

War's Silent Victim: The Environment

Written by Laure Verheyen

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Warfare is a concept for all times all over the world. Weapons are the means of warfare so if there are no weapons there can be no war. Many international instruments notwithstanding, many conflicts are adjudicated daily with weapons, without all diplomatic means having been exhausted. A great deal is being written and said about the impact of warfare and terrorism on peoples' lives. There is no doubt that such impacts are detrimental to mankind. However, there is another victim in this story which is often overlooked: the environment.

The security environment of today's world is changing fast and proves to be incredibly complex. As we can see, most ongoing conflicts are domestic and are not necessarily situated in an international context. Such conflicts range from Russian assertiveness in the Baltic area and hostile military initiatives in Ukraine to thoroughly organized terrorism in the Middle East, without forgetting the enormous challenges still faced by Afghanistan.

The threats we are confronting today are not strictly limited to classical military action. Modern conflicts cause immense damage to humanity and environment alike and it is to be expected that future conflicts will be even more destructive. Indeed, according to Malviya two dangerous trends can be observed in modern conflicts.^[1] On the one hand there is the increased level of environmental destruction caused by modern warfare and on the other hand there is a rapid development of technology with an even greater capacity of destruction of the environment. Because of this environmentally destructive trend in modern warfare the need for international law is greater than ever before.^[2]

In this essay International Humanitarian Law (IHL) and all other legal instruments which deal with the protection of the environment during armed conflicts are examined. Some real situations will be discussed as examples to make this topic more concrete. A conclusion will be formulated to summarize all findings in this paper.

Historical Events and the Impact On the Environment

We cannot deny that war and military activities have an obvious detrimental impact on the environment. The application of weapons such as those used in Hiroshima, the Afghanistan war, the Gulf War, WWI and WWII and the Syrian conflict had an extremely devastating and destroying effect on both humankind and the environment. Large-scale deployment of land mines and the destruction of forests by defoliating agents are just two examples of how both war and military activities continue to harm our environment in peacetime. Today, countries affected by ongoing conflicts continue to suffer problems related to warfare. The two cases that are discussed below show the extent of international law with regard to the protection of the environment.

Vietnam war (1945-1975): Napalm and Herbicide, Devastating Consequences

During the Vietnam War extremely environmentally damaging and devastating weapons and tactics were applied by the USA. More than 20 million gallons of herbicides were sprayed by the USA to eliminate enemy crops, defoliate forests and to clear growth along the borders of military premises. This practice not only had a tremendous humanitarian but also had an elevated environmental impact. Today agriculture in Vietnam continues to suffer environmental problems due to the applied chemicals. Agent Orange was later determined to be in violation of the Geneva Protocol of 1925 banning biological and toxic weapons in warfare.^[3]

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Another destructive element used during the Vietnam War by the USA was napalm. The application of this chemical is catastrophic for both human beings and nature. The usage of napalm destroyed thousands of acres in Vietnam. The US army burned down sections of forest and bushes in order to eliminate any enemy guerrilla fighters.^[4]

International law does not specifically preclude the use of inflammatory weapons such as napalm against military targets. However, the use of this agent against civilian population is clearly forbidden by the 1980 UN Convention on Certain Conventional Weapons (CCW). The use of napalm is also prohibited under customary international law. The general rules of international humanitarian law determine in particular the prohibition of the use of combat methods which cause superfluous injury or unnecessary suffering and define rules relating to the protection of civilians from the effects of hostilities, including the prohibition of indiscriminate attack.^[5]

According to the Stockholm International Peace Research Institute (SIPRI), countries are considered a party to the convention as long as they ratify at least two of the five protocols. The Obama administration signed the convention in 2009 with a reservation that that the treaty can be ignored if it would save civilian lives.^[6]

Kosovo War (1998-1999): NATO Bombing With Disastrous Environmental Consequences

In the Kosovo war a distinction must be made between two conflicts. Related to this topic is the one between Kosovo and NATO. The military operations conducted by NATO against the Federal Republic of Yugoslavia (FRY) during the Kosovo crisis caused large-scale environmental damage within the territory of the FRY. As NATO air forces aimed to destroy industrial sites and infrastructure they caused dangerous substances to pollute air, water and soil. These substances have a lasting impact on civilian health and nature. For example, the environmental impact by depleted uranium was found to be significant.^[7] The question that arises is whether the NATO bombings were in accordance with existing legal instruments?

