

The Protection of the Environment during Armed Conflict

By: Kenneth Wyne Mutuma¹

Introduction

War has effects. The effects of warfare today go beyond the suffering of humans, their displacement or the destruction of infrastructure. The far-reaching effects of warfare get to the environment either directly or indirectly. The environment is gradually being realized as a victim in situations of armed conflicts. A look into the conflict affected areas tells the narrative of water resources contamination, air pollution, deforestation, oil pollution and soil poisoning as part of the effects that armed conflict has on the environment. Environmental damage because of conflicts can either occur directly where the military actions such as use of high explosive munitions or dangerous chemical substances that impact negatively on the environment. Indirectly, military actions and their expenditure can happen at the expense of environmental and natural resource management. Further, the instability because of conflicts means disregard for the policies and institutions put in place at the domestic levels to protect the environment. This article aims to examine the status of the existing laws that seek to protect the environment during armed conflict with a special focus on Africa. Generally, the environment has been afforded some protection at the international level with international humanitarian law (IHL) treaties providing for the protection of the environment during armed conflict. Similarly international environmental law (IEL) which is a body of international law that specifically caters for issues of the environment contains provisions that apply during situations of armed conflict. Africa, being a region that is richly endowed with natural resources has equally put in place measures that are particular to Africa in terms of protecting the environment during armed conflicts. The article will therefore first discuss the impact that war has had on the environment over the years by looking at the various periods of war and the effects they have left on the environment. It will then consider the response that the law has had on issues of environmental destructions during situations of armed conflicts, looking at both IHL and IEL. Lastly, the article will endeavor to elaborate the situation

¹ *Kenneth Wyne Mutuma is senior lecturer at the University of Nairobi, School of Law and an IHL practitioner.*

in Africa and look at the measures that are specific to the African situation and the framework laid out to ensure environmental protection during times of armed conflict in Africa.

The Impact of War on the Environment

Environmental destruction during the periods of war has been evident since time immemorial. More particularly, the effects that warfare has on the environment have persisted for many years even after the end of the conflict when order and peace has been restored in the once conflicted areas. History shows that wars have been eminent over the years given the nature of man and examples of wars such as the Seven Year War in the 18th Century have left the environment damaged*. The First World War which is considered the greatest war ever witnessed not only affected the people but the environment was similarly damaged*. With the advent of new technologies, the First World War utilized weapons such as the machine guns, chemical weapons and artillery shells that had adverse effects on the environment.² For instance, the battlefield used for the Battle of Verdun in France during World War I was and is still rendered inhabitable up to date, this being more than a century later. This is because of the use of artillery shells which contained poisonous gases that left the area contaminated, together with the unexploded ordinances that still litter the area. Such is an indication of how far warfare can affect the environment.

The Second World War also saw environmental damage starting from the pollution witnessed during the Pearl Harbor incident that left the environment heavily damaged*. The oil leakage from the ships that destroyed the aquatic habitats and the toxins released to the environment as a result of the ashes from the battles was an indication of just how much warfare could negatively impact on the environment*. Notably also is the atomic bombing of Hiroshima and Nagasaki which happened in 1945 towards the end of World War II*. As much as it is argued that the only way to get Japan to surrender was through the demonstration of total destruction, the effects it had on the environment were devastating and life changing. Everything was decimated on the areas where the bombs were dropped and

²P. Souvent, and S. Pirc, "Pollution caused by metallic fragments introduced into soils because of World War I Activities," *Environmental Geology* 40, no. 3 (January 2001): 317.

this had the potential of rendering the whole place as a waste field that could be considered inhabitable.³ It has taken years to rebuild the two cities to the point that they could be regarded as safe. Even after the end of the Second World War, there have been wars that have greatly destroyed the environment. The Vietnam War for instance was a long and divisive conflict that had one of the most shocking effects on the environment because of the military choices made by the parties in the conflict*. The use of Agent Orange, which is a toxic herbicide, by the USA Army on the Vietnamese forest led to its total destruction, massive soil erosion and further annihilation of animal habitats*. The Vietnam War therefore presented a unique situation where the public became aware of just how much military actions could impact on the environment. This was particularly a lively discussion as it occurred during a period where there was a key rise in environmental awareness.

At the end of the 20th Century, the Persian Gulf War also saw the massive destruction of over 600 oil wells by the Iraqi army led to extensive pollution, resulting to what is considered the largest oil spill in history.⁴ The devastating effects of the oil spill are considered to be the largest act of ecological terrorism because of the harmful pollutants it left in the water, land and air.⁵ During this period, Africa also saw significant damage to the environment because of wars especially it being a period of liberation for many countries after years of colonization. Particularly, the Rwandan genocide that happened in 1994 had adverse effects on the environment. Rwanda which is a biological hotspot endowed with great and diverse biodiversity had environmental damage both during and after the genocide. The complexities of the genocide saw deforestation of the forest covers, soil erosion and even wetlands destroyed because of misuse.

³ Masao Tomonaga, 'The Atomic Bombing of Hiroshima and Nagasaki: A Summary of the Human Consequences, 1945-2018, and Lessons for Homo sapiens to End the Nuclear Weapon Age', 2019. Available at: <https://doi.org/10.1080/25751654.2019.1681226>

⁴ T. M. Hawley, *Against The Fires of Hell: The Environmental Disaster of the Gulf War* (Harcourt Brace Jovanovich, 1992)

⁵ J. Michel, 'Gulf War Oil Spill' in *Oil Spill Science and Technology*, Gulf Professional Publishing, 2010, p.1127.

In the past decades, Africa has witnessed many conflicts, some stretching over a long periods of time such as the civil war in the DRC, South Sudan and Somalia*. The environmental impacts of the war coupled up with climate change variability in the areas have caused long term damage to the environment. Deforestation, loss of wildlife and biodiversity are just some of the impacts of the conflicts in these areas*. This may be an indication that there is still a long way to go before the actualization of the protection of the environment during armed conflicts. Africa's situation when it comes to environmental damage because of armed conflict is therefore similar to what has been experienced in other parts of the world. However what makes the situation in Africa different is the shape of war in Africa. Most wars in Africa take the form of non-international armed conflict with effects that are more localized*. For instance, The Democratic Republic of Congo has been hit with great waves of violence and rebellions for many years that have been triggered by the available natural resources. DRC is arguably amongst the richest countries on earth in terms of the natural resources found within its territory, but this has also proved to be a curse because of the political instability it has caused in the country.⁶ Nigeria similarly has experienced situations of armed conflicts because of the negative effects of oil extraction and this has seen violent clashes between ethnic groups in the region and the Federal Government together with other multinational oil corporations.⁷ The effects from the armed conflicts have not only affected the people from the areas but also the environment.

The funding of the wars, either by the armed groups or the state has also often relied on the over-exploitation or misusing of the available natural resources.⁸ Evidence from the conflict in Sudan indicates that the environment was negatively affected by the scorched earth strategies that were employed as the methods of warfare. The Darfur conflict left many areas in Sudan affected by the landmines and further unexploded ordnances

⁶ UNEP, 'The Democratic Republic of the Congo Post-Conflict Environmental Assessment: Synthesis for Policy Makers' (2011).

