
ENVIRO-LEGAL PERCEPTIONS IN INTERNATIONAL LAW: A REASSESSMENT OF THE ENVIRONMENTAL MODIFICATION TECHNIQUE

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ABSTRACT: *In the early 1970s, the issue of artificial environmental alteration for strategic or other aggressive uses was placed to the international agenda. Following the United States decision of July 1972 to abandon the use of climate change technology for hostile purposes, a 1973 US Senate Resolutions calling for an international agreement "prohibiting the use of any environmental or geophysical activity as a war weapons" and a detailed study of military aspects of the climate and other environments by the Department of Defense. In July 1974, the United States and the Soviet Union agreed to engage in bilateral negotiations on proposals to resolve risks to strategic use of the technology of environmental change, and in three successive discussion rounds in 1974 and 1975. In August 1975, in the Conference of the Committee on Disarmament (CCD), in which intense discussions culminated in an amended text and an agreement on four Articles of the Convention in 1976, the US and USSR presented the same draft texts of the Convention. Environmental Modification Technical covers any method of altering the dynamics, composition, or configuration of the earth, including its biota, lithosphere, hydrosphere and atmosphere, or its outer sphere, by deliberately manipulating natural processes. This however explains the intent of this study; to assess the legal implications of flouting international laws as regards environmental modification as well as adopting changes in international criminal law in order to establish international environmental crimes in internal conflicts. This study adopts content analysis with solely secondary data.*

KEYWORDS: international law, environmental law, modification technique, international crime, military, and conventions.

INTRODUCTION

The importance of the environment is universally acknowledged. As the ICJ proclaimed in 1996, in its Advisory Opinion on the legality of the Threat or use of Nuclear Weapons:

“the environment is not an abstraction but represents the living space, the quality of life and the health of human beings, including generations unborn¹”

Attacks in wartime against military objectives often impact upon the environment. Oil facilities as military objectives can serve as a prime example. When an oil storage facility is demolished,

¹ Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, ICJ Reports 1996, 226 et seq., (241, para. 29),

the oil may Sep into the ground and poison water resources. When an oil tanker is sunk as sea, the resultant oil spill may be devastating for marine life²

The term “environmental modification techniques” refers to any technique for changing – through the deliberate manipulation of natural processes – the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space.³

“Environmental warfare is defined as the intentional modification or manipulation of the natural ecology, such as climate and weather, earth systems such as the ionosphere, magnetosphere, tectonic plate system, and/or the triggering of seismic events (earthquakes) to cause intentional physical, economic, and psycho-social, and physical destruction to an intended target geophysical or population location, as part of strategic or tactical war.”⁴

“Weather modification offers the war fighter a wide range of possible options to defeat or coerce an adversary... Weather modification will become a part of domestic and international security and could be done unilaterally... It could have offensive and defensive applications and even be used for deterrence purposes. The ability to generate precipitation, fog and storms on earth or to modify space weather... and the production of artificial weather all are a part of an integrated set of [military] technologies.”⁵

EXISTING RELEVANT LAW

Provisions relevant to the research can be found in documents of human rights law, international criminal law, international environmental law and international humanitarian law. Customary humanitarian law provides customary rules, when application of written (treaties’) obligations due to their vagueness and/or high threshold of applicability is complex. The mechanism of environmental protection in internal armed conflicts is an outcome of different types of law merging together for the sake of environmental preservation.

1949 Geneva Conventions and its protocols

Despite the fact that Geneva Conventions do not include environmental norms, Additional Protocol I, which applies during times of international armed conflicts, made a huge step forward with Articles 35 (3) and 55. Art. 55 establish a general obligation to protect the environment during armed conflict, but this obligation for belligerent states is aimed at the protection of civilian population. Article 35(3) is meant to protect environment as such.⁶ Although a subject to

² In the course of the Iran-Iraq War, hundreds of oil tankers were attacked by both sides in the Persian Gulf. As a result, in 1984 alone, more than 2 million tons of oil was spilled into the sea. See P. Antoine, “International Humanitarian Law and the Protection of the Environment in Time of Armed Conflicts”, *Int’l Rev. of the Red Cross* 32 (1992), 517 e seq., (530).

³ Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, United Nations, Geneva: 18 May 1977

⁴ Eco News (www.econews.uk.com)

⁵ US Air Force document AF 2025 Final Report

⁶ Bouvier, A. Protection of the Environment in Time of Armed Conflict. *International Review of the Red Cross*. 1991 12 31, 285, part C.

criticism mostly referring to the high threshold of applicability, these articles were a first step towards the recognition of the necessity of environmental norms in the law of war.

Because of the notably narrow regulation of Common Article 3 and the majority of the conflicts after 1945 being internal, the adoption of Additional Protocol II (hereinafter -AP II) was more than necessary. Despite the absence of explicit environmental norms in Additional Protocol II, an implicit environmental provision exists. Article 14 prohibits attacks against “foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works”⁷, objects that are „indispensable to the survival of the civilian population.”⁸ Article 15 prohibits attacks against dangerous forces, such as dams, dykes and nuclear electrical generating stations, if „attack may cause the release of dangerous forces and consequent severe losses among the civilian population.”⁹ These two provisions are clearly aimed at protection of the civilian population; nonetheless, environmental impact of the provisions is also evident.

Another reason of AP II not meeting the expectations is that an internal armed conflict has to meet the high threshold requirements to fall under the scope of application of AP II.¹⁰ Article 1(1) lays down an additional condition to the ones already present in Common Article 3: dissident armed forces or other organized groups have to be under responsible command and exercise control of the part of the territory. Requirements are set up as cumulative; therefore, it is difficult to find an internal conflict meeting all of them. Therefore, AP II has never been applied in neither of international judicial institutions, which proves questionable contribution to the protection of the environment in times of internal armed conflict.

Disarmament and weapons’ treaties and their impact on environmental protection in NIACs

Naturally, disarmament and weapons’ treaties are not designed specifically to protect the environment. Nonetheless, the impact assessment shows that in case of using weapons of prohibited or restricted use, such effect would be inevitable. Disarmament treaties can be considered as part of International Humanitarian Law; however, some of them also comprise provisions that indicate the application during peace time or under “any circumstances”.¹¹

⁷ 1977 Protocol Additional to the Geneva Conventions of 12 August, 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II) (adopted 8 June, 1977, entry into force 7 December, 1978). 1125 U.N.T.S. 609/ [1991] ATS 30/16 ILM 1442 (1977), Article 14.

⁸ Ibid

⁹ Ibid Art. 15

¹⁰ Solis, G. D. *supra* note 1, p. 131, 138.

¹¹ The Convention on the prohibition of the Development, production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (adopted 10 April, 1972, entry into force 26 March, 1975). 1015 U.N.T.S. 163 / [1977] ATS 23 / 11 ILM 309 (1972), Article 1; The Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects (adopted 10 October, 1980, entry into force 2 December, 1983). 1342 U.N.T.S. 137/ [1984] ATS 6 / 19 ILM 1823 (1980), Article 1; 1980 protocol in Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (adopted 10 October, 1980, entry into force 2 December, 1983) 1342 U.N.T.S. 168, 19 I.L.M. 1529, Article 6 (2); 1980 Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (adopted 10 October, 1980, entry into force 2 December, 1983). 1342 U.N.T.S. 171, 19 I.L.M. 1534 Article 2 (1)

The 1971 UN Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction

The purpose of protecting the population and the environment is expressed in Article 2 of the Convention: “In implementing the provisions of this Article all necessary safety precautions shall be observed to protect populations and the environment”. The convention prohibits the use of biological agents “in any circumstances”¹² if it does not have justification for using it for peaceful purposes. It suggests that the Convention applies in times of non-international armed conflict. Part II of Art. 1 specifically prohibits hostile purposes and using bacteriological agents in war.

At the time of writing, 165 states were parties to the Bacteriological (Biological) Weapons Convention (hereinafter – the BWC) and 12 states were signatories to it.¹³ Although criticized because of its indeterminate language, such as the absence of quantities and parameters to determine when is the substance being used to the peaceful purpose, which may give ground for circumvention,¹⁴ it is a contribution to the environmental protection in NIAC.

