The Conventions Concerning Weapons of Mass Destruction and the Extent of Their Application to the Depleted Uranium Weapon

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Abstract—In view of the features and the dangerous effects of weapons of mass destruction, these weapons have been organized under international conventions. Some of these weapons have been internationally banned such as chemical and biological weapons. Others have been restricted like the nuclear weapons. Depleted uranium, which defined as a secondary result of uranium mining in nuclear reactors, have the same characteristics and effects of the latter weapons, but they have not been covered by any international convention so far. This constitutes a shortage in the international legislation requiring a treatment. This paper will be conducted through doctrinal approach; data will be collected through secondary source by examining the contribution of scholars in the field of law. The current research will try to clarify the possibility of application of conventions on weapons of mass destruction with respect to depleted uranium weapons.

Index Terms—Weapons of Mass Destruction, Depleted Uranium, characteristics and Impacts of Depleted Uranium, Conventions on Weapons of Mass Destruction.

I. INTRODUCTION

There is a lack in international conventions banning the use of depleted uranium weapon, this lack in the convention regarding the prohibition of a weapon [1], does not mean that the use of such weapon is legal [2].

There are particular conventions that could be applied to the use of depleted uranium weapons in the light of the objectives of these conventions and agreed with the use of depleted uranium weapon in terms of its features and effects [3]. This research tackles the extent of the application of the conventions on weapons of mass destruction to the use of depleted uranium weapon which had not been organized by any international convention although this weapon shares the same effects and features of weapons of mass destruction [4]. According to these previous issues, depleted uranium weapon will be discussed in the light of the conventions pertaining to chemical, biological and nuclear weapons.

II. THE DEPLETED URANIUM WEAPON AND NUCLEAR WEAPONS

The depleted uranium weapon and the nuclear weapon have something in common; they share the feature of launching the toxic radiation that affects the living creatures despite the fact that the proportion of this radiation is less than the nuclear weapons radiation. Due to previous statements, the depleted uranium weapon is considered as a new type of nuclear weapons [5].

Due to the fact that the depleted uranium weapons and nuclear weapons share the feature of launching the toxic radiation, the former violates the treaties that govern nuclear weapons. They violate the goal of these treaties. The reference to the goal of the conclusion of the treaty is considered as one of the general rules followed in the interpretation of treaties in accordance with Article 31 in paragraph III of the Vienna Convention on the Law of treaties in 1969. The Article mentioned above stipulates that “treaty shall be interpreted in good faith in accordance with the ordinary meaning of the words of the treaty in its own framework and in the light of its topic and purpose” [6].

The violation of the use of depleted uranium weapons against the international conventions pertaining to nuclear weapons can be noted through their violation to the goals regulated by those conventions. This violation will be discussed below in the light of each convention pertaining to the nuclear weapons.

A. The convention on the prohibition of conducting nuclear explosions tests in the atmosphere, in outer space and under water (Moscow Convention) of 1963 [7].

Two kinds of goals of this convention will be introduced. The first kind involves immediate goals that can be achieved once it puts into practice. The second kind can be achieved in a long-term period. It should be noted that the immediate goals are represented by the prohibition of conducting nuclear explosions tests above the ground, in the air, and under water. They are also represented by putting an end to the pollution of the environment emerging from the radioactive materials. With respect to the long-term goals, they are represented by achieving a convention that permanently bans all nuclear tests, including those tests conducted underground with the exception of the tests conducted for peaceful purposes. Also, a treaty for nuclear disarmament should be comprehensively and generally conducted [8].

To attain the goals of the convention mentioned above, Article I of the convention obligates the states parties to
refrain from making any test explosion of nuclear weapons or any other nuclear explosion in the outer space, in the air, under water, or in any other area in any place which is under its supervision. It also obliges them to abstain from test explosion in the range of the limits of its legitimate authority if the explosion causes the waste outside its regional boundaries. Nevertheless, this convention has obligated all states parties to abstain from being the reason behind encouraging, participating, or assisting in any nuclear explosion no matter its type has been against another state if it leads to radioactivity concerning the limitation mentioned in the paragraph I of the Article I of the Convention [9].

