental damage in the context of armed conflict, but have very different applicability and efficacy. The decades-long environmental effects of war are starkly illustrated in a case study of the Gulf War (1990-1991) and applied to the current Russia-Ukraine war. This section reviews the legal machinery used to respond to such injury: the UN Compensation Commission set up following the Gulf War, for example, and modern accountability systems in the wake of Ukraine. The paper also presents a comparative analysis of the different legal systems - international humanitarian law, environmental law, international criminal law and human rights law - and how each deals with environmental damage occurring during war in different ways, while highlighting overlaps, conflict and gaps between the various legal systems. The paper concludes that, although the environment is increasingly recognized by international law as a protected 'silent victim' of armed conflict, there are significant gaps in the current law, especially with respect to enforcement and accountability. It is therefore recommending a series of reforms; in particular, the adoption of an international crime of 'ecocide', more widespread ratification of key environmental and humanitarian treaties by all states, the binding ratification of the International Law Commission's Draft Principles on the Protection of the Environment in Relation to Armed Conflicts (PERAC), and the creation of more effective and stringent enforcement mechanisms for environmental accountability during and after Armed Conflict.

¹ Assistant Professor, PRIST Deemed to be University, School of Law, Vallam, Thanjavur

Introduction

Armed conflicts cause catastrophic damage not only to human beings and infrastructure but also to the environment. The warring factions have “polluted water, burned crops, destroyed forests, poisoned soil, and killed wildlife to achieve military objectives,” and the environment has become a “hidden victim” of war. This environmental destruction is detrimental to the well-being of civilians, increases the vulnerability of food and water resources, and can lead to the destabilization of a whole region.² In response to these dangers, the international community has gradually established legal safeguards for the environment in armed conflict. Since the 1970s, rules of application (such as the Environmental Modification Convention and Articles 35 and 55 of the 1977 Additional Protocol I) and customary rules have evolved to prohibit warfare methods that cause “widespread, long-term, and severe damage” to the environment. Notable developments in the 2020’s, such as ICRC Guidelines and the UN International Law Commission’s Draft Principles, indicate an increasing trend towards incorporating environmental concerns into the laws of war. This paper examines these developments in more detail and discusses how the current state of international law on environmental protection in armed conflict can be improved.

International Perspectives

United Nations and International Law Commission

The United Nations (UN) has increasingly been involved in addressing environment-in-conflict-related questions. In 1991, the UN Security Council formally recognized environmental damage in Resolution 687, which imposed post-Gulf War obligations on Iraq, noting that Iraq was “liable under international law for any direct loss [or] damage, including environmental damage and the depletion of natural resources” resulting from its invasion and occupation of Kuwait.³ More generally, the UN General Assembly (UNGA) has reaffirmed that environmental destruction in war has “prolonged effects ‘beyond the period of conflict’ and often ‘beyond the limits of national territories’.” For instance, UN General Assembly Resolution 56/4, adopted in 2001, designated 6 November as an international day of observance to draw attention to the fact that “damage to the environment in times of armed conflict impairs

² Int’l Comm. of the Red Cross, Guidelines on the Protection of the Natural Environment in Armed Conflict 1–3 (2020).

³ S.C. Res. 687, paragraph 16, U.N. Doc. S/RES/687 (Apr. 3, 1991).

ecosystems and natural resources long beyond the period of conflict.” More recently, in December 2022, the UN General Assembly adopted Resolution 77/104, which welcomed the International Law Commission’s (ILC) Draft Principles on the Protection of the Environment in Relation to Armed Conflicts (PERAC).⁴ These 27 Draft Principles (proposed by the UN ILC in 2021-2022) flesh out rules on preventing and remedying the environmental harm caused by war. The ILC draft principles and GA support confirm that the environment must be “respected and protected in accordance with applicable international law and, in particular, the law of armed conflict.”

In addition to resolutions, UN specialized agencies and entities bring their expertise, such as the UN Environment Programme (UNEP), which has carried out rapid environmental assessments of post-conflict damage (e.g., after the Gulf War and in modern-day Ukraine) to help guide remediation and accountability efforts.⁵ Although no specific treaty on war and the environment exists within the UN system, the UN’s normative efforts in resolutions, ILC draft principles, and sectoral treaties (such as ENMOD) demonstrate international consensus that environmental protection is a key part of peace and security.