The 1977 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD)

In terms of the environmental protection, this treaty prohibits technical and scientific manipulation of natural processes, which may affect the environment, and when this manipulation is used as a weapon.¹⁵

Art. 1 of the Convention does not make the distinction between IACs and NIACs. On the contrary, it says „not to engage in *military or any other hostile use* of environmental modification techniques“¹⁶ (emphasis added). Presumably applicable in NIAC, the basic obligation in Article 1 is constructed very similarly to the wording of AP I of GC's. There is one crucial difference though. While AP I requirements „Widespread, long lasting and severe“ are cumulative, ENMOD convention uses conjunction “or”, which implies that only one of the requirements can be sufficient for the Convention to apply. Being of the lower threshold than AP I, and, moreover, applicable in NIAC, the ENMOD convention has its disadvantages. Firstly, it is not created for the protection of the environment. Careful reading of Article 1 (1) shows that it

and 2 (2); The 1993 Convention the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons (adopted 3 September, 1992, entry into force 29 April, 1997). 1974 U.N.T.S. 317, Article 1.

¹² The Convention on the prohibition of the Development, production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, *op. cit.*

¹³ Official Website of International Committee of the Red Cross Geneva, 2013 [interactive]. [accessed on 15-08-2017]. <<http://www.icrc.org/ihl.nsf/INTRO/450?OpenDocument>>.

¹⁴ Solis, G. D. *supra* note 1, p. 607–611.

¹⁵ Verwey, W. D., *supra* note 1, p. 16.

¹⁶ Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (adopted 10 December, 1976, entry into force 5 October, 1978). 1108 U.N.T.S. 151.

seeks to prevent injury of another state party, not the environment *per se*.¹⁷ Tarasofsky names several points of criticism of ENMOD: „No prohibition exists against damaging environment of nonparties or to the global commons. [...] it does not prevent testing and development of environmental modification techniques.”¹⁸ This argument, however, can be rebutted by saying that in case of damage while using techniques for non-hostile purposes, international environmental law and its prohibitions apply. However, the above described imperfections of the Convention may explain the fact that only 76 states are parties to it. Therefore, the ENMOD convention cannot be considered as a strong instrument contributing to the environmental protection in NIACs.

The 1980 Certain Conventional Weapons Convention and its protocols

The Certain Conventional Weapons Convention (hereinafter – the CCWC) is based on three general principles of IHL – unnecessary suffering, distinction and limited means of warfare.¹⁹ Three original protocols on non-detectable fragments, mines, booby-traps and other devices and incendiary weapons were adopted together with the treaty in 1980. Additional two on laser weapons and explosive remnants of war were enacted in 1996 and 2001 respectively. Initially, the treaty and its three original protocols applied only in IAC.

Talking about crucial steps in the development of international law documents applicable in NIAC, it should be emphasized that the amendment of the Article 1(2)²⁰ extended the CCWC and its protocols’ application to the NIAC that are described in Common Article 3. Common Article 3, as it is known, sets the lower threshold for the internal conflict to be considered as such than does the AP II. This broadens the scope of applicability to the nowadays’ most common armed conflicts. Preamble of the Convention recalls prohibition “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.”²¹

The CCWC Protocol III Concerning Incendiary Weapons refers to prohibition to make forests or other kinds of plant cover the object of attack by incendiary weapons.”²²

Reference is also made to the principle of distinction, when such prohibition fails to exist when using natural elements for military purposes. Other protocols do not refer to the environment by any means directly or indirectly. However, prohibition of such indiscriminate weapons itself is a type of the environmental protection, especially regarding its application in NIAC.

¹⁷ Tarasofsky, R. G. Legal Protection of the Environment during International Armed Conflict. *Netherlands Yearbook of International Law*. 1993: 17–79. Also see p. 47.

¹⁸ Ibid

¹⁹ For this section, see generally Solis, G. D. *supra* note 1, p. 578-591.

²⁰ Amendment of the Article 1.2 of 1980 Convention on Prohibition or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects (adoption 21 December, 2001, entry into force 18 May, 2004) 2260 U.N.T.S. 82.

²¹ The Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects, *supra* note 9, Preamble.

²² The Chemical Weapons Convention Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III), *supra* note 9, Article 2(4).