⁷ Kenneth Omeje, 'Oil Conflict and Accumulation Politics in Nigeria' ECSP Report from Africa Population, Health, Environment, and Conflict Issue 12, (2008)

⁸Berman N., Couttenier M., and Thoenig M., 'This Mine is Mine! How Minerals fuel Conflicts in Africa' (2017) 107 *American Economic Review* 1564, 1610.

were left abandoned in such areas.⁹ In the same way, countries such as Angola because of the use of landmines have been left with cases of deforestation and massive loss of wildlife.¹⁰ Therefore, the environment in many situations of armed conflict is left as the unintended victim. This has therefore been the reality of warfare for a very long time. When war comes to an end, the casualties have always been counted in terms of those who are dead, the wounded civilians or the wounded soldiers, destroyed infrastructure, lost livelihoods and the wrecked cities.¹¹ The environment in most times is then left as the unpublicized victim of war given the anthropocentric view adopted in war when it comes to the environment*. In most times it is the people's safety and security that always came to the front in times of armed conflicts and even after the conflict is all over. Therefore as long as the destruction of the environment bears no effect on the population, it could be considered negligible and scant attention will be given to it.¹² This is compounded by the fact that most environmental damage caused by human activities can be hard to decipher because of the infinite nature of the environment and how it responds to certain actions. Determining the extent of the impacts of warfare on the environment and further the period in which these effects will last is similarly hard to determine. However, in recent times the importance of the environment and the key role it plays in human survival is being realized and with it, more attention is moving towards environmental damage caused by warfare. With this attention, the law continues to evolve to actually cater for the environment and ensure that damaged caused on the environment is limited. It is therefore important to examine how IHL, the *lex specialis* in armed conflicts has developed over the years to ensure protection of the environment.

⁹ UNEP, 'Conflict and the Environment: Sudan Post-Conflict Environmental Assessment' (2007). https://postconflict.unep.ch/publications/UNEP_Sudan.pdf.

¹⁰ UNEP, 'Africa Environmental Outlook 2: Our Environment, Our Wealth' (2006) 395
<https://www.unep.org/dewa/Africa/publications/AEO-2/content/203.htm>.

¹¹ Jahidul Islam, *The Protection of Environment during Armed Conflict: A Review of International Humanitarian Law (IHL)*, 2019.

¹² Michael N. Schmitt, 'Green war: an assessment of the environmental law of international armed conflict', in *Yale Journal of International Law*, Vol. 22, No. 1, 1997.

IHL and the Protection of the Environment

IHL seeks to limit the effects of war on civilians, and by extension the effects that are felt by civilians due to the ravages of war on the environment*. Over the years there have been campaigns to raise awareness on the protection of the environment amidst the pressing issues of climate change. This has cast a light especially on protection of the environment during times of armed conflict and why it is vital. For various humanitarian reasons, it is important that we realize how and where armed conflict is impacting the environment. The environment arguably plays a significant role in the attainment of various humanitarian efforts so much so that its protection is to be considered at all times. Central to it all is that environment gives life, and because humanitarian aim is to ensure the survival of the people both during and after the conflict, the environment also needs to be afforded similar protection. Also the protection of the special groups during war such as the wounded is dependent on the environment. Activities of relocating and setting up these people require that the environment is safe and habitable and thus it is pertinent that the environment is protected. Similarly, the environment and natural resources plays a key role in the post-conflict peace building as it gives the people a chance at rebuilding their lives. If the environment and the natural resources are destroyed during armed conflicts, the peace building process becomes almost impossible. This is because people are put back into conflicts for the reason of the competition over the scarcely available resources. This is particularly true for a country such as the Democratic Republic of Congo where the area is still faced with conflicts because of the competition for control over the natural resources in such a mineral-rich country.

IHL has had treaty provisions together with customary international humanitarian law that provide for the protection of the environment during situations of armed conflicts. However, for many years protection that was afforded to the environment by IHL was greatly coincidental and indirect*. This protection was mainly through provisions that regulate the means and methods of warfare and similarly those that have aimed to limit the impacts of warfare on civilian objects and their properties.¹³ The 1907 Hague Convention makes a provision under its Article 22 that the employment of

¹³Dinstein, Y. *The Conduct of Hostilities under the Law of International Armed Conflict* (3rd edn, Cambridge University Press, 2016).

means and methods of warfare is in fact not unlimited. This Article is read with the Martens Clause which is provided for in its preamble, and as such, the two provisions have been interpreted to afford the environment some protection during armed conflicts*. There were also early treaties such as Treaty of Versailles of 1919 and the Geneva Protocol of 1925 that dealt with poisonous gases*. This was at a particular time where new technologies introduced the use of chemical and biological weapons that were used in the World War. Inferably, by these treaties prohibiting the use of such weapons that had the potential to harm the people, the environment was also protected from harm that could be caused by such weapons. Thereafter, the Geneva Convention IV of 1949 which specifically caters to the protection of civilians and property during armed conflict and occupation dictates that it will constitute a grave breach of international humanitarian law when there is excessive destruction and appropriation of property which is not justified by military necessity.¹⁴ Further the Convention provides that “any destruction by the Occupying Power of real or personal property belonging individually or collectively to individuals, or to the State, or to other public authorities, or to social or cooperative organizations, is prohibited, except where such destruction is rendered absolutely necessary by military operations.”¹⁵ These two provisions therefore mean that any destruction of civilian properties, which includes the environment, will be deemed unlawful unless justified by military necessity.

The environment was however given special attention in the 1970s with the adoption of two international instruments that for the first time *explicitly* made mention of the environment; The ENMOD Convention and Additional Protocol I*. After the international outcry because of the Vietnam War, the adoption of these instruments proved to be a directional development in the Law of Wars finally incorporating the environment.¹⁶ The Additional Protocol I under Article 35(3) contains a prohibition of the employment of means and methods of warfare that are expected to cause ‘widespread, long-term and severe’ damage to the environment.¹⁷ This means that as much as

¹⁴ Geneva Convention IV, Article 147.

¹⁵ *Ibid*, Article 53.

¹⁶ Walter Sharp, ‘The Effective Deterrence of Environmental Damage during Armed Conflict: A Case Analysis of the Persian Gulf War’, 37 *Mil. L. Rev.* 1 (1992).

¹⁷ Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of

the parties' right to choose the means and methods of warfare is unlimited, they should ensure that the means and methods they employ do not cause damage to the environment. Similarly, a reading of Article 55 of the Protocol affords the environment the same protection that is given to civilian properties. It prohibits environmental damage to the extent that it is prejudicial to human health and survival of the population and dictates that the environment should not be attacked as a way of reprisal. The inclusion of the specific provisions that protect the environment in the Protocol was at a time when the effects military operations on the environment had drawn attention and there was a rise in environmental awareness after the witnessing of the effects of Vietnam War. It was therefore important that there was an inclusion of environmental debates in the discussions that led to the Protocol. This was the first time in very many years that the environment had particular provisions that explicitly mentioned its protection.¹⁸ However, there have been many contentions that surround the application of the two provisions. They both provide that the damage to the environment has to be 'widespread, long-term and severe' for the act to amount to a violation under IHL. The use of the conjunctive 'and' implies that all the three requirements have to be fulfilled. This has been argued to have created a very high threshold as to what acts will amount to a violation of IHL. The final report by The Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia stated that this threshold was so high that it was indeed difficult to find a violation of environmental damage.¹⁹ Similarly, the threshold led to serious debates of whether the environmental damage caused during the Gulf War indeed crossed the threshold and warranted accountability of the Iraqi army.

