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# Legal Protection of the Environment in Armed Conflicts with Emphasis on the Second Gulf war

Azadbakht, B<sup>1</sup>, Poorhashemi, S.A.<sup>1</sup>, Zibakalam, S.<sup>2</sup>, Bavand, D.H.<sup>1</sup>

<sup>1</sup>Department of Environmental Law, Science and Research Branch, Islamic Azad University, Tehran, Iran, <sup>2</sup>Department of Political Science, Faculty of Law and Political Science, Tehran University, Tehran, Iran,

# ABSTRACT

The international community has passed terrible ordeals in the course of wars and, due to the stability of environmental damages of war, the protection of the environment has proved to be of high necessity for the international community. As a geopolitically important maritime region, the Persian Gulf, due to massive energy resources, is no exception to this trend and is under the supervision of the international law of armed conflicts. Today, since the necessity of environmental protection in times of armed conflicts has had marked effects on promoting the status of the wartime environmental protection, its norms can be viewed as customary international law and jus cogens with erga omnes effects. Considering environmental concerns in times of war and peace is thus accounted to be an international requirement, particularly for the belligerent parties in armed conflicts. Accordingly, regarding the strategic status of the Persian Gulf and the previous experiences of two wars in the region, the Second Gulf War (1990-1991) and its environmental effects in particular, and by evaluating the existing regulations in the course of the Second War, the present study attempts to reach a new legal approach according to which, in case of the outbreak of another war in the region or in any spot in the world, environmental damages caused by armed conflicts be kept to a minimum.

KEYWORDS: Environmental Law, Jus cogens, War Law, The Second Gulf War, Pollution.

#### **1. INTRODUCTION**

As undoubtedly the most amazing social phenomenon, war serves to shape history [1]. From a long time ago, humans have found themselves in conflict with each other and the astonishing developments in human life, particularly over the past centuries, has not changed this very tradition. Therefore, no era through the course of history can be found in which there is no trace of violence and war [2].

As an inevitable principle in international relations, war has always been imposed upon the governments in conflict with no limitation in time and place which entails certain consequences and by its outbreak, valid regulations in the time of peace might lose their legitimacy and be superseded by rights of war (Jus in bello) [3], except for regulations which are considered as jus cogens in peacetime and wartime as well. Therefore, since international law cannot prevent the outbreak of war, it strives to establish a safer world by formulating regulations by which all the members to international law abide. Modern international law has particularly stressed the environment from and protecting it in the time of war and peace [4], since the international community has come to realize that the environment means whatever the human life is dependent on [5], according to which the international community underlines the undeniable role of the environment on one hand and it is aware of the unavoidable outbreak of armed conflicts on the other hand. Hence, it seeks to minimize the damages to the human environment in the course of conflicts. Typically, in armed conflicts, besides the human toll, the environment also proved to be vulnerable to degradation and with the current advanced technologies in military warfare the environment is being severely damaged. With this respect, based on human rights and aiming at easing the sufferings of war, the rights of international military conflicts have formulated regulations by the employment of which a compromise can be reached between military requirements and humanitarian considerations by which irreparable damages to the environment are avoided [6]. It is worth noting that since implementing the aforesaid regulations does not require a central power, it calls for international cooperatives and sound decisions by the belligerents in the course of military conflicts with the purpose of protecting the environment for the current and the future human generation. However, since the third-generation human rights recognized the responsibility to protect the environment as considered as erga omnes obligation of toward states, the states move towards protecting the environment in peacetime and wartime as well [7].

Over the past few years, the Persian Gulf has been recognized as one of the world's potentially hazardous regions. The outbreak of two major wars in this region has caused irreparable damages to the environment of this precious region, according to which most of wildlife habitats in Iran, Iraq, and Kuwait have undergone severe damages in the course of World War I (1980) and World War II (1990) which came to be known as the war for oil.

\*Corresponding Author: Azadbakht, B, Department of Environmental Law, Science and Research Branch, Islamic Azad University, Tehran, Iran,

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Environmental pollution in several areas within and outside the conflicts has caused serious damages to the aquatic and soil ecosystems in these countries [6]. The conflict parties' tendency to win military victory by employing devastating weapons led to the violation of humanitarian principles and where the primary human rights are ignored the conflict parties are not expected to have concern for the environment (wildlife, plants, and etc).

