

Efficacy of Existing Rules for Environmental Protection in Non-International Armed Conflicts

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Abstract

Modern combat has a cost that goes far beyond human suffering, dislocation, and material damage. Modern conflicts have also resulted in significant environmental destruction and deterioration. As a result, environmental degradation, which frequently extends beyond the borders of conflict-affected countries, can pose a threat to people's lives and livelihoods even after peace agreements are signed. While public concern about environmental harm in armed conflict was significant at the time of the Diplomatic Conference that established the Additional Protocols, the new laws of non-international armed conflict at the time did not explicitly address the issue. The insufficiency of environmental protection in non-international armed conflicts is highlighted in this article. It also discusses which international treaties now safeguard the environment in non-international armed conflict. The research will make a unique contribution to the literature by identifying, investigating, and debating key existing international law provisions in order to offer a foundation for informed debate; a discourse that, hopefully, will lead to proper environmental protection in non-international armed conflict in the future.

Keywords: Environment, armed conflict, non-international, protection, convention

1. Introduction

The natural environment is typically one of the war's casualties. Environmental protection during armed conflict has received very little interest in recent times. Indeed, and for obvious reasons, during armed conflict, the primary emphasis of attention has not been on the conservation of flora and wildlife, but rather on the protection of armed conflict victims (Ballentine, 2003). The environmental repercussions of combat, on the other hand, should not be overlooked. When implementing the principle of proportionality and the regulations on military necessity, environmental issues must be taken into account (Quéguiner, 2008). However, the regulations governing non-international armed conflict are insufficient. Under IHL, there is no particular legal norm or treaty that provides such protection. In several aspects, non-international armed conflict is protected against environmental damage by conventional armed conflict regulations. "However, deciding whether customary law applies in non-international armed conflict is difficult because "violations of the law are as numerous as they are severe" in armed conflict, and customary law requisitions are strict. In the case of an international armed confrontation, environmental protection is largely supplied" (Meron, 1996). This research study focuses on the

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general protections offered by International Humanitarian Law in non-international armed conflict (IHL). It quickly remembers several other important sections of IHL after addressing these general guidelines before turning to alternative options for strengthening and clarifying or strengthening IHL in this area, taking into account the protection offered by international human health and social law, legal protection of the environment in armed conflict can be achieved.

2. Research Methodology

When conducting research on any subject, there are two methodologies that are widely used: primary and secondary. The primary methodology is one in which the research is conducted in the field or in the laboratory. The secondary methodology, on the other hand, is one in which data is gathered through internet, magazines, or books. Aside from that, there are two forms of studies in terms of data and information application and explanation, *viz-*(a) qualitative research and (b) quantitative research. The study is based mostly on an assessment of main legal texts, such as treaties, legislation, state documents such as international agreements, and international court and tribunal judgements. Secondary legal sources such as treaty commentaries, international organization evaluations and reports, publications, scholarly articles, and media reports are used to examine these original documents. The legal research methodology adopted in this paper is fundamentally doctrinal legal analysis. The research also includes a comparative analysis of several branches of international law and practice.

3. Definition of Terms

The notions of 'non-international armed conflict'; 'damage to the environment/injury to the environment'; and the 'prohibition of harm to the environment' are established and defined to provide a framework for the argument throughout the research piece.

3.1 Non-International Armed Conflict

In reaction to conduct that was unregulated by international law during the Spanish Civil War, non-international armed conflict was initially recognized as a category of armed conflict in Article 3 common to all four 1949 Geneva Conventions (Wills, 2011). No clear definition is found of what constituted an armed conflict that was not fought on an international level. "If a non-international armed conflict occurs in the territory of one of the High Contracting Parties, each party to the conflict must apply, at the very least, the provisions of Common Article 3. Additional Protocol II, created in response to the brutality of the 'liberation wars' against colonial control in the 1950s and 1960s, reinforced this view of non-international armed conflict by defining non-international armed conflict as a violation of Article 1 of Additional Protocol I" (Pilloud, 1987). Armed conflict of international in nature, as defined according to article 2 of the four Geneva Conventions, includes "all cases of declared war or of any other armed conflict which may arise between two or more of the High Contracting Parties, even if the state of war is not recognized by one of them," as well as

“armed wars in which people confront colonial dominance” (Aldrich, 1991). As defined by the United Nations, “Non-international armed conflict must rise above situations of internal disturbances and tensions, such as riots, isolated and sporadic acts of violence, and other activities of a similar sort” (Junod, 1983).

