

**IMPACT OF ARMED CONFLICT ON THE
ENVIRONMENT IN AFRICA:
A CASE STUDY OF SIERRA LEONE CIVIL WAR**

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Abstract

This paper examines the impact of armed conflict in Africa with particular reference to Sierra-Leone. The paper notes that the cause(s) of the conflict in Sierra-Leone were for resource control and marginalization and these are the root causes of most conflicts in Africa. The paper notes that the conflict has both direct and indirect impacts on the environment and infrastructures including natural habitats. The paper also examines the legal framework protecting the environment in times of armed conflict. In addition, soft laws for environmental protection are assessed. The paper reveals that originally International Humanitarian Law was not designed to protect the environment. The need to protect the environment arose in the 1970's. Again, the Additional Protocol II to the Geneva Conventions of 1949 applicable in internal conflicts does not protect the environment directly. The paper also notes that the Geneva Law will not apply where the conflict does not meet the threshold of armed conflict. In all, both the basic principles of IHL and the soft laws were not observed in the Sierra-Leone conflict. The paper notes that most African Countries are yet to ratify the Geneva Protocols and there is a need for them to do so.

Introduction

This paper examines the impact of armed conflict on the environment in Africa with a view to determining whether the laws of war are adequate for environmental protection in times of conflict. Since the end of the cold war, a lot of conflicts have happened and are still happening in various parts of Africa and these conflicts have brought about poverty, diseases, degraded environment, and other ills in the African regions.¹ Available data

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¹ These wars were characterized by massive rape, recruitment of children into armed groups, mutilations, ethnic cleansing, murders, environmental

as far back as the 90's show that 14 countries out of the 53 in Africa have been involved in armed conflicts and several deaths resulted from these conflicts. In addition to these, there were cases of more than 8 million refugees, returnees and internally displaced persons.² It is important to note that these numbers do not account for the recent armed conflicts in Sudan, Egypt, Libya and Tunisia.³ The human rights abuses and gross violation of international humanitarian law on civilians and civilian objects in Africa are so unprecedented that one can rightly refer to Africa as a region that has the worst records of war related human rights abuses.⁴

Records have also shown that some countries in the West African Region such as Liberia, Sierra Leone, Guinea Bissau and Cote D'Ivoire have some of the worst cases as these countries at one time or the other were hosts to bloody internal conflict. After the election in Cote D'Ivoire, there was a protest that led to the commission of atrocities against the civilian population since December 2010.⁵ The human rights abuses or atrocities that occurred as a result of these conflicts in Africa are beyond the scope of this paper. The paper is to examine the environmental consequences of these conflicts using Sierra Leone as a case study.

The impacts of armed conflicts on the environment, development and the well-being of the people are either long or

degradation, poaching of wild life and refugee problems including situations of internal displacement.

² Annan, K. "The Causes of Conflict and the Promotion of Durable Peace and Sustainable Development in Africa", Report of the Secretary General to the United Nations (UN: 1998).

³ These wars that occurred between 2005 and 2011 witnessed a lot of atrocities. In Sudan alone 2,700,000 people from the tribes of Fur, Masalit and Zaghawa migrated. Libya and Egypt have had large numbers of refugees fleeing to safety.

⁴The human rights situation in Africa is considered to be poor and typically seen as area of grave concern by the United Nations, governmental and non-governmental observers. The increase in civil strife and authoritarian rule in the region gave rise to the growth of Human Rights Commissions in Africa in 1990. See Human Rights Watch, "Protectors or Pretenders? Human Rights Commission on Africa" <http://www.hrw.org/reports/2001/africa/overview/summary.html> . Accessed 22nd January, 2016.

⁵ Kwesi, Aning and Atta-Asamoah, A. "Demography, Environment and Conflicts in West Africa" *KAIPTC Occasional Paper*, No. 34, April 2011, p. 2.

short term.⁶ It is believed that these effects caused by internal conflicts can be felt both within and beyond the territorial boundaries of the affected states.⁷ The effects of these conflicts can affect the environment, the physical infrastructure, human and social capital, which would invariably affect sustainable development policies of any affected state or locality.⁸ As earlier noted, this paper will focus on Sierra-Leone in a bid to discover the effects of the armed conflict on the environment. To achieve this, the paper will be divided into eight parts. Part one is the introduction, part two would look at the background of the Sierra – Leone civil war, part three would examine the causes of the armed conflict, part four would assess the environmental impacts of this armed conflict, part five would seek to answer the question of whether the environment is a cause or victim of conflicts in Africa and part six will look at the IHL framework for environmental protection in armed conflict and the soft laws applicable in times of conflict for environmental protection, part seven would answer the question whether IHL provisions are adequate for environmental protection in times of conflict while part eight would conclude the paper.

A Background to the Civil War in Sierra Leone

Sierra Leone is a small West African State with over 4.5 million people. The country gained independence in 1961. It has been asserted that since independence Sierra Leone has had a succession of corrupt leaders⁹ which led to authoritarianism, corruption and patrimonialism, depriving the majority of Sierra Leoneans of basic amenities.¹⁰ The ineffectual leadership together

⁶ “Environmental and Socio-Economic Impacts of Armed Conflicts in Africa” <http://www.eoearth.org/article/environmental-and-socioeconomic-impacts-of-armed-conflict-in-africa> . Accessed 22nd January, 2016.

⁷ Ibid.

⁸ Ibid.

⁹ Svard Proscovia. “The International Community and Post-War Reconciliation in Africa: A case study on the Sierra Leone Truth and Reconciliation Commission”, p. 38.

¹⁰ Sesay, A. *Civil Wars, Child soldiers and Post Conflict Peace Building in West Africa* (Lagos: College Press; 2003).

with mass social disaffection plunged the country into war. The war of 1991 began when members of the Revolutionary United Front (RUF) attacked towns in Kailahun District; near the Liberian border. This was led by Corporal Foday Sankoh and the insurgency was described as a by-product of the Liberian Civil War.¹¹ The RUF claimed its mission was to overthrow the one-party regime of the All Peoples Congress (APC) which had been in power since 1968 and bring democracy.¹²

Some commentators saw its rise as a response by youth to the general failure of Sierra Leonean society to offer them access to opportunity and social mobility in a society riddled with inequalities, patronage and deprivation.¹³ Charles Taylor, leader of the former National Patriotic Front of Liberia (NPFL), was considered a de-establishing force in the region and a sponsor of the RUF. It is trite to note that the Special Court of Sierra Leone (SCSL) in May of 2012 found him guilty of war related offences committed in Sierra Leone and sentenced him to 50 years imprisonment. At the onset, the RUF fought against the Sierra Leone Army (SLA) and shortly after, the Civil Defence Forces (CDF) known as the “Kamajors”.¹⁴ As the conflict progressed, the Sierra Leone Army grew from 3,000 ill equipped and poorly trained soldiers to 14,000 having recruited the local youths¹⁵. These soldiers appeared to have little loyalty to the State and became ‘Sobels’,¹⁶ contributing to the general insecurity felt by the citizens of Sierra Leone rather than protecting them.¹⁷ Similarly,

¹¹ Lekeje, C. “Sierra Leone: The Long Descent into Civil War” in Sesay, A. ed., *Civil Wars, Child Soldiers and Post Conflict Peace Building in West Africa* (Lagos: College Press; 2003) 113.

¹² UNICEF. *The Role of Education in Peace Building. Case Study: Sierra Leone* (New York: UNICEF; 2011) 17.

¹³ Richards, P. *Fighting for the Rain Forest: War, Youth and Resources in Sierra Leone* (Oxford: James Currey; 1996).

¹⁴ This group emerged as a civilian response to the perceived failure of the SLA to mount a robust challenge to the RUF.

