

International Liability for Environmental Damage during Armed Conflicts

المسؤولية الدولية عن الأضرار البيئية أثناء النزاعات المسلحة

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Abstract:

The global community expresses increasing concern over environmental conservation during armed conflicts, as military actions significantly threaten ecosystems and civilian well-being. Despite existing international agreements and humanitarian law principles aimed at limiting environmental harm, such as proportionality and military necessity, these guidelines have proven insufficient.

International law mandates that parties responsible for environmental damage must cease such actions, prevent recurrences, and rectify the harm done. Moreover, military or political leaders may face individual criminal charges for war crimes resulting in substantial environmental degradation, provided the damage is intentional or grave, and exceeds justifiable military necessity.

Keywords: Environment, Armed conflict, Reparation, Individual criminal liability.

الملخص:

ازداد اهتمام المجتمع الدولي بمسألة الحفاظ على البيئة ولا سيما أثناء النزاعات المسلحة، كون الضرر البيئي الناتج عن استخدام الأسلحة أو العمليات العسكرية يشكل تهديداً مباشراً للنظم الإيكولوجية

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ولحياة المدنيين على المدى الطويل، وبالرغم من أن المواثيق الدولية خاصة القانون الدولي الإنساني كرست مبادئ عامة للحد من الأضرار البيئية، مثل مبدأ التناسب والضرورة العسكرية، إلا أن ذلك لم يحد من الإضرار بالبيئة.

وللحد من ارتكاب الأفعال الغير مشروعة أقر القانون الدولي التزام أطراف النزاع المسببة للضرر البيئي بالتوقف عن ذلك وضمان عدم تكراره، وإصلاح ما نتج عن هذا الضرر، كما يمكن أن تقوم المسؤولية الجنائية الفردية للقادة العسكريين أو السياسيين أمام المحكمة الجنائية الدولية، في حال ارتكاب أفعال تشكل جرائم حرب تتسبب في تدمير واسع النطاق للبيئة، متى كان الضرر مقصوداً أو شديداً بما يتجاوز مبررات الضرورة العسكرية.

الكلمات المفتاحية: البيئة، النزاعات المسلحة، التعويض، المسؤولية الجنائية الفردية

1. Introduction

The impact of war goes beyond just human and material losses; it now also affects our environment, including essential natural resources and ecosystems. This shift has sparked greater international interest, especially among experts in international law.

As a result, we've seen the enact of various international conventions, such as the clear guidelines laid out in the Geneva Conventions of 1949 and the two Additional Protocols from 1977, along with environmental agreements like the 1976 Convention on the Prohibition of Military or Hostile Use of Environmental Modification Techniques.

The International Law Commission has been busy crafting rules about how states should be held responsible for wrongful actions, including those that harm the environment. Meanwhile, international law has played a key role in shaping principles around liability and compensation.

It's important to recognize that the fallout from using chemical and biological weapons, the destruction of oil facilities, and the damage to our water, soil, and air adds new layers to the tragedy of armed conflicts. These issues have serious, long-lasting effects that jeopardize global environmental security and hinder sustainable development. This is why it's crucial to hold conflicting parties accountable for environmental harm, viewing the environment as a shared heritage of humanity that deserves protection, even during times of war.

1.1. Reasons behind Choosing the Topic:

The decision to explore international liability for environmental damage during armed conflicts comes from a mix of personal and objective motivations:

a/ Personal Reasons:

- The strong interest in diving deeper into a subject that merges international humanitarian law with international environmental law. This interdisciplinary approach not only enriches my understanding but also enhances academic research in a meaningful way.
- The psychological toll of ongoing international events and conflicts, which wreak havoc on the environment -like those in the Gulf, the Balkans, Ukraine, and beyond- highlights the urgent need for research in this delicate area. We need to find ways to curb these violations, especially those justified by military necessity, and to implement measures for compensating the damage and holding accountable those responsible for these unlawful actions in international criminal courts.

b/ Objective Reasons:

- The environmental destruction caused by armed conflicts is no longer just a fleeting issue; it has evolved into one of the most pressing threats to global environmental security. The repercussions extend far beyond the battlefield and the nations involved, impacting our shared international environment.
- This topic is relatively new in the realm of international law, paving the way for further exploration.
- While there are international legal frameworks aimed at protecting the environment during conflicts, their effectiveness is often limited when faced with the scale and severity of real-world violations. This situation calls for a closer examination of how adequate these rules are and how they can be practically enforced.

