Károly Végh[1]: "And who will desalt Carthage's grounds?" – International environmental legal approaches of the Yugoslavian wars 1991-1999

Introduction

No war can be fought without harming or, moreover, destructing the environment – it is necessarily accompanied with war. The global history of mankind is marked by wars and other types of armed conflicts causing time after time incredible sufferings to each affected person being both civilian and combatant.

However, parallel to destruction, several rules also developed among the nations in order to limit the human sufferings, more or less effectively. It must be emphasized that these constraints on the waging of warfare are aimed to provide protection to persons as human beings – mainly led by humanitarian considerations. Hence, any protection provided for objects other than human beings is based on their importance for survival and the maintenance of human dignity.

For a long period of time, therefore, an enhanced protection of the natural environment per se in times of armed conflicts was found as an 'unnecessary burden' beside the efforts to save human lives. The process to establish specific legal obligations for the protection of the environment in wartime begun only after the Vietnam conflict, and led to results relatively fast, however, with arguable effectiveness.[2]
The international legal, political and diplomatic pressure reached one of its high points in the nineties, when, partly as a result of globalization and enhanced international cooperation, the members of the international community demanded more responsibility for all the consequences of armed conflicts.[3]

Regrettably, this decade was also marked by very serious international and non-international armed conflicts, such as the Gulf War in 1991, wars in Africa and the wars in the territory of the former Yugoslavia from 1991 to 1999.

The disintegration of the former Yugoslavia led to the bloodiest war in Europe after World War II, which demanded an intensive intervention of the international community. The North-Atlantic Treaty Organization (NATO) inflicted several air strikes on Serbian military objects from 1994 to 1995 on the request of the UN Security Council, and in 1999, in the form of a 'humanitarian intervention' with the purpose to speed up the ending of the fights and to ensure the protection of the civilian population.[4]

The aim of this study is to demonstrate and analyze the environmental and international legal consequences of the Yugoslavian wars 1991-1999 by pointing out the two main environmental problems, namely, the destruction of certain dangerous facilities and the use of depleted uranium weapons, both by the NATO forces.

The main goal is to explore the factual data and the applicable legal norms for each case and to find possible international legal liabilities for the damages caused.

It is also aimed to shed light upon the emerging importance to establish a comprehensive legal framework for the protection of the natural environment in times of armed conflicts and to demonstrate the advantages and drawbacks of the existing international legal background.

The focus on the 'environmental consequences' of the Yugoslavian wars is directed only for the natural and not the human (in the meaning of 'built') environment. The research, internationally orientated, focuses furthermore on the consequences caused by international (NATO- and UN-led) intervention during the Yugoslavian conflicts. However, it is not an aim of the study to analyze the international legality of the interventions.

At the end of the study, summarizing in a main conclusion with de lege feranda suggestions, a broad overview will be given concerning the international legal possibilities and limits of protecting the environment during armed conflicts and recent developments of state liability for serious damages caused by wars.

I. The attack on certain (dangerous) facilities and environmental protection

I.1. Attacks on certain facilities during the Yugoslavian wars by NATO forces

Being insomuch as generally accepted as the most creditable source on the topic, the data presented in the followings are based on the report 'The Kosovo Conflict – Consequences for the Environment and Human Settlements' presented in 1999 by the United Nations Environment Programme and the United Nations Centre for Human Settlements (Habitat).

The report points out four environmental 'hot spots', namely in Pančevo, Kragujevac, Novi Sad and Bor, which cities were extensively bombed during the Kosovo war in 1999 hitting several (dangerous) facilities such as factories, oil depots and refineries, and other plants.[5]

In Pančevo, a petrochemical complex, an oil refinery and a fertiliser plant were hit several times.