International Committee of the Red Cross (ICRC)

The ICRC, as the protector of International Humanitarian Law (IHL), has played a prominent role in the interpretation and dissemination of the rules of war and the environment. In 2020, the ICRC issued Guidelines on the Protection of the Natural Environment in Armed Conflict, which replaced its guidelines from 1994.⁶ The Guidelines distill existing IHL (treaty and customary) into a set of recommendations for military forces. The ICRC also offers an online casebook and Customary IHL Study that explain the rules: for instance, according to ICRC sources, “IHL prohibits the use of means of warfare which may be expected to cause widespread, long-term and severe damage to the natural environment” and that “due regard must be given” to environmental protection in hostilities. The ICRC’s Customary IHL Study (2005) cites Rule 45, which prohibits the destruction of the environment as a weapon and reprisals against the environment. Although these rules were originally written for international armed conflicts (IAC), the ICRC reports that “much of this protection has been

⁴ G.A. Res. 77/104, U.N. Doc. A/RES/77/104 (Dec. 7, 2022).

⁵ U.N. Env’t Programme, *The Environmental Impacts of the Gulf War* (1991); U.N. Env’t Programme, *Ukraine: Environmental Assessment and Recovery Priorities* (2022).

⁶ Int’l Comm. of the Red Cross, *Guidelines on the Protection of the Natural Environment in Armed Conflict* (2020).

considered customary law (applicable in both international and non-international conflicts), although ‘a limited number of States’ still deny the customary status of Rule 45.”

The ICRC also promotes policy actions: it urges states to identify and demilitarize ecologically important areas (such as national parks) in conflict, and to enforce the law through criminal repression (such as war crimes tribunals). In this way, the ICRC has contributed to the construction of a global discourse that recognizes the environment as a concern “in times of armed conflict” a view reflected in the words of officials such as Secretary-General Ban Ki-moon, who linked natural resource exploitation to conflict and called for preventive diplomacy.

ENMOD, Geneva Protocols

The law of treaties specifically addressing environmental damage in warfare began in the 1970s. The 1976 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD) prohibits the hostile use of methods that entail “widespread, long-lasting or severe effects” on another state’s environment. ENMOD’s criteria (“widespread, long-lasting or severe”) are cumulative and apply to the use of weather modification (e.g. massive flooding, chemical alteration of ecosystems).⁷ Likewise, the 1977 Additional Protocol I (to the Geneva Conventions) includes two foundational provisions: Article 35(3) prohibits methods or means of warfare likely to cause “widespread, long-term and severe damage to the natural environment,” and Article 55 obliges parties to “take care in warfare to protect the natural environment” against such damage and prohibits using the environment as a weapon or for reprisals. These treaty provisions formalize a stringent standard “widespread, long-term and severe” that must be satisfied for applicability. Additional Protocol II (non-international armed conflicts) does not have specific environmental provisions other than those concerning hospitals and disability conditions, so AP I is again paramount. Other conventions indirectly help, such as some weapons treaties (e.g., incendiary weapons, landmines, chemical/biological weapons) that protect the environment by banning inherently indiscriminate or toxic weapons of war.

It is important to note that most treaty provisions on environmental protection in armed conflict are directed at international conflicts (IAC). This has led to questions about their applicability to civil wars, but customary international law fills the gap for most countries. The ENMOD

⁷ Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques arts. I–II, May 18, 1977, 1108 U.N.T.S. 151.

Convention has 78 signatories, AP I has 172 signatories (as of 2025), but great powers such as the United States of America, Israel, and Iran have not signed AP I (though the U.S. has AP I Common Article 1 incorporated into federal law, and Israel partially complies). The non-universality of AP I means that customary international law is essential for worldwide application.⁸