¹⁵ UNICEF supra note 12.

¹⁶ Soldiers by day and rebels by night.

¹⁷ Davies, V. A. B. “Development Co-operation and Conflict in Sierra Leone”, *Conflict, Security and Development*, Vol. 10, No. 1, 2010, pp. 5776.’

the Civil Defense Forces grew from a set of loosely linked anti-RUF paramilitaries to a fighting force of more than 20,000 members.¹⁸

In 1995, the progress of the Revolutionary United Front was halted by the government of Sierra Leone when they hired the Executive Outcomes, a South African private security company to repel the rebels and this led to the signing of the Abidjan Peace Agreement in 1996.¹⁹ The RUF and a section of the SLA²⁰ led a *coup d'état* against President Kabbah in 1997 and he thereafter fled into exile, and formed a military government.²¹ In 1998, the Economic Community of West African States Monitoring Group (ECOMOG)²² intervened in the conflict, retaking the capital city, and reinstating the exiled President Kabbah. With the planned withdrawal of ECOMOG in 1999, the international community intervened. The military intervention by the United Kingdom shifted the military balance in favour of the government and this crucial factor induced the RUF into final peace negotiations with the government. The Lome Peace Accord which was signed on the 7th July, 1999 was a fall out of the negotiations. The Accord included the cessation of hostilities and demobilization of armed actions; the transformation of the RUF into a political party, the creation of a Truth and Reconciliation Commission, the establishment of a commission to manage the country's national resources; and a pardon for all ex-combatants of all the groups.²³

Causes of the Conflict

The major cause(s) of the war in Sierra Leone will remain a topic of debate in academic literature as has been the case with

¹⁸ UNICEF, *supra* note 15.

¹⁹ *Ibid.*

²⁰ The Armed Forces Revolutionary Council (AFRC)

²¹ Human Rights Watch. "The Jury is still out: A Human Rights Watch" Briefing Paper on Sierra Leone: 11 July 2002. <http://www.hrw.org/en/reports/2002/07/11/jury-still-out>. Accessed 2nd September, 2015.

²² ECOMOG was made up of Armed forces of the Member States of the Economic Community of West African States

²³ UNICEF, *supra* note 12, p.18

other wars or conflicts around the globe. This section will examine the truth on the claims that the war was borne out of greed and avarice of the leaders or as a result of genuine political structural inequalities. In almost all the wars in Africa, that of Sierra Leone was termed as “new wars” or “dirty wars”. These conflicts that occurred after the fall of the Soviet Union and the end of the Cold War, were non-international armed conflicts or civil wars that were fought brutally with small arms and low tech weapons²⁴ and these weapons also have their impacts or effects on the natural environment.

a. War for resource

The internal conflict in Sierra Leone was basically termed a resource war and a war for diamonds²⁵, with Charles Taylor, the former President of Liberia exchanging weapons for diamonds with the rebels of Sierra Leone particularly the RUF. The role played by Taylor later led to his trial and conviction at the Special Court for Sierra Leone (SC-SL) in 2012.²⁶ The theory adduced from this war is the fact that most internal conflicts were as a result of greed of the actors. There were economic gains from the exploitation of this resource and the armed groups were able to fund their fighting.²⁷ This further led to the massive inequalities in resources and access to opportunities within and this to a large extent divided the population.

While the RUF was being criticized for using illegal diamond trade to finance their cause, there was also a widespread allegation that many parties to the conflict²⁸ were all funded at least in part

²⁴ Gberie, L. *A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone* (Indiana: Indiana University Press; 2005).

²⁵ Collier, P. et al. *Breaking the Conflict Trap: Civil War and Development Policy* (Washington DC: The World Bank; 2003).

²⁶ Charles Taylor was sentenced to 50 years imprisonment for his roles during the Sierra Leonean War.

²⁷ It was alleged that the RUF funded their fight through this resource and there were economic motivations of other actors in the conflict both internal and external. See UNICEF supra note 12, p. 20.

²⁸ Troops like ECOMOG and the Foreign Security Firms like the Executive Outcomes and later Sand Line International.

with the resources obtained from the diamond.²⁹ Again, the intervention by the Western World could not be said to be purely on humanitarian ground, there were clear evidences that the protection of foreign civilians and the Western Corporate interests were their priority.

b. Marginalization

Marginalization is one of the factors that have led to several internal conflicts and tensions in most parts of Africa. This is as a result of colonial and post colonial mismanagement, corruption and patronage. Sierra Leone is not an exception to this menace. The theory discussed earlier that the RUF was motivated by greed if taken in its entirety would fail to recognize genuine grievances which arose as a result of many decades of marginalization occasioned by colonial and post colonial mismanagement. This is crucial because discrediting the RUF and denying the existence of genuine grievances as a course of the conflict in Sierra Leone will mean that social justice and redistribution have not been central to post conflict reconstruction policies.³⁰

Environment: A cause or a victim of conflicts

The relevance of environmental issues in disputes leading to armed conflicts include: dispute over access to renewable resources; disease burdens that overwhelm communities' ability to cope and that tear apart fragile social fabrics; the repercussions of migrant populations; and the unequal nature of adverse impacts and burdens.³¹ In West Africa, accessibility to renewable resources and the repercussions of the flow of environmental refugees are an important way by which the environment is greatly relevant to armed conflict. Whilst the former has been noted in almost all the

²⁹ Richards Paul, *supra* note 13.

³⁰ UNICEF *supra* note 12 p. 20.

³¹ Westing, H. A. et al. "Environmental Degradation as Both Consequences and Cause of Armed Conflict," Working Paper prepared for Nobel Peace Laureate Forum Participants by PREPCOM Sub-Committee on Environmental Degradation, June 2011. <http://www.institute-for-non-violence.com/all/download/pdf/envirdegrad.pdf> . Page 5 of 16 Accessed 13 March, 2015.

major conflicts in West Africa and the Nigerian Niger Delta crises, the latter is rarely mentioned notwithstanding its importance in the discourse on the nexus or relationship between conflicts and the environment. The outbreak of conflicts in West Africa has had critical impact on the environment and these include: the use of high explosive munitions, use of heavy equipment particularly tanks and other off road vehicles; pitching of bases and camps; over exploitation of the environment for shelter food and economic purposes by insurgents; bush burning as a military tactics, among others.³² Although, these stated points have direct adverse impacts on the environment, the breakdown of law and order due to civil war usually leaves protected areas and species vulnerable to over exploitation by communities and warring factions. In Sierra Leone, forest population officers such as foresters, rangers and guards were not paid for a long period during the civil war. This gave the leeway for illegal mining activities, logging and other forms of massive deforestation of the country's forest cover.³³

The negative impacts of armed conflicts on the environment are becoming increasingly documented in a growing body of literature.³⁴ During and after armed conflicts, an armed and lawless society can have both direct and indirect impacts on the environment. These impacts occur for subsistence, strategic or commercial reasons, and often have political, social and economic root causes.³⁵ Habitat destruction and the accompanying loss of wildlife are among the most common and far-reaching impacts of conflict on the environment, and occur for subsistence, strategic, or

³² Kwesi, A and Atta-Asamoah, A. *supra* note 5, p. 24.

³³ Squire, C. *Sierra Leone's Biodiversity and the Civil War* (Washington DC: Biodiversity Support Program; 2001) pp. 21-22.

³⁴ See Austin, J. E. and Bruch, C. E. *The Environmental Consequences of War*, (Cambridge: Cambridge University Press; 2000), Blom, A. and Tamindou, J. *The History of Armed Conflict and its Impact on Biodiversity in the Central African Republic* (Washington DC: Biodiversity Programming; 2001).