"As a result of the air strikes, various hazardous substances were released into the environment, either directly from damaged storage facilities, or as a result of fires, with the most obvious visual impact being the dense clouds of black smoke which poured from burning installations."[6]
In Kragujevac, the 'Zastava' car factory was hit several times, causing the release of heavily toxic material into the soil, water and air of the environment.[7]
In Novi Sad, one of the biggest oil refineries of the FRY was targeted, with the result "that groundwater polluted with petrochemicals from oil refinery could enter drinking water wells".[8]
In Bor, an oil depot and a copper mine were bombed, with the result of "severe air pollution from sulphur dioxide emissions".[9]

Some of the 'Key Conclusions' of the report may be particularly relevant in order to establish the applicable law and possible liabilities:

"(…) the Kosovo conflict has not caused an environmental catastrophe affecting the Balkans region as a whole. Nevertheless, pollution detected at some sites is serious and poses a threat to human health. (…)Part of the contamination identified at some sites clearly pre-dates the Kosovo conflict (…)".[10]

I.2. The applicable legal norms for the protection of certain facilities in war

In the division of the international legal system into the two main, original branches, namely, the law of peace (ius pacis) and the law of war (ius in bello), the general international legal norms for the protection of the environment can be placed in the ius pacis. However, in the international legal science it is argued, whether the general, treaty-based or customary rules of international environmental law can be applied also in wartimes.[11] In this dispute we lean to take the position of accepting the arguments in favorem their very limited applicability during armed conflicts.[12] The treaty-based norms of 'peace-time environmental protection' can in many ways be treated as lex generalis in relation to the lex specialis rules of the laws of war-treaties; the unique legal situation established by wars can also establish a rebus sic stantibus case, in which the rules of ius in bello shall prevail. In this regard, the principle of 'military necessity' creates a particular justification for environmental damages applicable only in wartime,[13] which can only be interpreted correctly in the context of ius in bello. However, an eventual suspension of existing treaties can only be applied between the belligerents and

not in relation to third (neutral) states. [14] In our position, the same rules apply for the customary environmental norms.

Therefore, for the purpose of the study, we decided to consider the specific rules for the protection of the environment in wartime, i.e. the norms of ius in bello.

The relevant rules for the protection of certain (dangerous) facilities can be approached in four ways; – from lex generalis to lex specialis – the general rules of the means and methods of warfare, the rules for the protection of the environment, the specific rules for the 'protection of works and installations containing dangerous forces' and – if the previous rules are not applicable – the international customary norms.

Nevertheless, the general rules on the means and methods of warfare are not aimed directly for the protection of the environment; they often have specific (collateral) protective effects in this regard. The provision that "[t]he right of belligerents to adopt means of injuring the enemy is not unlimited"[15], just as the obligations to distinct between military and civilian objects and the prohibition to attack civilian facilities and installations[16] (with specific exceptions) obviously constraint the extension of the fights and their possible environmental results.
There are only a few expressed provisions which aim to protect the natural environment in times of armed conflict. These are Articles 35 (3) and 55 of GP I 1977 – prohibiting attacks "which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment"[17].

Article 56 of GP I 1977 contains specific rules for the protection of certain dangerous facilities, "namely dams, dykes and nuclear electrical generating stations" – however, the restrictions' purpose is, in first place, the protection of the civilian population; no mention of the natural environment can be found in the provisions of Art. 56. GP I 1977.

Beside the texts of the relevant treaties, no customary international legal norms can be found with the particular object to protect the natural environment during wars – these norms have not yet reached the general acceptance to become customary rules. In our view, the customary norms relating to the means and methods of warfare are too much general to establish specific legal obligation for the protection of the environment in contrast to the treaty-based norms.

The well-known 'precautionary principle' is also present in the rules of ius in bello, however, it rather intends to constrain loss of civilian population and goods[18].

I.3. The attacks by the NATO forces under international law

The main question of the chapter is, 'did the NATO forces violate the relevant customary and treaty-based norms relating to the protection of certain facilities and the environment during armed conflicts'? The answer can be given in a twofold way: by comparing the states involved in the attacks and the states parties to the conventions above; and by analysing the substantive applicability of the provisions mentioned.

By the International Committee of the Red Cross, all the then NATO member states had ratified the 1949 Geneva Conventions and their Additional Protocols of 1977 except of France and the United States.[19] Therefore, in their relation, the treaty-based rules cannot apply.
Discussing the specific provisions for the protection of certain dangerous facilities (Art. 56 GP I 1977), one must consider that – underpinned by the wording of the travaux preparatoires – the list enumerating the protected facilities, "namely dams, dykes and nuclear electrical generating stations" and "[o]ther military objectives located at or in the vicinity of these works or installations" is rather exhaustive than open,[20] therefore, the Article cannot apply for cases when other facilities are targeted. In the case of Yugoslavia, according to the official

reports, none of the above was hit or targeted, and so, this provision is non-applicable for our considerations.