In the course of Iraq-Kuwait War, Iraq, countless Kuwaiti oil wells were set on fire by the Iraqi forces causing massive environmental damages due to oil spill. Shocking reports also revealed environmental problems caused by the oil fires including smog formation and acid rain. According to the report of World Meteorological Organization (WMO) "burning of hundreds of Kuwait's oil wells has released approximately half a million ton carbonic dioxide, 40 thousand tons of sulfur dioxide, and 3 thousand tons of nitrogen oxide and various potentially hazardous gases into the atmosphere of the Persian Gulf per day, such a pollution had extensive effects in a way that the black smoke were drawn up to the west of China and Himalaya heights in India [8]. Sedimentation of this black smoke in the marine food chain was another adverse effect which caused an increase in the volume of pollutants in the Persian Gulf and ultimately led to extensive damages to animal and plant life in this region [9]. Despite the entire environmental damages in the course of the Second Gulf War (August 2, 1990 – February 28, 1991), only Security Council Resolution 674 (October 29, 1990), among the 13 issued Resolutions, recognized Iraq responsible for the damages caused by destruction and seizure of public and private property in Kuwait which did not, in effect, lead to reduce the destructive effects on environment.

In this paper, regarding the international experiences of war and its effects on human lives, it has been, therefore, attempted to reach a legal approach based on which, in case of the outbreak of another war in the region or any other spot in the word, the irreparable damages to the environment be considerably reduced.

# 2. Significance of the Persian Gulf

As an ecologically valuable region, the Persian Gulf, due to massive reserves of energy, has been a traffic zone for huge vessels and oil tankers on one hand and on the other hand, since it is a semi-closed sea, the movement of water masses is poor and anti-clockwise and it takes a long time for the water in Persian gulf to be replaced through the Strait of Hormuz. This replacement time has been estimated between 3 to 5 years, thereby intensifying any types of pollution. 40 thousand vessels pass the Persian Gulf and the Strait of Hormuz annually that makes up nearly 30% of the world's oil tanker traffic [9]. Such a massive traffic in this region caused the contamination to be 40 times more than the contamination in other seas. With this respect, in 2007, International Maritime Organization (IMO) introduced the Persian Gulf and the Gulf of Oman as Special Sea Areas [8]. Further, because of the geopolitical identity of this region (a blend of volatile regional situations) on one hand and the international community's need for the region's gas and oil reserves on the other hand, the Gulf has always been susceptible to crises and serious threats such as wars.

#### 2.1 Geographical location

With an area of 232850 km<sup>2</sup>, the Persian Gulf is located between Iran and the Arabian Peninsula (Fig.1) which is connected to the Gulf of Oman in the east by the Strait of Hormuz [6]. It has warm and salty shallow water. The Persian Gulf is an extension of the Indian Ocean into Iranian plateau in the south with an approximate length of 1000 kilometers, a width of 250 to 300 kilometers, and a maximum depth of 90 meters. The maximum wave height is 3 meters with a volume of  $10 \times 13$  cubic meters [9]. The Gulf's depth is not the same everywhere; in the northern parts it is relatively shallow, due to the sedimentation of the alluvium deposits of the rivers flowing to the Gulf, and in the central parts the depth does not exceed 40 or 50 meters. The deepest part is 93 meters deep in 15 kilometers off the cost of the Greater Tunb. Overall, the eastern parts are deeper [6].



Fig.1. Persian Gulf Map [6]

## 2.2 Strategic location

Due to the navigable marine environment on one hand and enjoying massive resources of oil, gas, and marine reserves on the other hand, the Persian Gulf has long been the center of attention. It bears mentioning that being situated in the challenging Middle East and Heart Land which is part of a more strategic region consisting of Indian Ocean region, its marginal countries, the Newly Independent States of the former Soviet Union (FSU), Afghanistan, Pakistan, and Turkey, should be added to the points mentioned above [10]. Also, the Gulf's population of 100 million people should be taken into account as a lucrative market for absorbing petrodollars. Accordingly, the Persian Gulf enjoys a particular geopolitical significance in the world. This geostrategic picture is completed by the military bases of the superpowers in the region and the maritime communication lines which cross the region [6].

Among all of the above mentioned reasons, a particular importance in attached to the Persian Gulf's massive energy resources globally. Therefore, the Persian Gulf has always been and will be one of the most important strategic locations in international conflicts among the superpowers [3].

#### 3. Environmental effects the Second Gulf War

The Second Gulf War proved to be a turning point which caused a global concern for the environment, since the Second Gulf War was the first war in which suffering of injured animals could be observed and felt. The casualties of this war were: thousands of seabirds, migrant birds, cattle and domestic animals, marine mammals, and other aquacultures which did not have any role in this conflict, but were injured and killed or were exposed to danger.