³⁵ The main impacts of armed conflict on the environment occur through habitat destruction and loss of wildlife, over-exploitation and degradation of natural resources and pollution.

commercial reasons.³⁶ Habitats are sometimes directly affected during armed conflict.³⁷

Vegetations are also not left out because they are cleared when large numbers of displaced people are resettled albeit temporarily. Vegetations are often cleared in order to farm and obtain firewood for fuel. This often leads to deforestation and erosion. Placing refugees and internally displaced persons in ecologically marginal and vulnerable areas makes the ability of the environment to recover very difficult. Vegetations are also destroyed during and after armed conflicts when valuable resources like diamond (as in the case of Sierra Leone) or gold are mined without due consideration to the environmental consequences since these minings are done without control.³⁸

With habitat destruction, certain species of plants and animals may become locally threatened, or even extinct.³⁹ Animals owned by individuals may also be killed or injured by land mines,

³⁶ James Shambaugh et al. *The Trampled Grass: Mitigating the Impacts of Armed Conflicts on the Environment* (Washington DC: Biodiversity Support Programs; 2001) p. 4.

³⁷ For instance, vegetation may be cut, burned or defoliated to improve mobility or visibility for troops. In Rwanda in 1991, the Rwandan army cut a swath 50-100 meters wide through the bamboo forest connecting the Virunga Volcanoes in order to reduce the possibility of ambush along a key trail. See Kalpers, J. *Overview of Armed Conflict and Biodiversity in Sub-Saharan Africa: Impacts, Mechanisms and Responses* (Washington DC: Biodiversity Support Program; 2001).

³⁸ Over exploitation of natural resources is often directly linked to armed conflicts and occurs both for subsistence and commercial reasons. One immediate result of political instability during war is that local people often cannot grow basic crops. For their survival, they are increasingly forced to depend on wild foods such as bush meat and wild food plant. At the same time, displaced people usually collect firewood, food plant, and other natural resources in the areas they have moved to. Such exploitation on a large scale may be unsustainable even in the short term. See James Shambaugh et al. *supra* note 36, p. 5.

³⁹ In Rwanda, two-thirds of the original area of Akagera National Park was removed from protected status and numerous refugees and their livestock were resettled there. The result was the virtual local extinction of some species of ungulates, including the roan antelope and the eland. See Kalpers J. *supra* note 37.

as was the case of elephants in Mozambique.⁴⁰ In areas, where fighting is occurring, troops often hunt large mammals in great numbers to obtain food. These practices have devastating impacts on wildlife population, especially if military action continues in an area for an extended period.⁴¹ Larger species with slow reproductive rates are particularly vulnerable, and tend to disappear first.⁴² During belligerency, those in power are often in need of money to fund their military activities. This need usually leads them to commercial scale extraction of natural resources such as timber, ivory and diamonds.⁴³ In certain cases, such extractions may be legal, but in others, the people in power may sell extraction rights to which they may have only temporary or even no legal rights at all. Large scale extraction was documented in the war economies of Liberia, Sierra Leone,⁴⁴ the Democratic Republic of Congo (DRC)⁴⁵ and also Angola.⁴⁶

From the analysis above, this paper submits that it is obvious that the role of the environment in an armed conflict cannot be overemphasized. Also, it is trite to note that the environment can either be the cause of an armed conflict or the victim but more often than not, the environment is the victim of an armed conflict and the impact or consequences of an armed conflict to the natural environment including the fauna and the

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² Wild life in DRC's Garamba National Park, was heavily exploited by marauding poachers who killed park animals, primarily for their meat. Patrol monitoring and maps showed the poaching moved steadily south through the park, killing large mammals initially buffalo, later elephants from 1991 onward. See James Shambaugh et al supra note 36, p. 6.

⁴³ Ibid.

⁴⁴ Global Witness. *The Role of Liberia's Logging industry on National and Regional Insecurity*. (London: Global Witness; 2001).

⁴⁵ United Nations. Report of the Panel of Expert on the Illegal Exploitation of Natural Resources and other Forms of Wealth of the DRC. <http://www.un.org/news/dh/latest/drcongo.html-msocom-2> . Accessed 14th March, 2015.

⁴⁶Global witness. *A Rough Trade: The Role of Companies and Governments in the Angolan Conflict* (London: Global Witness; 1998).

flora is unimaginable and some environments may never recover from the effects of belligerency.

Environmental Impact of Armed Conflict in Sierra Leone

The Sierra Leone civil war was officially brought to an end in 2002 but the impacts of that war could still be felt today. The United Nations Environment Program (UNEP)⁴⁷ conducted an assessment of the environmental impacts of that armed conflict and concluded that the environmental impacts of the conflict are of three main types: direct,⁴⁸ indirect⁴⁹ and institutional.⁵⁰ It is important to understand that when environmental impacts are not mitigated, crucial livelihoods and human health can be put at great danger, threatening recovery and stabilization. In effect, identifying the enduring environmental impacts of the conflict in Sierra Leone is very important and crucial to its agenda for change and recovery.

This paper will primarily focus on the direct and indirect impacts as this would help in the analysis of the IHL legal framework for environmental protection in times of armed conflict.

Direct Impacts

According to UNEP's report, the direct impacts of the conflict in Sierra Leone on the environment have in many cases not yet been fully addressed. Although the assessment by UNEP was carried out over seven years after the conflict, many direct

⁴⁷ UNEP Sierra Leone: "Environment, Conflict and Peace Building Assessment 2010". Technical Report <http://www.postconflict.unep.ch/publications/sierra-leone.pdf> p. 46. Accessed 14th March, 2015. See also <http://www.unep.org/conflictsanddisasters> . Accessed 15th January, 2016.

⁴⁸ The Direct impacts are those with highly visible environmental consequences such as the destruction of ecosystems or water supply and agriculture as a result of fighting.

⁴⁹ Indirect impacts such as those caused by coping and survival strategies, often occur over a longer period with the effects manifesting more severely over time.

⁵⁰ The institutional impacts are made up of the governance and management changes that occur during the time of conflict, which make dealing with direct and indirect impacts much more difficult in both the short and long run.

environmental consequences are still visible.⁵¹ These impacts include:

1. Water Facilities

While most of Sierra Leone's infrastructure was damaged and neglected during the conflict, the lack of water system recovery has been particularly harmful.⁵² RUF fighters repeatedly targeted water holding tanks, wells and other water related infrastructure in their thorough sacking of local villages across the country. This is a direct contravention of the provisions of Article 14 of the Additional Protocol II to the Geneva Conventions which protect drinking water installations and supplies and irrigation works.⁵³ These destructions of water facilities inhibited other activities in the dry season due to the fact that there is almost no irrigation currently taking place beyond some cultivation of wetland valleys, which does not require additional infrastructure.⁵⁴ The destruction of water installations and wells is a clear breach of the provision that protects objects indispensable to civilian survival.

2. Agriculture

The rural areas of Sierra Leone are basically dependent on subsistence agriculture and it is a major source of livelihood and the damage to this sector as a result of the armed conflict cannot be ignored. UNEP notes that the damage to agricultural operations in rural areas is still apparent, most notably in the loss of cash crops plantations, experimental plots and livestock.⁵⁵ The direct-damage to agricultural output was a combination of damage caused by rebel fighters as they sacked towns and villages, and the fact that most displaced owners

⁵¹ UNEP's Report, supra note 45, p. 46.

⁵² Ibid, p. 47.

⁵³ Article 14, Additional Protocol II. Protection of objects indispensable to the survival of the civilian population.

⁵⁴ It was also reported by UNEP that a lack of waste management capacity has caused problems for sanitation, surface water degradation and damage to coastal areas.