Treaty-law clauses are silent on what constitutes an armed conflict in general. On 2 October, 1995, in the case of *Prosecutor v Tadic*, 1995, the first ruling issued by the ad hoc International Criminal Tribunal for the former Yugoslavia (ICTY) made a significant contribution to the rules of armed conflict by providing criteria that could aid in determining what constituted an armed conflict situation. (Gagro, 2010) “According to the Appeals Chamber of International Criminal Tribunal for the Former Yugoslavia,

An armed conflict arises whenever there is recourse to armed force between States or protracted armed violence between governmental forces and organized armed groups or such groups within a State (Calvo-Goller, 2005, p. 114).

As a result, non-international armed conflict is characterized as long-term armed violence that is more serious than internal disturbances or riots but falls short of state conflict, occupation, or resistance to colonial dominance, oppression, or racist regimes. The factual conditions must be evaluated, according to the *Tadic Appeals Chamber Decision*, depending on the length of the violence, its intensity, and the extent of organization of the opposing parties” (Cullen, 2010). Non-international armed conflicts are recognized under international law in a variety of ways, making it impossible to know which one applies in any specific situation.

3.2 Environmental Harm

Hulme has done extensive research on the topics of environmental damage and harm in the setting of armed conflict. She claims that

The concept of environmental harm is a complex one, requiring various multi-faceted considerations such as the precise element of the ecosystem in question, as well as other factors, whether there is a minimal threshold for ‘damage,’ and whether the damage is natural, manmade, or both (Hulme, 2010, p. 675).

She emphasizes that the impact on the environment varies depending on whether the problem is assessed from a scientific or legal standpoint. In any event, from a legal standpoint, the level of environmental harm required will always be larger than from a scientific standpoint” (Lyon & Maxwell, 2008). Hulme has devised and thoroughly researched a sophisticated set of criteria for estimating environmental damage in armed conflict settings. The Committee of the Red Cross (ICRC) issued the first guidelines for Military Manuals and Instructions on the Protection of Armed Conflict in Time of Armed Conflict in 1994, in response

to a request from the United Nations General Assembly, to aid in the instruction and training of armed forces on IHL protecting the natural environment” (Prescott, 2018). The worldwide legal framework has continued to evolve since then. “At the same time, international armed conflict continued to wreak havoc on the environment, underscoring the ongoing need to reinforce and promote greater regard for IHL. The ICRC has updated its 1994 Guidelines to reflect developments in treaty and customary international Humanitarian Law, as part of the ICRC's efforts in relation to the environment and climate crisis, and in accordance with the recommendation of a 2009 expert meeting organized by the United Nations Environment Program and the ICRC” (Lostal, 2017). In this regard, the discussion that follows in this paper, mostly reaffirms that environmental harm should be determined on a particular instance basis, taking into consideration all of the details of the situation.

3.3 Environmental Harm Prevention

The concept of protection of environmental protection or prevention of environmental harm prevention are used synonymously all throughout the article. Between these three terms, there are nuances and differences to be made. The term ‘protection’ refers to some form of proactive action performed to protect the atmosphere from damage. The terms ‘prevention’ along with ‘prohibition’ refer to restrictions on the aptitude to take acts that would if not harm the environment. According to Hulme, the word "environmental protection" is used in broad environmental discourse to refer to a wide range of ecologically beneficial activities that states must do. (Hulme, 2010). As a result, the article does not focus on the distinctions between protection, prevention, and prohibition, but rather utilizes these categories to refer to restrictions on behaviour that try to prevent environmental harm.

4. Treaty-based Laws on Non-International Armed Conflict

Bothe provides that International Humanitarian Law is the set of rules that control warfare and armed conflict for humanitarian reasons. “IHL is the first body of legislation to consider in a study of environmental protection during armed conflict” (Bothe, 2010). “IHL is primarily concerned with two issues: the protection of persons who are not, or are no longer, participating in hostilities, and the protection of persons who are not, or are no longer, participating in hostilities and constraints on warfare's means and methods, such as weapons and military tactics” (Marsh, 2009). Inner unrest, such as individual acts of aggression, is not protected under IHL, which only applies to armed combat, according to Marsh. International humanitarian law also differentiates both situations of armed conflict (IAC) involving multiple countries and non-international armed conflict (NIAC) involving either conventional armed forces or armed non-government organizations battling one another. “International armed conflict is governed by a hefty array of set of laws, including those outlined in the major IHL treaties, whereas internal armed conflict is governed by fewer laws” (Al-zahrani, 2018). This section looks at the regulations included in

the four basic sources of IHL in order to assess the level of environmental protection provided by IHL and to better understand the challenges of enforcing it.