Unfortunately, only 114 states have signed the Convention, and only 75 states recognize the application of the Convention in NIAC, as in amended article 1(2).²³

The 1993 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons Convention of Chemical Weapons (hereinafter – the CCW) regulates use of toxic chemicals and their precursors.

The prohibition is established in wording quite similar to the BWC – “never under any circumstances.”²⁴ In Art. 2 (9), this Convention indicates peaceful purposes of using chemical substances that are not prohibited. Therefore, inference can be made that the Convention of Chemical Weapons is applicable in times of peace, international and non-international armed conflicts. In Article 7, the Organization for the Prohibition of Chemical Weapons is established, which makes the Convention with its 188 parties and two signatories²⁵ nearly universal treaty with the mechanism of compliance. Next to the safety of people, the CCW explicitly mentions the protection of the environment as the “highest priority” while transporting, sampling, storing and destructing chemical weapons and production facilities.²⁶

Applicability of International Environmental Law in Times of Non-International Armed Conflict

While analyzing environmental issues, it is logical to refer to binding environmental treaties and environmental soft law instruments. Does the environmental law continue to apply during the internal armed conflict? In the legal doctrine, one of the justifications for terminating the application of certain treaties is the principle *clausula rebus sic stantibus*. Treaties become inapplicable due to the fundamental change of circumstances. Armed conflict can inevitably be considered as such a circumstance. Moreover, in a case of an armed conflict, principle *lex specialis, derogat lexi generalis* applies. War time laws are undoubtedly *lex specialis* and prevail over peace time laws. Therefore, it is usually considered that peacetime treaties cease to apply in times of hostilities. This is highly questionable due to the following reasons.

Voneky writes that the sufficient state practice shows that for certain kinds of treaties clear rules remain applicable between belligerent states. These rules are applied in particular when

- “(1) treaties expressly provide for continuance during war,
- (2) treaties are compatible with the maintenance of war,
- (3) treaties creating international regime or status,
- (4) human rights treaties and

²³ Official Website of International Committee of the Red Cross. Geneva, 2013 [interactive]. [accessed on 16-08-2017]. <<http://www.icrc.org/ihl.nsf/WebSign?ReadForm&id=600&ps=P>>.

²⁴ The 1993 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons, *supra* note 9.

²⁵ Official Website of International Committee of the Red Cross. Geneva, 2013 [interactive]. [accessed on 16-08-2017]. <<http://www.icrc.org/ihl.nsf/INTRO/553?OpenDocument>>.

²⁶ The 1993 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons, *supra* note 9. Articles IV (10), V (11), VI (3).

(5) *ius cogens* rules and obligations *erga omnes*.²⁷

However, treaties rarely address application during an armed conflict, or can, as *peace time* treaties create regime (emphasis added). Treaties compatible with the maintenance of war raise less questions, so do human rights treaties, which are proclaimed not to cease to apply in a case of an armed conflict by the International Court of Justice.²⁸

Human rights treaties, though being constructed to the protection of human rights, protect the environment *via* proper exercising of the former. Since the above mentioned treaties are primarily meant to apply in the peacetime, it is logical that they do not make the distinction between the NIAC and the IAC. Therefore, if they fall in the concept of the treaties, remaining to apply during the times of engaging in hostilities, they apply in the NIACs, as well.

Attention has to be paid to soft law instruments, such as Stockholm Declaration,²⁹ Rio Declaration,³⁰ World Charter for Nature, the UN GA resolution 47/37 and also the UNESCO convention for the protection of the World Cultural and Natural Heritage. However, principles established in the soft law are not binding. In order to invoke any legal obligations, these principles have to approach international customary law stage.

In times of an armed conflict, it „could not reasonably meet the test of general practice and *opinio juris*.“³¹ Continued applicability of International Environmental Law is of a grave importance, showing rapid evolution and spread of environmental awareness. Nonetheless, it still lacks efficiency to provide the proper protection during times on the NIAC.

Statutes of International Criminal Tribunals and Environmental Protection

Any kind of prohibition functions the best if it criminalizes the conduct. Thus, leaving aside Nuremberg, when modern IHL and environmental norms were only started to be established in treaties, a look can be taken at the statutes of the International Criminal Tribunal for Former Yugoslavia (hereinafter – the ICTY), the International Criminal Tribunal for Rwanda (hereinafter – the ICTR) and the International Criminal Court (hereinafter – the ICC).