⁵⁵ UNEP's Report, supra note 45, p 47

abandoned their plots for several seasons or years.⁵⁶ As a result of the damage to the agricultural sector, recovery of the rural farm economy has been slow and capital intensive.⁵⁷

3. Forests

During armed conflicts, it is usually very easy for belligerents to target the forests on the reason that it serves as a cover for the enemy thereby making the forest a military objective that must be destroyed.⁵⁸ The civil war in Sierra Leone was not an exception to this military tactics. The forests were damaged by the activities of RUF, the Sierra Leone Army and the Government affiliated militias and mercenaries. The impacts on forests were particularly destructive due to the nature of the activities of the rebel groups/forces which include – the destruction of crops, vegetations, and others.⁵⁹

4. Mining

This paper earlier noted that one of the causes of the conflict in Sierra Leone was greed exhibited by the people in government over the exploitation of natural resources particularly diamond. The paper also noted that during armed conflicts the belligerents engage in illegal mining of resources and the sale of same which they use to fund their cause. During the conflict in Sierra Leone, the RUF and the other military groups increased the intensity of illegal/illicit diamond mining to support their operations. This illicit mining was part of the

⁵⁶ UNEP's report stated that although there have been considerable efforts by the donor community the ministry of Agriculture and foreign investors to revitalize this sector, the renewed benefits of commercial crop production are yet to materialize. At the same time, beyond relatively small chicken and goat populations, replacing livestock has been possible only for the wealthiest.

⁵⁷ UNEP's supra note 55, p. 47

⁵⁸ This has happened in many instances during the Vietnam War; the US used agents white and orange to defoliate the Vietnamese forests on the ground that it provided cover for the Vietnamese soldiers. Vietnam is yet to recover from the impacts of those chemicals to date.

⁵⁹ The extent of impacts of fighting and looting on forests is currently unclear as little or no direct evidence is available on the subject. See UNEP's report supra.

well-known and publicized “arms for diamonds” trading that sparked the Kimberly Process, and was the basis for Taylor’s prosecution.⁶⁰ An estimated annual amount of between USD 25 million and USD, 25 million in diamond left the country each year throughout the war as part of the RUF’s diamond trade.⁶¹ The mining sites that were expanding were not rehabilitated in any way, leaving effluent, degraded sites and lost arable land. The mining also caused a great deal of persistent damage to the sector, in terms of reduced flows of natural capital and a heavily degraded environment.⁶²

5. Environmental Toxicity

The report from UNEP indicates that despite the fact that Sierra Leone has a very small industrial sector; it is possible that some pollution occurred in the Western Area as a result of direct attacks on light industry and neglect of maintenance during the war. Environmental impacts may have resulted from damage to Freetown’s port as a consequence of the destruction of two large warehouses⁶³ and through possible underwater leakage of hazardous waste and industrial chemicals.⁶⁴ It is presumed that these impacts have affected groundwater or the fisheries sector although UNEP was not able to obtain quantitative samples or data.⁶⁵

Indirect Impacts

It has been observed that the indirect impacts of war on the environment and natural resources base are usually more

⁶⁰ Charles Taylor was eventually sentenced to 50 years imprisonment for his involvement in the civil war. He was sentenced by the Special Court for Sierra Leone although the court’s statute did not provide for jurisdiction on environmental degradation.

⁶¹ Squire, C. *Sierra Leone’s Biodiversity and the Civil War* (Washington DC: Biodiversity support programme; 2001) pp. 21-22.

⁶² See UNEP’s Report , note 45, p.48.

⁶³ Squire, C. Supra note 59.

⁶⁴ Ibid.

⁶⁵ UNEP’s Report , note 45, p. 49.

significant and long lasting than the direct impacts.⁶⁶ In Sierra Leone, the most visible indirect impact had been the environmental consequences of large-scale displacement during the conflict.⁶⁷ Over half the population was forced to move; both internally and over the borders of Sierra Leone into Guinea and Liberia as refugees.⁶⁸ Again, internal conflict-induced migration speed up the process of urbanization, particularly in the capital, Freetown, as people came in search of a stable security situation during the 1990's and subsequently decided to settle.⁶⁹

IHL Framework for Environmental Protection in Times of Armed Conflict

Wars or armed conflicts have been prohibited by the UN Charter⁷⁰ but the use of force will be justified in self-defense⁷¹ where an armed attack occurs. However, the only purpose or reason for war is to neutralize or defeat the opposing army or armed group. This should be the goal of the belligerents and not to cause unnecessary harm to civilians and their objects which would include the natural environment.

The limit on the means and methods of warfare was first set forth in St. Petersburg Declaration of 1868 and it reads:

The only legitimate object which States should endeavor to accomplish during war is to weaken the military forces of the enemy, that for this purpose it is sufficient to disable the greatest possible number of men; that this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death

⁶⁶ Ibid.

⁶⁷ Ibid.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Article 2(4), UN Charter.

⁷¹ Article 51, UN Charter. Self-defense can either be individual or collective.

inevitable; that the employment of such arms would therefore be contrary to the law of humanity.⁷²

This rule, established 145 years ago, prohibits the use of arms that exceed the military advantage, which is to weaken the military forces of the enemy. This prohibition can be extended to protect the environment, as the use of certain weapons can affect the environment negatively and thereby “aggravate” the suffering of disabled men or render their death inevitable. In 1899 and 1907 respectively, the Hague Conventions respecting the Laws and Customs of War on Land reiterated this prohibition on the means and methods of warfare.⁷³ The Conventions provide that the rights of belligerents to adopt means of injuring the enemy are not unlimited.⁷⁴ Environmental harm or destruction associated with means or methods of warfare can give rise to humanitarian concerns.⁷⁵

In 1977, the Additional Protocols to the Geneva Conventions of 1949 came on board. The Additional Protocol I reiterated the provisions of the Hague Conventions. Article 35(1) provides that “in any armed conflict, the right of the parties to the conflict to choose methods or means of warfare is not unlimited.” Article 35(1) of Additional Protocol I does not limit the means of injuring the enemy, but it does limit the choice of methods or means of warfare. The greatest challenge that is facing IHL today is the technological advancement which has also affected the development of hi-tech means and methods of warfare and although some of these hi-tech weapons may not necessarily injure humans, they devastate the environment.

⁷² Declaration Renouncing the Use in Time of War of Certain Explosive Projectiles under 400 Grams in Weight, Para 2, St. Petersburg Declaration 1868, 1 *A.J.I.L.* (supp.) 95.

⁷³ Article 22 of the Regulations Annexed to the Hague Conventions Respecting the Laws and Customs of War on Land of 1899 and 1907.

⁷⁴ *Ibid.*

⁷⁵ For instance, polluting water supplies, destroying chemical or nuclear plants and releasing toxic substances into the air and destroying sewage facilities, dumping raw materials or corpses in water bodies, will affect the environment primarily and the people eventually.

The general principles regulating warfare is also contained in Article 35 AP I and they include the principles of distinction, proportionality, necessity, and humanity. These would be considered hereunder.

The Principle of Distinction

This rule states that the parties to the conflict shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives.⁷⁶ The principle prohibits all means and methods that cannot make a distinction between those taking part in hostilities (combatants) and those not taking part in hostilities (civilians).

It simply means that for an attack to be lawful, the weapons and tactics must clearly distinguish between military and civilian objects, and attacks must only be directed at military objects. Therefore, in the conduct of hostilities, civilians or civilian objects should be spared.⁷⁷ Here, the environment is considered a civilian object because damage to the natural environment will prejudice the health or survival of the population.⁷⁸

One can safely conclude that the belligerents in the Sierra Leone did not advert their minds to this principle neither did they apply it in their attacks.⁷⁹ Schools were destroyed, agriculture and water facilities were destroyed and the health and survival of the civilian population were hinged on these facilities. Private homes and villages were destroyed, thereby displacing the civilians and creating the problems of refugees and internally displaced persons.