1.2. The Research Problematic:

With the severe environmental destruction that comes from armed conflicts -think about the devastation, water and soil pollution, and other serious violations- I became curious about how effective international conventions are in addressing the environmental damage caused by these

conflicts. The goal is to hold those responsible accountable, both civilly and criminally. So, here's the question: Do the provisions of international law create a solid framework for establishing civil and criminal liability for the harm done to the environment during armed conflicts?

1.3. Methodology:

To tackle the issue of international liability for breaching environmental protection laws during armed conflicts, we need to take a thoughtful analytical approach. In this context, we'll delve into the rules of international humanitarian law, explore various legal perspectives, and examine international practices and judicial decisions that pertain to environmental protection in the midst of armed conflicts.

1.4. The Research Plan:

This study will be organized into two main parts: The first part will focus on the conditions necessary for establishing international liability for environmental damage that occurs during armed conflicts. The second part will address the issue of liability for environmental damage resulting from armed conflicts.

2. Liability for Environmental Damage during Armed Conflicts

With the growing use of destructive military tactics that have lasting effects on the environment, a pressing legal question has come to the forefront: who is accountable for the environmental damage caused by parties in conflict? Inflicting harm on the environment is increasingly seen as a tactic of coercion or punishment, a concept known as the 'comprehensive environmental destruction strategy.' This situation prompts us to consider how much responsibility armed conflict parties hold in the eyes of the international community and the populations affected by their actions.

This sense of responsibility has shifted from being just a moral duty to a binding international legal obligation, rooted in rules that come from customary law and international treaties, including principles of international humanitarian law, international environmental law, and international criminal law. The implications of this responsibility can take on different forms, ranging from civil to criminal liability, which we will explore by looking into the criteria for establishing international responsibility and the legal consequences that follow.

3. Conditions for the Establishment of International Liability

Discussions international liability in the realm of environmental protection during armed conflicts, it's important to first look at the legal foundations that hold individuals accountable for environmental damage caused in these situations. To establish this liability, there are key conditions that must be met, as they are vital for triggering accountability measures and pursuing reparations.

3.1. Existence of a Binding International Legal Rule Criminalizing Environmental Damage

To establish international liability, there needs to be a legal rule on a global scale that makes certain acts criminal. This rule can be clear-cut, like what we see in Article 55 of the Additional Protocol I to the Geneva Conventions,⁽¹⁾ or it can be more subtle, as with general customary rules that forbid causing significant harm across borders.

Essentially, this means that the party at fault has violated an international obligation, whether that obligation comes from a legal rule, customary law, or breaches the protective measures set for the environment under international humanitarian law, such as the destruction of vast areas of forests.⁽²⁾

It's crucial to recognize that non-governmental organizations have become increasingly concerned about the environmental harm caused by armed conflicts. This, combined with the lack of enforcement of humanitarian laws aimed at protecting the environment, has prompted the International Committee of the Red Cross to declare in its 2005 guide on customary humanitarian law that the environment is indeed safeguarded under international humanitarian law, whether that's explicitly mentioned or just implied.

It's crucial to understand that the ENMOD Treaty from 1976, along with the Rome Statute of the International Criminal Court established in 1998, lays down a solid legal framework. These documents define environmental damage as a crime when there's an intention to inflict such harm.