Customary International Law

In the ICRC's 2005 study on customary IHL, Rule 45 specifically regulates the natural environment: it bans environmental warfare (as a means or end) that causes "widespread, long-term, and severe damage," and prohibits reprisals against the environment. It also requires parties to take "all feasible precautions" to prevent incidental environmental damage. These customary rules, largely borrowed from AP I, are found to have "broad support," although some States (notably Israel and the U.S.) have made reservations about the formulation of Rule 45. Moreover, general customary rules apply: for example, the environment is presumed to be a civilian object, unless it is a military objective, and thus is protected by the general principles of IHL, distinction and proportionality. Common Article 1 of the 1949 Geneva Conventions establishes a universal humanitarian obligation to "respect and ensure respect" for IHL, which customaries include environmental rules. Other customary rules related to IHL, such as the protection of civilian populations and objects, medical and food supplies indirectly protect the environment (e.g., by banning attacks on farmland or water sources). The Martens Clause (in AP I and customary international law) further requires that the interpretation of treaties be guided by the "principles of humanity and the dictates of the public conscience," which, it is argued, implies the protection of life-supporting ecosystems.⁹

Customary international law thus supports most of the core prohibitions on environmental damage in war. The ICRC and most writers on the subject take the view that even in non-parties, the prohibition on wanton environmental destruction is now part of customary law. However, its implementation is not consistent. Nevertheless, the fact that a wide customary norm exists means that international armed forces cannot easily plead ignorance of the rules, since under international law, they must at least take environmental damage into account in

⁸ Int'l Comm. of the Red Cross, Customary International Humanitarian Law, r. 45 (2005).

⁹ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts art. 1(2), June 8, 1977, 1125 U.N.T.S. 3.

their targeting calculations.

Statutory Provisions

Geneva Conventions and Additional Protocol I

The Geneva Conventions of 1949 (I-IV) themselves lack any specific environmental provisions, since environmental warfare was not a major issue at that point in time. Nevertheless, their common articles establish general obligations with relevance to environmental protection. For instance, Common Article 1 establishes the general duty for all High Contracting Parties to “respect and ensure respect” for the Conventions - a duty that has been interpreted as requiring the training and enforcement of all IHL rules, including environmental ones. Moreover, the rules on civilian objects and protected persons indirectly protect resources. Attacks on objects essential to the survival of civilians (food, water, crops, and so on) are prohibited, and cultural property (such as parks and heritage sites) is given special protection.

The actual legislative progress was achieved through the 1977 Additional Protocol I (AP I) to the Geneva Conventions. Article 35(3) of AP I states a specific provision:

“It 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”.

Article 55 also states that “care shall be taken in warfare to protect the natural environment” and specifically prohibits the use of the environment as a weapon or subjecting it to reprisals¹⁰. Thus, AP I sets forth both a prohibitive norm (no serious environmental damage) and a positive precautionary obligation (due care for the environment). These rules are then supplemented by general rules of conduct of hostilities in AP I (such as proportionality, necessity, and precaution), which apply equally to environmental matters. For example, Article 57 requires that belligerents take precautions, which necessarily includes preventing transboundary environmental damage.

AP I has 174 states parties. AP I is limited to international conflicts by Article 87, but its principles have an impact on general law. Some States claim that AP I does not apply to non-

¹⁰ Id. art. 55.

parties (such as the U.S., which is not a party but follows most of AP I as customary international law). However, the text of AP I is frequently quoted. For instance, the Rome Statute of the ICC (see below) repeats AP I's wording on environmental war crimes. The commentary on AP I and the ICRC's publications emphasize that parties "must give effect" to these commitments in training and in weapon reviews.

Rome Statute of the International Criminal Court (ICC)

The Rome Statute of the ICC of 1998, which came into force in 2002, codifies environmental destruction as a war crime.¹¹ In particular, Article 8(2)(b)(iv) states that it is a war crime in IAC to "intentionally launch 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".¹² This provision clearly carries over the "widespread, long-term and severe" standard from AP I. This provision criminalizes only the most serious kind of environmental attack (e.g., intentional poisoning of a water supply or large-scale oil well burning resulting in transboundary pollution). It is important to note that this crime is only applicable in international armed conflict. In non-international armed conflict, Article 8(2)(b)(xx) is frequently cited (although it is worded in terms of 'environmental destruction' to civilians, the actual text is narrower).