During and after the Kosovo conflict, reports have shown that NATO used depleted uranium in military operations. The report of United Nations Environment Programme (UNEP) presents the findings of the first-ever international assessment of the environmental impact of depleted uranium when used in a real conflict situation. This toxin is a risk to human health and the environment. Furthermore, NATO strikes against chemical plants, particularly at Pancevo and Kragujevac, released large quantities of toxic chemicals into the air and water.^[8] Yugoslavia has alleged that these actions violated law regarding the protection of the environment during the conduct of war.^[9]

In addition to filing suit before the International Court of Justice (ICJ), Yugoslavia brought a claim of environmental damage against NATO forces before the International Criminal Tribunal for the Former Yugoslavia (ICTY). The Prosecutor decided that concerning the use of depleted uranium projectiles by NATO aircraft, the report observed that there is currently no specific treaty banning the use of such projectiles, but that principles such as proportionality are also applicable in this context. It highlighted the insufficient development and clarity, as well as the inapplicability of existing international norms for protecting the environment during armed conflicts.^[10]

Schwabach concludes that it is impossible to say whether the bombardments of the industrial facilities at Pancevo and Kragujevac were legal. It is not sure if these acts fall within the scope of art. 56 of additional protocol (AP) I. Even if those kind of actions are not currently illegal, they mark the outermost limits of legal conduct.^[11]

During armed conflicts a distinction must be made between the *jus in bello* and *jus ad bellum*. *Jus ad bellum* is the right to war. *Jus ad bellum* enumerates criteria that need to be met before engaging in war in order to determine whether war is justified. On the other hand *jus in bello*, better known as IHL, contains the rules which regulate the conduct of war. It focuses on two issues: firstly, the protection of persons who are not, or no longer, taking part in the hostilities and secondly, restrictions on the means and methods of warfare, including weapons and military tactics.^[12]

International humanitarian law concerns rules that are established by both treaty and custom. They are specifically intended to solve humanitarian problems directly arising from international or domestic armed conflicts. It protects people and property that are, or may be, affected by an armed conflict and limits the rights of the parties to a conflict to use methods and means of warfare of their choice. In short, IHL represents a balance between military necessity

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and humanitarian considerations in the context of a conflict.^[13]

Occasionally, the concept of IHL is unfairly confused with International Human Rights (IHR). Human rights are established by treaty or custom, on the basis of which individuals and groups can expect or claim certain behavior or benefits from governments. Human rights are inherent entitlements that belong to every person as a consequence of being human.^[14] In contrast, IHL is based on the Geneva and Hague Conventions, APs and a series of treaties governing means and methods of waging war^[15], as well as customary law. It has to be emphasized that IHL and IHR are not two sides of the same coin. International humanitarian law is only applicable during times of an armed conflict, meanwhile IHR are applicable all the time, whether in times of peace or war. The two branches of law involve a different set of international treaties as seen above.

The Role of IHL in the Environment

The protection of global environment has become a matter of grave international concern and IHL alike. International humanitarian law makes a distinction between International Armed Conflict (IAC) from Non-International Armed Conflict (NIAC). When we talk about IAC at least two states are involved.^[16] This is a big difference with NIAC because when as far as NIAC is concerned, the conflict is restricted to the territory of a single state. Lawrand says a NIAC refers to a situation of violence involving protracted armed confrontations between government forces and one or more organized armed groups, or between such groups themselves, arising on the territory of a State.^[17]

The body of IHL treaties and customary law is relatively limited. The obligations applicable are generally far less restrictive than for IAC. The qualification is not easy to make but in the same time it is an important question to determine which rules are applicable during warfare. When a conflict is considered an IAC the set of rules are found mainly in the four Geneva Conventions and AP I rather than when it is a NIAC, because then the set of rules is found mainly in art. 3 common to the four Geneva Conventions and AP II. Situations of occupation are regulated by IHL, namely the 4th Geneva Convention and AP I.^[18] Finally, it has to be said that NIAC are the conflicts which are the most strongly linked with the environment.