Therefore, Article I of this convention has determined the range of the prohibition to involve nuclear tests in regard to military purposes. The nuclear weapons tests and nuclear tests allocated for peaceful purposes are determined. States parties are obliged in the commitment after conducting such tests or experiments. This commitment should however be within the limits allowed by the convention provided that the leak of the nuclear radiation should not take place outside the borders of the state that conducts such tests. Thus, the convention has not banned nuclear weapons tests or other nuclear explosions happened underground as long as the radioactivity caused by nuclear tests has been trapped inside the borders of the state making such tests [10].

Based on the statements mentioned above, the objective of the prohibition of the nuclear tests under the convention is to preserve the environment from the consequences of serious radiation emitted from those tests. Since the depleted uranium weapon is a radioactive weapon that leads to extensive, serious and long-term damages to the environment, the use of this weapon probably violates the provisions of this convention aiming to stop the radioactive contamination of the environment [11].

B. The Convention on the Non-Proliferation of Nuclear Weapons in 1968

Because of the consequent risks of the spread of nuclear weapons, the need to ban the spread of these weapons during the four sessions from 1958 until 1961 was discussed by the United Nations General Assembly. The result of the discussion was the recommendation of states to hasten the conclusion of an international convention in which nuclear and non-nuclear states were obliged to prohibit the spread of nuclear weapons [12]. The convention in 1968 was held after intensive international effort. It lasted about ten years with respect to the framework of the United Nations [13].

In its preamble, the convention has taken into consideration the need to make greatest efforts to prevent nuclear war. Also, it includes the necessary measures taken as an essential step to prevent the spread of nuclear weapons and the nuclear tests to cease the nuclear arms industry and the liquidation of its storage in the light of a comprehensive convention with respect to a complete disarmament under successful international control. Furthermore, it involves the emphasis on the significance of the peaceful use of nuclear energy to prevent the military use described by the nuclear weapons industry [14].

It is important to note that the convention aims at prohibiting states that do not possess such weapons from the spread of nuclear weapons. It also aims at allowing the peaceful use of nuclear energy for all states parties. This step is to prevent nuclear tests wherever they have been and to prevent the arms race, to stop the manufacture of nuclear weapons and finally to remove the existing ones [15].

Article I of this convention provided that “each state that is a party in the convention and possesses a nuclear weapon pledges not to directly or indirectly transfer nuclear weapons or any other devices of nuclear explosive to any recipient. They should avoid giving help, encourage or inducing any state, that does not involve the possession of the nuclear weapons, to manufacture or have the supervision of those weapons”. Article 2 of the same convention forces the states that do not own nuclear weapons to avoid receiving such weapons, devices, accepting the supervision, manufacturing or getting them and those states do not accept or seek for assistance [16].

Articles I and II of the convention ban the nuclear weapons, nuclear explosive devices, the source of fissile material, equipment or materials designed specifically for the use or producing particular fissile materials. Hence, the depleted uranium weapon is regarded as banned weapon under this convention since the uranium depleted material can be transferred into a nuclear bomb made from plutonium-239. Additionally, providing adequate amount of the uranium shells can be dismantled and in this case the uranium can be converted into fissile elements known as the plutonium. This can be done in the nuclear power reactors for this aim. As a result, the depleted uranium weapon is regarded as a fissile material source [17].

In its preamble, the convention stressed the advantages of the peaceful uses of nuclear technology. There is a massive need to make the nuclear power conducted for peaceful purposes to all states parties available whether these states own nuclear weapons or not [18]. In Paragraph I of Article 4 of the convention, it stressed that there is nothing that can be interpreted in a way that can decrease or affect the inalienable right of all states parties in cultivating their research, producing and using the nuclear energy for peaceful purposes, providing that this can be performed according to the provisions of Articles I and II of the convention [19].