However, ICC prosecutors have also investigated environmental damages in the context of other crimes. States such as Ukraine have called on the ICC to investigate environmental damage inflicted by Russian forces as a war crime (or as an act of aggression).¹³ Although there was talk of an "ecocide" crime, no new crime has been introduced as of yet; however, the existing Article 8(2)(b)(iv) of the Rome Statute is the closest available provision to address severe environmental damage. In 2022, the European Parliament went so far as to adopt a resolution to call on the ICC to formally qualify massive environmental damage (such as the Kakhovka Dam attack) as a war crime. The ICC's recognition of environmental war crimes and the recent campaign for an ecocide amendment both indicate the trend towards criminally enforcing IHL's environmental standards.

¹¹ Rome Statute of the International Criminal Court art. 126, July 17, 1998, 2187 U.N.T.S. 90.

¹² Id. art. 8(2)(b)(iv).

¹³ International Criminal Court, Situation in Ukraine, ICC-01/22 (investigation opened Mar. 2, 2022).

Other International Statutes and Resolutions

A number of other international treaties implicitly safeguard the environment in conflict situations, although they are not considered “war laws.” The Chemical Weapons Convention (1993) and Biological Weapons Convention (1972) ban the use of weapons whose effect would be to generally pollute the environment. The Convention on Certain Conventional Weapons (CCW) and Protocol III (Incendiary Weapons) apply, as burning can lead to fires and pollution. But these laws are concerned with methods, not the general tenet of environmental stewardship.

International environmental agreements (such as the 1972 Stockholm or 1992 Rio Conventions) in general do not contain specific provisions for wartime. However, their broad provisions (such as the sustainable use of resources) are technically in force during conflict, except where they are specifically negated by IHL.¹⁴ For instance, a State’s obligations under the Kyoto Protocol would not supersede the IHL provision against poisoning wells, but it emphasizes the value of environmental protection. Environmental agreements are generally inactive during times of conflict.¹⁵

Other important UN resolutions after 56/4 would include UNGA Resolution 61/36 (adopted in 2006), which reaffirmed that “widespread, long-term and severe damage to the natural environment is contrary to the principles of international law applicable in armed conflict” and called for the promotion of IHL with environmental protection. The UN Environment Programme has documented post-conflict restoration (for example, UNEP’s 2009 publication “Protecting the Environment During Armed Conflict” examines the law in place). The Security Council has seldom addressed environmental concerns outside the Gulf War (for example, Resolution 687 (1991) concerning Iraq). More recently, in 2023, the UN Environment Assembly adopted a resolution on “Protection of the environment in areas affected by armed conflict,” urging states to follow IHL and take into account the ILC guidelines (UNEA Res. 2/15 (2022)).¹⁶

¹⁴ Stockholm Declaration on the Human Environment, U.N. Doc. A/CONF.48/14/Rev.1 (June 16, 1972); Rio Declaration on Environment and Development, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I) (Aug. 12, 1992).

¹⁵ Int’l Law Comm’n, Draft Articles on the Effects of Armed Conflicts on Treaties, with Commentaries, 2011 Y.B. Int’l L. Comm’n, Vol. II (Part Two), arts. 2–7.

¹⁶ U.N. Env’t Assembly, Res. 2/15, Protection of the Environment in Areas Affected by Armed Conflict, U.N. Doc. UNEP/EA.2/Res.15 (May 27, 2016).

Case Study: Environmental Damage and Legal Responses

Gulf War (1990-91)

The Persian Gulf War of 1991 is a case in point regarding the damage to the environment during wartime and the legal consequences that follow. During their withdrawal from Kuwait, Iraqi forces ignited more than 600 oil wells, releasing millions of barrels of oil into the desert and the Persian Gulf, as well as damaging other infrastructure. This resulted in the formation of huge “oil lakes,” air pollution, and large-scale contamination of the marine environment. A staggering 700,000 tons of oil were released into Kuwait’s waters, causing massive damage to marine life and the adjacent coastlines. The land environment was affected by oil sea (soil pollution) and massive smoke and soot (causing acid rain).

Legally, the environmental scorched earth policy in Iraq was denounced by the UN Security Council. Resolution 687 (1991) stated that Iraq is liable under international law for any direct loss, damage, including environmental damage and the depletion of natural resources, resulting from, caused by, or attributed to its aggression.¹⁷ Based on this, the UN formed the United Nations Compensation Commission (UNCC) to handle claims. In a historic ruling, the UNCC’s “Environmental Claims Panel” ruled that Kuwait, Iran, Jordan, and Saudi Arabia were entitled to compensation for environmental damage caused by the war. The Panel ruled that even “pure environmental damage” damage to ecosystem services with no commercial value is compensable if it is caused directly by war. The UNCC awarded money for clean-up projects (such as restoring wetlands and oil lakes) and for public health effects of pollution. Eventually, Iraq paid out over \$300 billion in compensation (including for environmental damage), showing how international law can require compensation for environmental war damage.