This framework complements various international agreements focused on environmental issues and highlights the United Nations' commitment to upholding international humanitarian law, especially regarding environmental protection during armed conflicts.

A prime example of this is the series of resolutions passed in this domain, particularly Resolution 47/37 of 1992, which has consistently stressed that protecting the environment during times of war is not just a moral duty but a legal requirement that must be adhered to.

3.2. *Committing an Internationally Unlawful Act – Unjustified Harm to Environment*

To hold someone accountable on an international level, it's needed that an individual under international law must commit an internationally wrongful act that results in a breach of an international obligation, causing harm to other states.

Regarding the definition of a wrongful act, Dr. Mohammed Hafeedh Ghanem defines it as “the violation by states of their obligations established under international law, resulting from their actions or omissions that are not permitted by international law or that infringe upon the rights recognized by that law for other subjects of international law”.⁽³⁾

Referring to Article 19 of the International Law Commission's draft of 1976, it highlights that if a peremptory norm in international public law is violated, it leads to increased liability for that serious breach. It also points out that the core of international liability lies in the illegality of actions taken by any subjects of international law, whether they are states or organizations.

The International Law Commission characterized unlawful acts as serious breaches of international rules stemming from treaties focused on environmental protection, which are designed to safeguard the fundamental interests of the global community.⁽⁴⁾

By extrapolating Article 40 of the International Law Commission's draft of 2001, it shifted away from the term “international crime” to emphasize serious violations of peremptory norms (**jus cogens**), underlining the critical nature of these violations for the international community.

It's important to note that international liability can emerge from serious breaches of binding rules found in international treaties related to environmental protection, such as:⁽⁵⁾

- A serious violation of a commitment that is crucial for maintaining international peace and security.

- A significant breach of a fundamental obligation to protect and preserve the human environment, particularly in light of the severe pollution threatening the air and seas.

3.3. *Attributing Unlawful acts to an Individual under International Law*

The term “attribution of unlawful acts” refers to linking such acts to their perpetrator, who is one of the subjects of international law, represented by states and international organizations.

In contrast, natural persons are only held accountable by their states for their actions if they act on behalf of the state or for its benefit, or when their states fail to prevent or punish them for unlawful acts.⁽⁶⁾

Unlawful conduct is defined as any violation of an international obligation imposed by a peremptory norm of international law, whether this action is positive, involving the performance of an act, or negative, involving the omission of an act.

In this context, the action attributed to the state is deemed unlawful due to its failure to respect its international treaty or customary obligations in accordance with the principles and provisions of international law.

This means that if damage results from the state fulfilling its legal obligations within the confines of public international law without acting arbitrarily,⁽⁷⁾ its international liability does not arise, as it has exercised its rights within the limits permitted by international law.

It is important to note that for an unlawful act to occur, the following two elements must be present:

- The action must be attributed to the state, an international organization, or an individual under international law.
- This behavior must have caused harm as a result of actions taken by an individual under international law, whether through their authority, subordination, or for their own account and benefit.⁽⁸⁾

It's crucial to understand that unlawful activities aren't just confined to the states involved in international law during conflicts; they also include insurgent groups and liberation movements engaged in internal armed struggles.

However, when we take a closer look at Additional Protocol II from 1977, which deals with non-international armed conflicts, it

becomes clear that it doesn't explicitly address environmental protection against the damage caused by these internal conflicts.

This gap is often used by those involved in the conflict as a reason to justify environmental harm. On the other hand, Additional Protocol I, which focuses on international armed conflicts, clearly outlines environmental protections in Articles 35/3 and 55 thereof.

3.4. The Environmental Damage Poses a Serious Threat

Environmental damage refers to significant harm inflicted on the natural environment on a large scale, or over an extended period, or of a severe nature due to military actions during armed conflicts, posing a threat to human life and ecosystems in a manner that cannot be easily remedied or resolved in a short time.⁽⁹⁾

By extrapolating Article 35, Paragraph 3 of the First Protocol of 1977, it was consistent with the previous definition, as it stated that “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”.