Legal Instruments For the Protection of the Environment: Sufficient?

A special characteristic of international environmental law is that many environmental problems are regulated by hard law and soft law.^[19] This is not different in this case. In the international context, international law concerning armed conflict has aspects that reflect its concern for environmental protection. It has to be emphasized that the legal documents mentioned below are not exhaustive. I tried to give the documents that in my opinion are the most important instruments. For the reader it is important to understand the difference between the sources and to have an idea of how far regulation concerning this topic goes.

Treaty Law

The relevant provisions of IHL which deal with the protection of nature during armed conflicts can be divided into three categories: (1) those who directly address the issue of environmental protection, (2) the general principles of IHL that are applicable and (3) the provisions that indirectly protect the environment during armed conflicts.^[20]

The International Criminal Court (ICC)

The powerful ICC in The Hague takes care of environmental destruction in international conflicts.^[21] This means NIAC are not within their protection. According to the policy paper of 16 September 2016 the ICC is to broaden its focus to prosecute governments and individuals for environmental crimes. Some examples which can be given are illegal deforestation, theft of resources, and expulsion of populations from their land.^[22] The office will seek to cooperate and provide assistance to states, upon request, with respect to conduct which constitutes a serious crime under national law, such as land grabbing or the destruction of the environment.^[23]

UN Treaties

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Several treaties have been developed by the United Nations aiming to limit the environmental impacts of warfare or military activities.

ENMOD Convention of 1976

The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD)^[24] developed by the UN prohibits the military or in any other way hostile use of environmental modification techniques having widespread, long-lasting or severe effects. It bans weather warfare which means the use of weather modification techniques for the purpose of inflicting damage or destruction. This convention was partly inspired by the use of toxic defoliation agents in Vietnam.^[25]

AP I to the Geneva Convention of 1949

Also adopted in 1977 was the AP I to the Geneva Convention of 1949, which prohibits methods of warfare intended or expected to cause widespread, long-term and severe damage to the natural environment.^[26] With this article a limit is placed on the mindless maiming which normally accompanies war. The primary purpose of this limitation is to protect the environment and afterwards the limitation of the destruction caused by warfare.^[27]

AP I contains two articles pertaining specifically to the protection of the environment in times of armed conflict. Firstly there is art. 35 which includes the environment as a basic rule of IHL. Paragraph three is the most important one in the context of this topic. This article concerns the methods and means of warfare and protects the environment as such. It includes protection of the natural environment as a basic rule of IHL.^[28]

Secondly there is art. 55 which provides a specific protection of nature. This article requires that care be taken to avoid similar damage, interpreting the prohibition as including a prohibition of the use of methods or means that can be expected, by means of such damage, to damage the health or survival of the population. Moreover, it prohibits reprisals against the natural environment in that they would penalize humanity as a whole.^[29] While it is a matter of interpretation, it would seem that this does not apply to attacks directed at some person or at some object not comprised in the natural environment but which has a collateral environmental impact. It would be unfair to conclude that this provision prohibits attacks on the natural environment when the environment itself has become a military objective.^[30]

Indispensable to note is that these articles are not a copy of each other. Art. 35 refers to the methods of warfare, art. 55 aims at ensuring the survival and health of the civilian population living in a particular environment during times of war. Also article 35 AP I includes "widespread damage" which refers to a much wider scope than article 55.^[31]

A Fifth Geneva Convention To Protect the Environment During Armed Conflicts?