It therefore seems very impossible that conventional warfare will ever reach the threshold set by the three conditions.²⁰ Further, uncertainty surround the application of the provisions as the Protocol does not define the terms

Victims of International Armed Conflicts (Protocol I) of 8 June 1977.

¹⁸ Anthony A., *Handbook of International Law*. Cambridge University Press, Cambridge, 2005.

¹⁹ ICJ Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign against the Federal Rep of Yugoslavia (13 June 2000).

²⁰ Schmitt M. N., 'War and the Environment: Fault Lines in the Perspective Landscape', AVR 37 (1999). Pg. 44

widespread, long-term or severe.²¹ The ambiguity caused coupled up with the set out threshold only serves to limit the effectiveness of the two Articles in protecting the environment.²²

The ENMOD Convention on the other hand prohibits the modification of the environment in ways that can cause ‘widespread, long-term or severe damage’ to the environment.²³ This convention came to be after the backdrop of the Vietnam War where the USA army had employed the use of Agent Orange to eliminate the forest cover used by the Vietnamese. Therefore such modification of the environment that translated to extensive damage on the environment and health hazards on the people had to be prohibited. Article 3 of ENMOD Convention however reads that not all forms of environmental modification techniques are forbidden. It is only military and hostile use of the environment that is forbidden.²⁴ If the use of such modification is peaceful then it would not warrant the application of the ENMOD Convention. The Convention focuses on using the environment as a weapon that results into great destruction.²⁵ This should be a deliberate act by the military officers to indeed cause the havoc because mere collateral is not included. The application of the ENMOD Convention has therefore been seen to condone manipulation of the environment that is only low-level. This is because, given that the act has to result in a widespread, long-term or severe damage, if doesn’t not result into such, they it would not fall under the ambits of the Convention.²⁶

Unlike the Additional Protocol I, ENMOD has attempted to define the meaning of ‘widespread, long-term and severe’. The term widespread refers

²¹ Lijnzaad, L. and Tanja, G. (1993). “Protection of the environment in times of armed conflict: The Iraq-Kuwait War.” *Netherlands International Law Review*, Vol. 40, p. 180.

²² Phoebe Okowa, ‘Natural Resources in Situation of Armed Conflict: Is There a Coherent Framework for Protection?’ (2007) 9 *International Community Law Review* 250.

²³ Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD), 10 December 1976, 1108 UNTS 151, Art. 1.

²⁴ *Ibid*, Article 3, Para 1.

²⁵ *Ibid*, Article 2

²⁶ Westing A.H., ‘Environmental Warfare: A Technical, Legal and Policy Appraisal.’ *Environmental Law* 15, 1984. Pg. 663

to an area on the scale of several hundred square kilometers; while long lasting is a period or months leading up to seasons.²⁷ Severe has been taken to mean causing significant harm to human life or natural and economic resources.²⁸ The Protocol has given no definition of the terms and for a long time the interpretation has been in regards to limiting only the unconventional warfare. As much as it is argued that the definitions of the ENMOD Convention can be used to give meaning to the Protocol, the ENMOD Convention provides that its provisions will not be prejudicial to the interpretation of other agreements. Over the years, after its adoption, there has not been any occurrence of environmental modification technique that calls for the application of the ENMOD Convention. This can be taken to be a success of the Convention in prohibiting such acts.

The 1998 Rome Statute of the International Criminal Court also provides under its Article 8 that “intentionally launching an attack in the knowledge that such an attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be excessive in relation to concrete and direct overall military advantage anticipated.”²⁹ The provision is quite similar to what is provided by The Additional Protocol I, other than requiring that for the act to amount to a war crime, there must be intent and knowledge. The knowledge and intent will form part of the mens rea required to find an individual responsible for the action.³⁰ Further, the Rome Statute provides that as much as the act can lead to widespread, long-term and severe damage, the damage is added as an element to the proportionality equation.

Customary International Humanitarian Law and Soft Law

Customary international humanitarian law importantly fills the gaps left by treaty laws*. CIHL constitutes principles of international humanitarian law

²⁷ Understanding annexed to the text of ENMOD, contained in the report of the UN Committee of the Conference on Disarmament to the General Assembly, Official Records of the General Assembly, 31st Session, Supplement No. 27 (A/31/27).

²⁸ Ibid.

²⁹ Rome Statute of the International Criminal Court (ICC) of 17 July 1998, A/CONF.138/9, Article 8 Para 2.

³⁰ Bassouni, M.C., “International crimes: Jus cogens and obligatio erga omnes.” *Law and Contemporary Problems*, Vol. 59, 1996.

which include the principle of distinction, military necessity, proportionality and humanity*. These principles guide on what is considered lawful and what is unlawful during times of armed conflict and apply to every state. Therefore, environmental destruction that results from the non-application of these principles is regarded to be a violation under international humanitarian law. In regards to the environment, the Martens Clause has also played an important role in its application because for a long time IHL had no provision on the environment.³¹ The ICJ has found that the applicability of the Martens Clause is of a customary nature and thus forms part of customary international humanitarian law.³² Further, the Martens Clause has importantly been included as Rule 16 under the 1994 Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict. Apart from the principles of IHL, grave breaches have also been identified to form an integral part of customary IHL. Certain provisions from the Geneva Conventions together with the Additional Protocols have been accepted to form part of customary IHL because of the general state practice witnessed and their inclusion in national legislations and the military manuals of many states. The acts of “extensive destruction of property, not justified by military necessity and carried out unlawfully and wantonly,” and the “launching of an indiscriminate attack affecting civilian objects in the knowledge that such attack will cause excessive damage to civilian objects,” form part of the core customary IHL.³³

In 1994 the ICRC came up with the Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict following the resolution of the UN General Assembly in 1992 and an International Conference on the Protection of War Victims in 1993*. The Guidelines provided a summary of the existing international rules that protected the environment which were to be respected and applied by all members of the armed forces. Importantly, it reiterated the provisions of the Additional Protocol I that prohibits attacks that lead to widespread, long-

³¹ Rupert T., “The Martens Clause and the laws of armed conflict.” *International Review of the Red Cross*, Vol. 317, 1997.p. 125.

³² ICJ, *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 8 July 1996, Para 84.

³³ Jean-Marie Henckaerts and Louise Doswald-Beck, ‘Customary International Humanitarian Law’, *International Committee of the Red Cross and Cambridge University Press*, Cambridge, 2005.

term and sever damage of the environment making such provisions customary in nature. More recently, in 2020, the ICRC updated the 1994 guidelines on environmental protection to come up with 32 rules and recommendations that evidently reflect the development that has been witnessed in international law ever since 1994.³⁴ The update was necessitated by the ICRC need to contribute in a practical way to the promotion of respect for environmental protection during armed conflicts. The rules and recommendations guide on the means and methods of warfare and the conduct of hostilities with regard to the environment and include concise commentaries.