4.1 Treaty Law

According to Pilloud, “Several international treaties, protocols, and similar instruments, such as the four Geneva Conventions of 1949 and Additional Protocols I and II of 1977, have been drafted and accepted by states” (Pilloud et al., 1987). Other specific conventions and protocols dealing with various aspects of warfare, such as limiting or prohibiting biological, chemical, and nuclear weapons, include the ENMOD Convention of 1976, which prohibits environmental modification techniques, and a number of other specific conventions and protocols dealing with various aspects of warfare, such as limiting or prohibiting biological, chemical, and nuclear weapons (Meron, 1987).

4.2 Customary Law

According to Caminos, “Unlike treaty law, which applies only to those states that formally ratify the treaties, shared international standards are shaped by widespread and consistent state practice, based on the universal belief that specific responsibilities bind all states” (Caminos & Molitor, 1985). Customary law, in this context, refers to *jus cogens* principles that cannot be deviated from, along with significant infringements as specified by Additional Protocol I to the four Geneva Conventions.

4.3 Soft Law

The term ‘soft law’ according to Ahmed and Mustofa “Refers to quasi-legal instruments that have no legally binding effect or have a weaker binding force than traditional law, which is frequently contrasted with soft law by being referred to as ‘hard law’”. The phrase ‘soft law’ has traditionally been linked with international law, but it has recently been applied to other fields of domestic law as well” (Ahmed & Mustofa, 2016). Environmental law has risen to prominence in recent years, and it is now one of the most important aspects of international law. According to Miles,

From a hesitant beginning with little or no law at all, global environmental law has grown into a vast and complex topic encompassing multiple treaties, declarations, general principles, and customary international law standards. Soft law is defined as the enunciation of a standard in a non-binding written form, such as charters, resolutions, declarations, or recommendations of the international community that are not intended to be as legally binding as international treaties (Miles, 2012, p. 56).

Manko uttered that “It is a key source of international law that has formed and developed quickly in the current period of globalization, particularly to address

delicate topics like as trade and commerce, human rights protection, environmental conservation, and so on. Despite the fact that the concept of soft law has been around for a long time, experts have yet to agree on why states regulate it or whether it is a logical category” (Manko, 2021). This uncertainty reflects a wide range of global agreement types and geopolitical events that develop them to some extent. “Despite the fact that soft law is widely recognized as a secret mechanism for harmonizing the hard-law regime and playing a critical role in the implementation of international environmental legislation, Reefat has been added” (Refaat, 2019).

4.4 Case Law

Cassese iterated that “decisions made by national or international judicial authorities that are useful for pact analysis or as proof of customary law, as well as assessing the realistic gaps in existing IHL rules domineering ecological shield during armed conflict. Despite the fact that there are no explicit regulations protecting the atmosphere in non-international armed conflict, treaty-based regulations of armed conflict do, to some extent, indirectly restrict environmental damage” (Cassese, 2012). “Article 3 Common to all Geneva Conventions, some articles of Additional Protocol II, and numerous prohibitions on non-international armed conflict techniques and means of combat are widely cited as possibly in the lack of precise restrictions on environmental degradation, the environment could be protected” (Mrema et al., 2009).

It seems inadequate that a treaty-based system exists in the present day to control behaviour in non-international armed conflict without statutory measures governing the amount to which the environment can be harmed. “Specific provisions of treaty-based rules of non-international armed conflict will be acknowledged and studied in this chapter to see if and to what degree they contribute to improving environmental safety in non-international armed conflict”(Smith, 2019).

4.5 Common Article 3

The Common Article 3 will be the first to be addressed. In non-international armed conflict, it is frequently regarded as providing a pretence of environmental protection since it encompasses all non-international armed engagements. According to Lopez, “Article 3 common to all Geneva Conventions has been wished-for as a way of barring ecological damage in non-international armed conflict in circuitous way”(Lopez, 2006).In this sense, Common Article 3 is neither the stronger nor most compelling rule in this regard. Elder provided that “The Geneva Conventions' Common Article 3 of 1949 was the first provision in the laws of armed conflict to recognize non-international armed conflict as a distinct type of armed conflict” (Elder, 1979). “All armed conflicts that are not covered by Common Article 2 of the four Geneva Conventions of 1949 are covered by Common Article 3.Common Article 3 applies to all armed confrontations that are not between states, according to Jean Pictet is “An almost unhoped for expansion of Article 2.” (Crawford, 2016).