Some attempts have been made by the UN to get a 5th Geneva Convention concerning the protection of the environment during times of armed conflict but so far this has not been successful.^[32]

Provisions Which Indirectly Address The Protection of the Environment

The IHL which indirectly addresses to protect the environment can be divided into five categories: (1) rules limiting or prohibiting certain weapons and methods of warfare, (2) clauses protecting civilian objects and property, (3) clauses protecting cultural heritage sites, (4) rules concerning installations containing dangerous forces and (5) limitations of certain specifically defined areas.^[33]

AP II to the Geneva Convention of 1949

In the two decades that followed the adoption of the Geneva Conventions, the world witnessed an increase in the number of NIAC and wars of national liberation nowadays. In response, two protocols were adopted in 1977. They strengthen the protection of victims of two kinds of war. On the one hand there is AP I which contains provisions

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during IAC. On the other hand, AP II is applicable when an armed conflict is not international but domestic. AP II contains provisions which limit the way wars are fought. Protocol II was the first-ever international treaty devoted exclusively to situations of NIAC.^[34] Article 16 of the AP II does not mention the nature *per se* but the provision can be useful in providing legal protection for the natural environment during armed conflicts. The provisions that indirectly address environmental protection are art. 14 on civilian objects, which prohibits attacks on objects indispensable to civilian populations, including foodstuff, agricultural land, crops, livestock, drinking water installations and irrigation works, art. 15 on installations containing dangerous forces and art. 16 on cultural objects and places of worship. It thus replicates for internal conflicts the protection provided by art. 54 of AP I applicable IAC.^[35]

It has to be said that AP II is significantly less substantial than AP I. It does not contain the basic rule that strongly articulates the principle of distinction enunciated in Art. 48 of AP I.^[36]

CCW and Protocol III Concerning Incendiary Weapons

The Preamble of this Treaty and its Protocol III explicitly mention environmental protection. Following a 2001 amendment, the CCW can not only be invoked during IAC but it is also applicable to NIAC now.^[37] The Convention seeks to prohibit or restrict the use of certain conventional weapons which are considered excessively injuring or whose effects are indiscriminate with respect to mankind and nature.

The Protocol For the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (1925)

This legal instrument was developed in response to the horrors of the use of chemical weapons on a large scale during WWI.^[38] These Treaty provisions are also examples of the indirect protection of the environment during armed conflicts, because the chemicals used in these weapons are detrimental to the environment. Prohibiting is the only way to save it.

Customary International Law

Besides the UN documents there is customary international law which deals with the protection of the environment during armed conflicts and military activities. Customary international law (CIL) is harder to define. It is said to be international custom, as evidence of a general practice accepted as law. Customary international law can be established by showing in the first place state practice and in the second place *opinio juris*. Both elements can be established by treaties themselves. The big difference between both of them is that treaties only bind the affected parties whereas customary international law is binding all over the world.^[39]

Rules Developed by the ICRC (2005)

The International Committee of the Red Cross (ICRC) Customary Law Study Report stipulates three rules which refer *directly* to the protection of natural resources during warfare.^[40] It has to be noted concerning rule 43 that state practice established this rule as a norm of customary international law applicable not only into IAC but also NIAC. Whereas, by rule 44 and 45 it is arguably also NIAC. Concerning the last rule, it appears that the USA is *persistent objector* to its first part. In addition, France, the United Kingdom and the USA are persistent objectors with regard to the application of the first part which deals with the use of nuclear weapons.^[41]

General Principles of IHL Which Protect the Environment

The general principles complement and underpin the various IHL instruments and apply to all countries except for those that persistently object to them. Their function is frequently seen to be to close a gap that might remain covered by the main sources of international law even if international tribunals do not expressly use general principles of law in their reasoning.^[42]