However, the issue of criminal liability for environmental war crimes was not pursued (no tribunal treated these acts as war crimes at the time). Nevertheless, the strict liability and reparations regime established after the Gulf War set a precedent in recognizing that environmental damage in war can lead to state responsibility and compensation.¹⁸ It also emphasized that Parties to conflict are obliged by international law to prevent such damage.

¹⁷ S.C. Res. 687, paragraph 16, U.N. Doc. S/RES/687 (Apr. 3, 1991).

¹⁸ S.C. Res. 687, paragraph 16–19, U.N. Doc. S/RES/687 (Apr. 3, 1991); U.N. Comp. Comm’n, UNCC at a Glance

Russian Invasion of Ukraine (2022)

The current war in Ukraine has also focused attention on the environmental cost of war. There has been systematic damage to the environment, including flooding caused by the destruction of dams, forest fires, pollution by heavy metals, dangerous industrial accidents, and massive land degradation. Initial estimates by Ukrainian officials suggested that the cost of environmental damage from war was over US\$46-60 billion.¹⁹ For instance, the intentional destruction of Ukraine's Kakhovka Dam in June 2023 (suspicion of Russian action) led to catastrophic flooding of 2,000 km², destroying habitats and releasing 150 tons of toxic lubricants into waterways. The European Parliament and others denounced this as ecocide and "the worst environmental disaster in Europe since Chernobyl." UNEP's preliminary report foresees a "multi-dimensional environmental crisis" - widespread pollution of soil, water, and air, potentially leading to toxic legacies. There are also hundreds of reports of pollution incidents (the Eco Zagroza registry recorded over 2,300 confirmed instances of military activity with direct environmental impact as of mid-2023). Neighboring areas (Moldova, Black Sea) fear pollution spillovers.²⁰

The legal reaction to the Ukrainian environmental damage has involved several forums. Politically, the UN General Assembly has overwhelmingly denounced Russia's environmental damage (for example, Resolution ES-11/3 in March 2022 deplored attacks on Ukraine's nuclear, industrial, and critical infrastructure). Environment-specific UNGA resolutions are in the works. Internationally, Ukraine has relied on its own laws and international law. The Ukrainian government has cited its own criminalization of "ecocide" (which was added to Ukraine's Criminal Code in 2022) but acknowledges that international options are required for full accountability.²¹ Ukraine has formally requested that the ICC investigate Russian crimes, including those committed against the environment (the ICC Prosecutor's office has opened an investigation into war crimes and crimes against humanity in Ukraine, although as of late 2025, environmental damage has not been specifically identified in a separate indictment). The UN General Assembly's Special Session (ES-11) gave the International Court of Justice (ICJ) the power to address provisional measures in the case of "genocide" brought by Ukraine against

¹⁹ Government of Ukraine, Closing Remarks of the Delegation of Ukraine at the Fifth Session of the Intergovernmental Negotiating Committee (Dec. 1, 2024).

²⁰ U.N. Env't Programme, Rapid Environmental Assessment of Kakhovka Dam Breach Ukraine, 2023 (Oct. 25, 2023).

²¹ Eur. Parl., Sustainable Reconstruction and Integration of Ukraine into the Euro-Atlantic Community, Res. 2023/2739(RSP), paragraph 4 (June 15, 2023).

Russia (under the Genocide Convention).²² Although this case does not directly claim a violation of the environment, environmental issues have been raised in the claims, and the ICJ (in its provisional measures order of March 2022) called on both parties to ensure that the environment is not further harmed (although it was not mentioned in the order, the environment was included in the interests in the initial and subsequent submissions).

Regionally, the European Union has been very active. The European Parliament adopted non-binding resolutions to recognize ecocide, support ICC engagement, and provide financial support for the restoration of war-damaged ecosystems. The EU also provided technical assistance (through UNEP) for Ukraine's assessments of environmental damage and demining activities. NATO member states (such as the U.S., France, and the UK) have publicly denounced environmental war crimes and provided environmental legal expertise.