Common Article 3 lays out a set of minimum humanitarian action principles that must be followed in all cases. It focuses on the bodily integrity and, as a result, the protection of civilians and non-combatants. As a result, it forbids any use of violence against anyone engaging in an armed conflict. Environmental injury can be viewed as a violation of one's dignity, as well as harsh and inhumane treatment. However, demonstrating that these ideas have any foreseeable impact on the ban on ecological harm in non-international military conflict would be a stretch.

4.6 Protocol- II (Additional Protocol)

Protocol- II (Additional Protocol) is largely treated as “A major advance over common article 3” because its contents are more thorough and clearer (Odello, 2008). According to Pilloud,

In comparison to the treaties that govern international armed conflict, Additional Protocol II is rather basic (Pilloud et al., 1987, p. 119).

However, Meron has said unequivocally that “Firm sections of Additional Protocol II could be construed broadly enough to give indirect environmental protection in non-international armed conflict” (Meron, 1996).

The material range of application for Protocol II is fairly limited. According to Cassese, “The armed conflict must first take place on the territory of a state that is a party to Additional Protocol II unless the provision in question has become part of the corpus of customary international law. A state must be one of the armed conflict's parties” (Cassese, 1984). Schmitt commented that “The other party must be a well-organized non-state armed force with proof of a command structure capable of implementing the Protocol and commanding a certain amount of territory. As a result, the requirements of Additional Protocol II do not apply to confrontations between two non-state armed groups” (Schmitt, 2010).

Although this Protocol has a better chance of preventing environmental degradation in non-international armed conflicts than Common Article 3, it doesn't apply to all non-international military conflicts; therefore, any ecological gain derived from its provisions is a competent development. Provisions of Additional Protocol II will be divided into two basic topics in this section: (i) Property protection as a Means of Environmental Protection and (ii) Persons' Protection as a Means of Environmental Protection.

4.6.1 Property Protection as a Means of Environmental Protection

It is controversial whether the environment as an entire can be considered as material goods. Whereas a few components of the atmosphere can be designated as personal or community property, determining who owns what is not always straightforward. However, by recognizing aspects of the environment to be protected as property, indirect bans on environmental damage might be established. According to UNEP (United Nations Environment Program),

preserving the environment as property could result in more protection than that is provided by Additional Protocol I's direct environmental protection requirements (Mrema et al., 2009). "Although the term 'property' is not defined in either of the conventions, it may be assumed to embrace natural resources" (Jong, 2009). It has been noted in the context of the Additional Protocols. The provisions of Additional Protocol II prohibiting pillage, protecting substance necessary to the national population's continued existence, protecting machinery and installations containing hazardous armed forces, and protecting artistic substance and places of devotion will be discussed in turn in the following discussion.

4.6.1.1 Pillage

Pillage is considered one of the oldest prohibitions in international humanitarian law. It first appeared in a feeble version in the Lieber Code (Lieber, 1863) during the American Civil War, but according to Bothe, "Its insertion in the Hague Regulations on the Laws and Customs of War on Land 1907 gave it more legal weight" (Regulations, 1907). It has been connected with pillage, spoliation, and plundering since this time. Since this period, it has been associated with pillaging, spoliation, and plundering. "Plunder was introduced to the Geneva Conventions as a forbidden act in the context of international armed conflict. It was also put into Article 4(2)(g) of Additional Protocol II, ensuring that it would apply in non-international armed confrontations" (Bothe et al., 2013).

According to Newalsing, "The ICTY's (International Crime Tribunal for Former Yugoslavia) Appeals Chamber has affirmed the rule against pillage's customary nature, which is substantiated by evidence submitted in the ICRC's Customary Law Study" (Newalsing, 2008). As a result, pillage might be measured to be relevant as a substance of norm to all non-international military conflicts, rather than being limited to those that fall within Additional-II. As it can be applicable to specific cases of natural resource exploitation, an increasing aspect of current non-international military will conflict. "Plunder is one of the strongest means of causing environmental degradation in non-international armed conflict. According to Sandoz et al Additional Protocol II covers both coordinated pillage and loot originating from individual acts of violence" (Pilloud et al., 1987).