⁷⁶ Article 48, Additional Protocol I.

⁷⁷ For instance, schools, hospitals, worship places, parks, bridges and dams should be excluded from military operations.

⁷⁸ Article 55(1), Additional Protocol I.

⁷⁹ This rule was created to restrict warfare or attacks to military objects and combatants. However, armed forces may go beyond this rule, to the minimum extent possible to eliminate the enemy forces, especially when the enemy uses civilian populations as shield for military targets or launches an attack from a civilian object, like the schools and places of worship. It is trite to note that Article 28 of Geneva Convention IV prohibits the use of protected persons to render certain points or areas immune from military operations.

The Principle of Proportionality

The principle of proportionality is another basic principle. It is to the effect that even if there is a clear military target, it is not possible to launch an attack if the risk of civilian property being harmed is larger than the expected military advantage. The Protocol clearly provides for prohibition of the following:

An attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.⁸⁰

To this extent, the principle demands a comparison between the military target and the environmental effects. Before an environmental site is destroyed, the military commanders must balance the expected environmental harm against the military advantage anticipated.⁸¹ Invariably, where the environmental damage outweighs the military advantage anticipated, the said military operation should be called off.

Even in the event of the enemy making use of civilians and civilian objects, the attacking forces are still under an obligation to meet the test of whether predictable harm would be proportional to the military advantage. If the harm is excessive in relation to the concrete and direct military advantage anticipated, a war crime would have been committed.⁸² Again, “an attack shall be suspended if it becomes apparent that the objective is not a military one or is subject to special protection (...) which would be excessive in relation to the concrete and direct military advantage anticipated.”⁸³

⁸⁰ Article 51(5) (b), Additional Protocol I.

⁸¹ It simply means that if the environmental damage outweighs the military advantage, the attack should be called off or suspended. Where the harm will be excessive in relating to the concrete and direct military advantage anticipated, it would be considered a war crime.

⁸² Article 57(2) (iii), AP I. See also Article 8(2) (iv) (b), ICC Statute which criminalizes environmental destruction in times of armed conflict.

⁸³ Article 57(2) (b), AP I.

For instance, in the Vietnam War, the use, by the United States in its effort to subdue the guerrilla enemy among other things, of herbicides (agent orange and agent white), high explosive ammunitions, and mechanical land clearing that resulted in large scale deforestation and destruction of crops, was considered disproportional due to the simple reason that the environmental destruction or loss suffered clearly outweighed the anticipated military advantage.⁸⁴ Another terrible example is the oil well fires by Iraqi troops in Kuwait in 1991.⁸⁵

In the Sierra Leone civil war, the destruction of the forest by the RUF and other forces largely affected the country. Despite this, industries were also destroyed in the Western Area and there was leakage of hazardous waste and industrial chemicals which greatly affected the masses. Such attacks and their consequences were disproportionate and should not have been carried out by the military and other militia groups in Sierra Leone and the perpetrators should be held responsible by the Special Court of Sierra Leone although the Statute of the Special Court does not contain provisions for environmental damage. It should be noted that the proportionality principle is well entrenched in Articles 35(2), 51(5) (b), and 57(2) (a) and (b) of the Additional Protocol I and it offers great protection to civilians and civilian objects and this protection can be extended to the environment.

The Principle of Humanity

The duty not to target civilians was reiterated in the UN General Assembly Resolution of 1969.⁸⁶ The resolution provides that (a) “the right of parties to a conflict to adopt means of injuring the enemy is not unlimited; (b) it is prohibited to launch attacks against the civilian population; (c) a distinction must be made at all

⁸⁴ Nada Al-Duaij. “Environmental Law of Armed conflict” (2002) Dissertation and Theses, Paper 1, Pace University School of Law. <http://www.digitalcommons.pace.edu/lawdissertations/1> . Accessed 10th June, 2015. P. 100.

⁸⁵ Ibid.

⁸⁶ UN General Assembly Resolution 2444 entitled “Respect for Human Rights in Armed Conflict” adopted 18 December, 1969.

times between parties taking part in the hostilities and members of the civilian population to the effect that the latter be spared as much as possible...”⁸⁷ This in effect means that IHL attempts to humanize war to the extent possible by prohibiting unnecessary suffering of victims of armed conflict. Prohibiting weapons and other tactics would help minimize the spread of poisons, disease or genetic damage as was and is still the case in Vietnam.

The Principle of Necessity

The United Nations Charter prohibits the use of force against another state except in the case of individual or collective self-defense.⁸⁸ In effect, any other use of force will be deemed illegal. To this extent, belligerents involved in legal and illegal armed conflicts should be restricted by this principle and this means that the use of methods and tactics of war should be limited to the minimum extent possible. If this principle is strictly observed, it will reduce the humanitarian and environmental loss associated with armed conflicts even in Sierra Leone. The major problem with this principle is the fact that attacks which can cause environmental damage can be excused or allowed on ground of necessity but this paper argues that such attacks should be balanced against the principle of humanity.

The Principle of Intergenerational Equity

This principle can be discussed here although it is not strictly an IHL principle. This is considered against the backdrop of massive exploitation of the natural resources in Sierra Leone to sponsor war efforts and in the purchase of arms for which Charles Taylor has been sentenced to jail by the Special Court for Sierra Leone. The principle of intergenerational equity implies that no weapon or tactics can be employed if it inflicts pain, risk of harm and damage, or if it can be reasonably apprehended to do so upon those unborn.⁸⁹ This term was first used by the Philippines Supreme Court in 1993 when it presided over a case involving a

⁸⁷ Ibid.

⁸⁸ Article 51, UN Charter.

⁸⁹Nada Al- Duaij, *supra* note 84, p. 109.

group of children as representatives of themselves and future generations to protect their rights to a healthy environment.⁹⁰ The court held that their personality to sue on behalf of the succeeding generations can only be based on the concept of intergenerational equity/responsibility in so far as the right to a balanced and healthful ecology is concerned.⁹¹

Again, principle 3 of the Rio Declaration of 1992 on Environment and Development recognizes the principle of intergenerational equity and provides that: “The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.”⁹² The diamond in Sierra Leone that was illegally mined to sponsor conflict, if properly harnessed could be used to develop the country for the benefit of the present and future generations thereby entrenching sustainability in the use of natural resources. It is important to note at this point that the Preamble of the 1997 Resolution of the *Institut de Droit International* on Responsibility and Liability under International Law for Environmental Damage recognized that “inter-generational environmental law is developing significant new links with the concept of inter-generational equity (which is) influencing the issues relating to responsibility and liability.”⁹³ Accordingly, the wrongful act of the present generation in Sierra Leone should never affect the future generations.

This means that when armed conflict occurs, combatants should keep future generations in their consideration of means and methods of warfare. In effect, no method or means of warfare should be used if they have the potential of affecting future generations. Again, natural resources should not be exploited

⁹⁰ *Minors Oposa v Secretary of the Department of Environment and Natural Resources*, 33 ILM 173 (1994).

⁹¹ *Ibid* at 11-12.

⁹² United Nations Conference on Environment and Development, Principle 3. UN Doc. A/ Conf 15/26, Vol. 1 (1992).

⁹³ Eight Commission Rapporteur: Mr. Francisco Orego Vicuna, “Responsibility and Liability under International law for Environmental Damage Resolution” Adopted on September 4, 1997 (1998) 10 *Geo. Int’l Environmental Law Review* 269 at 269.

without recourse to the principle of sustainable development. The effects of warfare, if they cannot be completely eliminated, should be borne by the generation that decided to have recourse to the use of force by failing to prevent war from occurring. The Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques (ENMOD) and the Additional Protocol I to the Geneva Conventions reiterated this principle when the two laws made use of the term long-lasting and long-term⁹⁴ to describe the means of warfare that is not acceptable.