The right in using the nuclear energy for peaceful purposes is recognized. This right of that use shall not lead to the spread of nuclear weapons. Therefore, it prevents states that do not own nuclear weapons from producing electric energy from uranium. Such weapons are banned to transfer or sell the materials that results from this process related to war. Thus, one can argue that Article IV of the convention aims to determine the use of nuclear isotopes, including the depleted uranium described as being nuclear isotopes [20].

C. The Comprehensive Nuclear-Test-Ban Treaty of 1969

The aim of this convention is to attain two main objectives. First, it is represented by the protection of the environment from pollution that resulted from the nuclear testing because of the fallout resulting from such tests. This action affects the
humans, animals and plants. The second objective is to cease the deployment of nuclear weapons, whether this spread has been vertical or horizontal as a first step towards removing these weapons completely. It is crucial to consider that the objective of the nuclear tests is to develop nuclear technology, particularly those pertaining to the introduction and development of new kinds of nuclear weapons. It involves testing its efficiency in a way that guarantees the enlargement of the military options field. In this way, the nuclear tests are regarded as an important factor for increasing the armament from quantitative and qualitative aspects and peace and international security will be then threatened. According to the comprehensive nuclear-Test-ban Treaty, there is an explicit need to qualitatively and quantitatively reduce the development of nuclear weapons and the prevention of the deployment of the technology of its manufacture [21].

The Article 18 of the Vienna Convention concerning the Law of Treaties in 1969 contained a stable rule in international law. This rule provided that signatories shall be obliged by the treaty to refrain from actions aiming at destroying the objective of the treaty [22]. Based on Article 18 mentioned above, the objective of the treaty shall not be destroyed. In addition, the use of the depleted uranium weapons violates the comprehensive nuclear-Test-ban Treaty of 1969 [23]. It is important to note that the radioactive fallout is a result of the depleted uranium weapon as well as the nuclear tests. Consequently, the use of depleted uranium weapons is the reason behind the violation of the first objective of the Treaty representing the protection of the environment from pollution. Also, the depleted uranium can be changed to a nuclear bomb [24]. This action violates the second objective of the Convention representing the cessation of the deployment of nuclear weapons.

III. DEPLETED URANIUM WEAPON AND BIOLOGICAL WEAPONS

Biological weapons are under the submission of the bans provided in the convention on the ban of the Development, Production and Stockpiling of Bacteriological and Toxin Weapons Convention of 1972. The issue of depleted uranium weapons is connected with this convention through the provision of its Article I in the paragraphs I and II. This Article provided that [25] “in this convention, in any circumstances each states parties undertakes that these states shall not deliberately develop, produce, store, save in other formation, or own the following issues:

1. The bacteriological factors, toxins, or other biological factors whatever their origin or the method of its production is. In addition, there are the types and the quantities that are not targeted for the purposes of protection, prevention, or other peaceful purposes. 2. The weapons, equipment or means of delivery directed to use such factors or toxins in the hostile purposes or in armed conflicts.” [26].

In Article I mentioned above, the toxins can be defined as the poisons; they are considered as a kind of biological materials and the other species covered by the biological materials [27]. It should be noted that the depleted uranium metal is as toxic and heavy as lead and mercury [28].

According to the US Air Force guide in 1976, the poison has been defined in a manner that explicitly describes the depleted uranium munitions, It can be defined as “toxins are biological or chemical substances that lead to death or permanent disability when they enter the digestive tract, the lungs, the bloodstream, or through the skin in small amounts [29]. Banning the poison by the existing long-term custom is due to the features of this uncontrolled material since this material leads to the inevitability of death or permanent disability. As a matter of fact, it is considered as treachery to use the poison. Based on the report issued by the environmental policy Institute of the US Army and submitted to the Congress in 1995, it has been stressed confirmed that the toxicity is considered as one of the main characteristics of the depleted uranium. The report provided that “there is no any available technology that it can seriously change the chemical and radiological toxicity in a way that inherently adheres to the depleted uranium. These features are thus important in the uranium metal” [30].