In absence of specific provisions, the general provisions for the protection of the environment (Artt. 35(3) and 55 GP I 1977) can be applied for the present case.

The wording of art 35(3) GP I 1977 opens and, at the same time, restricts it own applicability. Opens in the way that it applies not only in cases of wilful destruction of the environment but also in cases when military activities have an "expected" collateral harmful effect on the environment. Restricts, because of a very high demand of severity; the cumulative conditions of a "widespread, long-term and severe damage".

It is often difficult to find a general interpretation of the terms, however, established state practice can indicate their meanings. Therefore, "long-term" must be "interpreted as a matter of decades";[21] "widespread" and "severe" shall exceed "the battlefield destruction in France in the First World War"[22].
If one considers the findings of the UNEP Report on Kosovo, first of all, the one stating that "the Kosovo conflict has not caused an environmental catastrophe affecting the Balkans region as a whole"[23], in the context of the whole report, one can see, that the severity level of the damages caused by the NATO-bombings cannot be qualified as a breach of Art. 35(3) GP I 1977. In our opinion, it surely does not comply with the term "widespread" in the context of its meaning, which breaks the cumulative conditions. Beside that, from a distance of five years, it cannot be stated positively that the environmental damages would have a "long-term" effect. The rebuilding processes are still in progress, however with some positive preliminary results.[24]

Article 55 of GP I 1977 goes further in the protection of the environment, insofar as it establishes (in its 'paragraph 1') a positive obligation for the belligerents 'to take care'. However, in our view, this obligation, as an alternate of the 'precautionary principle', can be subject to the 'military necessity'. It must be added, nevertheless, that 'military necessity' does not establish a carte blanche exemption. In order to reach an objective result, one must consider all the circumstances in their context and interaction.

The relationship between the principle of 'military necessity' and the direct or possible environmental damages caused by attacks deserves some further thoughts. In the literature of international humanitarian law, the notion of 'military necessity' is not interpreted unanimously. On the one hand, as stated above, it can constitute a specific justification for (collateral) damages resulting from attacks; on the other hand it also constitutes a restriction on the waging of warfare, in so far as only those attacks are permitted under international humanitarian law, which indicates considerable military advantage compared to the damages caused. Therefore, in practice, the principle of 'military necessity' is closely bound to the principle of 'proportionality' in the design and execution of armed attacks.

In this special case, it needs to be considered whether the attack on the facilities mentioned above can be justified with the combined requirements of 'military necessity' and 'proportionality' in the field. In our view, in this regard, the threshold of the damages needs not to reach that in Art. 35(3) GP I 1977 in order to be qualified 'unproportioned'; the qualification is related with the military advantage gained by the attacks.[25]

Art. 52(2) GP I 1977 provides the commonly used definition of "military objectives" which can be of great importance in the analysis of the legality of the bombings. It is obvious that the targets are not military property, however, they can be used for military purposes, and, therefore, they deem to have 'dual function'. The military advantage gained by their

destruction can only be seen in the context of the whole "Operation Allied Force"; the main purpose of which was to force the Serbian forces to withdraw from the territory of Kosovo. The destruction of those facilities can validly be seen as an effective means of that goal, therefore, considering the 'military advantage' gained and the possible damages caused, we take the position that NATO forces complied with the provisions of Art. 55 GP I 1977.

As applicable treaty-based norms are available, there is no need to analyze the existing customary norms, however, since the main contributor to the air strikes, the USA have not ratified GP I 1977, a survey of applicable customary norms can be necessary, above all, regarding a possible liability. Therefore, herewith we repeat our remark that in our view no legal obligation can be based on customary norms of ius in bello for environmental protection.[26] In the case of the USA, only the customary rules on the constraints on the means and methods of warfare (including the duty to take into consideration the principles of 'military necessity' and 'proportionality') can apply. [27]

I.4. Questions of liability for caused damages

As, in our view, no violation of the applicable treaty-based and customary norms happened during the bombings of certain facilities in the territory of the former Yugoslavia,[28] none of the member states can be held international legally responsible or liable for damages caused in relation to Yugoslavia. This view was also presented in para. 25 of the Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia.

It must be added, that, based on an intensive international diplomatic a political pressure, many of the NATO member states sponsored or contributed to the 'clean-up project' of the UNEP.