These reactions demonstrate a trend: Unlike in 1991, there is now a pursuit of legal accountability for environmental damage at the international level in a timely manner for the environmental damage in the Ukraine war. The onset of conflict has hastened efforts to fill the legal gap - for example, the ILC principles were in part developed in response to Ukraine's appeals, and there is ongoing consideration of proposing an amendment to the ICC Statute to include ecocide as a crime.

Comparative Analysis

Various legal systems intersect in dealing with wartime environmental damage, sometimes complementing each other and sometimes leaving gaps.

International Humanitarian Law (IHL) - specifically Additional Protocol I - is the main branch of law that specifically deals with the environment in wartime. It is founded on the idea of weighing military necessity against humanitarian concerns (which now include environmental damage). The strength of IHL is its relevance to war: it was designed with war in mind and therefore specifically excludes certain acts (even if it means forbidding the use of powerful weapons or tactics). However, IHL is inherently reactive: it bans the use of certain weapons or tactics after they have been used, but it has little preventive power. Furthermore, IHL only

²² G.A. Res. ES-11/3, Suspension of the Rights of Membership of the Russian Federation in the Human Rights Council, U.N. Doc. A/RES/ES-11/3 (Apr. 7, 2022).

binds states during wartime and says nothing about environmental damage during peacetime.²³

In International Environmental Law (IEL) treaties such as the Framework Convention on Climate Change or biodiversity treaties, there are no specific wartime provisions. During peacetime, states are obliged, for instance, to avoid transboundary damage (Stockholm Declaration Principle 21) and to safeguard vital resources. During wartime, these rules are likely to continue through the principle of continuity, but most states consider that Article 103 of the UN Charter (or the *lex specialis* of IHL) gives priority to IHL rules in the case of a conflict of obligations. In general, general environmental law is silent or secondary in wartime.²⁴ One exception is the no-harm rule, which is a customary norm of environmental law (prohibition on causing significant transboundary harm). Some authors consider that this rule should also apply in the context of armed conflict. In fact, the principles of necessity and precaution, which are inherent in IHL, can be interpreted as a means of implementing the no-harm rule. However, unlike IHL, IEL lacks enforcement mechanisms in wartime, as its procedures (such as arbitration under environmental treaties) are rarely used by belligerent states during a conflict.

International Criminal Law (ICL) - as in the Rome Statute - makes extreme environmental damage a war crime. This introduces an enforcement provision (prosecution of persons) that does not exist in IHL treaties. Nevertheless, ICC prosecution is not universal: only states parties or UN Security Council referrals. Among the major parties, Russia and Ukraine are ICC non-members, making prosecution difficult. (Iraq was not under ICC rules in 1991.) The ICC's high prosecution bar ("widespread, long-term, severe") also means that many damages are not classified as war crimes. Nevertheless, ICL complements IHL by adding bite to the bans, as in Ukraine, where domestic war crimes legislation and ICC deliberations include the environment in armed crimes.²⁵

Human Rights Law (HRL) may also offer a parallel regime. The key human rights, such as the right to life, health, and a clean environment (enjoyed through regional regimes, such as the Aarhus Convention, or through UN Human Rights Council resolutions), apply even in times

²³ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts arts. 35(3), 55, June 8, 1977, 1125 U.N.T.S. 3; Int'l Comm. of the Red Cross, Guidelines on the Protection of the Natural Environment in Armed Conflict (2020).

²⁴ Stockholm Declaration on the Human Environment, princ. 21, U.N. Doc. A/CONF.48/14/Rev.1 (June 16, 1972).