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There are four principles which can be given related to this topic and one of them is the principle of proportionality (art. 57 AP I).^[43] Destroying an entire village like in Kosovo or burning entire forests like in the Vietnam war obviously do not meet the principle of proportionality. Many actions during armed conflicts which cause environmental damage could be seen as *disproportionate* responses to perceived threat and therefore considered illegal. This opinion is shared by many experts in the case of massive pollution resulting from the burning of oil fields and the millions of gallons of oil deliberately spilled into the Gulf during the Gulf War (1990-1991).^[44] Another one is the principle of humanity. It should be noted that the Martens Clause refers to the *laws of humanity*. The Martens Clause is a general principle of IHL on its own. It was first adopted at the 1899 Hague Conference and thereafter included in the Preamble of the 4th Hague Convention. This general provision is a fundamental principle in IHL and a core principle protecting the environment in the absence of treaty law or other provisions of customary law.^[45] Nonetheless there is a problem with this general provision: there is no common interpretation by humanitarian lawyers, which causes several problems at first sight.^[46]

Soft Law

Even soft law is not legally but can be morally or politically binding. These instruments are used most of the time because it solves the environmental problem quicker than binding hard law instruments like for example treaty law. It does not need any ratification like, *inter alia*, treaty law.^[47] On the one hand it is the best instrument to choose because it is faster than treaty law. On the other hand soft law instruments seldom engage states in any really ambitious environmental protection, whereas international treaties are binding.^[48]

Rio Declaration on Environment and Development of 1992

In this context we could consider the *Rio Declaration on Environment and Development of 1992*, in particular, principle 24.^[49] It needs to be emphasized that the 1992 Rio Declaration has to be widely considered as one of the most authoritative codifications of international environmental law principles.^[50]

Resolution of the UN

A resolution is not legally binding either. Principles articulated in UN resolutions with widespread acceptance may be recognized as customary international law, their provisions are binding on all states.^[51] A resolution related to this topic is Resolution 47/37 of 1992^[52] which is adopted by the General Assembly (GA) in response to the Gulf War.^[53] This Resolution determines that "Destruction of the environment, not justified by military necessity and carried out wantonly, is contrary to existing international law...." The GA recognizes by this resolution that the use of certain means and methods of warfare may have dire effects on the environment. Moreover, the GA emphasizes the importance of the provisions of international law applicable to the protection of the environment in times of armed conflict.

Legal Liability: More Than a Fine Proclamation?

Decisions by a court (e.g. ICJ) are only binding to the parties of the dispute. However, insofar as they constitute persuasive evidence of international norms, they are also relevant for non-parties. Cases which address the responsibility and liability of states for violations of IHL have been extremely rare.^[54] There are very few interpretations by authoritative judicial bodies of IHL and CIL norms relating to environmental protection.

There are progressions made but unfortunately we have to conclude that liability related to this topic still is in its infancy.

The Use of the Environmental Protection Law to Interpret Environmental Protection Concepts of the Law of Armed Conflicts

It was suggested to Malviya that the environmental protection law can be a great help in interpreting the laws of wars. According to it the law of armed conflict and law of environmental protection are closely related topics of concern to

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the international community.^[55]

Legal Instruments for the Protection of the Environment During Armed Conflicts: Sufficient?

Nowadays it is difficult to deny the existence of international law which deals with the restrictions on combatants as to the way and manner in which armed conflicts are to be conducted, and the nature of weapons to be used during armed conflicts. As we could see these rules exist either as rules of customary international law or conventional law.^[56]

The need to protect the environment during armed conflicts is set forth in several international instruments as mentioned above. Unfortunately, these mechanisms are, for the greatest part, applicable during IAC and not NIAC whereas, as said before ongoing conflicts are NIAC. None of the above approaches offers a definite or comprehensive solution concerning NIAC. Taken together, they suggest useful strategies for more effective protection of the environment during NIAC, and serve to facilitate the development of international law, conventional and customary, in this area of growing concern.^[57] Despite the development of the legislature, it is clear that the current regime is insufficient to protect the environment during armed conflicts.

Conclusion

Throughout history, war has been omnipresent. In recent history however, a trend towards elevated environmental damage becomes abundantly clear. Evidence points out that nations are more likely to violate international law, rather than risking losing a conflict, especially when the latter would result in the annihilation of the nation itself. Therefore the international community must be vigilant and should aim to prevent excessive harm to the environment.