Another question is the liability of the NATO forces for caused damage towards third (neighbouring) states. In this regard, the general treaty-based and customary rules of international environmental law may apply between the disputing state parties, or, at least theoretically, even between the third state(s) and NATO as an international organisation. However, based on the available information, such a demand has not (yet) been raised.

II. Environmental and legal consequences of using depleted uranium weapons

II.1.The use of depleted uranium as a weapon during the Yugoslavian wars

Uranium is a heavy metal which can also be found in the nature. The use of this heavy metal through its enrichment is twofold – a peaceful use in nuclear electric plants and a military use in weapons of mass destruction. However, not only the enriched uranium is used in the military, but also a by-product of the enrichment – depleted uranium (DU).[29]

DU is used to cover up tips of conventional ammunitions because of

"[t]he high density of DU and its various alloys also makes it suitable material for use in armour piercing munitions and to penetrate hardened targets. Depleted uranium also has advantages over similarly dense alternative materials, such as tungsten, in that it is:

• relatively inexpensive.

• non-brittle unlike tungsten.

• at the high temperatures and pressures involved during the impact of such weapons DU has been found to adiabatically shear (e.g. self sharpen) giving increased penetration."[30]

DU is used in many types of ammunition, mainly in anti-tank rounds and missiles, fired both from fighter aircrafts and tanks.[31]

DU weapons were extensively used by American and NATO forces during the Yugoslavian wars and not only in 1999, during the bombings of Serbia and Montenegro but also earlier, during the air strikes on Serbian forces in Bosnia and Herzegovina and Croatia. The webpage of NATO provides an extensive list of targeted places and amount and type of ammunition fired on them.[32]

According to the lists, during the Bosnian war, between 5 August 1994 and 11 September 1995, on 19 targets, far more than 6780 rounds of DU ammunition were fired.

In 1999 112 strikes were launched on 96 different targets attacked. From these, 85 targets in Kosovo, 10 targets in FRY/Serbia (other than Kosovo) and 1 target in FRY/Montenegro; among them 16 targets were hit more than once. The exact number of rounds fired is still unknown, but it considerably exceeds the number of 30523.[33]

II.2. Possible consequences of depleted uranium weapons for the environment

It must be stated in advance, that there is no unanimous opinion in science regarding the exact environmental consequences of the use of DU weapons – that means that currently there is no proven evidence neither pro nor contra the high and long-term risk of applying DU weapons.

However, it is obvious (proven by field studies) that after the use of the weapon the uranium content releases into the soil and ground water and will be stored in them.

It is also proven by studies that DU can dissolve in ground water and soil, and so, easily get into plants, animals and even humans through the 'biological cycle'. It needs no further explanation that accumulated uranium can have serious health effects in all living beings.[34]

In the case of the former Yugoslavia, extensive field research has been undertaken to assess the environmental consequences of the use of DU ammunition.

The research was (again) led by UNEP, and a report has been submitted with the findings and conclusions.[35]

The main findings of the report are as follows:

"No significant, widespread contamination of the ground surface by depleted uranium could be detected by portable beta and gamma radiation detectors. The much more sensitive laboratory analyses of soil samples have shown that there is generally widespread, but very low-level, DU surface contamination at all sites except one (which had no indication of DU contamination). This means that any widespread contamination was present at such low levels that it could not be detected or differentiated from natural radiation using state-of-the-art portable detection instruments. The corresponding radiological and toxicological risks from the widespread low-level contamination are insignificant."[36]

A preliminary assessment of the UNEP from 1999 and a Fact sheet of WHO also confirm the views that the released uranium from DU weapons is at a very low level and, therefore, only long and direct contact with a high amount of this metal can surely cause considerable health effects.[37]

II.3. The legal background for the use of certain weapons

The applicable norms of ius in bello for the use of certain weapons can (also) be approached in many ways from the general rules to specific articles or, even to specific conventions.

Obviously, the general rules on the constraints on the means and methods of warfare and the above mentioned provisions for the protection of the environment (Artt. 35(3) and 55 of GP I 1977) can be applied for that case.

As there are different types of treaties for restriction or prohibition of different weapons, first one has to consider, whether DU weapons can be treated as conventional weapons or radiological/chemical weapons or nuclear weapons. In our view, considering that the depleted uranium part of the ammunition is only intended to help the penetration of the steel core and is not intended to use its possible chemical or radiological effect for the destruction of the enemy, DU ammunition can be treated as a conventional weapon.