The Persian Gulf's pollution after the Second Gulf War, besides low self purification, was also caused by oil spill and widely dispersed smoke plum (Fig.2) due to burning of oil wells in Kuwait which ultimately resulted in acid rain leaving several destructive effects on the region's environment. Smoke inhalation was toxic for humans and animals. The smoke, due to a partial blockage of sunlight from reaching the surface of the earth, further caused several adverse effects on plant growth and reproductive cycle in marine organisms [11].

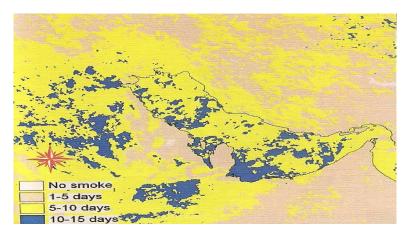


Fig.2. Dispersion of released black smoke caused by burning of the oil wells of Kuwait in the Persian Gulf region in February 1991 [6]

In January 19, 1991, Iraq began pumping Kuwaiti oil into the Gulf, creating an oil slick covering thousands of square miles. The oil spilled into the Gulf until May 26, creating an extensive pollution (about 400 miles off the coast of Kuwait and Saudi Arabia) which brought about the extermination of several species and destruction of their environment. In December 1990, a few months before the tragedy, Iraq experimented with effectiveness of explosives on 6 Kuwait's oil wells. Afterwards, by the outbreak of ground war, Iraq began to widely set oil wells on fire which accordingly took full advantage of the past experience. The total number of oil wells set afire reached 732 creating a widespread pollution in the atmosphere. The remaining 82 intact oil wells pumped their oil into the Gulf, creating widespread oil pollution in the region until November 6, 1991, when all the oil well fires were extinguished. (Fig.3) Experts believed that an estimated 6 to 8 million barrels of crude oil have released into the Persian Gulf or got into the coastal areas or deposited on the floor of the Gulf (particularly on coastal areas of Kuwait and Saudi Arabia).

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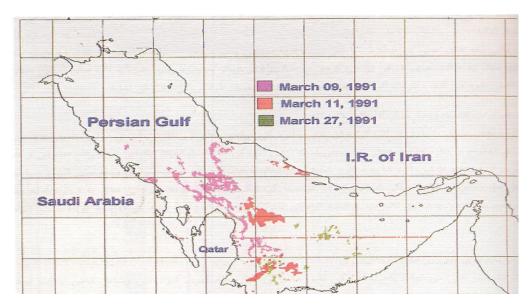


Fig.3. Oil dispersion in the Persian Gulf [6]

Furthermore, the destruction of a large number of oil tankers of Iraq and Kuwait, during the Gulf War, released thousands of barrels into the Gulf creating more pollution in the region in the spring and summer of 1990. Oil spill movement increased the pollution widely in the region's coastal areas. It is worth noting that the coastal areas of Kuwait remained unaffected because the water streams directed the oil spills away from Kuwait's shores towards the coastal areas of Saudi Arabia.

The ecosystem of seagrasses, shore waters which are the whereabouts of many aquatic larvae such as shrimp, and also the habitat of sea turtles have been most affected by the pollution . Further, coral reefs in the south of the Gulf which are home to many aquatic organisms were mostly influenced by the pollution. The results of experiments revealed that the amount of damage to shrimp larvae and the other aquatic organisms during the first five days of pollution in the contaminated areas were much more than the other days. Although the direct effects of pollution vanished over time, the inflowing of toxic hydro-carbonated substances into the food chain of animals had created subsequent drastic effects on the Gulf's flora and fauna.

For a preliminary estimate of the likely extent of ecological damage resulting from the spill, Regional Organization for the Protection of the Marine Environment (ROPME) employed a research vessel, owned by National Oceanic and Atmospheric Administration (NOAA). The vessel's mission was carried out in a 100-day marine patrol in six stages. After the primary estimation which revealed that 11 million barrels of oil have released into the Persian Gulf, it appears that this figure has been two third of the original amount. In essence, there was no consensus about the amount of oil spill. Nevertheless, regarding the extension of pollution and several other factors, it can be considered bigger than the Gulf of Mexico oil disaster in 1979 [6]. The extent of this oil spill is roughly estimated to be 160 kilometers long and 22 kilometers wide [11].

