

NUCLEAR WEAPONS AND INTERNATIONAL LAW

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INTRODUCTION

World War II, that lasted from 1939 to 1945, had sowed the seeds of scientific advancement along with technological weapons. With the dramatic use of nuclear weapons—that led to the surrender of Japan—the world ventured into the nuclear age. During the Cold War, nuclear weapons assumed a significant role in the international arena in shaping the conduct of states and their activities with respect to each other. Soon, the possession of these weapons became a matter of pride for many countries' military arsenals and also an expression of their sovereignty, until they realised that their subsequent proliferation—and possible accidental/indiscriminate use—could result in the destruction of the entire globe, thereby raising the ultimate question of human existence. Today, though the nuclear shadow cast during the Cold War has faded, the danger remains. The fear of nuclear proliferation is still very prominent and the new danger of nuclear technology coming under the control of non-state actors still causes great fear among the international community.

Keeping these points in view, this study takes into account the legal developments that have taken place in the various fields under international law that is applicable to the “use or threat of use of nuclear

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weapons”, and it would also strive to understand whether these weapons conflict directly with the principles of an international legal order or not. And if yes, then what are the existing legal gaps within the international legal regime in relation to nuclear disarmament and total elimination of these deadly weapons? The study would also suggest changes necessary for a more just world order.

INTERNATIONAL LAW: ITS HISTORY AND EVOLUTION

Definition and Scope

International law, unlike other areas of law, “does not have a definite governing body, but instead constitutes such set of standards, traditions and understandings which oversee the effect, and manage the legitimate associations amongst various countries, their administrations, organizations and associations, to incorporate their rights and duties in such dealings”.¹ This diverse body of law includes worldwide traditions; agreements, accords, treaties and international contracts (for example, the UN Charter); tribunals; protocols; memorandums; legal precedents of the International Court of Justice (ICJ, otherwise known as the World Court), etc. Without an extraordinary administrative or implementing entity, international law is, to a great extent, a wilful undertaking, wherein the intensity of enforcement only exists when the parties agree to abide by the agreements.²

In other words, when sovereign states enter into binding and enforceable agreements, it is called international law. Nations come together to make regulating rules that they think might help their citizens. International law promotes justice, peace, common interests and trade.

1. Jan Klabbers, *International Law* (Cambridge University Press, 2013).

2. Ibid.

International law is not the same as a state-driven legal structure as it is essentially applicable to nations instead of individual citizens. National law ends up being international law when treaties allow national jurisdiction to supranational councils, for example, the European Court of Human Rights or the International Criminal Court. Treaties like the Geneva Conventions may require national law to comply with the respective parts. International law is also mostly consent-based governance because if a state disagrees with any particular international legal mechanism, it might choose to not abide by that international mechanism. This is an issue of state sovereignty.³

History and Evolution

Though the modern discourse of international law began during the 19th century, its origin goes back to at least the 16th century. The basic components of international law, such as the treaties, go back to the ancient or pre-historic era. Traces of the nascent form of international law can be found in ancient Eurasia, portrayed by intense networks of tiny independent states sharing a common religious and value system. Other places where international law can trace its inception are Mesopotamia, Northern India during the Vedic period (1600 BCE), and Classical Greece. It is in these places that we find earlier examples of treaties which were basically agreements between the rulers of the city-states.

These states were mostly a blend of political fragmentation and social solidarity requiring a development of fair and standard practices that would help the inter-state relations to have a firm establishment. These fair practices soon became visible in the areas of diplomatic relations, treaty-making, and the conduct of war, and extended across deeper cultural lines as well.

3. David J. Bederman, *International Law in Antiquity* (Cambridge University Press, 2001).

International trade also played an important role in the evolution of the code of conduct between states that were involved in trading, which invariably necessitated elaborate interactions between merchants. A guarantee of safety and protection for these merchants was, therefore, felt necessary. Hence, economic self-interest also hastened the process of the evolution of international law. With the increasing complexities and involvement in international trade, international customs and practices became a sheer necessity. The Hanseatic League of more than 150 entities was a good example of this. Apart from this, the Italian city-states created discretionary standards, as they started sending envoys to foreign capitals. Settlements between governments turned into a helpful apparatus to ensure trade. The dread of the Thirty Years' War, in the meantime, led to the evolution of the principles of battle that would secure civilian populations.⁴

Hugo Grotius: Hugo Grotius, remembered as the “**Father of International Law**”, was its first proponent. His work *De Jure Belli Ac Pacis Libri Tres*,⁵ is viewed as the starting premise of modern international law. He defined his own thoughts on the law of nations that he saw as an arrangement of shared lawful restraints, in view of the conviction that the law radiated both from human reason or common law, and from custom. His work *De Jure Belli Ac Pacis Libri Tres* gave a rational angle to international humanitarian law.

Apart from that, the treaties of Westphalia in 1648 were the pioneering sources for the establishment of the idea of **state sovereignty** which had, in turn, laid the major foundation for international order. However, earlier, in the 16th century, the first attempt to develop autonomous theories of international law occurred in Spain by the early theorists who were the Roman Catholic theologians—Francisco de Vitoria and Francisco Suárez.