The toxic feature of depleted uranium weapons makes the weapon have international ban under Article 23 \ A of the Hague Regulations concerning the Laws and customs of war on land. It provided that “toxicity or toxic weapons are prohibited” [31]. Furthermore, under Geneva Protocol on the use of the toxic and asphyxiating gases and the like as well as the bacteriological means in war of 1925, the protocol confirms the basis that toxic gases and all its resemblance of liquid substances or equipment used in the war are banned” [32].

The radiation resulting from depleted uranium weapons is regarded as a gas within the meaning provided in the Geneva Protocol of 1925. The air pollution resulting from its radiation makes it toxic gas in its properties in addition to the damage it causes [33]. This shows that depleted uranium weapons are covered by the provisions of the Geneva Protocol in 1925 in which the convention of 1972 on biological weapons assures the provisions as given in its preamble. This means that the use of depleted uranium weapons and even its development, production and storage violates the convention on the prohibition of the development, production and stockpiling of biological weapons in 1972 [34].

IV. DEPLETED URANIUM WEAPON AND CHEMICAL WEAPONS

Chemical weapons are under the submission of the prohibition stated in the convention of 1993 on the ban of all kinds of chemical weapons as well as their development, transfer, production, and storage [35].

Each of Geneva Protocol of 1925 concerning the ban of use of asphyxiating and poisonous gas as well as the convention on the ban of biological weapons of 1972 are both considered as part of the chemical weapons convention of 1993. According to the preamble of this convention and the provision of the Article II in its paragraphs I and II, the preamble provided that “the states parties to this convention ...recognizing that this convention strengthens the principles of the Geneva Protocol of June 17, 1925. Its goals and commitments are assumed under this protocol as well as the Convention on the Prohibition of the Development, production and Stockpiling
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of Bacteriological "biological" and toxin weapons and the destruction of these weapons signed at London, Moscow and Washington on April 10, 1972 [36]. The weapon of the depleted uranium has been subject to the provisions of the Geneva Protocol and the Convention on the Prohibition of biological and toxic weapons as stated when addressing the issue of the depleted uranium weapons and biological weapons. As a result, the depleted uranium weapon is under the submission of the provisions of this convention based on its preamble [37].

The paragraph I of Article 2 of the Convention on the Prohibition of Chemical Weapons in 1993 defined the chemical weapon as "the term of the chemical weapons fully or separately means the chemicals and their precursors except those intended for non-prohibited purposes under this convention as long as the types and quantities go in line with these purposes". However, paragraph II of the same Article defined the toxic chemical material as "any chemical through which its chemical action on living processes leads to death or temporary incapacity or permanent harm to humans or animals. This includes all chemical materials that are alike regardless of their origin or the method of its production whether they are produced in facilities, in munitions or elsewhere" [38].

The definition of both chemical weapon and toxic chemical material provided in the provision of Article 2 in paragraph I and II mentioned above applies to depleted uranium weapons because of its chemical toxicity [39].

Based on the aforementioned, the depleted uranium weapon is subject to the ban provided on the chemical weapons under the convention concerning the ban of such weapons in 1993 for being toxic weapons according to Article 2 \ paragraph 1 \ A of this convention. This goes in line with definition of the toxic material in accordance with the paragraph II of the same Article.

V. CONCLUSION

The weapon of the depleted uranium has something in common with nuclear, biological and chemical weapons due to its toxic radioactive nature. There are international conventions expressly prohibiting biological and chemical weapons and restricting the nuclear weapons. Due to the dangerous effects of these weapons on the human and environment, these conventions can be conducted concerning the depleted uranium weapons. This action is on the ground that the use of these weapons violates the provisions of these conventions because of its violation of the convention’s aims.

REFERENCES


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