Additional Protocol II Relevant to the Protection of Victims of Non-International Armed Conflict

This Protocol is designed to protect victims of non-international armed conflict like the type experienced in Liberia, Sierra Leone, Nigeria, Ivory Coast, Democratic Republic of Congo, Libya, Sudan and so forth. The major setback with this Protocol is the fact that several States have not accepted or ratified the Protocol especially in Africa despite the fact that most of the non-international armed conflicts presently take place in the continent. Another setback is that the Protocol did not mention environmental protection directly but in Article 14, the Protocol provides that:

Starvation of civilians as a method of combat is prohibited. It is therefore prohibited to attack, destroy, remove or render useless for that purpose, objects indispensable to the survival of the civilian population, such as foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works.⁹⁵

⁹⁴ Art 35(3) of Additional Protocol I provides that “it is prohibited to employ methods or means of warfare which is intended, or may be expected to cause widespread, long-term and severe damage to the natural environment.”

⁹⁵Article 14, Additional Protocol II. This article is parallel to Articles 54 and 56 of Additional Protocol I which protects objects that are indispensable to the survival of the civilian population and prohibition of attacks on environment related targets.

The essence of this provision is to prohibit attacks on objects that are indispensable to the survival of civilian population. A careful look at the conflict in Sierra Leone would reveal a clear breach of the above provision of the Protocol. As noted earlier in this work, UNEP observed that the destruction to the agricultural sector in Sierra Leone is still visible. The civilians lost crop plantations, experimental plots and livestock, towns and villages were sacked and the civilians were displaced.⁹⁶ Water facilities were destroyed according to the report from UNEP.⁹⁷

One would recall that the poisoning of water and water facilities in Sudan in the tribes of Masalit, Zagawa and Fur led to the migration of 2,700,000 persons from those tribes and was one of the reasons for the indictment of Omar Al Bashir by the International Criminal Court in 2005. Water facilities and agricultural areas including livestock are indispensable to the survival of civilian population and should not be targeted in the event of conflicts. Additionally, the Protocol made provision for the protection of monuments, works of art, and places of worship because these also form part of the human environment. The Protocol states:

Without prejudice to the provisions of The Hague Convention for the protection of cultural property in the Event of Armed conflict of 14, May 1954, it is prohibited to commit any acts of hostility directed against historic monuments, works of art or places of worship which constitute the cultural or spiritual heritage of people's and to use them in support of the military effort.⁹⁸

The two provisions discussed above reveal that Protocol II affords indirect protection to the environment and to apply the Protocol, one of the parties to the conflict must be a government that can implement the Protocol in the event of a breach. The

⁹⁶ UNEP supra note 45, p. 47.

⁹⁷ Ibid.

⁹⁸ Article 16, Additional Protocol II.

Sierra Leone Army (SLA) which is the government armed force was involved in the conflict and the government should have made effort to implement the Protocol.

The Martens Clause

One of the IHL's landmarks is the Martens Clause. The clause was originally designed to provide supplementary humanitarian rules for the protection of all persons in times of armed conflict.⁹⁹ This clause was originally drafted in 1899, when the laws of armed conflict were few. The clause provides that unforeseen situations should not be left to the arbitrary judgment of military commanders, but should be governed by articulated rules.¹⁰⁰ In 2000, the Martens clause inspired a further action by the international environmental law community when the International Union for Conservation of Nature and Natural Resources (IUCN) Amman Clause was adopted to regulate environmental matters.¹⁰¹ This clause was adopted by seventy-two States in the IUCN World Conservation Congress in Amman, Jordan.¹⁰²

⁹⁹ Dina Shelton and Alexandre Kiss. "Adoption of the Marten's Clause for Environmental Protection". A paper prepared for the Second World Conservation Congress, Amman, Jordan (Oct 4-11, 2000). See also Theodor Meron. "The Marten's Clause Principles of Humanity, and the Dictates of Public Conscience" (2000) *American Journal of International Law* (A.J.I.L.) 78 at 78.

¹⁰⁰ Ibid.

¹⁰¹ Nada. Al-Duaij, *Supra* note 84, p. 121.

¹⁰² 4-11 October, 2000. That action was held to be one of the most fruitful efforts of the Amman congress. The IUCN also known as the World Conservation Union was found in 1948. IUCN is unique among international organizations in that it is a membership organization comprising governments, both international and national non-governmental organizations as well as non-voting affiliate members. The IUCN objective shall be to influence, encourage and assist societies throughout the world to conserve the integrity and assist societies throughout the world to conserve the integrity and the diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. IUCN has five Commissions: Education and communication, environmental law, Environmental, Economic and Social Policy, World Commission Protected Areas, Species, Survival and Ecosystem Management. Its headquarters is in Switzerland.

The Marten's clause provides a foundation for all contemporary IHL from its adoption in 1899. It has been reiterated in the four Geneva Conventions and the two Additional Protocols. The Marten's clause provides that:

Until a more complete code of the laws of war has been issued, the high contracting parties deem it expedient to declare that in cases not included in the regulations adopted by them, the inhabitants and the belligerents remain under the protection and the rule of the principles of the law of nations, as they result from the usage established among civilized peoples from the laws of humanity and the dictates of the public conscience.¹⁰³

The Marten's clause declares that the civilian population and the combatants shall at all times remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience. Assuming there were no laws regulating the choice of means of combat in Sierra Leone, the belligerents should have adverted their minds to the laws of humanity and the dictates of public conscience before targeting and destroying facilities that should have been spared because their destruction would not contribute any military advantage.

Again the Marten's clause seeks to protect community interest by providing for the protection of individuals or groups of individuals,¹⁰⁴ specifically the combatants and civilian population. The Marten's clause also has a foundation in Morality; this is due to the fact that a moral norm generates obedience not because of a

¹⁰³ Hague Convention II of 1899, Preamble para. 9. See also The Hague Convention IV of 1907, Preambular paragraph 8. Additional Protocol II, Preambular paragraph 4. Additional Protocol I, Article 1(2).

¹⁰⁴ The protection of these groups serves the benefit of the community by seeking to prevent harm to large segments of the population. Again, the ultimate purpose of the international legal order is to guarantee respect for human beings, which the Marten's clause seeks directly to promote.

judicial incentive, but because of an internal incentive.¹⁰⁵ A moral obligation forces the application of the *jus cogens* norms even if they were not adopted by an international convention.¹⁰⁶ Consequently, derogation of such moral obligation is internationally condemned, even if it is not legally enforceable.¹⁰⁷

Soft Laws on Environmental Protection in Armed Conflict

This refers to treaty provisions that are capable of entailing legally binding obligations which are drafted in weak substantive terms. They also include declarations, guidelines, standards and other international materials adopted by States, inter-governmental organizations, or their organs that are not normative in character but which have some pre- or sub-normative effect, usually on the immediate behavior of States or on the future formation of principles of customary international law.¹⁰⁸ It should be noted however that traditionally treaty law or hard international law, is the primary source of binding international law, but soft laws provide a form of international law that usually obtains more readily than in the case of treaties.¹⁰⁹

Some international law experts on environmental law have noted that soft international law can be a reflection of very well accepted general principles of international law arising from the dictates of public conscience and therefore may be binding even

¹⁰⁵ Nada Al-Duaij, *supra* note 84 p.132

¹⁰⁶ *Ibid.*

¹⁰⁷ This was the situation prior to 1899 when the clause was adopted. When the combatants and the populations were not covered by any kind of legal protection, morality was the only basis for humanitarian protection. At that time, the protection of civilians can partly be explained by fear that the gods or the spirits of victims might wreak vengeance or by a desire to restore normal relations with a neighboring tribe. At other times humanitarian treatments were based on justice and integrity or on a religious requirement such as a passage in the Bible. See Jean Pictet. *Development and Principles of International Humanitarian Law* (Martinus Nijhoff Publishers; 1984) pp. 8-12.