In the year 2005, according to the Democratic Republic of the Congo v Uganda decision, the International Court of Justice established a specific precedent for natural resource extraction to be termed looting, which is described in greater detail below. "The subject of conflict resource exploitation is prevalent in the current research on the environment and non-international armed conflict, although it does not come naturally within the area of protection envisaged by armed conflict legislation in general" (Lundberg, 2007). Because appropriation of enemy property is not forbidden under Additional Protocol II, any state-owned natural resources appropriated by non-state actors during a non-international armed conflict would be exempted from the article 4(2) (g) prohibitions (Jong,

2009). In this circumstance, the plunder provisions' primary goal of limiting environmental damage would be greatly hampered. Jong (2009) stated:

Despite this, the prohibition of pillage provides a powerful mechanism for holding non-state armed organizations accountable for the exploitation and looting of natural resources during armed conflict while plunder is a somewhat effective technique of preventing environmental damage in non-international armed conflict, it is important to be aware of its limitations and not to view pillage as the new promise on the horizon. (Jong, 2009)

4.6.1.2 Starvation

The use of famine as a weapon of war is expressly prohibited under Article 14 of Additional Protocol II. Foods, farming regions that generate food products, harvests, animals, drinkable water systems, and hydro systems are all included in Article 14 as things important to the civilian population's survival. Article 14 does not contain an entire list of indispensable objects; the mentioned objects are preceded by the term such as, indicating that other similar objects may be protected by this article. Furthermore, Article 14 safeguards the stated objects from being destroyed, removed, or rendered worthless at any time during hostilities.

Article 14, on the other hand, only prohibits the demolition of the aforementioned things if it would cause residents to starve. According to Torrelli, "The prohibition on attacking agricultural areas, which are a key part of the natural environment, may be the closest thing to direct environmental protection in non-international armed conflict law. Crop and cattle protection is equivalent to direct environmental protection in non-international armed conflict. point out that the verbs 'attack', 'destroy', 'remove', and 'make worthless' are used to encompass a wide range of scenarios, including chemical agents polluting water supplies or defoliants destroying crops because the civilian population would be without drinking water, residential water, or agricultural water if they were not present(Torrelli,1987).Freeland pointed out that, "Poisoning of important water wells and drinking water installations as part of a government-supported plot by the Arab Janjaweed militia to eradicate or expel ethnic black Africans residing in that region are examples of state-caused environmental degradation under Article 14" (Freeland, 2005).

4.6.1.3 Protection of Dangerous Forces-Containing Works and Installations

Bombardment on structures and sites sheltering hazardous troops are prohibited in non-international armed conflict under Article 15 of A P II. It goes like this "works or installations containing dangerous forces, namely dams, dykes and nuclear electrical generating stations, shall not be made the object of attack, even where these objects are military objectives, if such attack may cause the

release of dangerous forces and consequent severe losses among the civilian population”(Corn, 2006). According to Henckaerts,

This clause has been recognized by the International Committee of the Red Cross (ICRC) as customary in both international and non-international armed situations. However, the ICRC notes significant reservations made by government ‘signatories to the Additional Protocols, as well as reservations made by states not bound by the Additional Protocols, such as the United States, in making this evaluation (Henckaerts, 2005, p. 87).

The reserving states express concern that they cannot ensure that such installations would always be spared, because these installations are thought to have a high military worth in particular instances. As per Gaudreau, “Instead, the reserving nations agree to target the enumerated installations within the confines of a strict application of the proportionality principle” (Gaudreau, 2003).

4.6.2 Persons' Protection as a Means of Environmental Protection

Although the power of Common Article 3 to avoid environmental damage was limited at best, Additional Protocol II's protection of persons has a little broader scope. Articles 13 and 17 on the protection of people and the prohibition of forced relocation of civilians are predominantly significant in this view. According to Smith, “From the perspective of customary law, the concept of distinction is crucial to the support of these two articles. We will look at how civilian protection in non-international armed conflict can contribute to better environmental conservation in this part” (Smith, 2019).