# 4. A review of the international regulations in defining the reciprocal relationship between the rights of the environment and the rights of armed conflicts

Unstable conditions which affect the humans' environment, regardless of developmental activities in peacetime, are highly influenced by armed conflicts or warlike conditions. Although there are ample legal regulations concerning peacetime environmental protection (even some of these regulations have dealt with the necessity to avoid environmental damages in the time of war), international community's urgent need seems to be reaching a global consensus about preserving the environment in times of armed conflict. With this respect, a couple of significant concerns are cited in the following:

#### 4.1 Hard Law

Regarding the Convention on the Law of International Treaties (1969), treaties are taken into account in the form of written agreement among individuals or member states based on the international law [12]. The arbitrary law has the executive power for only the member states, unless, due to significance of the issue, it is considered as a customary or jus cogens in the international community. The issues concerning the protection of the environmental, according to International Court of Justice (ICJ), are often accounted as these regulations [13]. Peacetime environmental treaties often involve accepted norms based on jus cogens with erga omnes effects which are,

undoubtedly, binding for conflicting parties in a war [14]. The following are a chronological account of treaties which addressed environmental protection either explicitly or tacitly:

-Article 22 of **Hague Convention (IV) (1907)** respecting the Laws and Customs of War on Land and its annex cites as the following: "The right of belligerents to adopt means of injuring the enemy is not unlimited" [15]. Although the mentioned Article has not firmly stressed wartime environmental protection (and due to the year of its formulation, one cannot expect more), it can, in a sense, be considered in line with protecting the environment since it considers unlimited rights for the conflict parties. Regrettably, during the Second Gulf War, this article went unnoticed and the state of Iraq used its full potential for destruction. This Article can be viewed as the cornerstone of the rights of armed conflicts.

-Article 6, paragraph 2, of **Charter of the Nurnberg International Military Tribunal (1945)** addresses "violations of the laws or customs of war, plunder of public or private property, wanton destruction of cities, towns or villages, or devastation not justified by military necessity" [16]. This issue was also overlooked during the Second Gulf War and the belligerent state acted against the Charter of the Nurnberg.

-Article 53 of Fourth Geneva Convention relative to the Protection of Civilian Persons in Time of War (1949) states that "any destruction by the Occupying Power of real or personal property belonging individually or collectively to private persons, or to the State, or to other public authorities, or to social or cooperative organizations, is prohibited, except where such destruction is rendered absolutely necessary by military operations" [17]. It is apparent that, in the course of the Second Gulf War, the state of Iraq moved toward destruction and pollution without any military necessity. Further, it should be noted that the Convention above is accounted as a fundamental regulation in armed conflicts which went unnoticed by the state of Iraq and the other states made no attempt to realize of the provisions of the Convention.

-Article 35 (3) of **Protocol (I)** Additional to the Geneva Conventions (1977) provides: "It is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment"

Article 55 (1) stresses that "care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage"

Article 55 (2) goes on to state: "Attacks against the natural environment by way of reprisals are prohibited" [18].

The Additional Protocol can be considered as the last comprehensive formulated regulation which explicitly stressed protecting the environment; however, in the course of the Second Gulf War, this legal document went regrettably unnoticed too and the state of Iraq acted against its provisions and employed destructive methods which caused long-term and severe damages to the environment affecting Kuwait, other states of the region, and the entire environment of the Gulf. The international community made no attempt in this regard either.

-According to Article 1 (1) of Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD, 1977) each State Party to this Convention undertakes: "not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party"

In Paragraph 2 of this Article, they also undertake "not to assist, encourage or induce any State, group of States or international organization to engage in activities contrary to the provisions of paragraph 1 of this article".

Article 2 of the Convention addresses the "environmental modification techniques" which 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" [19].

In the diction of ENMOD Convention, as an environmental convention, the concepts of widespread, longlasting, or severe damage are rather ambiguous and shall not be considered as a comprehensive deterrent regulation in this regard. Nevertheless, it should be considered as the sole international environmental convention which, in contrary to all peacetime environmental conventions, stresses protecting the environment in time of war. However, it is worthy of noting that if the provisions of this very convention had been met during the Second War, most of the environmental damages with wide-spread, long-lasting or severe effects would have been avoided.

#### -Rome Statute of the International Criminal Court (ICC) (1998)

According to Article 8, paragraph 4, of the Rome Statute, war crimes means: "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 ...".

Also, Article 5 of the Rome Statute addresses the crimes within the jurisdiction of the Court and states: "The jurisdiction of the Court shall be limited to the most serious crimes of concern to the international community as a whole. The Court has jurisdiction in accordance with this Statute with respect to the following crime: a) The crime of genocide; b) Crimes against humanity; c) War crimes; d) The crime of aggression" [20].