¹⁰⁸ Linda C. Reit. "Multi-Disciplinary Perspectives on the Improvement of International Environmental Law and Institutions" (1994) *Mich J. Int'l Law*, 15, 723.

¹⁰⁹ Nada Al-Duaij, *supra* note 84, p. 135.

though not provided for in a treaty.¹¹⁰ Principle 2 of the Stockholm Declarations and principle 2 of the Rio Declarations are general environmental law principles indicating a right to a clean and healthy environment for the present and future generations. It also includes the right which is the responsibility of not to harm the environment of other states.¹¹¹

There are other soft laws that protect the environment both in times of peace and in times of conflict.¹¹²

a. UNSC Resolution 1856 on the Situation Concerning the Democratic Republic of the Congo (22 December, 2008).¹¹³

The UN Security Council in Resolution 1856 strongly and explicitly recognizes “the link between the illegal exploitation of natural resources, the illicit trade in such resources and the proliferation and trafficking of arms as one of the major factors fuelling and exacerbating conflicts in the Great Lakes region of Africa, and in particular in the Democratic Republic of Congo”. Consequently, the Council decided that the UN Mission in the Democratic Republic of Congo (MONUC)¹¹⁴ should have the mandate to “use its monitoring and inspection capacities to curtail the provision of support to illegal armed groups derived from illicit trade in natural resources”. It also urged states in the region to

¹¹⁰ An example is the Stockholm Conference Principle 21 that talks about the no harm rule which has become customary and binding and have featured in the decisions of the international court of justice. Another example is the Martens clause.

¹¹¹ Principle 21 of the Stockholm Declaration has been relied upon by governments to justify their legal rights and duties.

¹¹² These would include the various UN General Assembly Resolutions protecting the environment and the use of natural resources in times of conflict, the sustainable development principle, the polluter pays principle, the intergenerational equity and many others.

¹¹³ UNSC Resolution, 1856. The Situation Concerning the Democratic Republic of the Congo (2008).

¹¹⁴ *Mission des Nations Unies au Congo / United Nations Mission in the Democratic Republic of Congo (MONUC).*

“establish a plan for an effective and transparent control over the exploitation of natural resources.”

This resolution appears to open a new avenue for stronger implementation and enforcement of existing law on the protection of the environment and natural resources during armed conflict.¹¹⁵ By suggesting new means of enforcement, it implicitly recognizes the weakness of existing enforcement mechanisms and the relevance of mandating peacekeeping missions, whose primary objective is the preservation of peace and security, to address natural resource issues. This resolution could have been of relevance in the Sierra Leone conflict if it had come earlier because one of the major causes of the conflict was the ineffective and non-transparent control over the exploitation of natural resources especially the diamond. The Security Council urged states in the region (Africa) to put plans in place for an effective and transparent control over such resources. It is hoped that in the peace building and reconstruction process in Sierra Leone, that is still ongoing, the stake holders would heed this advice from the Security Council.

b. UNSC Resolution 1509 (15 September, 2003)¹¹⁶

When establishing the UN Mission in Liberia, the Security Council mandated it “to assist the transitional government in restoring proper administration of natural resources.” This created an interesting precedent for UNSC Resolution 1856 discussed above. One would have expected that such a Resolution should have guided the ECOMOG forces that went to Sierra Leone on a Mission to help restore proper administration of natural resources that served as a source of income that was used to fuel the conflict if the UNSC had passed the resolution in the year 1999 or prior to that date. The submission here is that despite the laudable nature of

¹¹⁵ By suggesting new means of enforcement, it implicitly recognizes the weakness of existing enforcement mechanisms and the relevance of mandating peacekeeping missions, whose primary objective is the preservation of peace and security, to address natural resource issues.

¹¹⁶ UNSC Resolution 1509, the Situation in Liberia (2003).

this resolution, it could not be applied during the conduct of hostilities in Sierra Leone.

c. UNGA Resolution 47/37 (9 February 1993)¹¹⁷

Here, the UN General Assembly stated in the preamble that “destruction of the environment not justified by military necessity and carried out wantonly is clearly contrary to existing international law.” The concern expressed by this resolution arose out of the fact that the relevant provisions of International Law on the mater “may not be widely disseminated and applied.” Accordingly, States were urged to take all measures to ensure compliance with the existing international law on this issue, including by “becoming parties to the relevant international covenants” and “incorporating these provisions of international law into their military manuals.” It is however expected that this resolution would have been applied during the Sierra Leone war because it came while the war was still on and basically urged States to observe the basic principles of warfare which this paper had earlier discussed. It is noted that this resolution did not identify specific gaps in the existing international legal framework, and consequently did not recommend developing or strengthening particular measures. This notwithstanding, the resolution was enlisted in the ICRC Study of 2005 as forming Customary International Humanitarian Law.

d. UNGA Resolution 49/50 (17 February 1995)¹¹⁸

The ICRC submitted a proposal to the UN General Assembly in the form of Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict in 1994.¹¹⁹ At its 49th Session, the General Assembly, without formally approving them, invited all states to disseminate the guidelines widely and to “give due consideration

¹¹⁷ UNGA Resolution 47/37 Protection of the Environment in Times of Armed Conflict, (1993).

¹¹⁸ UNGA Resolution 49/50 United Nations Decade of International Law (1995).

¹¹⁹ UNGA Resolution, *Supra* note 117 .

to the possibility of incorporating them into their military manuals. These guidelines have also been published as an annex to the Secretary General Report A/49/323 United Nations decade of International Law (1994). Looking at the call made to all States by the General Assembly to disseminate the Guidelines and incorporate them into their military manuals, it is unbelievable that Africa is experiencing this level of environmental degradation in times of conflict. The only logical reason that can be adduced for this is that African countries have failed to implement this resolution sponsored by the International Committee of the Red Cross.

The applicable resolutions could have been applied to the war in Sierra Leone in order to preserve humanity and the environment upon which life depends particularly when one considers the fact that treaties may not be applicable in times of non international armed conflicts, the type that has been witnessed in Africa lately especially when the country involved has failed to ratify the treaties that are applicable to such situations.

Can the IHL Regime Protect the Natural Environment in Times of Armed Conflict in Africa?

This question has been answered in the negative. Most scholars¹²⁰ admit that the *lacuna* is as a result of the fact that environmental law is a new field that gained prominence only in 1970s with the Stockholm Conference. Invariably, IHL texts adopted before 1970 made no reference to the environment because the concept did not exist at that time even though certain wars had been fought with dire environmental consequences.¹²¹ They were basically designed to ameliorate human suffering and

¹²⁰ Bouvier, A.” Protection of the Natural Environment in Times of Armed Conflict” (1991) International Review Red Cross (IRRC), Vol. 285, No. 567, 576, 577. See also Jozef Golbatt “Legal Protection of the Environment Against the Effects of Military Activities” (1991) 22 BULL of Peace Proposals Pp. 299-403 at 399.