4.6.2.1 Civilian Population Protection and Environment

The goal of provisions protecting the civilian population is to safeguard civilians. According to Ratner, “The degree to which ecological damage could result in a contravene of Articles 13(1) and 13(2), as discussed below, would be greatly dependent on the conditions at the time of the assault and the extent to which the civilian population was directly affected” (Ratner, 2001). As per Homer-Dixon, “Whether the attack occurred in a densely populated urban area or a sparsely populated rural area; for example, would determine the extent to which any environmental harm caused could imperil human protection under Article 13” (Homer-Dixon, 1991). The relevant clauses of Article 13 are as follows:

The civilian population as a whole, as well as individual civilians, shall be protected from the hazards posed by military activities, and the civilian population as a whole, as well as individual civilians, shall not be attacked. Acts or threats of violence with the primary goal of instilling fear in the civilian population are forbidden (Homer-Dixon, 1991, p. 567).

According to Brissman, “Terrorism could be spread among civilians by starting forest fires, killing and maiming domestic and wild animals, or destroying large areas of the ecology that the civilian population depends on. Using the environment to scare populations, to put it another way, could be deemed a violation of the laws of armed conflict” (Brissman, 2007). The legality principle would almost probably apply to this indirect constraint on environmental damage.

4.6.2.2 Prohibition on Civilians being Forced to Move

During or as a result of military confrontation, civilians may not be forcibly transferred and article 17 of Additional Protocol II focuses on this ban. When the environment is harmed with the intent of prohibiting residents from residing in a certain location, and as a result, they are forced to relocate, this may constitute a infringement of article 17. According to Robbins,

The actual environmental damage might take many different forms, including meddling with water sources and water tables, contaminating rivers, targeting food supplies, destroying agricultural land, and so on. In effect, the environment on which the inhabitants relied was deliberately sabotaged in the hopes of forcing the residents who lived there to flee. Forcibly transferring humans has a clear environmental dimension, and a prohibition on such activities, if followed or enforced, can have an equally clear effect on preventing environmental damage in non-international armed conflict (Robbins et al., 2014, p. 319).

5. Limitations on Non-International Armed Conflict Methods and Means of Warfare

Smith in his scholarly work iterates that “In Common Article 3 and Additional Protocol II, there are no limitations on the means or techniques of warfare. Despite this, many weapons have the potential to cause considerable and long-term ecological harm. As a result, laws dealing with the use of weapons which might result in indirect ecological shield in non-international armed conflicts” (Smith, 2012). Treaties governing invention and exercise of weaponry; on the contrary, are negotiated far more regularly. These treaties; however, do not automatically extend to non-international armed conflict. There are international legal instruments that states have negotiated and ratified. As a result, ecological destruction sustained by a weapon that is either illegal or used outside of the limits imposed on it may be outlawed.

5.1 Geneva Protocol, 1925

According to Baxter, “The Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare, usually called the Geneva Protocol, is a treaty prohibiting the use of chemical and biological weapons in international armed conflicts”(Baxter &

Buergenthal, 1970). “It was signed at Geneva on 17 June, 1925, and entered into force on 8 February, 1928. It was registered in *League of Nations Treaty Series* on 7 September, 1929. It prohibits the use of "asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices" and "bacteriological methods of warfare". This is now understood to be a general prohibition on chemical weapons and biological weapons, but has nothing to say about production, storage or transfer” (McElroy, 1991). According to Cassese, “This type of armed conflict did not exist before 1949, the 1925 Geneva Protocol does not apply expressly to non-international armed conflict. In non-international armed conflict; however, it may apply as a matter of customary international law” (Cassese, 1984).

5.2 Biological Weapons Convention, 1972

To injure or kill humans, animals, or plants, biological weapons distribute disease-causing microbes or toxins. As per Littlewoods, “The Biological Weapons Convention (BWC), or Biological and Toxin Weapons Convention (BTWC), is a disarmament treaty that effectively bans biological and toxin weapons by prohibiting their development, production, acquisition, transfer, stockpiling and use (Littlewood, 2005). Frank further added that, “The treaty's full name is the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction. The Biological Weapons Convention of 1972 does not specifically extend to non-international armed conflict, but customary international law may allow it to do so. The Convention ‘protects the environment in armed conflict from weapons that are likely to cause severe environmental degradation’ by prohibiting the development, manufacture, and stockpiling of biological weapons because natural environment, as well as wildlife and plants, are vulnerable” (Frank, 1975). “Article II of the BWC mandates each state party to take all essential safety procedures to "protect populations and the environment" when implementing the Convention” (Goldblat, 1997).