Statutes of the ICTY and the ICTR

Created to establish jurisdiction of the tribunals over the crimes committed during the very particular time in very particular area, statutes of the ICTY and the ICTR fail to explicitly name environmental damages in the list of crimes. By way of interpretation and especially bearing in mind the significance of environmental damage in the Former Yugoslavia, it can be inferred that

²⁷ Voneky, S. Peacetime Environmental Law as a Basis for State Responsibility. *Environmental Consequences of War. Legal, Economic and Scientific Perspectives*. Cambridge: Cambridge University Press, 2000, p. 190–225.

²⁸ *Legal Consequences of the Construction of Wall in the Occupied Palestinian Territory*. International Court of Justice, Advisory Opinion I. C. J. Reports. 2004, p. 136, para. 106.

²⁹ 1972 Declaration of the United Nations Conference on the Human Environment (adopted at the United Nations Conference on Human Environment in Stockholm, 16 June, 1972). 11 I.L.M. 1416 (1972).

³⁰ 1992 Rio de Janeiro Declaration on Environment and Development (adopted at Rio de Janeiro Declaration on Environment and Development in Rio de Janeiro, 13 June, 1992). 31 I.L.M. 881 (1992).

³¹ Bothe, M.; Bruch, C.; Diamond, J. and Jensen, D., *supra* note 2, p. 585.

environmental issues are covered, at least partially, by Article 3 of the statute of the ICTY and Article 4 of the statute of the ICTR. The former criminalizes the use of poisonous weapons, destruction of cities, devastation, seizure of property, destruction, willful damage done to historic monuments. The devastation can amount to the destruction of the protectable landscape; historical monuments can be partially incorporated into the natural environment or parts of the natural environment can be of historical value as such. The latter, Article 4 of the ICTR statute, however, is more difficult to interpret. In fact, there are no provisions whatsoever in the ICTR statute, that could be related to the environmental protection, which suggests that the conflict in Rwanda being completely internal brought up less, if any, environmental concern. Meanwhile, the situation in the Former Yugoslavia had some international features, thus allowed the applicability of some of the humanitarian laws regarding the environmental protection. However, it still leaves open the question whether the sufficient environmental protection can be based on the protection of particular areas, covered by the statutes of the ICTY and ICTR statutes, and whether such protection in these statutes exists.

The Rome Statute

One of the crimes, over which the ICC has jurisdiction, is in the Article 8(2)(b) (iv) described prohibition to launch an attack causing “widespread, long-term, and severe damage to the environment that would be clearly excessive to [...] the military advantage anticipated.”³² However, this ICC statute article is very controversial and does not favorably collaborate with this research for the environmental protection in times of the NIAC mostly due to its inapplicability in the NIAC. Articles 8(2)(c) and (e), that name crimes punishable within non-international armed conflicts, do not include environmental crimes in the list. In 2000, Henckaerts wrote about the review conference of the Rome Statute, which could be an arena for discussions about extending applicability of war crimes relevant for the protection of the environment of the application in the NIAC.³³ According to the rules laid down in the statute and its coming into force in 2002, such conference was supposed to be organized in 2009. It was opened in 2010; however, environmental issues were not on the agenda.³⁴

CONCLUSIONS

This research work draws the following conclusion from the fore discussion:

1. Despite the slowly growing concern on the issue, environmental devastation in times of internal conflict still is an underestimated consequence of the hostilities.
2. Environmental protection in times of NIAC is regulated by a number of incoherent, implicit and quite vague norms that are dispersed in too many types of sources among humanitarian law, international environmental law, international criminal law and human rights

³² The Rome Statute for the International Criminal Court (adopted 17 July, 1998, entry into force 1 July, 2003). 2187 U.N.T.S. 90. Article 8 (2)(b)(iv).

³³ Henckaerts, J. M., *supra* note 3, p. 17.

³⁴ *Review Conference of the Rome Statute*. Coalition to the International Criminal Court Kampala, 2010 [interactive]. [accessed on 16-08-2017]. <<http://www.iccnw.org/?mod=review>>

law. Elements of environment are not independent subjects of protection and have to be linked to other subjects of protection, such as civilian objects or human rights.