The guidelines laid out in Articles 35 and 55 of the first additional protocol highlight the importance of assessing environmental damage to determine international liability based on these criteria:⁽¹⁰⁾

- The damage inflicted on the natural environment must be significant.
- This damage should be widespread and may affect the protected environments of neighboring states.
- The environmental damage must be long-lasting, as its effects and remnants can persist for extended periods, potentially remaining even after necessary measures have been taken to restore the situation to its original state.

Moreover, **the gravity of environmental damage criterion** has become the primary criterion for holding states or warring parties accountable for the harm inflicted on the environment.

International law does not impose liability for any incidental effects of military operations; it is limited to serious and significant damages that affect the fundamental structure of the environment.

This is explicitly stated in Article 35, paragraph 3 of the Additional Protocol I of 1977, which prohibits the use of weapons or means of

combat expected to cause “widespread, long-term, and severe” damage to the natural environment.

The International Court of Justice, in its advisory opinion on nuclear weapons in 1996, emphasized that the environment isn't just the concern of one generation; it's a “fundamental interest of the international community as a whole”. They pointed out that any major environmental damage is a breach of international law.⁽¹¹⁾

A current example of significant environmental harm can be seen in the ongoing war in Ukraine (2022–present). The bombing of nuclear power plants and dams has raised serious concerns about potential radiation leaks and the flooding of extensive agricultural lands. This scenario clearly fits the definition of “serious and imminent danger” that international law aims to regulate.⁽¹²⁾

3.5. The Environmental Damage shouldn't have been Compensated Beforehand

Compensation for environmental damages is seen as one of the key ways to address harm in international law. The goal is to bring things back to how they were before the harmful act took place or to lessen its impact. However, this principle is tied to an important rule: the damage for which compensation is being claimed must not have already been compensated. This rule is in place to avoid double compensation and to uphold justice and fairness.⁽¹³⁾

It is important to note that the purpose of compensation is to:

a/ Prevent duality of compensation

This means that the same affected party or multiple parties do not receive multiple compensations for the same environmental damage, and thus, the reparation for the damage is only to the extent of what has been incurred.⁽¹⁴⁾

b/ Protect justice and fairness

This condition serves as a guarantee to achieve justice between the harmed party and the party responsible for the damage; the one who caused the environmental damage should not be penalized more than once for the same harm, and the harmed party should not benefit twice for the same damage.⁽¹⁵⁾

c/ Maintain stability in legal transactions

The stability of the legal system requires that the ruling or agreement regarding compensation be final, unless new or subsequent damages arise that were not covered by the initial compensation.

It is important to note that in practical application, international courts and arbitration bodies require parties to demonstrate that the claimed damage has not been previously addressed or compensated. In international environmental disputes, countries often submit reports to verify whether the damage has been remedied or remains unresolved.⁽¹⁶⁾

In addition, during armed conflicts, environmental resources such as forests or water are often destroyed. If the affected state is compensated through an international fund or a UN mechanism, it cannot later claim additional compensation for the same damage.

This principle was stipulated by the United Nations Committee in relation to compensation for environmental damage from the Gulf War in 1991. The goal is to ensure that claims haven't been compensated before, promoting fairness and preventing any overlap in compensation.⁽¹⁷⁾

The condition that environmental damage should not have been compensated before is a key part of the international environmental compensation system. This principle is all about fairness when it comes to fixing harm; it helps avoid paying out twice for the same issue and promotes the idea of actually restoring the environment instead of just throwing money at the problem.

Added to that, it strikes a balance between the rights of those affected and the obligations of those at fault, which ultimately helps to foster greater environmental justice.