There are several provisions for restricting or prohibiting certain conventional weapons in the 1907 Hague Regulations, the 1949 Geneva Conventions and their 1977 Additional Protocol I. Beside them, a specific treaty has possible applicability, namely, the 1980 'Geneva 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' and its four Protocols on Non-Detectable Fragments (Protocol I), on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II, amended on 3 May 1996), on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III) and on Blinding Laser Weapons (Protocol IV, 1995).

There is a specific provision in Art. 36 GP I 1977 (provisions on 'new weapons') on newly developed weapons which cannot be classified in the types above – as a subsidiary rule.

Beside (or in absentio of) the treaty-based norms, of course the relevant customary norms on the restriction of the "right of belligerents to adopt means of injuring the enemy" may also apply.

II.4. The use of depleted uranium weapons under international law

First of all, the applicability of special treaties on the prohibition of certain weapons (Geneva Conventions 1980 and Protocols) shall be considered as the relevant lex specialis in this regard. The question is, whether DU ammunition can be classified on one the weapons mentioned above.

A classification as a 'weapon with non-detectable fragments' (Geneva Protocol I 1980) – the primary effect of DU ammunition is not to "to injure by fragments which in the human body escape detection by X-rays", therefore, it cannot apply for DU weapons.

A classification as "a mine, booby-trap [or] other device" (Geneva Protocol II, amended on 3 May 1996) – the only classification that might come up is the open term 'other device'. However, in the context of the Protocol, the term can only be interpreted as a weapon with similar effects to mines and booby-traps, which follows from the words "actuated manually, by remote control or automatically after a lapse of time" (Art. 2 (5)). In our view, this classification can neither be applied to DU weapons.

A classification as an "incendiary weapon" (Geneva Protocol III, 1980) – the provisions of the Protocol expressly exclude weapons like DU, by stating that

"[i]ncendiary weapons do not include […] [m]unitions designed to combine penetration, blast or fragmentation effects with an additional incendiary effect, such as armour-piercing projectiles, fragmentation shells, explosive bombs and similar combined-effects munitions in which the incendiary effect is not specifically designed to cause burn injury to persons, but to be used against military objectives, such as armoured vehicles, aircraft and installations or facilities […]" (Art. 1(b) of Geneva Protocol III, 1980)

By the effect of DU weapons, it is obvious, that it cannot be classified as "blinding laser weapon" under the Geneva Protocol IV, 1995.

As seen, DU ammunitions cannot be treated as special conventional weapons under the current state of ius in bello norms (however, in our view, special provisions on DU would be desirable).

In the next step, it shall be considered whether the use of DU weapons complies with the general rules on the restriction on means and methods of warfare and the rules on the protection of the environment during wartimes.

First, the very uneasy question shall be set, whether DU weapons can be prohibited based upon their "nature to cause superfluous injury or unnecessary suffering"[38].

As quoted by Yoram Dinstein,

"a weapon is not banned on the ground of 'superfluous injury or unnecessary suffering' merely because it causes 'great' or even 'horrendous' suffering or injury".[39]

DU weapons are aimed to be 'anti-material weapons', i.e. generally, they are not targeted against military personnel per se. In this regard, in our view, the crucial point is the question of effectiveness and the 'military advantage' DU weapons can gain. It can be validly stated that DU weapons provide a much more effective result in overcoming armoured vehicles than comparable conventional weapons. At the present status of military technology, we cannot state positively that the application of DU weapons could be prohibited under Art. 35(2) GP I 1977.

Another question concerning the legality of DU weapons is whether they violate the rules on environmental protection, namely, Artt. 35(3) and 55 of GP I 1977. (With the consideration that not all NATO states are state parties to GP I 1977.)[40]

According to Art. 35(3), the test shall be raised again to prove whether DU weapons cause "widespread, long-term and severe damage to the natural environment".

Referring back to Chapter II.2., the findings of the organisations in the field did not confirm an assumption of widespread and severe damage in the territory of the former Yugoslavia. In our view, any considerations on the long-term effect of DU would be deemed untimely. However, the cumulative conditions for the applicability of Art. 35(3) are not fulfilled.