Nowadays the importance of preserving nature has finally been recognized under international law. This is emphasized in conventions such as the Geneva Conventions but also in customary law. Moreover, despite the non-binding character, soft law can also have a huge impact: the Rio Declaration can be given as a precedent. However, despite the progress made by the international community, liability related to this topic still is in its infancy.

At this moment, most ongoing conflicts are classified as NIAC, which has disastrous consequences for the environment. In the effort to prevent excessive damage to the environment due to armed conflicts there are binding and non-binding instruments concerning IHL and environmental protection. Meanwhile treaty law, customary law, soft law and general principles respond to a wide range of practical problems and moral concerns. Hence, we have to conclude that in IHL, the legal instruments for NIAC are relatively limited. The international community has to extend its arsenal of legislative instruments to the current situation. It is obvious that IHL is not advanced enough to handle this matter as compared to other areas of international law.

Concern for the environment –and the codification of rules for its preservation– first emerged at national level and starts gaining momentum on the international level. Despite recent efforts, more action of national governments and the international community is necessary if we want to protect the environment against the increased level of destruction that comes with modern warfare. As we can see, the ICC is making progress with its Policy Paper from 2016 which allows them to prosecute environmental crimes.^[58]

With the last words of this essay, I would like to say that it is no longer a surprise that the environment is the silent victim of war. We sometimes forget that the environment represents the hope and future of every society. Destroying the environment means destroying society itself.

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[14] An example of an IHR-instrument is the Convention on Human Rights of 1969.

[15] *Inter alia* banning blinding laser weapons, landmines and chemical and biological weapons.

[16] Examples which are the Vietnam War, the Great War and WO II.

[17] X., "Internal conflicts or other situations of violence – what is the difference for victims?", 10 December 2012, <https://www.icrc.org/eng/resources/documents/interview/2012/12-10-niac-non-international-armed-conflict.htm>, consulted on 5 November 2016; Many examples can be given since, as said before because ongoing conflicts are NIAC and not IAC. The ongoing conflict in Donetsk, Eastern Ukraine is one of them.

[18] http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf.

[19] T. Koivura, *Introduction to international environmental law*, London and New York, Routledge, 2014, 58.

[20] UNEP, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law*, UNEP/ Earthprint, 2009, 10-11, http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf.

[21] As we can see art. 8 (2) (b) (iv) of the ICC Rome Statute directly protects the environment: Intentionally launching an attack in the knowledge that such 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 clearly excessive in relation to the concrete and direct overall military advantage anticipated.

[22] See therefore: ICC, *Policy Paper On Case Selection and Prioritization*, ICC 15 September 2016, 18 p., https://www.icc-cpi.int/itemsDocuments/20160915_OTP-Policy_Case-Selection_Eng.pdf.

[23] ICC, *Policy Paper On Case Selection and Prioritization*, ICC 15 September 2016, 5, https://www.icc-cpi.int/itemsDocuments/20160915_OTP-Policy_Case-Selection_Eng.pdf.

[24] ENMOD Convention see: <http://www.un-documents.net/enmod>.

[25] P. SANDS, J. PEEL, A. FABRA and R. MACKENZIE, *Principles of International Environmental Law*, Cambridge,

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Cambridge University Press, 2012, 208.

[26] Art. 55 of the Protocol I to the Geneva Convention of 1949.

[27] R.A. Malviya, "Laws Of Armed Conflict And Environmental Protection: An Analysis Of Their Inter-Relationship", *ISIL Yearbook of International Humanitarian and Refugee Law 2001*, Sydney, <http://www.worldlii.org/int/journals/ISILYBIHRL/2001/5.rtf>.

[28] UNEP, o.c., 11, http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf.

[29] W. H. Boothby, *Weapons and the Law of Armed Conflict*, Oxford, Oxford University Press, 2009, 47.

[30] W. H. Boothby, o.c., 98.