3.6. Availability of Criminal Intent

The criminal intent is regarded as the essential mental element (*mens rea*) for establishing international criminal liability for environmental damage during armed conflicts. It is not sufficient for the harmful act to occur; it must also be accompanied by the knowledge and intention of the party responsible for the damage.⁽¹⁸⁾

The jurisprudence distinguishes between two forms of intent in environmental crimes:⁽¹⁹⁾

- **Direct intent:** where the perpetrator aims to cause environmental harm as a means to weaken an opponent or to achieve military gains, such as through forest burning or contaminating water sources.
- **Probable intent:** where the primary goal is not to harm the environment, but the perpetrator almost certainly anticipates that their military act will result in harmful environmental effects and accepts the associated risks.

It's crucial to understand that the concept of criminal intent is backed by Article 35, paragraph 3 of the Additional Protocol I from 1977. This article clearly states that “the use of methods or means of warfare intended to cause widespread, long-term, and severe damage to the natural environment is prohibited”.

By looking at this article, we can see that international lawmakers view criminal intent as a key factor in enforcing this prohibition.

Given how important this principle is, Article 55 of the First Additional Protocol highlights the need to safeguard the natural environment from any attacks that could seriously harm the health and survival of the population. This means that to prove criminal intent, one must show that the military leader or commander was aware of the possible environmental impacts of their actions and still chose to go ahead, fully understanding the risks involved.

It is important to note the practical challenges in proving criminal intent in environmental crimes, as parties often justify their acts in armed conflict under the guise of “military necessity”.

However, the principle of proportionality in international humanitarian law imposes strict limitations, making it unacceptable to cause significant environmental damage if the anticipated military gains are limited or hold little strategic value.⁽²⁰⁾

One notable example that sparked debate over proving criminal intent in environmental matters is the use of toxic herbicides such as “**Agent Orange**” during the Vietnam War. This was done to wipe out forests and crops, leading to devastating environmental and health consequences.

A similar scenario unfolded during the Gulf War when, in 1991, oil wells in Kuwait were set ablaze, causing extensive environmental pollution. In both cases, there were serious questions about whether

military leaders had criminal intent and if their main objective was to cause environmental harm or to gain tactical advantages in warfare.⁽²¹⁾

The proof of criminal intent in environmental crimes during armed conflicts leads to the international accountability of the perpetrator before the International Criminal Court. This is because actions that cause extensive and long-lasting harm to the environment can be classified as war crimes. Furthermore, the presence of intent eliminates any claims of ignorance or the invocation of military necessity.

From the above, we can conclude that criminal intent lies in both the knowledge and the will regarding harmful environmental outcomes, and the continuation of actions that damage the environment despite this awareness. This serves as an important criterion for distinguishing between internationally unlawful acts and lawful actions justified by military necessity under the provisions of international humanitarian law.

4. The Liability for Environmental Damage during Armed Conflicts

Once we've laid out the elements of international liability for environmental harm caused by armed conflicts, a whole range of legal consequences comes into play. These aren't just about financial compensation; they also involve criminal accountability, political positions, and diplomatic relationships.

Added to that, the obligations can linger on for years after the conflict has wrapped up. The impact can differ based on who's responsible -whether it's a state, an individual, or an organization- as well as the type of damage done, its nature, and how much it breaches international laws.⁽²²⁾

4.1. Civil Liability

a/ Obligation to Cessation and Non-repetition

- ***Obligation to cessation from causing damage to the environment during armed conflict***

Commitment to Cessation and Non-repetition is a crucial aspect of international liability for those involved in conflicts, especially when environmental damage occurs during warfare. This liability isn't just about paying for the damage done; it also means there's an obligation to

put an end to illegal activities and prevent their recurrence in the future.⁽²³⁾

According to Article 30 of the International Law Commission's draft on State Responsibility for Internationally Wrongful Acts of 2001, "The State responsible for the internationally wrongful act is under an obligation, to cease that act, if it is continuing; to offer appropriate assurances and guarantees of non-repetition, if circumstances so require".

In simpler terms, this means that a state or armed group must stop military actions that lead to significant environmental harm, like setting oil wells on fire or attacking industrial sites that cause chemical or radioactive pollution.