The updated guidelines seek to bind all parties who take part in armed conflicts as well as those in a position to influence the course of the armed conflict. Significantly, the updated guidelines have shed light on the uncertainties that surround the application of Article 35(3) and 55 of the Additional Protocol I. The Commentary under paragraph 47 establishes that the rule prohibiting the means and methods of warfare that are intended to cause widespread, long-term and severe damage to the environment is customary in nature. Additionally, the confusion that surrounds definition of the terms widespread, long term and severe has also been addressed. The guidelines under paragraph 60 gives that since the only definition of the term widespread is provided under the ENMOD Convention, to mean a scale of several hundred square kilometers, then this should be the minimum basis that guides the definition of the term in determining the damage. Further paragraph 66 gives a very clear understanding to what is meant by long-term. The commentary provides that when assessing the issues of long-term, consideration should be given to not only the direct effects but also the reverberating effects. The recommendation is that the understanding of the term should be informed by touchstones such as how far the damage costs can persist and not just the thirty years mark. In regards to the term Severe, paragraph 72 provides that it is a recommendation that since ENMOD Convention gives a comprehensive definition of the term; this should serve

³⁴ ICRC Updated Guidelines on the Protection of the Natural Environment in Armed Conflict: Rules and Recommendations Relating to the Protection of the Natural Environment under International Humanitarian Law, with Commentary, 2020.

as the minimum basis for the development of a clear definition at the moment.

The guideline has also significantly provided a clear understanding of the application of the principles of IHL.³⁵ With no definition of important terms such as what is meant by ‘excessive’ or ‘military advantage’, an edge has been given to military commanders to apply what they think is correct over the years. For instance the application of the principle of proportionality has come under so much debate because of the imprecise methods of its application.³⁶ The updated guidelines therefore attempt to at least offer some clarity on what should guide the actors in armed conflict in the application of the principles in order to ensure the protection of the environment. The guidelines also give some key recommendations, which if adopted by states can guarantee the protection of the environment.³⁷ They call on to states to disseminate the rules of IHL by including the rules provided in the guidelines in their national legislations, military manuals and in military education and training of the military officers. States are also challenged to adopt and implement measures that increase their understanding of the effects of armed conflict on the environment. They are also called on to identify and designate areas of environmental significance as demilitarized zones. This is a particularly important provision and is also included in the draft guidelines of the ILC under paragraph 4 because it serves to ensure that such demilitarized areas can never be subject to military attacks.³⁸ If taken up by states, then protection of such parts of the environment can be guaranteed.

Lastly it is ICRC’s recommendation that states should actively exchange examples and good practices of measures that can be taken to comply with the rules of IHL on protecting the environment.

³⁵ *Ibid*, Rule 5-8

³⁶ *Ibid*, Paragraph 117 and 122.

³⁷ *Ibid*, Paragraph 14.

³⁸ International Law Commission, Draft Principles on the Protection of the Environment in Relation to Armed Conflict (2019), reproduced in UN General Assembly, Report of the International Law Commission: Seventy-first session (29 April–7 June and 8 July–9 August 2019), UN Doc. A/74/10, UN, New York, 2019, Chap. VI. Protection of the environment in relation to armed conflicts, pp. 209–296.

The ILC has prepared draft guidelines at the same time as the ICRC updated guidelines, which in certain instances offer a broader scope when it comes to environmental protection during armed conflict situations.³⁹ For example, they include how other bodies of law actually complement IHL in the protection of the environment. Importantly, the draft principles have measures that can be taken before during and after the armed conflict in order to safeguard the environment. All in all, a combined reading of the updated guidelines by ICRC and the draft guidelines by the ILC enhance environmental protection during war and provide a framework that ensures protection in this regard. As a supplement to the treaties and CIHL, such soft law remains useful in informing and elaborating on the ever changing situations of armed conflicts. They also create an avenue that allows for the better implementation and enforcement of the existing laws.⁴⁰ This is clear when one looks at the role that UNGA and UNSC resolutions have played in the context of many of the changing circumstances of armed conflict.

International Environmental Law and Armed Conflict

Under international environmental law, there is no specific instrument that provides for the protection of the environment during armed conflict, but relevant provisions that can apply to such situations are found scattered all across the existing international environmental law instruments. The International Environment Law framework comprises of multilateral environmental agreements (MEAs), the guiding principles of IEL and customary international environmental law and other soft laws that either afford direct or indirect protection during armed conflicts. Generally, the application of the MEAs is expected to continue during and after the armed conflict. The draft articles of the International Law Commission of 2008 make mention of the fact that the application of treaties doesn't necessarily come to a halt or is terminated during armed conflict.⁴¹ It further provides that the application of the treaties during armed conflict will greatly rely on the nature of the particular case at hand, the specific provisions of the treaty and further, the nature of the conflict and the effect it has on the treaty application. This means that the application of the various MEAs will be

³⁹ Ibid.

⁴⁰ Kessing P. V., 'The Use of Soft Law in Regulating Armed Conflict; From Jus in Bello to 'Soft Law in Bello', Oxford University Press. Pg.129.

⁴¹ International Law Commission, Effects of Armed Conflicts on Treaties, UN Doc. A/CN.4/L.727/Rev.1, 6 June 2008 Article 3.

considered on a case to case basis. The MEAs either have specific provisions that directly or indirectly allows for the application of the provisions to continue even during armed conflicts while some provide for their termination or suspension. Many of them do not mention anything about their application during armed conflict.

The World Heritage Convention for one takes notice under its preamble that cultural heritage and the natural heritage are increasingly threatened with destruction not only by decay but by other social conditions which does include armed conflicts.⁴² Further, it acknowledges that armed conflict can be a threat to the cultural and natural heritage and therefore the Committee keeps a world heritage list for properties that are threatened by these serious of specific dangers.⁴³ The United Nations Convention on the Law of the Sea (UNCLOS) also protects the environment and indirectly allows for its application at all times including during armed conflicts.⁴⁴ Several provisions of UNCLOS are focused on the protection and prevention of the pollution of the marine environment and prohibit states from carrying out activities that have the potential of polluting the marine environment.⁴⁵ Further, the coastal states have the right to create laws and regulations against pollution of the seas and also enforcement rights against those who violate such laws. The applicability of the UNCLOS even during armed conflict has been subject to various debates but the argument for its application during armed conflict is inferred from Article 236 that requires vessels to always comply with the rules against marine pollution.⁴⁶ Another notable MEA would be the Ramsar Convention that deals with wetlands as a waterfowl habitat.⁴⁷ Article 2 of the Ramsar Convention allows states to enlist at least one of the wetlands found in its territory to a List of Wetlands of International Importance. Although the Convention is not explicit in mentioning armed conflicts, it can be inferred from its provision that gives

⁴²World Heritage Convention, Preamble, Para 1 and 7

⁴³ Ibid, Article 11.

⁴⁴ United Nations Convention on the Law of the Sea (UNCLOS), 10 December 1982, 1833 UNTS 3.