²⁵ Rome Statute of the International Criminal Court art. 8(2)(b)(iv), July 17, 1998, 2187 U.N.T.S. 90.

of conflict. For instance, damage to the environment can breach the right to health or water of civilians. However, HRL is government-focused (concerned with states, not insurgents) and requires balancing (some rights can be waived in emergency situations). Nevertheless, there is increasing experience of applying HRL norms to limit armies: for instance, the European Court of Human Rights has held in the case of *Budayeva v. Russia* that environmental damage (landslide) breached Article 2/8 rights in an emergency situation.²⁶ The full-fledged rights approach to the environment in war remains in its infancy, although UN human rights rapporteurs propose the establishment of a “human right to a healthy environment” even in emergencies (the UNGA adopted a right to a healthy environment in 2022). This may have implications for claims brought by civilians against armies for environmental damage as a rights violation.²⁷

National and Regional Frameworks are quite different. Some states (e.g. Ukraine, France) have national legislation that criminalizes environmental destruction in wartime. Others include IHL provisions in military manuals. At the regional level, few documents specifically regulate environment in wartime. The Kampala Convention of 2009 (AU) deals with environmentally caused displacement, not war-related environment.²⁸ The EU has robust environmental legislation but no war-related competency. However, the EU’s Common Security and Defence Policy now takes climate/environmental security into account. Asian or Middle Eastern states usually apply international rules. If they have national environmental legislation, it often expires or is disregarded in wartime.

In conclusion, by comparison, the law of armed conflict is the most immediately relevant set of rules (at least in treaty form), while international environmental law is background and human rights law is additional interpretive assistance. However, no one set of rules is sufficient to regulate environmental destruction in wartime. The IHL approach (method-oriented) must be combined with environmental law notions (such as the rehabilitation of ecosystems) and criminal enforcement if it is to be effective. Regional differences often simply reflect political reality, countries that have ratified AP I and ICC (such as EU states and African states) are more bound by law than those that have not (such as the U.S. and Russia). This means that in

²⁶ *Budayeva & Others v. Russia*, App. Nos. 15339/02, 21166/02, 20058/02, 11673/02 & 15343/02, ¶¶ 147–160, 165, 2008-II Eur. Ct. H.R. 7.

²⁷ G.A. Res. 76/300, The Human Right to a Clean, Healthy and Sustainable Environment, U.N. Doc. A/RES/76/300 (July 28, 2022).

²⁸ African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention) arts. 1–5, Oct. 23, 2009, 49 I.L.M. 83; African Union, Kampala Convention.

different regions, the focus may be on reparations, criminal prosecution or diplomatic settlement.

Conclusion

Environmental protection in armed conflict has now become a recognized, albeit developing, norm of international law. “Decades of legal development have resulted in a basic rule set: there is a prohibition on methods of warfare that cause ‘widespread, long-term, and severe’ environmental damage; attacks must distinguish between military objects and the environment; and obligations to respect shared natural resources continue in wartime.”²⁹ The ICRC has developed these into guidelines and rules, and the ILC has prepared draft principles to fill the gaps. However, experience indicates that there are still challenges. “Real-world armed conflicts (Gulf War, Ukraine, Syria, Vietnam’s defoliation campaign, African rainforest conflicts, and others) prove that the environment is frequently severely affected.” There is also lack of compliance: “some warring parties brazenly disregard the intent of the rules, and there is little accountability.” The costs of clean-up and restoration are also left to the affected countries for many years after the conflict.

In sum, there is a broad international consensus that the environment is entitled to protection during armed conflict, as evidenced in treaties, custom, criminal law, and UN resolutions. What is needed is stronger enforcement and wider acceptance. Parties to a conflict must be forced, through law, politics, and moral persuasion, to restrict ecological damage. The existing legal framework offers a sound basis, but a secure peace and security in the 21st century require that this basis be consolidated through new instruments and commitments.

Suggestions for Strengthening Legal Protections

1. Enshrine “Ecocide” as an International Crime. In response to civil society and parliamentary calls, adding “ecocide” to the Rome Statute would address a current gap in accountability. This would recognize serious environmental damage as a distinct crime, not tacked on to existing war crimes.

2. Broaden Ratification of Additional Protocol I and ICC Statute. Countries that have not

²⁹ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts arts. 35(3), 55(1), June 8, 1977, 1125 U.N.T.S. 3.

ratified AP I (including the U.S., Israel, Russia) should be encouraged to do so, and those outside the ICC should consider membership. Universalization would eliminate havens for environmental crimes.

3. Enshrine the ILC's Draft Principles. The ILC's PERAC principles address prevention, conduct, and post-conflict restoration. Hardening these soft-law principles into a UN treaty or norm would clarify areas of concern not yet adequately covered (such as the post-conflict protection of naturally contaminated areas).