[31] S.M. Christiansen, *Climate Conflicts. A case of International Environmental and Humanitarian law*, Lüneburg, Springer, 2016, 203-204.

[32] See therefore: Plant G., *Environmental Protection and the Law of War: A Fifth Geneva Convention on the Protection of the Environment in the Time of Armed Conflict?*, London, Belhaven Press, 1992, 284 p.

[33] UNEP, o.c., 13, http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf.

[34] X. "The Geneva Conventions of 1949 and their Additional Protocols", ICRC, 29 October 2010, <https://www.icrc.org/eng/war-and-law/treaties-customary-law/geneva-conventions/overview-geneva-conventions.htm> consulted on 1 December 2016.

[35] UNEP, o.c., 18, http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf.

[36] *Ibid.*

[37] UNEP, o.c., 15, http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf.

[38] UNEP, o.c., 14, http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf.

[39] T. Koivura, o.c., 77-79.

[40] Rule 43: *general principles on the conduct of hostilities apply to the natural environment [...].* Rule 44: *Methods and means of warfare must be employed with due regard to the protection and preservation of the natural environment. [...], and in any event to minimize, incidental damage to the environment. Lack of scientific certainty as to the effects on the environment of certain military operations does not absolve a party to the conflict from taking such precautions.* Rule 45: *The use of methods or means [...] to the protection and preservation of the natural environment. In the conduct of military operations [...] Destruction of the natural environment may not be used as a weapon.*

[41] J.M. Henckaerts and L. Doswald-Beck, *Customary International Humanitarian Law. Volume I Rules*, Cambridge, Cambridge University Press, 2005, 143-158.

[42] T. Koivura, o.c., 79.

[43] The other general principles which can be invoked related to this topic are: (1) Distinction (art. 52 (2) AP I (2) military necessity (art. 23 (g) 4th Geneva Convention) (3) proportionality (art. 57 AP I) and (4) humanity (Martens Clause).

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[44] UNEP, *o.c.*, 12-13, http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf.

[45] *Ibid.*

[46] R. Ticehurst, "The Martens Clause and the Laws of Armed Conflict", *International Review of the Red Cross* 1997, <https://www.icrc.org/eng/resources/documents/article/other/57jnhy.htm>.

[47] T. Koivura, *o.c.*, 58.

[48] T. Koivura, *o.c.*, 61.

[49] Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.

[50] T. Koivura, *o.c.*, 59.

[51] UNEP, *o.c.*, 10, http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf.

[52] Resolution 47/37 of the General Assembly of the United Nations (25 November 1992), <http://www.un.org/documents/ga/res/47/a47r037.htm>.

[53] UN, *Yearbook of the ILC 1996*, I, 110.

[54] E.g. in 1995 Australia and New Zealand requested the examination by the ICJ of a situation relating to the legality of nuclear testing by France in the Pacific Ocean.

[55] R.A. Malviya, "Laws Of Armed Conflict And Environmental Protection: An Analysis Of Their Inter-Relationship", *ISIL Yearbook of International Humanitarian and Refugee Law 2001*, Sydney, (11) 11, <http://www.worldlii.org/int/journals/ISILYBIHRL/2001/5.rtf>.

[56] M. K. SINHA, "Protection of the Environment During Armed Conflicts: A Case Study of Kosovo", *ISILYBIHRL 2001*, (1) 2, <http://www.worldlii.org/int/journals/ISILYBIHRL/2001/13.html>.

[57] T. Meron, "Comment: Protection of the Environment During Non-international Armed Conflicts", in R. J. Grunawalth, J.E. King and R. S. McClain (Eds.), *Protection of the Environment During Armed Conflicts*, (353) 358, <http://stockton.usnwc.edu/iils/vol69/iss1/22>.

[58] See therefore: ICC, *Policy Paper On Case Selection and Prioritization*, ICC 15 September 2016, 18 p. https://www.icc-cpi.int/itemsDocuments/20160915_OTP-Policy_Case-Selection_Eng.pdf

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