⁴⁵ Ibid, Article 192, 194, 207, 208 and 212.

⁴⁶ Michael N. Schmitt, 'Green war: an assessment of the environmental law of international armed conflict', in *Yale Journal of International Law*, Vol. 22, No. 1, 1997, pp. 47–49.

⁴⁷ Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) (1971).

right to the contracting states to take measures such as restricting boundaries of the listed wetlands in cases of national security.⁴⁸ Issues of national security have therefore been taken to even include situations of armed conflicts.

On the other hand there are MEAs that have provisions that directly relate to situations of armed conflict. For instance The Revised African Convention on the Conservation of Nature and Natural Resources of 2003, which is a significant instrument for the protection of the environment and natural resources in Africa specifically, includes a provision that is on protection of the environment during military and hostile activities.⁴⁹ Similarly, the Sao Remo Manual that relates to armed conflict at sea, prohibits damage caused to the environment unless justified by military necessity and not carried out in a wantonly manner.⁵⁰ There then exists a lot of MEAs that are silent on their application during armed conflict. Examples include the Convention on Biological Diversity (1992), the UN Convention to Combat Desertification (1994), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973); and the Convention on the Conservation of Migratory Species of Wild Animals (1979)*. The lack of mention of their application during times of armed conflicts only gives a rise to imprecisions on how parties to an armed conflict proceed especially in regards to the sites that are protected under the various MEAs.

Customary International Environmental Law

One of the most established customary IEL is the prohibition against trans-boundary pollution which is guided by the general principle of ‘sic utere tuo ut alienum non laedus’ that obligates states not to make use of property in ways that would injure the property of others. The Principles of IEL such as the precautionary principle, polluter pays principle, prevention principle and the principle of good neighborliness and cooperation, just to name a few of the relevant principles. However the status of these principles as customary has been subject to various debates and since the area of IEL is fairly new

⁴⁸ Ibid, Article 4

⁴⁹ Revised African Convention on the Conservation of Nature and Natural Resources. (Adopted 11 July 2003, entered into force 23 July 2016) 7782 AU Treaties 0029, Article XV.

⁵⁰ San Remo Manual on International Law Applicable to Armed Conflict at Sea, Article 34.

and greatly dynamic, this has not been settled. Several instruments under IEL therefore contain these principles whose application can serve to protect the environment even during armed conflict.

The Stockholm Declaration for instance has two important principles that can serve to apply during armed conflict.⁵¹ Principle 21 obligates states to ensure that their exploitation and use of the environment in their jurisdiction does not affect and cause damage to the environment of other states outside its jurisdiction. Further principle 26 can be taken to directly refer to armed conflicts as it relates to the use of nuclear weapons and bans the use of such weapons as they are highly likely to affect man and his environment. Similarly, the World Charter for Nature, although not binding is an international instrument that articulates principles that apply under IEL.⁵² Principle 5 which is contained in the World Charter for Nature recognizes that nature should be secured from degradation caused by warfare or other hostile activities. This is for reasons that the survival of human being is greatly dependent on the environment and thus every state is called to respect the principles of the Charter. Principle 20 specifically provides that military activities that are damaging to the environment should be avoided.

The Rio Declaration, although not a binding instrument, also provides for environmental principles that relate to situations of armed conflict.⁵³ Its Principle 23 provides that the environment and natural resources of people under oppression, domination and occupation shall be protected. Further, Principle 24 acknowledges that warfare is inherently destructive and obligates states to respect and adhere to international laws that protect the environment during armed conflict. The non-binding nature of these principles means that there are doubts in their application even when they have great potential in the protection of the environment. Therefore, International Environmental Law as a corpus of international law offers some great potential to the protection of the environment during armed

⁵¹ Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration), 16 June 1972, UN Doc. A/CONF.48/14/Rev. 1 (1973).

⁵² UN General Assembly resolution 37/7, 28 October 1982, World Charter for Nature, UN Doc. A/RES/37/7.

⁵³ Rio Declaration on Environment and Development, 13 June 1992, UN Doc. A/CONF.151/26, Vol. I.

conflict. Where the international humanitarian law framework law has left a gap, IEL, though limited, has some provisions that continue to protect the environment in times of warfare. However the question of when and how the provisions of IEL continue to apply during armed conflict is an issue that is still unclear and this requires some special consideration to be taken. The practicality and introduction of IEL to situations of armed conflict is greatly attainable and would offer better protection to the environment than leaving it all to the application of the Laws of Wars to protect the environment.

Looking to the Regional Framework

Regional laws in Africa that apply to situations of armed conflict have proven useful in filling the gaps left by both international humanitarian law and international environment law in respect to Africa. They specifically provide a stronger and more direct protection especially in regards to the environment. The existing regional laws recognize the nature of armed conflicts in Africa and aim to ensure that the provisions in their application can suit the circumstances. The Revised African Convention on the Conservation of Nature and Natural Resources is a particularly important instrument when it comes to the protection of the environment during and even after armed conflict in Africa. Furthermore, regional economic blocs in Africa have also attempted to have provisions that similarly protect the environment.

The effects of armed conflicts particularly to the environment and natural resources have been acknowledged in several African instruments. The Constitutive Act of the African Union which is a declaration of African leaders to uphold and promote unity and cooperation among the people of Africa recognizes in its preamble the effects that conflict can have on the socio-economic development of African states.⁵⁴ Similarly, the Action Plan for the Environment Initiative of NEPAD takes into consideration the long term approach towards environmental stability and recognizes that armed conflict in Africa poses a serious challenge in the protection of the environment and natural resources.⁵⁵ They indicate that there has been a

⁵⁴ Organization of the African Union, Constitutive Act of the African Union, 1 July 2000. Para 8

⁵⁵ NEPAD 'Action Plan of the Environment Initiative' (2003) Para 133.
http://www.africa-platform.org/sites/default/files/resources/9_vincent_oparah_nepad.pdf.

significant realization on the importance on the environment and the requirement to provide for its protection.

The Revised African Convention on the Conservation of Nature and Natural Resources is therefore the comprehensive treaty that offers prospects of environmental protection and provides particular protection before, during and even after the armed conflict*. This convention was originally adopted in the year 1968 by the OAU and came into force in 1969*. It was the first multilateral instrument in Africa that specifically catered for the regulation and protection of the environment. Its adoption was highly necessitated by the need of African states to govern themselves and more so in regards to their natural resources after the colonial period. As the Convention allowed for the revision of the convention in part or in whole through requests by the states⁵⁶, the OAU in 1999 called for its revision considering the development witnessed in environmental protection. A revised convention was therefore adopted during a heads of states summit in Mozambique, in July 2003 after through revision by experts.

The 2003 revised AU Convention therefore aims to ensure a comprehensive environmental regime that governs the conservation of the natural resources in Africa.⁵⁷ Its preamble recognizes that Africa is richly endowed with natural resources and that its conservation is a common concern for all mankind and that the conservation of the African environment is the primary concern of all Africans.⁵⁸ This provision in the preamble therefore guides the interpretation of the other provisions of the Convention. It is quite similar to the provisions of other international environment instruments that acknowledge the protection of the environment is an issue that concerns all humankind. As much as the Convention is in light of environmental protection generally, it makes a special mention of environmental protection in times of warfare. Article 15 relates to protection afforded to the environment during military and hostile activities. It reads that:⁵⁹

⁵⁶ Article 24

⁵⁷ Revised African Convention on the Conservation of Nature and Natural Resources.(adopted 11 July 2003, entered into force 23 July 2016) 7782 AU Treaties 0029.