4. National Implementation and Training. Countries should include environmental war protection provisions in military manuals and national law. Training in environmental IHL, environmental impact assessments in operational planning, and rules of engagement can help prevent environmental crimes.

5. Environmental Protection in Peace Agreements. In ceasefires and peace agreements, parties should agree to protect key ecosystems and conduct joint assessments of war damage. This was accomplished, for example, in the Bosnian conflict where water infrastructure was specifically protected in ceasefire agreements.

6. Strengthen Peacekeeping and Peace building Mandates. UN missions in post-conflict zones should monitor environmental conditions (air, water, pollution) and assist in cleanup. Mandates of Security Council missions could explicitly include environment.

7. International Fund for War-induced Environmental Damage. Similar to the UNCC for the Gulf, a permanent mechanism could be established to collect contributions to remediate conflict zones, irrespective of legal liability, particularly in situations where attribution is unclear.

8. Reporting and Transparency Requirements. Parties to an armed conflict could be obliged (e.g. through UNGA resolution or ILC principles) to submit reports of environmental incidents to a UN entity. Such information could help deter.

9. Public Awareness and Advocacy. Ongoing advocacy efforts (by NGOs, research institutions, media) are required to keep "green violations" in the public eye. Commemoration of the International Day on Environment and War (6 Nov) and education on environment within human rights education efforts help to establish norms.

10. Research and Technical Support. Assistance with scientific and legal research on environmental damage in conflict (such as through UNEP or research grants) would help to build a stronger factual foundation for claims and to inform rule development.

The above steps would ensure that the current legal framework is more effective. However, in order for the environment to be protected in conflict, there is a need for militaries to consider environmental damage not as collateral damage but as a serious consequence with legal and strategic costs. The law has developed; now it is time for states and international institutions to close the gap between the law and conflict.

References

1. Additional Protocol (I) to the Geneva Conventions of 12 August 1949, 8 June 1977, arts. 35(3), 55.
2. Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD), 18 May 1977.
3. Rome Statute of the International Criminal Court, 17 July 1998, art. 8(2)(b)(iv).
4. Geneva Conventions for the Protection of War Victims (I-IV), 12 August 1949, Common Art. 1.
5. UNGA Res. 56/4 (2001), “Observance of the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict”.
6. UNGA Res. 77/104 (2022), “Protection of the Environment in Relation to Armed Conflicts.”
7. ICRC, Guidelines on the Protection of the Natural Environment in Armed Conflict (Geneva, 2020).
8. ICRC, Customary International Humanitarian Law (Jean-Marie Henckaerts & Louise Doswald-Beck eds., 2005) (ICRC Customary Law Study).
9. Cymie R. Payne, “UN Commission Awards Compensation for Environmental and Public Health Damage from 1990-91 Gulf War”, ASIL Insights (Aug. 2005).
10. Bruno Demeyere, Editorial: Protection of the Environment During Armed Conflict, 103 Int’l Rev. Red Cross 7 (Dec. 2022).
11. Rigmor Argren, The Obligation to Prevent Environmental Harm in Relation to Armed Conflict, 103 Int’l Rev. Red Cross 591 (Dec. 2022).
12. W. Casey Biggerstaff & Michael N. Schmitt, Protecting the Environment in Armed Conflict: Evaluating the US Perspective, 103 Int’l Rev. Red Cross 707 (Dec. 2022).

13. Hellen Huang, Curtailing Environmental Harms in Armed Conflict - New UN Principles for Protecting the Environment During Wartime, Human Rights Watch (Nov. 4, 2022).
14. United Nations Environment Programme (UNEP), Protecting the Environment in Relation to Armed Conflicts (2023) [Final Draft].
15. Gabija Leclerc et al., Russia's War on Ukraine: High Environmental Toll, European Parliamentary Research Service, EPRS At a Glance (July 2023).
16. Jiayi Zhou & Ian Anthony, Environmental Accountability, Justice and Reconstruction in the Russian War on Ukraine, SIPRI Backgrounder (25 Jan. 2023).
17. Benjamin Neimark et al., War on the Climate: Greenhouse Gas Emissions of the Israel-Gaza Conflict, SSRN (May 30, 2025).
18. International Day for Preventing the Exploitation of the Environment in War and Armed Conflict, UN.org.