Nevertheless, the above cited wording of Art. 55 of GP I 1977 indicates a positive obligation to "take care". Regarding DU ammunitions, this obligation can be connected with the provisions of Art. 36 GP I 1977 which state that

"[i]n the study, development, acquisition or adoption of a new weapon, means or method of warfare, a High Contracting Party is under an obligation to determine whether its employment would, in some or all circumstances, be prohibited by this Protocol or by any other rule of international law applicable to the High Contracting Party".

In the context of Art. 55, the main question is whether the NATO forces applying DU weapons provided sufficient circumspections in order to prevent "widespread, long-term and severe" environmental (and health) damages both during the development and the operational use of this ammunition.

As many of the preliminary test results are non-available[41], and the field studies on the environmental effects cannot show a high severity of damages, at present, it cannot be stated positively that NATO forces would have failed to take sufficient care, however, through further developments in research this view can change.
In our view, the proper interpretation of Art. 36 may impose some problems concerning the extension of the obligation. As it is generally understood, the obligation of 'precaution' only

applies for the ‘normal or expected use’ of the weapon. Today, there is no international review mechanism for a standardisation of criteria, it is the duty of each Member State to elaborate its own standards.[42] Therefore, much depends on the developments of science in the field, where new results may influence the international legality of DU weapons.
Today’s uncertainty in this regard could be interpreted twofold: either stating that a weapon with dubious effects must not be applied, or stating that in absence of scientific proof on their extensively harmful effects, DU weapons cannot be banned. An argument for the second view may be that the obligation, set forth in Art. 36, covers only the foreseeable consequences of the use of specific weapons and cannot include ‘far-fetched potentialities’.[43]

Summarizing the findings above, at present it cannot be stated positively that using DU weapons would violate current general or specific rules of ius in bello, however, future developments in law and science can tinge its classification.

II.5. A possible liability of NATO forces for caused damages

In our view, a possible liability for caused damages by DU weapons is much more difficult to establish than in the case of the destruction of certain facilities.

The Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia has also dealt with the question of DU weapons; however it came to the conclusion that based on the significant uncertainty on the exact environmental consequences no legal responsibility can be raised against NATO forces.[44]

From a legal point of view, as no violation of the currently applicable rules can be determined at the moment, there is no room for raising a question of international legal responsibility.

However, in our view the question of a political (or moral) responsibility could arise based on the use of weapons with dubious environmental effects.

In a later phase, it is also imaginable that if harmful health effects of DU weapons on the civilian population can be proven, a series of law suits can be brought against NATO member states. In our view, in these possible cases in the future the principle of ‘military necessity’ will not be applicable as a justification for damages.

Conclusions

Recalling the introductory remarks, i. e. ‘no war can be fought without harming the environment’ we can regrettably acknowledge that at the end of the 20th and the beginning of the 21st century this remark still keeps its validity in spite of the efforts made during the last decades.

This statement is, in our view, particularly true for the case of the armed conflict in the territory of the former Yugoslavia. Despite the ‘high-tech’ weapons used and the precision-bombings of suspected military targets, the collateral damage to the environment could not be avoided. Therefore, the question could be raised – can the purpose justify the means and if yes, to what extent? How far can reach the exception called ‘military necessity’ on the cost of environmental protection?

The current rules applicable for the protection of the environment during wars are, in our view, setting the threshold of violation to much high (not) to be effective. The current interpretation of the cumulative conditions “long-term, widespread and severe” damages provides an extremely broad space for states to comply with it – and gives only little chance for violations.

Of course, there are several ideas of possible solutions but the realization of them depends largely on the political decision of states concerned. One of the solutions might be the change of state practice concerning the above mentioned interpretation by lowering the threshold of application. Another idea is the establishment of a 'Fifth Geneva Convention on the protection of the environment during armed conflicts', which has already been initiated by several NGOs and scientific institutions in 1991, however without any further results.

It must be confirmed however, that the development in the field of environmental protection during wars has recently been accelerated by the demands of the international community in the form of political and diplomatic pressure, which may lead in the future to an international conference on the topic and hopefully to the establishment of a legally binding instrument.

Beside looking into the future one must not forget about the serious situations of the present, among of them about the environmental situation in the former Yugoslavia:

the projects are still in progress, the scientists are trying to find the best solutions.

Nevertheless, it became obvious that regarding official reports none of the member states of NATO have violated the applicable international legal rules and therefore none of them can international legally be held liable for damages caused.