⁵⁸ Ibid, paragraph 1 and 4.

⁵⁹ Ibid, Article 15.

(1) Parties shall (a) take every practical measure, during periods of armed conflict, to protect the environment against harm; (b) refrain from employing or threatening to employ methods or means of combat which are intended or may be expected to cause widespread, long-term, or severe harm to the environment and to ensure that such means and methods of warfare are not developed, produced, tested or transferred; (c) refrain from using the destruction or modification of the environment as a means of combat reprisal; (d) undertake to restore and rehabilitate areas damaged in the course of armed conflicts.

(2) The Parties shall cooperate to establish and further develop and implement rules and measures to protect the environment during armed conflicts.

This is a significant provision for the direct protection it affords the environment in situations of armed conflict and the acknowledgement of the intrinsic value of the environment. It utilizes similar words as those of the Additional Protocol I and the ENMOD Convention such as widespread, long-term and even severe. Similar to Article 55 of the Additional Protocol I, the provision also requires every signing state to take ‘every practical measure’ to safe guard the environment. It however does not give explanation to the care that is to be given to the environment by the states. Importantly, Article 15 does not distinguish between international armed conflict and non-international armed conflict and thus its application is taken to apply to any situation of armed conflict. This is vital because, as discussed the shape of armed conflicts in Africa is non-international in nature and in most times the environment lacks adequate protection from the international instruments unless such rules are of a customary nature. The convention therefore fills the gap left by the International laws in respect to non-international armed conflict which has always been difficult to regulate.

Noteworthy, a reading of Article 15 also indicates that it gives a lower threshold in regards to the environmental damage as compared to the Additional Protocol I. it makes use of the disjunctive ‘or’ to mean that only one of the three conditions of either widespread, long-term or severe needs to be fulfilled before the military act is found to be in violation of the rules

set out. The need for the fulfillment of just one of the three condition afford better protection to the environment because then it applies to the environmental damages in Africa that are substantially significant but do not fulfill the requirements of Additional Protocol I. This becomes necessary because the destruction of the environment in Africa is always localized and as much as it greatly affects the population in such areas, it hardly gains international attention. The Convention further makes a special provision that has not been included in many other instruments before in regards to environmental protection. It requires that parties should undertake to restore and rehabilitate the areas that have been affected through the armed conflict. The responsibility imposed even after the armed conflict gives a higher standard of protection to the environment. States are therefore required to address the environmental damage caused by their actions during armed conflicts and this serves as a preemptive factor. The provision acts to guide military officers from making the environment a military objective and also serves as an enforcement mechanism because of the obligation they would have in restoring the environment to its previous safe state.⁶⁰

The Contacting states have also been called on to establish national mechanisms to ensure the implementation of the provisions that seek to protect the environment, especially during armed conflict. This is critical in the dissemination of such rules to the national level to aid in direct protection of the environment. It is recognition that most of those African countries that have and are still experiencing armed conflicts lack a regulation framework that protects the environment and thus it is essential that they take up this obligation to include such rules in their domestic laws. Further Article 39 of the revised AU Convention provides that state parties are not allowed to make any reservation to the provisions of the Convention. It becomes an important provision that makes sure the parties to the Convention are aware that in signing and ratifying the Convention, the bind themselves to protection of the environment even in situations of armed conflict.

The Convention therefore bears a great potential in ensuring environmental protection and especially during armed conflict if it is implemented correctly. However it still lacks an institutional mechanism in place that can

⁶⁰ Humle Karen, 'Taking Care to Protect the Environment against Damage: A Meaningless Obligation?' (2010) 92 *International Review of the Red Cross*.

effectively monitor its implementation and the enforcement of the provisions. The Secretariat is the provided institution⁶¹ but the status of its establishment is still not clear. The Chairperson of the African Union then undertakes the Secretariat's role on an interim basis until the Secretariat comes into place. It is vital that there exist a functional institutional mechanism if the implementation of the provisions of the Convention is to be achieved.

The Maputo Protocol also caters to environmental protection during armed conflict.⁶² Its Article 28D gives an explanation of war crimes to include, "including attacks that are launched with knowledge that it will cause 'widespread, long-term and severe damage to the natural environment ...'".

It gives a similar provision as that contained in the Additional Protocol I and from that it follows that the shortcomings of the Protocol are also associated with the Maputo Protocol when it comes to environmental protection during armed conflict. The high threshold set out means that most armed conflicts that happen in Africa can hardly fall under the ambit of the Maputo Protocol. Also, its applicability to only situations of international armed conflicts makes it less effective in the application in most African Scenarios where many of the conflicts are internal in nature. However the Maputo Protocol has also provided a definition of what is meant by illicit exploitation of natural resources that apply to situations of peace and even during armed conflicts. This definition serves to clearly illustrate the violation that would amount to a crime.⁶³ In the prosecution of environmental crimes, the Maputo Protocol specifically provides for the criminal liability of individuals and further the liability of corporates.⁶⁴ The corporate responsibility recognizes that during armed conflicts, there are many contributors to the warfare and it is critical that everyone who takes part is bound by the rules set out. Furthermore, the Maputo Protocol provides for the fining and forfeiture in cases of liability with the aim of deterring such violations.⁶⁵ The challenge that then remains before the actualization of the provisions of the Maputo

⁶¹The Revised African Convention, Article XXVII.

⁶² Protocol on the Statute of the African Court of Justice and Human Rights (adopted 1 July 2008) 36396 AU Treaties 0035 (Malabo Protocol).

⁶³ *Ibid*, Article 28L.

⁶⁴ *Ibid*, Article 46C.

⁶⁵ *Ibid*, Article 43A, 46J.

Protocol is that it is not yet in force. The required number of states that have signed has not yet been achieved, without any ratification yet. Though limited, the Protocol has potential to protect the environment during armed conflict in Africa when it comes into force.

Sub-Regional Instruments

The regional economic blocs have also attempted to come up with regulations that guide environmental protection during armed conflicts. For instance, ECOWAS which is a West African regional bloc has the Protocol on Conflict Prevention, Management and Peacekeeping. This Protocol even though limited in the protection of the environment, it still provides for the duty to rehabilitate the damaged environment.⁶⁶ The Southern African Development Community (SADC) Security or Protocol on Politics, Defense and Security Cooperation is also an instrument that can be invoked by the Southern Africa bloc during armed conflict to protect the environment.⁶⁷ The East Africa Community on the other hand has a protocol that specifically caters to the environment and natural resources and especially during armed conflict. The Protocol on the Environment and Natural Resources is an echo of the revised African Union Convention on the Conservation of Nature and Natural Resources. It obligates the states similarly as the revised AU Convention and as such, the parties should ensure environmental protection during armed conflict by desisting from the use of means and methods of warfare that would have a widespread, long-term or severe damage to the environment.⁶⁸ The parties are further required to also take up measures of restoration and rehabilitation of the damaged environment because of armed conflicts.⁶⁹ Likewise, the state parties are required to establish national mechanisms for the implementation and enforcement of these provisions.