¹²¹ Such wars include the World War II and the Vietnam War.

environmental considerations or benefits were merely secondary.¹²²

Although the ICRC condemned the use of weapons of mass destruction in 1973¹²³ in the introduction to the Draft Protocol I, it affirmed that ICRC would not address environmental problems by declaring that:

Problems relating to atomic, bacteriological and chemical warfare including the environmental effects are subjects of international agreements or negotiations by governments, and in submitting these Drafts Protocols the ICRC does not intend to broach these problems.¹²⁴

The implication of this provision is that the ICRC had no intention of getting involved in environmental protection in times of armed conflict. This stance may have changed to an extent as the ICRC has shown interest in environmental protection¹²⁵ lately even though it may not be considered as a significant goal. Another valid point is the fact that IHL norms protecting the environment are very general, vague, and subject to military necessity exceptions and are not directed to stop practices of the sort most likely to general environmental harm. IHL provision is limited by the military necessity concept.¹²⁶ This is a concept that has been used as part of a legal justification for attacking military objectives that may have adverse or terrible consequences for the

¹²² The priority given to human suffering as against environmental destruction or harm reflected on the level of environmental protection especially when there is interference between two interests.

¹²³ Green, L.C. "The Environmental and the Law of Conventional Warfare" (1991) *The Canadian Yearbook of International Law*, Vol. 29, 223, 228.

¹²⁴ *Ibid.*

¹²⁵ In 2010, an edition of the International Review of the Red Cross was dedicated to the environment particularly Vol. 92, No. 879, September 2010 edition.

¹²⁶ Such terms include "necessity of war" used in Article 23(1)(g) of the 1907 Hague Convention IV or the "necessary by military operations" used in Article 53 of the fourth Geneva Convention.

environment and for civilians and civilian objects. A lot of environmental destruction has been witnessed during armed conflicts under the pretext of military necessity.¹²⁷ The IHL, including its environmental protection, is dependent on the application of customary principles and on the sweeping generalization of Article 35 (3) of the Additional Protocol I. Such a dependency is a major deficiency, as considerations of military expediency are especially difficult to constrain in the absence of treaty norms, and even allegations about enemy conduct tend to sound propagandistic if based purely upon such general, vague, prescriptive principles.¹²⁸ It is sad to note that the protection under Article 35(3) of the Additional Protocol I is limited to preventing only “widespread, long-term, and severe” environmental damage, thus weakening the environmental protection offered by the IHL as these terms are not clearly defined in the Protocol.

With respect to non-international armed conflict, IHL rules are few and no provision of Additional Protocol II directly addresses environmental protection although we have earlier noted in this paper that AP II protects the environment indirectly. It is submitted that the AP II should be revised to contain provisions on environmental protection specifically. Another problem that the IHL regime is facing is the non-ratification of the existing legislation by African States and the lack of adherence to the rules by non state actors who feel not obligated to obey rules ratified by the government they are seeking to dethrone.

¹²⁷ For instance, during the Vietnam War, the United States considered environmental modification technique necessary to interfere with the guerrilla tactics of North Vietnam. Guerrilla Warfare in Vietnam was based on the teachings on Mao Tes-Tung, who stressed the need of quick and effective actions to surprise the enemy. It requires the use of natural environment for cover and camouflage during attack, and to disguise supply bases. See Juda, L. “Negotiating a Treaty on Environmental Modification Warfare: The Convention on Environmental Warfare and its Impact Upon Arms Control Negotiations” (1978) *Int’l Org.* 975, 976.

¹²⁸ Article 35 (3) provides: “In any armed conflict, ... 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 only possible means of enforcing or ensuring environmental protection in armed conflict is to punish those indicted of using means and methods of warfare that have disastrous effects on the environment. Because punishment plays a great role in assuring the respect and the applicability of laws, IHL considers environmental destruction in armed conflict as a “grave breach of its rules and principles and therefore a war crime.”¹²⁹ The criterion for determining whether a grave breach has occurred is dependent on the effect on civilian populations. If civilian populations are directly and considerably affected by the environmental breach, the act then will be considered a “grave breach” of IHL principles.¹³⁰

If the above represents the actual position of the law, one wonders why nobody has been brought to book in Africa for environmental breach. The Statute of the ICTR does not have an environmental protection provision and same goes for, the Statute of the Special Court for Sierra Leone even with the glaring environmental destruction that occurred in that country during the conflict. It was only in 2005 in the case of *DRC v. Uganda*¹³¹ that Uganda was held liable to pay reparations to the Democratic Republic of Congo for environmental destruction caused by Uganda. Again in 2005, the International Criminal Court indicted President Omar Al-Bashir *inter alia* for poisoning water in three regions in Sudan.¹³² It is pertinent to note that in addressing the problems associated with the protection of the natural environment using the IHL regime, it would be necessary to address the issue of enforcement, difficulty of access to information or IHL rules, and the inapplicability of the IHL regime on revolutions and other

¹²⁹ Article 85(5), Additional Protocol I.

¹³⁰ Nada Al Duajj, *supra* note 84, p. 144.

¹³¹ *Armed Activities on the Territory of Congo (DRC v Uganda)* ICJ Rep. 2005. The ICJ in this case found that the Republic of Uganda failed to comply with its obligation as an occupying power in the Ituin district and did not prevent acts of looting, plundering and exploitation of Congolese natural resources.

¹³² The regions include the Masalit, Zaghawa and Fur tribes. Although the indictment was based on grounds of genocide, it also reinforces protection for water and water resources which constitute objects indispensable to the survival of the civilian population..

disturbances and the failure of IHL in controlling terrorism because in such situations that do not qualify as armed conflicts, the non State parties may be using small arms and light weapons that may have disastrous consequences on the environment.

Conclusion

This paper examined the impact of the Sierra Leone civil war on the environment. It was discovered that objects indispensable to the survival of civilians were attacked and destroyed. There were cases of illegal mining of the natural resources in Sierra Leone. The paper further traced the history of the conflict. A critical examination of the IHL provisions protecting the environment in times of armed conflict was done with particular interest on the basic principles of IHL and the use of soft law. The paper found that the basic principles were not adhered to and also observed that the principle of military necessity has contributed to the destruction of some targets that had disastrous effects on the natural environment. It further noted that these breaches are as a result of the fact that there are very few IHL provisions regulating non-international armed conflict and the existing rules did not address environmental protection issues. They only offer indirect protection to the environment.

Non-ratification of treaties was noted as one of the challenges faced in Africa and the paper suggests that African governments should endeavour to ratify existing treaties especially the Additional Protocol II and then take steps to implement the provisions of the Protocol by making them part of their military manual. They are also to have civil and military instructions on these rules. The issue of applicability of threshold should be addressed. The paper further suggests that those found liable of environmental destruction should be prosecuted. This is due to the fact that the formidable provisions of IHL cannot prevent humanitarian and environmental disasters from occurring if the existing legal structures allow perpetrators to avoid punishment and victims to remain without a remedy and the environment left wrecked. The existing framework should be enhanced as earlier noted to provide better protection for the environment. It is also

suggested that other branches of law like environmental law, human rights law and international criminal law should be used to reinforce and strengthen IHL.

Finally, it is sad to note that the Special Court of Sierra Leone does not have jurisdiction to try cases bordering on environmental destruction during the conflict. The court's jurisdiction covers crimes against humanity, serious violations of common Article 3 to the Geneva Conventions, intentional direction of attacks against humanitarian or peacekeeping personnel, conscription of children into armed forces or groups, and a few select aspects of Sierra Leonean law relating to the abuse of girls and arson. Genocide was not included. Grave breaches of the Geneva Conventions of 1949 were also excluded, largely because the conflict was seen as domestic and grave breaches apply only to international conflicts. This paper argues that this conclusion cannot be correct. For instance, the Statute of the ICC considers environmental destruction as grave breach and ICC does not only consider cases of environmental destruction in times of international armed conflict. If grave breaches apply only to international armed conflicts, the African continent is in danger as most of the non-international armed conflicts take place within the continent. There is a need for a reinterpretation of what constitutes grave breaches and under what circumstances it will apply.