5.3 Environmental Modification Convention, 1976

“The Environmental Modification Convention (ENMOD), formally the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, is an international treaty prohibiting the military or other hostile use of environmental modification techniques having widespread, long-lasting or severe effects” (Juda, 1978). “While this Convention looks to be far ahead of the pack in terms of prohibiting environmental damage during armed conflict, it only outlaws the employment of environmental modification techniques in future conflicts, rather than environmental damage in general. Furthermore, the ENMOD Convention does not apply expressly in non-international armed conflict, and the extent to which it has become part of international armed conflict is debatable” (Yuzon, 1996). According to Bassiouni, “Article 1(1) prohibits governments from causing harm to other states through environmental change during armed conflict. In armed confrontation

between states and non-state parties, it may not be binding, or at least not on the non-state party. The precise nature of the types of international organizations envisioned by Article 1(2) is not specified in an annex to the ENMOD Convention, which clarifies important phrases. As a result, the extent to which this Convention applies to non-international armed conflict is uncertain” (Bassiouni, 2007).

5.4 Convention on Certain Conventional Weapons, 1980

The Convention on the Prohibition or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, as revised on December 21, 2001, is commonly known as the Inhumane Weapons Convention. As per Mathews, “The United Nations Convention on Certain Conventional Weapons (CCW or CCWC), which was signed in Geneva on October 10, 1980 and went into effect in December, 1983, aims to prohibit or limit the use of certain conventional weapons that are deemed highly harmful or have indiscriminate effects. The full name of the treaty is the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons that may be deemed excessively injurious or have indiscriminate effects. Land mines, booby traps, incendiary devices, blinding laser weapons, and clean-up of explosive relics of war are all covered under the convention” (Mathews, 2001).

As a result of a 2001 “revision to Article 1, the 1980 CCWC is now expressly applicable to all non-international armed engagements (Mrema et al., 2009). Several protocols exist under the Convention, some of which have the ability to legally ban environmental damage caused by the use of forbidden weapons. Protocol V on unexploded ordnance” (Meier, 2016); for example, requires parties deploying either type of weapon to “enable substantial restoration to former environmental circumstances and guard the environment indirectly from post conflict dangers” (United Nations, 1981).

Protocol III's preamble expressly prohibits using incendiary weapons to target the environment unless the environment is a military objective in the circumstances. As a result, Protocol III to the CCW contains a conditional restriction on environmental damage. “It is uncertain to what extent this treaty can bind non-state actors. Because the Convention was just amended in 2001 to make it relevant to non-international armed conflict, it cannot be considered customary international law” (Durant & Brito, 2019).

The convention's Protocol II governs the use of landmines. Landmines, by their very nature, are indiscriminate and offer a particularly dangerous long-term risk to both humans and animals. Landmines and “all delay explosive devices or those that have not exploded, for whatever reason” (Pilloud et al., 1987). Landmines represent a particular threat to large animals, as discussed in Chapter 1 of convention's Protocol II. Landmines, ironically, may have a positive impact on the environment by reducing human activity in areas where they are known to be dispersed, allowing for the growth or regeneration of biodiversity.

5.5 Chemical Weapons Conventions, 1993

As per Hooijschuur, “The Chemical Weapons Convention (CWC), also known as the Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and on their Destruction, is an arms control treaty administered by the Organisation for the Prohibition of Chemical Weapons (OPCW), an intergovernmental organization based in The Hague, Netherlands” (Hooijschuur et al., 2002). “The Chemical Weapons Convention of 1993 restricts the destruction of chemical weapons by "dumping in any body of water, land burial, or open pit burning," reducing the human and environmental costs of disposal” (Mesilaakso, 2005). According to Jha, “The CWC has an immediate relevance on the protection of the natural environment during armed conflict, because chemical compounds can have especially direct and severe environmental repercussions. Chemical components of specific material war remains can have long-term negative consequences on humans, animals, flora, water, land, and the environment as a whole. The Convention's applicability in non-international armed conflicts; however, is questionable. The Convention's text does not clearly state that it applies in non-international armed conflicts, although it may do so as customary international law in these situations” (Jha, 2014).