Regarding the Statute of the International Criminal Court, firstly it should be pointed out that this Statute has been adopted after the Second Gulf War and it has been taken into account to see to what extend it can influence the

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methods and means of the conflicting states in the case of a third war in the region. Secondly, Article 8 of this Statute has recognized serious violations of the Four Geneva Conventions (1949) as war crimes. One of the provisions of the above mentioned Conventions which concern intentional destruction of properties with no military necessity is of great importance since avoiding war crimes, as obligations of the treaties and customary international law, entails erga omnes effects and the violation of which is not tolerable and brings about international reaction. Thirdly, the provisions of the Statute, for the first time, have targeted the individuals' responsibility in the course of war as hard international law. International Criminal Court, therefore, represents the emergence of individuals' obligation and commitment [21]. which can have deterrent effects on unnecessary destructive behaviors causing damages to the environment. In the case of a third war in the Persian Gulf, in contrary to the Second Gulf War, military commanders are not expected to repeat what has been done to the environment in 1991, since that will have repercussions for them. It is safe to say that if the aforesaid Statute had been formulated before the Second Gulf War, most of the environmental damages could have been avoided.

#### 4.2 Soft law

Some declarations and resolutions, referred to as the soft law, can be considered as customary laws since they represent the approach of the states and achieve the international consensus over time.

Since the experts in international law refer to customary rights as the primary source of defining the obligations of the states, due to the behaviors of the states (material element) and the states' commitment to execute it (spiritual element), international customary laws are, therefore, assumed as the launch pad of progress [22]. The environmental principals of some declarations and resolutions, because of the great importance attached to the issue, became international customary laws and, occasionally, jus cogens. Soft law (as some examples are provided in the following) can be benefited from in wartime environmental protection.

**-Declaration of St. Petersburg (1868)** stresses that "the only legitimate object which States should endeavor to accomplish during war is to weaken the military forces of the enemy" [23].

-Principle 26 of **Stockholm Declaration on the Human Environment (1972)** states that "man and his environment must be spared the effects of nuclear weapons and all other means destruction. States must strive to reach prompt agreement, in the relevant international organs, on the crimination and complete destruction of such weapons" [24].

-Paragraph 5 of **World Charter for Nature** (1982) states that "nature shall be secured against degradation caused by warfare or other hostile activities" [25].

-Rio Declaration on Environment and Development (1992) has taken into account the necessity of protecting the environment in time of war as such:

Principle 24 posits that "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".

Also Principle 25 postulates that "Peace, development, and environmental protection are interdependent and indivisible" [26].

**-Resolutions of the UN General Assembly**: Resolutions of the UN General Assembly are of great significance from two perspectives: firstly, the UN's decisions, irrespective of being legally binding or not, are valid; secondly, the resolutions of the UN originate authoritative law [27]. The following is the two important resolutions of the UN General Assembly concerning the protection of the environment in times of armed conflicts:

**Resolution 47/37 on "The Protection of the Environment in Times of Armed Conflict" (1992)**: the first resolutions of the UN General Assembly which particularly addresses the protection of the environment in times of armed conflicts. Paragraph 5 of the above mentioned Resolution states that:

"Destruction of the environment not justified by military necessity and carried out wantonly is clearly contrary to existing international law" [28].

Many jurists argue that the mentioned Resolution has been acknowledged internationally as a customary international law or jus cogens at times. Therefore, in case of an armed conflict in the future, if only this regulation is taken into account, many environmental damages will be avoided. Note that this Resolution has been ratified after the Second Gulf War (1990-1991) with the purpose of preventing the damages the state of Iraq caused to the region's environment.

**Resolution 56/4 adopted by the General Assembly (2001)**: "damage to the environment in times of armed conflict impairs ecosystems and natural resources long after the period of conflict, often extending beyond the limits of national territories and the present generation". The resolution also declares 6 November each year as "the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict" [29].

Regarding the above mentioned Resolution, it should be noted that it is expected that declaring an international day for protecting the environment in times of war which is annually held in different countries will raise concerns about this very issue. Another issue concerns no unnecessary damage to the environment in times of war because of its long-lasting effects. Wars eventually end but their effects last for so many years which it is in contrast to the states' obligation concerning environmental protection for enjoying a healthy environment as a third-generation

human rights' regulation. This regulation, according to many jurists, is presently jus cogens with erga omnes obligations.

-Paragraph 19 of the **Johannesburg Declaration on Sustainable Development(2002)** (a ten-year review of Rio) states that "we reaffirm our pledge to place particular focus on, and give priority attention to, the fight against the worldwide conditions that pose severe threats to the sustainable development of our people, which include ...; and armed conflict; ..." [30].

Overall, it bears noting that changing of soft law into customary law, due to being comprehensive and binding appears to be a merit; however, a major drawback that cannot be ignored concerns the ambiguity of such regulations. In other words, since customary law are non-codified, it lends itself to different interpretations – unless these regulations gain international acceptance as jus cogens with erga omnes effects.