▪ ***Obligation to non-repetition***

It means taking preventive measures to prevent the recurrence of the same harmful acts, embodied in:

- Issuing high-level military orders and instructions not to target elements of the environment.
- Amending national policies and military doctrines to comply with the rules of international humanitarian law.
- Accepting international or regional oversight mechanisms to ensure compliance with non-repetition.⁽²⁴⁾
- Amending combat doctrine to comply with Article 35 of Additional Protocol I of 1977, which prohibits the use of means and methods of warfare that cause widespread, long-term, and severe damage to the natural environment.

Referring to international precedents, the significance of this commitment is evident in the Gulf War of 1991, during which the United Nations Security Council mandated Iraq to cease the burning of oil wells that caused catastrophic environmental damage. This represents a direct application of the obligation to refrain from harmful acts (**Obligation to Cessation**).⁽²⁵⁾

In addition to the principle of non-repetition, international organizations have sparked significant debate regarding the use of depleted uranium munitions due to their toxic and long-lasting effects on the environment during the Balkan conflict in 1999. United Nations

reports have called for measures to ensure that such practices won't be not repeated.⁽²⁶⁾

From what we've discussed, it's clear that the obligation to avoid repetition serves a preventive purpose, focusing on bolstering environmental protection in future conflicts. This obligation continues to apply even after any monetary compensation has been settled or damage has been fixed, ensuring that international agreements on environmental protection are respected.

b/ Restitution in kind or status quo ante

status quo ante means “returning the situation to its original nature, i.e. before the harmful act occurred. If it is impossible to restore that thing to its original nature, then a sum of money must be paid to replace that and at the real value”.⁽²⁷⁾

The restitution in kind is regarded as one of the optimal forms of compensation, essentially restoring matters to their original state before the harmful behavior occurred, as if nothing had happened. Therefore, it is a return to the previous condition. The fundamental principle in damage repair is the obligation to restore the situation to its prior state whenever possible.

Referring back at the projects outlined in Article 35 of the International Law Commission'2001, which deal with state responsibility for unlawful acts, the term “restitution” refers to the process of restoring a situation to its former state. This restoration should be feasible and not create a burden that outweighs the benefits gained from it, rather than opting for compensation.⁽²⁸⁾

In the context of environmental damages arising from armed conflicts, restitution manifests in various forms, such as cleaning rivers and waters from oil or chemical substances resulting from military operations, reforestation of forests that have been burned or removed, as well as rehabilitating agricultural lands that have been damaged due to landmines or bombings.⁽²⁹⁾

Restitution is characterized by its restorative nature, aimed at returning the natural balance and ecosystems to their prior state, reflecting the humanitarian and ethical dimension of international environmental law.⁽³⁰⁾

It is worth noting that the restitution in kind are often difficult to implement due to the severity of environmental damage during conflicts

(such as the destruction of oil wells or radioactive contamination), which makes financial compensation more common. Nevertheless, restitution in kind remains an important principle as they reflect the restorative nature of international responsibility.⁽³¹⁾

This is what the International Court of Justice concluded in its advisory opinion regarding the legal consequences arising from the construction of a wall in the occupied Palestinian territory. The Court determined that Israel is obligated to return the land, orchards, olive gardens, and other fixed properties that were taken from individuals or legal entities for the purpose of building the separation wall on the occupied Palestinian lands.⁽³²⁾

The restitution in kind, from the view of ICJ, indicates that the occupying state should restore the Palestinian territory, the properties of its residents, and its demographic and geographic conditions to the state they were in prior to the commencement of wall construction.

It's essential to note that the focus on the principle of restitution in kind comes before any financial compensation. The value of land, especially in Palestine, is vital in shaping the identity of the Palestinian people. This land carries deep existential, historical, and cultural importance as they defend their sacred sites and fight against Israeli occupation.