6. Findings from the Research

Many aspects of international law, such as international norms, international crimes law, international environmental legislation, and human rights legislation, safeguard the environment and restrict the use of natural resources during armed conflict, either directly or indirectly. Articles 35 and 55 of Additional Protocol I to the 1949 Geneva Conventions do not adequately protect the environment during non-international armed conflict due to the strict and imprecise threshold required to demonstrate harm. Weapons and battle methods (such as military tactics) are restricted, which provides indirect environmental protection; nevertheless, developing technologies, such as the use of depleted uranium, have yet to be handled - except by broad norms of international law of war. Provisions that preserve civilian property and objects, such as industrial installations and cultural/natural assets, provide indirect environmental protection.

The majority of international law safeguards for the environment during armed conflict were designed for international conflicts and may not necessarily apply to domestic conflicts. There is a scarcity of legal precedent on environmental protection during military confrontation due to the tiny number of cases submitted before the courts. There is no permanent intergovernmental system in place to track legal infractions and settle claims for ecological harm caused by global military conflicts.

To avert damage to the environment, the ethical criteria of distinction, requirement, and appropriateness may not be sufficient. Despite rising public awareness, ecological destruction during times of inner conflict remains an unappreciated side impact of the war. There is no universally accepted UN

concept of a "war commodity" or when measures should be employed to restrict the illegal exploitation and trade of such resources.

Environmental protection during the NIAC is controlled by a patchwork of inconsistencies, omissions, and ambiguities drawn from a variety of sources, including IHL, worldwide environmental legislation, international crimes law, and human rights legislation. Natural factors are not self-contained protection concerns; they must be linked to others, such as civilian targets or human dignity.

Under the Rome Statute, climate change and natural resource depletion could be a component or underlying conduct of many other crimes. As a result, the International Criminal Court (ICC) as well as national criminal courts of ICC Parties may hold it accountable for criminal guilt and prosecution. As a result, the International Criminal Court (ICC) and national criminal jurisdictions of ICC Parties are both capable of prosecuting it. Internal armed conflicts within States Parties and foreign conflicts between States Parties are both covered.

Pillage as an international crime is particularly important since it can be used to justify the theft of environmental assets during conflicts. Finally, the current legislative framework is insufficient to enable proper environmental regulation during times of internal armed conflict.

7. Some Useful Recommendations

In June 1991, the England Round Table Meeting on a "Fifth Geneva" Convention on the Environmental protection in Time of Military Action, which would cover both IACs and NIACs, was held in London. Despite the fact that the meeting produced a draft for a text draft, it is still only a figment of ecological lawyers' minds. This does not, however, rule out the prospect of it being adopted. If carefully structured and published with the assistance of the nations, the comprehensive policy text will be the most helpful commitment in favor of environmental preservation during times of conflict. When designing the new instruments, keep the following factors in mind:

- i. Non-international military conflicts should, first of all and primarily, be included within the purview of its regulation.
- ii. Describe how environmental degradation has an effect on public health, economy, and stability, as well as hampers sustainable reconciliation.
- iii. Defining clearly essential phrases like "widespread", "long-term", "severe" etc.
- iv. Address the problem of the continued application of international environmental legislation during armed conflict.
- v. The relationship among environmental damage, proportionality, and military necessity should be stated more clearly rather than being left to the discretion of military leaders.
- vi. The definitions of nature reserves, locations, artifacts, and geological cycles are introduced. It might be done in the form of a catalogue of preserved objects that could be designated Environmental Heritage, or it could be done in the form of a broad definition (similarly to World Heritage List, provided by the World Heritage Convention).

- vii. Addressing the question as to whether only deliberate acts should result in prosecution and/or punishment, and whether the regulations should also cover ignorance.
- viii. Maintaining disarmament treaty bans and focusing on the use of these weapons.
- ix. Either adopting the notion of ecocide or creating new massive environmental breaches under the instrument, incarcerating ecological destruction not only in the IAC but also in the NIAC.
- x. Establishing a new entity to oversee the implementation of the new device - punitive and/or quasi-punitive.

8. Conclusion

The number of non-international armed conflicts on the rise in today's world, many of which are tied to environmental issues. There seem to be no specific prohibitions against environmental degradation in the laws of military confrontation in NIAC. Other armed conflict regulations are frequently argued to indirectly protect the environment. However, no comprehensive legal examination into the environmental implications of any non-international military conflict legislation has been conducted. As more than just a result, it is plausible that the legislation on this subject is at best ambiguous. The regulatory protection of damage to the environment in non-international military confrontation is argued to be woefully insufficient to overcome present conflict situations all through this study.

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