# 5. DISCUSSION

**5.1** The extent and severity of pollution and environmental degradation and long-lasting effects of damages to the environment caused by war, as the means of damage or injury to either the ecosystem or any other state party, have caused the destruction of many habitats and vital resources in the planet. Therefore, in light of Article 53 of Vienna Convention (1969), international acceptance has paved the way for the states to acknowledge protection of the environment as jus cogens against damages caused by war in the near future [12]. Jus cogens entails erga omnes obligations owed by states towards the community of states as a whole which is, therefore, enforceable against any state infringing. Note that authoritative law does not depend on the will of the states and every state should comply with its legal requirements [27]. Presently, the majority of jurists come up with the idea that the necessity of protecting the environment in times of armed conflicts is considered as jus cogens and an international obligation with erga omnes effects since the realization of which calls for international cooperation. Several treaties involve accepted norms having erga omnes effects which are, undoubtedly, binding for either member states or non-members. First Geneva Protocol, ENMOD, Resolutions of the UN General Assembly in 1992 and 2001, and also Statute of the International Criminal Court (ICC) are prime examples of such treaties.

The argument originates from the fact that the International Criminal Court, in Barcelona, recognized the existence of erga omnes obligations in regulations regarding the protection of the environment. Commentators also argued that in cases where environmental degradation and pollution is widespread enough to threat the international community, prohibition of massive pollution of the environment is an obligation with effect erga omnes [13].

It bears mentioning that due to shaping of new requirements in international community over time, arbitrary law and customary law create more legally binding obligations and among which jus cogens emerges and infringing of which entails concomitantly more severe reaction from the international community.

**5.2** The outbreak of war is quite likely in different parts of the world which might be attributed due to a gap between the physical development of international community, resulting from advances in science and technology (such as getting access to modern warfare with more destructive power), and the lack of spiritual development caused by the little attention paid to humanitarian concern by the states which itself reduces 'systematic efficiency' (the dream of those who drafted the UN Charter) [31]. By the same token, the outbreak of war is does not sound far-fetched in a region such as the Persian Gulf geopolitically situated in the challenging Middle East and Heart Land [11]. Particularly, if the other conditions such as international policies on controlling oil exports, high per capita income, limited industrial products, consumerism which has thrown open lucrative market for artifacts and products of industrial countries creating intense competitive conditions, and energy crises are taken into account, outbreak of war in the region would seem more probable.

The Second Gulf War (1990-1991) repercussions have various repercussions and widespread pollution which were, in some senses, irreversible and their devastating effects are still present in the region. The pollution was so extended and it is safe to say that no other region in the world had ever experienced such an extensive damage to the environment [11].

**5.3** The rights of armed conflicts seek to regulate the rights and obligations of belligerents and since consider the unavoidable nature of war, regardless its cause, attempt to place constraints on belligerents aiming at reducing the environmental effects of war. With this respect, the rights of war need to create a balance between humanitarian considerations and the requirements of the countries to operate military actions [32].

As jus cogens with erga omnes effects, Article 22 of the Hague IV is accounted as the cornerstone of the rights of armed conflicts stressing limited right for belligerents to adopt means of injuring the enemy. In a more detailed interpretation of Article 22, some argue that in wartime conduct (jus in bellum) and the right to wage war (jus ad bellum), four customary principles should be observed as the following: Discrimination, Proportionality, Necessity, and Humanity. The Principle of Discrimination underlies discrimination tactics between military and non-military targets; the Principle of Proportionality seeks to establish criteria for limiting the use of force; the Principle of Necessity concerns the necessity for measures which are essential to attain the goals of war, and which are lawful in accordance with the laws and customs of war; and the Principle of Humanity stresses restricting the extent of warfare

to protect both combatants and the environment from unnecessary suffering. Note that today, these principles have gone beyond customary international law and become peremptory norms (jus cogens) with erga omnes effects accepted by the international community [33-34].

**5.4** Besides the issues addressed above concerning inevitable nature of war and its damages and reducing the effects of such damages as the purpose of the rights of armed conflicts, if the long-lasting effects of environmental damages and their cross-border consequences are taken into account, a common dominator is reached in which the international environmental law and international law of conflicts seek to minimize the environmental effects in the course of war. With this respect, the following are some international legal texts: Protocol (I) Additional to the Geneva Conventions (1977), ENMOND Convention (1977), Statute of the International Criminal Court (1998), Resolutions of the UN General Assembly in 1992 and 2001, and Stockholm (1972), Rio (1992), and Johannesburg Declarations (2002) which all seek to minimize the damages to the environment in times of war.