The situation intensified into the conflict in the Gaza Strip in 2021, particularly with the events in the Sheikh Jarrah predominantly Palestinian neighborhood of occupied Jerusalem, where the Israeli occupation attempted to evict Palestinian families from their homes and transfer them to Israeli settlers.⁽³³⁾

c/ Financial compensation for environmental damage during armed conflicts

The term “monetary or financial compensation for environmental damages” refers to the obligation of the party responsible for causing the harm to commit to paying a monetary amount to the affected party, provided that it is proportional to the severity of the damage incurred.

Alternatively, the court may order the party that engaged in unlawful conduct to pay a financial sum that assists the affected party in remedying the damages they suffered as a result of those unlawful actions, particularly the damages inflicted on the environment, especially in cases where restitution in kind is not feasible.⁽³⁴⁾

Referring to Article 36 of the Draft Articles on Responsibility of States for Internationally Wrongful Acts, prepared by the International Law Commission, it states:

- The State responsible for an internationally wrongful act is under an obligation to compensate for the damage caused thereby, insofar as such damage is not made good by restitution.
- The compensation shall cover any financially assessable damage including loss of profits insofar as it is established.

Referring to the judgments issued by the International Court of Justice on this issue, specifically in the Corfu Host case between the United Kingdom and Albania in December 1949, which assessed the three points of compensation included in the United Kingdom's claim:⁽³⁵⁾

- Providing a replacement for the destroyer “Saumarez”, which was completely destroyed by the explosions in the Corfu Channel.
- Compensation for the damage sustained by the destroyer “**HMS Volage**”.
- Compensation for the loss of life and injuries sustained by the naval personnel, and based on the experience of specialists in naval construction and warships, the same court ruled that Albania should pay the United Kingdom significant sums of money in compensation.

In the same context, the International Court of Justice ruled that the United States is obligated to pay compensation for the damages incurred by Nicaragua due to the military and paramilitary activities conducted by the United States in the ports of Nicaragua.⁽³⁶⁾

It should be noted that monetary compensation must fully reflect the direct damages incurred by the state and the profits it has lost, in order to eliminate all effects of the unlawful act as if nothing had happened. This is an attempt to mirror restitution in kind, but in a monetary form.

Furthermore, it is important to highlight that monetary compensation for environmental damages is particularly challenging, as it is difficult to quantify the harm inflicted on the environment, especially when it comes to precisely identifying the direct damages that have occurred.⁽³⁷⁾

4.2. Criminal Liability

The concept of individual criminal responsibility has been a cornerstone of international criminal law since the Nuremberg Trials. This means that just like countries, individuals can be held accountable in international courts for serious crimes they commit.

Article 25 of the Rome Statute backs this up, stating that natural persons fall under the jurisdiction of the International Criminal Court. This principle is crucial because it holds individuals accountable for decisions that lead to significant harm to the environment, which in turn strengthens the deterrent effect of international law.⁽³⁸⁾

To ensure non-impunity and accountability, it is essential to establish **Actus reus**, which consists of the criminal act, such as launching an attack that results in extensive, long-term, and severe damage to the environment. Additionally, **Mens rea** requires prior knowledge of the consequences of the act and the intention to commit it, along with a causal relationship linking the act to the environmental harm.

By examining Article 8(2)(b)(4) of the Rome Statute reveals significant forms of environmental crimes in conflicts, particularly in conducting an attack with the awareness that it will cause extensive, long-term, and severe damage to the natural environment.

Furthermore, Article 55 of the Additional Protocol I of 1977, which is attached to the Geneva Conventions of 1949, emphasizes the prohibition of using means or methods of warfare intended to cause serious environmental damage.

It is important to note that individual criminal liability applies to both those who ordered the destruction of natural resources and those who executed these orders while knowing that such actions are criminal under international law. Therefore, the principle extends beyond the direct perpetrator to include military and civilian leaders who contribute to the decision-making process.