However, the existence of considerable damage is clear but if nobody is obliged to prevent or neutralize it, one could raise the theoretical question – "And who will desalt Carthage's grounds?"

Végh Károly[1]: „Ki sótalanítja Karthágó földjeit?" – A volt Jugoszlávia területén zajlott fegyveres konfliktusok (1991-1999) egyes nemzetközi környezetvédelmi jogi vetületei

- Összefoglaló -

Általánosan elfogadott nézet, hogy egyetlen háború sem vívható meg anélkül, hogy ne ártana a természetnek, sőt, ne rombolná le azt; ennél fogva, hosszú időn át a háborúk e hatását elkerülhetetlen következménynek tekintették, melynek megakadályozására nem született átfogó, nemzetközi rezsim.

A nemzetközi közösségben, az 1990-es években kiteljesedő értékrendváltozás nyomán, azonban egyre erősödött az igény a környezet védelmének háborúk idejére való kiterjesztése iránt is. E folyamattal egyidejűleg a világ számos régiójában törtek ki fegyveres konfliktusok, melyek sajátos esettanulmányokként mutatják be a nemzetközi jogi szabályozás és annak gyakorlati érvényesülése közötti, gyakran ellentmondásos kapcsolatot.

A tanulmány középpontjába állított, a volt Jugoszlávia területén zajlott konfliktusok számos súlyos kérdésre és hiányosságra hívták fel a nemzetközi közvélemény figyelmét, elsősorban két területen: bizonyos, veszélyesnek tekinthető objektumok támadását, valamint a szegényített urániumot tartalmazó lövedékek használatát illetően, mindkét esetben felvetve a támadásokban közvetlenül érintett Észak-atlanti Szerződés Szervezetének (NATO), valamint tagállamainak esetleges nemzetközi jogi felelősségét.

A tanulmány első részében vizsgált veszélyes objektumok támadását illetően átfogó képet az UNEP által készített jelentés biztosít, mely azonban maga is több tekintetben árnyalt, olykor ellentmondásosnak tekinthető megállapítást is tartalmaz. A támadások pontos környezeti hatásának tisztázatlansága mellett számos további kérdést hagy nyitva a releváns nemzetközi

jogi szabályozás is. Az 1949-es genfi egyezmények és 1977-s kiegészítő jegyzőkönyveik szabályai alapján ugyanis a támadott objektumok nem minősülnek veszélyesnek, ennél fogva kiemelten védettnek, annak ellenére, hogy támadásaik kimutatható környezeti károkat okoztak.

A tanulmány, és egyben a vizsgált jogterület kulcsproblémája azonban a jogsértés minimális határértékének tisztázatlansága, illetve ésszerűtlenül magasra helyezése, melynek révén csupán a rendkívül nagy területet érintő és páratlanul súlyos szennyezés minősül az egyezmények megsértésének. A szerző megítélése szerint e kritériumrendszer átértelmezése lehet az első lépés a környezet háborúk idején való hatékony védelme kidolgozásához.

A második vizsgált kérdésként vizsgált szegényített uránium tartalmú lövedékek használata a megosztott és kiforratlan tudományos álláspont miatt további jogbizonytalanságot eredményez.

Noha e lövedékek a hatályos nemzetközi hadijogi szabályozás alapján nem minősülnek kifejezetten tiltott fegyvereknek, az ilyen lövedéket alkalmazó feleket kifejezett körültekintési és elővigyázatossági kötelezettség terheli a polgári lakosságot érintő káros mellékhatásokat illetően.

E kérdés tehát továbbra is lezáratlan, azonban a szerző nem zárja ki annak lehetőségét, hogy amennyiben a jövőben e mellékhatások tudományos alapossággal is bebizonyosodnak, a NATO, illetve tagállamai nemzetközi jogi felelőssége felmerüljön.

Összefoglalóan megállapítható, hogy a hatályos szabályozás, az elmúlt évek fejlődési tendenciái ellenére továbbra is több hiányossággal küzd, különösen a felelősség megállapítása és a kikényszerítési eljárások tekintetében.

Noha az elkezdett folyamatok a jövőben kiteljesedhetnek, mindaddig, amíg a jelen nemzetközi rendszerben a háborúindítás továbbra is az államok gyakorlatának része, a környezet háborúk idején való védelmének lehetőségei korlátozottak maradnak.

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