⁶⁶ Article 3(j) of the Protocol relating to the Mechanism for Conflict Prevention, Management, Resolution, Peacekeeping and Security ('the Mechanism') of the ECOWAS Conflict Prevention Framework,

http://www.ecowas.int/publications/en/framework/ECPF_final.pdf .

⁶⁷ Southern African Development Community Protocol on Politics, Defense and Security Cooperation (adopted 14 August 2001, entered into force 2 March 2004) SADC 3613/5213/8367.

⁶⁸ Protocol on the Environment and Natural Resources Management established through Article 151(1) of the East African Community Treaty, Article 33.

<https://www.eac.int/environment/natural-resources-management/protocol-on-environment-and-natural-resource-management>.

⁶⁹ *Ibid.*

Kenya, Tanzania and Uganda are the only countries that have signed the protocol, with Tanzania yet to ratify. As the East African Community has seen the inclusion of other countries over the years, countries such as Rwanda and Burundi are yet to sign the protocol and the Protocol is yet to come into force and apply to the whole East African Community. However having signed the Protocol, countries such as Kenya and Uganda are required by the Vienna Convention on the Law of Treaties to act in good faith and desist from acts that go against the provisions of the signed Protocol even though it is not yet on force.⁷⁰ The major hindrance to the application of these sub regional instruments is that they lack the binding force on the states. There are very few treaties that have a binding force and relate to the protection of the environment during armed conflict. The International Conference on the Great Lakes Protocol to the Pact of Security, Stability and Development for one is instrument that purposefully binds the eleven contracting state parties of the Great Lakes Region.⁷¹ It specifically prohibits the illegal exploitation of natural resources in a region that is greatly endowed with natural resources. Other treaties therefore await the signing and ratification of states before they can fully come into force. Another challenge that persists is that the countries lack domestic frameworks that serve to ensure the implantation of the regional instruments at a domestic level even though this is an obligation reiterated in most of the instruments.

Administrative and Enforcement Measures under the Regional Framework

The original Convention on Conservation of Nature and Natural Resources greatly failed to provide for an administrative, legal and institutional framework for the implementation of its provision. However the revised Convention with the aim of establishing a comprehensive framework provides for a modern institutional arrangement that will ensure the implementation and enforcement of the provisions of the Convention. It introduces the Secretariat, A Conference of Parties, and further, financial mechanism and techniques for reporting that will attain the aim of

⁷⁰ VCLT, Article 8.

⁷¹ The Pact on Security, Stability and Development in the Great Lakes Region (adopted December 2006, entered into force June 2008) 46 ILM 173. Its contracting member states include Angola, Kenya, Uganda, Sudan, Zambia, Rwanda, Central African Republic, Burundi and Congo.

implementation. The Conference of Parties (COP) is the decision-making body of the Convention. It is charged with the responsibilities that range from receiving information and reports from the Secretariat or state parties to making recommendation especially on matters related to the implementation of the Convention.⁷² The COP also has the power to establish subsidiary bodies that are necessary for the implementation of the Convention. As the Convention does not mention any of these subsidiary bodies, the COP has discretion to establish them as they see fit. They are also charged with consideration of any other action that speaks to the achievement of the purpose of the Convention and also they consider and adopt additional amendments to the Convention.⁷³ The Secretariat on the other hand has been charged with the responsibility to execute the decisions of the Conference of the Parties.⁷⁴ The Secretariat is also responsible for ensuring that there is dissemination of laws and reports that guide on the implementation of the Convention. it is also the duty of the Secretariat to administer the budget of the convention among other obligations that aim to ensure the full implementation of the Convention. However for reasons that the Secretariat is yet to be established, the Chairperson of the African Union is in charge on an interim basis to see to the implementation of the Convention.⁷⁵

The revised AU Convention recognizes that central importance of financing to the achievement of the purpose of the Convention.⁷⁶ The contracting state parties according to their different capability are required to ensure that there are available financial resources for the implementation of the Convention. Therefore there are arrangements for the contributions from the state parties, contributions from the AU and from other institutions that go into the budget of the Convention to facilitate its implementation. Importantly, the revised Convention provides an avenue for the settlement of disputes. It gives a first chance to the state parties to settle disputes through direct agreements reached by the parties or through the good offices of a third party. If this

⁷² Revised African Convention on the Conservation of Nature and Natural Resources. (Adopted 11 July 2003, entered into force 23 July 2016) 7782 AU Treaties 0029, Article XXVI, Para 5.

⁷³ *Ibid.*

⁷⁴ *Ibid.*, Article XXVII.

⁷⁵ *Ibid.*, Article XLI.

⁷⁶ *Ibid.*, Article XXVII

proves to be impossible, then it may be brought before the Court of Justice of the African Union.⁷⁷ The effectiveness of the court as an institutional mechanism for the implementation of the Convention and especially in regards to the environment during armed conflict has greatly been curtailed by the wait to merge the existing courts of the AU. The Maputo Protocol which envisages establishing the African Court of Justice and Human and Peoples' Rights is not yet in force and this means that the court is yet to be established. The establishment of this court however bears great potential as an institutional mechanism for the protection of the environment most especially during armed conflict. The court will create three chambers; a general affairs chamber, a human rights chamber and an international crimes chamber. This will create an avenue that can particularly deal with the environmental crimes especially in regards to the illegal exploitation, whether in times of peace or during situations of armed conflict in Africa.

Apart from the court, a look at the African Commission on Human and Peoples' Rights which is a quasi-judicial body under the AU also indicates that it has played a noticeable part albeit limited in furthering the protection afforded to the environment most especially during armed conflict. The jurisprudence from the interpretation of the existing laws laid out by the Commission contributes significantly to better protection of environment. In Communication 155/96: Social and Economic Rights Action Centre (SERAC) and Center for Economic and Social Rights (CESR) vs. Nigeria addressed the environmental destruction caused by the military government of Nigeria over the oil conflicts in the area. It was the holding of the Commission that Nigeria was in violation of the provisions of the African Charter and appealed to the government of Nigeria to ensure the protection of the environment by stopping the attacks on the areas and ensuring adequate compensation to those affected because of the violations. Similarly in Communication 279/03-296/05: Sudan Human Rights Organization (SHRO) & Centre on Housing Rights and Evictions (COHRE) v Sudan, the Commission acknowledged that the effects of Darfur conflict in Sudan affected the environment and in effect, it also affected the populations' right to health.⁷⁸ The Commission's holding therefore required Sudan to

⁷⁷ Ibid, Article XXX

⁷⁸ Sudan Human Rights Organization & Centre on Housing Rights and Evictions (COHRE) v Sudan (Communication 279/03-296/05) ACHPR 45.

rehabilitate the damaged areas in Darfur in order to provide a safe environment for the population. As much as the Commission pronounces itself on matters that relate to human rights violation, its holdings also have a bearing on environmental protection during armed conflict because of the link it has on the survival of the population.