The topic of individual international criminal liability branches into another significant area, which is the command international criminal responsibility.⁽³⁹⁾

Referring to Article 25 of the Rome Statute, the command criminal responsibility is established when these leaders fail to take necessary and reasonable measures to prevent or suppress the commission of violations.

Based on the above, acts that harm the environment are considered serious violations of international humanitarian law; therefore, criminal responsibility arises for leaders and commanders who order its destruction, or who do not take the necessary steps to prevent these transgressions from occurring. This is affirmed by the provisions of the Additional Protocol I to the Geneva Conventions of 1977, which classify serious environmental violations as war crimes.⁽⁴⁰⁾

It is important to note that serious environmental violations constitute war crimes that incur criminal responsibility for harming the environment, which does not exempt any subordinate from accountability for committing such acts, nor does it absolve officers and commanders if they had information that could have prevented them from committing these crimes, or if they were on the verge of committing such a violation.

Consequently, the president, as the “officer or command” in charge of the forces involved in an armed conflict, is responsible for his troops' violations of international humanitarian law, including environmental damage.

Therefore, he bears the overall responsibility for ensuring respect for this law within his authority to maintain order and discipline. This responsibility cannot be denied by the leadership of the party committing the violations, even if that party is represented by a government or an authority recognized by the adversary.⁽⁴¹⁾

From the above, it is clear that the system of international criminal responsibility for individuals holds significant importance in preventing crimes that violate international law rules designed to protect the environment during armed conflicts. This importance lies in the fact that this system ensures the respect of human rights, particularly the right to a clean environment.

In addition to the direct impact this system has on individuals by stabilizing international criminal justice, which prevents offenders from escaping punishment, it is essential to have an international criminal court with the authority to prosecute those accused of the most serious crimes against humanity, including those committed against the environment during armed conflicts.⁽⁴²⁾

5. Conclusion:

After wrapping up our research, we came to these key conclusions:

To establish international responsibility for environmental damage during armed conflicts, several key elements need to be in place. This includes having a binding international legal rule that makes environmental harm a crime, the occurrence of an internationally wrongful act-specifically, unjustified environmental damage, the ability to attribute this wrongful act to an individual under international law, the environmental damage must pose a serious threat, it must not have been compensated before, and there must be evidence of criminal intent.

The only way to address environmental damages that happen during armed conflicts is through compensation, as options for retaliation or restoring the situation to what it was before are nearly impossible.

Individuals have become subjects of international law, which means they can be held criminally accountable in international criminal courts. As a result, they carry criminal responsibility for the environmental damage they inflict. When it comes to civil liability, it's also unlikely that an individual would be able to provide the significant financial compensation needed to restore the damaged environment.

Recommendations:

- Adopting a special convention on the protection of the environment in times of armed conflict, complementing the 1949 Geneva Conventions.
- Including serious damage to the environment as a war crime in the Statute of the International Criminal Court.
- Establishing an international body affiliated with the United Nations to monitor and document environmental damage during armed conflict and assess compensation.
- Establishing an international compensation mechanism that includes in-kind and financial compensation, with the establishment of a special fund for environmental compensation under the auspices of the United Nations.
- Using satellites and artificial intelligence to monitor and document environmental damage.

- Obliging states to incorporate environmental protection rules into their domestic military legislation and imposing penalties on violators.
- Integrating the environmental dimension into negotiations for agreements to end armed conflicts, ensuring rehabilitation and preventing recurrence of environmental damage.
- Enhancing international cooperation between UN organizations and the international community to document violations and achieve environmental justice.

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^[42] It should be noted that Article 25/3 of 1998 Rome Statute of the International Criminal Court stipulates that natural persons shall be criminally liable in the following cases:

a- "Committing this crime, whether as an individual, jointly with another, or through another person, regardless of whether that other person is criminally liable.

b- Ordering, soliciting, or inciting the commission of a crime that has already occurred or has been attempted".