# 6. CONCLUSION

**6.1** Considering the fact that peacetime environmental treaties are also applicable in times of war, arbitrary and customary environmental regulations, which ensure jus cogens with erga omnes obligations, describe obligations toward conflicting states in times of armed conflicts irrespective of being member or non-member of international treaties. Since reaching opinio juris in the form of a treaty to protect the environment in times of war proved to be quite challenging, the necessity of wartime environmental protection has tended towards jus cogens and erga omnes obligations. Over the post World War years and the terrible ordeal of damages of war in wartime and their long-lasting effects in peacetime the international community has been through, humans have come to realize that wars eventually end but their effects remain for a long time. It, therefore, calls for a concerted attempt to minimize these effects.

**6.2** Over the past few years, the rise of environmental issues on one hand and the right to enjoy a healthy environment (Principle 1 of Stockholm Declaration, 1972), on the other hand, has been defined as one of the principles in third-generation human rights and is referred to as jus cogens which underlies the necessity of wartime environmental protection. Accordingly, it can concluded that since the obligation of the states concerning protecting of the environment in times of armed conflicts has been universally acknowledged as jus cogens and an international erga omnes obligation, it is hoped that, in the case of another war in the Persian Gulf or in any other region, environmental damages of war be kept to a minimum. End goal of the international community, however, concerns living in a world without friction.

6.3 Since in the course of the Second Gulf War (August 2, 1990 – February 28, 1991) United Nations Security Council (UNSC), in only Resolution 674, recognized Iraq responsible for the damages caused by destruction and seizure of public and private property in Kuwait, it can be taken to mean that Iraq is also responsible for the damaged environment and pollution in the Persian Gulf. Regarding the performance of UNSC at that time, what is remarkable is that in the early 90s the international community had not yet reached a common approach concerning the significance of the environment and protecting it in peacetime and wartime. By that time Stockholm Summit (1972) had only convened whereas since World War II, two summits [26 and 30], have been convened and also Resolutions 47/37 (1992) and 56/4 (2001) and Rome Statute have been ratified which implies the international community's approach towards this very important issue. Although during the Second Gulf war the international community did not reach a global consensus about penalizing Iraq for the environmental damages, today in the case of a potential war with widespread environmental effects in the Persian Gulf or any other region, we are confronted with a different performance of the international community and United Nations. Because besides the rise of international awareness concerning the cross-border effects of environmental damages, several regulations concerning the rights of armed conflicts, according to majority of jurists, have been considered as jus cogens with erga omnes obligations by which the states are obliged to consider this issue in peacetime and wartime. Despite the efforts of governments to reduce the environmental effects of war, the environment is always susceptible to damages and the only way to enjoy a healthy environment is therefore a world without conflict and a world which has always considered environmental considerations in peacetime.

It is therefore argued that jus cogens describes obligation towards the states in protecting the environment in the times of armed conflicts. The following are, accordingly, two suggestions which bear mentioning:

# The first suggestion

Since reaching a global consensus in the form of a binding treaty is quite problematic (at least seems farfetched in the near future), possibly the best option for countries located in politically challenging regions apt to bear conflicts (such as the Persian Gulf and the Caspian Sea which, in addition to geopolitical concerns, have highly fragile environment), appears to be some regional environmental treaties to reduce environmental effects of armed conflicts.

#### The second suggestion

Regarding and the fact that measures against the environment has been gradually equated with crimes against humanity and that the world is no more capable of coping with environmental damages in wartime and also the rising importance attached to environmental issues, some regulations should be established by which in the cases of armed conflicts if the environment is intentionally targeted and its effects on human and his environment are severe and long-lasting, the issue be accounted as a war crime.

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# REFERENCES

1. Farkhojasteh, H. 1989. Sociology of War, 1<sup>st</sup>.Ed. Publishing and Education Organization of the Islamic Revolution.

2. Azghandi, A., R. and J. Roshandel, 2005. Current Military and Strategic Issues, 4<sup>th</sup>.Ed. SAMT Publication.

3. Bakhtiari, A, F. 1997. Environment Protection in International Armed Conflicts, 1<sup>st</sup>.Ed. Publication of Foreign Affairs Ministry.

4. Henderson, C. W. 2010.Understanding International Law, 1<sup>ST</sup> Ed (pp.292 - 293) Wiley-Blackwell Publication.

5. Habibi, M., H. 2000. Environmental Law. 1<sup>st</sup> Ed. Volume 1. Tehran University press.

6. Ettehad, M. 2007. A Review of Structure and Function of the United Nations Compensation Commission in Connection with Environmental Consequence of Iraq – Kuwait War (1991) .Dissertation, Science and Research Branch of Islamic Azad University of Tehran. Iran, (pp.4 – 45).