The East African Community also provides a similar framework as that of the African Union in relation to the implementation of the Protocol on Conservation of the Environment and Natural Resources. Article 40 gives a framework for dispute settlement by first allowing for settlement through negotiations between the parties and if no agreement is reached, the matter can be brought before the East African Court of Justice, whose decisions will be final.⁷⁹ This means that the court has jurisdiction over matters of environment destruction during armed conflicts as this is an issue articulated under the Protocol. Africa as a continent has therefore made considerable effort to ensure that the environment remains to be protected even during times of armed conflict. As a region that is greatly endowed with natural resources, African states have realized that the environment and its resources play an important part in the social and economic development of the region and thus its protection is necessary at all times.

Conclusion

The discussion from this article indicates the importance of protecting the environment and most especially during times of armed conflict. The article has illustrated just how much war can impact on the environment. By looking at the different wars that have taken place it can be concluded that the environment has always been the silent victim of warfare with little attention afforded to it by the laws in place. The article has explained in section two the legal framework regarding the protection of the environment and how it has evolved over the years with the aim of safeguarding the environment. It is clear that IHL greatly attempts to protect the environment during armed conflict but because this is an area of law that is greatly dynamic and it keeps developing, IHL falls short in the protection of the environment. The article has also taken a look into IEL which is the main body of international law that concerns itself with the environment in an attempt to find provisions that

⁷⁹ Protocol on the Environment and Natural Resources Management established through Article 151(1) of the East African Community Treaty, Article 40.

ensure the environment is still protected during armed conflicts. IEL generally protects the environment during times of peace. It however has very few provisions that show the applicability of IEL as a body of laws during armed conflict. It is probably from the gaps evident in the IHL and IEL framework that Africa as a continent has created its own framework that specifically caters to the situations witnessed in regionally. The regional approach seems to fill the gaps left by the UN instruments and serves to protect the environment and natural resources in Africa more efficiently. The problem that remains is setting up institutional mechanisms that are effective in order to ensure the full implementation and enforcement of the provisions of the existing laws. Africa truly has the potential to see the protection of the environment during armed conflicts, but only if the African states can fully realize the importance of taking such steps. It is not enough to sign and ratify the relevant instruments that protect the environment and natural resources. This would mean total cooperation and inclusion of the rules regarding the environment in every aspect of their dealing to ensure its protection.

References

- Afriansyah Arie, 'The Adequacy of International Legal Obligations for Environmental Protection during Armed Conflict' (2013) 1 *Indonesia Law Review* 55.
- Andriy Shevtsov, "Environmental Implications the 2006 Israel-Lebanon conflict" ICE Case Studies, No. 216, 2007. <http://www1.american.edu/ted/ice/lebanon-war.htm>
- Aust, Anthony (2005). *Handbook of International Law*. Cambridge University Press, Cambridge.
- Austin, J.E. and Bruch, C.E. (Eds.) (2000). *The environmental consequences of war: Legal, economic, and scientific perspectives*. Cambridge University Press, Cambridge.
- Bassouni, M.C. (1996). "International crimes: Jus cogens and obligatio erga omnes." *Law and Contemporary Problems*, Vol. 59, p. 63.
- Bothe, M. (1991). "The Protection of the Environment in Times of Armed Conflict," 34 *German By Int'l L.* 54.
- Fenrick, W.J., "The law applicable to targeting and proportionality after Operation Allied Force: A view from the Outside." *Yearbook of International Humanitarian Law*, Vol. 3, 2000.
- Henckaerts, J.-M. (2000). "International legal mechanisms for determining liability for environmental damage under international humanitarian law." In J.E. Austin and C.E. Bruch (Eds.), *The environmental consequences of war: Legal, economic, and scientific perspectives*. Cambridge University Press, Cambridge.
- Hulme, Karen. (2004). *War torn environment: Interpreting the legal threshold*. Martinus Nijhoff Publishers, Leiden.
- Humle Karen, 'Taking Care to Protect the Environment against Damage: A Meaningless Obligation?' (2010) 92 *International Review of the Red Cross*.
- Jacqueline Michel, *Gulf War Oil Spill* in *Oil Spill Science and Technology*, Gulf Professional Publishing, 2010, p.1127.
- Jahidul Islam, *The Protection of Environment during Armed Conflict: A Review of International Humanitarian Law (IHL)*, 2019.
- Jens Iverson, and Jennifer S. Easterday, *Environmental Protection and Transitions from Conflict to Peace: Clarifying Norms, Principles, and Practices* (Oxford University Press 2017) 3.

- Lijnzaad, L. and Tanja, G. (1993). "Protection of the environment in times of armed conflict: The Iraq-Kuwait War." *Netherlands International Law Review*, Vol. 40, p. 180.
- Melzer N & Kuster E, *International Humanitarian Law: A Comprehensive Introduction* (International Committee of the Red Cross, 2019).
- Masao Tomonaga, 'The Atomic Bombing of Hiroshima and Nagasaki: A Summary of the Human Consequences, 1945-2018, and Lessons for Homo sapiens to End the Nuclear Weapon Age', 13 Nov 2019. Available at: <https://doi.org/10.1080/25751654.2019.1681226>
- Nicolas Bermamy, Mathieu Couttenier, Dominic Rohnerx And Mathias Thoenig, 'This Mine is Mine! How Minerals fuel Conflicts in Africa' (2017) 107 *American Economic Review* 1564, 1610.
- Omeje Kenneth, 'Oil Conflict and Accumulation Politics in Nigeria' *ECSP Report from Africa Population, Health, Environment, and Conflict Issue* 12, (2008)
- Okowa Phoebe, 'Natural Resources in Situation of Armed Conflict: Is There a Coherent Framework for Protection?' (2007) 9 *International Community Law Review* 250.
- Peter Vedel Kessing, 'The Use of Soft Law in Regulating Armed Conflict; From Jus in Bello to 'Soft Law in Bello'', Oxford University Press. Pg.129.
- Reyhani R, 'Protection of the Environment During Armed Conflict' (2006) 14 *Mo. Envtl. L. & Pol'y Rev.* 323.
- Sands, P. (1994). *Principles of International Environmental Law*. Cambridge University Press, Cambridge.
- Schmitt, Michael N. (1997). "Green war: An assessment of the environmental law of international armed conflict." *Yale Journal of International Law*, Vol. 22.
- Schmitt, Michael N. (2000). "War and the environment: Fault lines in the prescriptive landscape."
- Sharp, W. (1992). "The effective deterrence of environmental damage during armed conflict: A case analysis of the Persian Gulf War", 137 *Mil. L. Rev.* 1.
- Ticehurst, Rupert. (1997). "The Martens Clause and the laws of armed conflict." *International Review of the Red Cross*, Vol. 317, p. 125

T. M. Hawley, *Against The Fires of Hell: The Environmental Disaster of the Gulf War* (Harcourt Brace Jovanovich, (1992).

Westing, Arthur H. (2000). "In furtherance of environmental guidelines for armed forces during peace and war.

Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (3rd edn), Cambridge University Press, (2016)