3. The current legal framework is not sufficient for a proper regulation of environmental protection times of internal armed conflict.

4. Improvements of the legal framework could have the form of:

a. Creation of the compensational system model or establishing international insurance scheme, which would prevent potential harms to the environment as well as would help in post-war recovery processes.

b. Adopting changes in international criminal law in order to establish international environmental crimes in internal conflicts.

c. Encouraging states to amend their national legislations.

d. Adopting a new comprehensive document, exhaustively addressing all the issues and obstacles related to the regulation and implementation of the environmental preservation in times of non-international armed conflicts.

Further Reading

Amendment of the Article 1.2 of 1980 Convention on Prohibition or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects (adoption 21 December, 2001, entry into force 18 May, 2004) 2260 U.N.T.S. 82.

Bothe, M.; Bruch, C.; Diamond, J. and Jensen, D. International Law Protecting the Environment During Armed Conflict: Gaps and Opportunities. *International Review of The Red Cross*. 2010, (92): 569-592.

Bouvier, A. Protection of the Environment in Time of Armed Conflict. *International Review of the Red Cross*. 1991, (73): 599- 611.

Bouvier, A. *Protection of the Environment in Time of Armed Conflict*. Report submitted by the ICRC for the 47th session of the United Nations General Assembly. 1 October, 1992.

Brunch, C. E. *Introduction. Environmental Consequences of War. Legal, Economic and Scientific Perspectives*. Cambridge, New York, Melbourne, Madrid: Cambridge University Press, 2000.

Cullen, A. *The Concept of Non-International Armed Conflict in International Humanitarian Law*. New York: Cambridge University Press, 2010.

Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons (adopted 3 September, 1992, entry into force 29 April, 1997). 1974 U.N.T.S. 317.

Convention on the Prohibition of the Development, Production and Stockpiling *Jurisprudence*. 2013, 20(2): 569–590. 587 of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (adopted 10 April, 1972, entry into force 26 March, 1975). 1015 U.N.T.S. 163 / [1977] ATS 23 / 11 ILM 309 (1972).

Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (adopted 10 December, 1976, entry into force 5 October, 1978). 1108 U.N.T.S. 151.

Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects, (adopted 10

October, 1980, entry into force 2 December, 1983). 1342 U.N.T.S. 137/ [1984] ATS 6 / 19 ILM 1823 (1980).

Declaration of the United Nations Conference on the Human Environment (adopted at the United Nations Conference on Human Environment in Stockholm, 16 June, 1972). 11 I.L.M. 1416 (1972).

Drumbl, M. A. Waging War against the World: the Need to Move from War Crimes to Environmental Crimes. *Environmental Consequences of War. Legal, Economic and Scientific Perspectives*. Cambridge, New York, Melbourne, Madrid: Cambridge

University Press, 2000, p. 620–646. European Convention on Human Rights (adopted by Council of Europe at 4 November, 1950, entry into force 3 September, 1953). 213 U.N.T.S. 222.

Falk, R. The Environmental Law of War: An Introduction, in Plant, G. (ed.). *Environmental Protection and the Law of War*. London: Belhaven Press, 1992, p. 78- 95.

Gasser, H. P. For Better Protection of Natural Environment in Armed Conflict: a Proposal for Action. *American Journal of International Law*. 1995, (89): 637–643.

Geneva Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (adopted 12 August, 1949, entry into force 21 October, 1950). 75 U.N.T.S. 31/ [1958] ATS No 21.

Geneva Convention (II) for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (adopted 12 August, 1949, entry into force 21 October, 1950). 75 U.N.T.S. 85/ [1958] ATS No 21.

Geneva Convention (III) Relative to the Treatment of Prisoners of War (adopted 12 August, 1949, entry into force 21 October, 1950). 75 U.N.T.S. 135/ [1958] ATS No 21.

Geneva Convention (IV) Relative to the Protection of Civilian Persons in Time of War (adopted 12 August, 1949, entry into force 21 October, 1950). 75 U.N.T.S. 287/ 1958 ATS No 21.

Gleditch, N. P. Armed Conflict and the Environment: A Critique of the Literature. *Journal of Peace Research*. 1998, (35): 381–400.