7. http://ezinearticles.com/International-Law-And-The-Right-To-A-Healthy-Environment-As-A-Jus-Cogens-Human-Right&id=1933199,page 5

8. http://www.ravy.ir / context 2341328.html.

9. http://forum.pacyrus.com/showthread.php?t = 5124.

10. http://www.aftabir.com/articles/view/politics/world/c-1-1298898200p1.php.

11. http://www.aa-mahmoodian.com/Papers/Persian\_Gulf\_pollution.htm.

12. Moussazadeh, R. 2005. The Law of Treaties, 2<sup>nd</sup>Ed. Mizan Publication, (pp.35-196).

13. Austin, J., E. and C. E. Bruch, 2000. The Environmental Consequence of War Legal Economic and Scientific Perspectives, 1<sup>ST</sup>.Ed. Cambridge University press, [Electronic version]. (pp. 203-207). Retrieved February 20, 2011, from http://www.amazon.com/gp/reader/0521780209/ref=sib\_dp\_pt#reader-link.

14. Hulme, k., and C, York, 2004. War Torn Environment: Interpreting The Legal Threshold, 1<sup>st</sup> Ed. Martinus Nijhoff Publisher, [Electronic version] (p.141). Retrieved February 15, 2011, from http://books.google.com/books?id=hKoXIleS8g4C&dq=isbn:9789004138483.

15. Convention IV Hague, 1907. Retrieved April 1, 2011, from http://www.icrc.org/ihl.nsf/FULL/195.

16. Charter of the Nurnberg International Military Tribunal, 1945. Retrieved April 1, 2011, from http://www.derechos.org/nizkor/nuremburg/charter.html.

17. Convention IV Geneva, 1949. Retrieved April 1, 2011, from http://www.icrc.org/ihl.nsf/FULL/380?OpenDocument.

18. Protocol Additional to the Geneva Conventions 1977. Retrieved April 27, 2011, from http://www.icrc.org/ihl.nsf/FULL/470?OpenDocument.

19. ENMOD, 1977. Retrieved April 1, 2011, from http://www.nti.org/db/china/engdocs/enmod.htm.

20. Rome Statute, 1998. Retrieved April 28, 2011, from http://www.icc-cpi.int /Menus/ICC/Legal+Texts+and+Tools/Official+Journal/Rome+Statute.htm.

21. Secretariat of the National Committee for Humanitarian Law, 2004. Observance of International Humanitarian Law.1<sup>st</sup> Ed. Sersem Publication.

22. Habibi, H. 2004. Public International Law, 1<sup>st</sup> Ed. Information Press.

23. Declaration of St. Petersburg, 1868. Retrieved April 8, 2011, from http://www.lawofwar.org/st-petersburg\_declaration.html.

24. Stockholm Declaration, 1972. Retrieved April 23, 2011, from http://www.polak.com/res/environment protection/stockholm declaration.

25. World Charter for Nature, 1982. Retrieved April 23, 2011, from http://www.un.org/documents/ga/res/37/a37r007.htm.

26. Rio Declaration, 1992. Retrieved April 23, 2011, from http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm.

27. Ziaee Bigdeli, M., R. 2004. Public International Law, 19th Ed. Publication of Ganje Danesh.

28. Resolution 47/37 of general assembly 1992. Retrieved May 3, 2011, from http://daccess-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/024/04/IMG/NR002404.pdf?OpenElement.

29. Resolution 56/4 of general assembly, 2001. Retrieved May 3, 2011, from http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N01/475/24/IMG/N0147524.pdf?OpenElement.

30. Johannesburg Declaration 2002. Retrieved April 23, 2011, from http://www.un.org/esa/sustdev/documents/WSSD\_POI\_PD/English/POI\_PD.htm.

31. Molaee, Y. 1994. The executive power of Security Council Resolutions (Iraq-Kuwait War), Journal of Law and Political Science, Volume 33, 107. Retrieved July 14, 2011, from http://journals.ut.ac.ir/page/article-frame.html?articleId=8194.

32. National Committee for Humanitarian Law, 2003. Rules and Law applicable in Armed Conflict, 1<sup>st</sup> Ed. Amir Kabir Publication.

33. Center of Naval Warfare Studies, 2000. International Environmental Law and Naval War, The Effect of Marine Safety and Pollution Conventions during International Armed Conflict, Naval War College Press, (pp.46-119). Retrieved July 26, 2011, from http://library.northsouth.edu/Upload/International%20Environmental.pdf.

34. Linderfalk, U. 2008. The Effect of Jus Cogens Norms. The European Journal of International Law., [Electronic version]. 18(5), 853-871. Retrieved June 27, 2011, from http://ejil.oxfordjournals.org/content/18/5/853.full.pdf+html.