4. H. S. Bhatia, *Society, Law and Administration in Ancient India* (Deep & Deep Publishing, 2001).

5. H Bull, B Kingsbury, and Adam Roberts, *Hugo Grotius and International Law* (New York: Oxford Scholarship Online, 1992).

Suárez distinguished between *jus inter gentes*⁶ and *jus intra gentes* which he derived from *jus gentium* (the rights of peoples) that refers to modern international law.

Towards the end of the 18th century, there was a move towards positivism in international law wherein the sole reason for international law to maintain peace was challenged by the emerging political strain between the European great powers (France, Prussia, Great Britain, Russia and Austria). This tension was reflected in works such as Emer de Vattel's *Du Droit des Gens* (1758).⁷

By the end of the 18th century, Immanuel Kant believed that though international law could legitimise war, it would not serve the purpose of peace anymore and, subsequently, contented in *Perpetual Peace* (*Zum Ewigen Frieden*, 1795) and *Metaphysics of Morals* (*Metaphysik der Sitten*, 1797) for the creation of a new kind of international law.⁸

Soon after World War 1 and the Thirty Years War, the world needed an international agreement that would curb invasions and establish peace across the globe. There was also a requirement for an international court that could peacefully settle disputes between nations without allowing them to escalate into war. Hence, the **League of Nations** and the **International Court of Justice** (ICJ) were created. The ongoing international crises, however, gave an impression that nations were not ready to commit to the idea of international authorities having a say in their sovereignty. For example, the ongoing hostilities in Germany, Italy and Japan were still uncontrollable by international law, and it took World War II to end them.

Soon after World War II, there was a strong demand for not again going through the horrors of the two World Wars, so the League of Nations was reformed into a new treaty organisation now known as the **United Nations Organisation**.

6. "*Jus inter gentes*, is the body of treaties, U.N. conventions, and other international agreements. Originally a Roman law concept, it later became a major part of public international law. The other major part is *jus gentium*, the Law of Nations (municipal law)".

7. Emer de Vattel, *The Law of Nations: Or, Principles of the Law of Nature* (T. & J.W. Johnson, 1797).

8. Immanuel Kant, *Perpetual Peace: A Philosophical Sketch* (1795).

Therefore, international law is about the conduct of war, on the one hand, and about the conduct of civilians in the areas of trade, shipping, air travel, on the other. These rules and obligations are mostly followed by nations to make the lives of their citizens easier.

In the context of nuclear weapons, it can be said that though the nuclear shadow cast during the Cold War diminished, the danger remained. With the improvement of newer technology, the fear of nuclear proliferation escalated. This called for a new nuclear strategy that could provide stability in such a situation. But the debate over nuclear weapons and their legality had always existed, and to put a successful end to this debate, assessing the present status of nuclear weapons under international law has become a necessity.

TREATMENT OF NUCLEAR WEAPONS UNDER THE INTERNATIONAL LEGAL REGIME

International Criminal Law

Since the end of World War II—which saw the use of nuclear weapons for the first time—it has often been suggested that a legal mechanism that can distinctively criminalise the use of nuclear weapons should be adopted so that it can strengthen the already existing norms restricting the use of nuclear weapons. This suggestion was being repeatedly made in the international community, keeping in mind the fact that whosoever had the plan of detonating a nuclear weapon against any state, would be more reluctant to do so, fearing that it might be personally liable for that decision. Additionally, such attention on the use of nuclear weapons could reinforce the humanitarian perspective of the nuclear weapons debate and the derogation associated with nuclear weapons evolving from such a process would also make the possession of nuclear weapons less desirable; this would be an impetus towards the ultimate goal of complete nuclear disarmament. Hence, it was suggested by the advocates of nuclear disarmament that criminalisation of the use of nuclear weapons was possible only by amending the **Statutes of the International Criminal Court (ICC)**

or by incorporating the use of nuclear weapons under the definition of War Crimes in the Rome Statute.⁹

Whether or not to include Weapons of Mass Destruction (WMDs) within the purview of illegal weapons under the Rome Statute was frequently discussed since the inception of the ICC negotiations. In 1998, during the concluding rounds of negotiations of the Rome Statute, it was stated by the ICJ in 1996 that “though the use of chemical and biological weapons was already prohibited under international law, use of nuclear weapons still remains contrary to the rules of international law”. This was opposed by many states and Non-Governmental Organisations (NGOs) and, as a result, the idea of inclusion of WMDs under the Rome Statute failed massively. At that point, the ICC started functioning in 2002 and the primary Review Conference of the Statute was held in Kampala, Uganda, in 2010. During the arrangements for the Review Conference, the nuclear weapons issue reemerged, and at the eighth session of the assembly of states parties, in November 2009, Mexico presented a proposition for a revision to the statute by forbidding the utilisation or danger to utilise nuclear weapons and including it under the meaning of war crimes under Article 8 of the Statutes. However, Mexico’s proposition could receive just minimal support since the start and Mexico, in the long run, pulled back the draft goals as it appeared certain that agreement would not be arrived at.¹⁰

International Criminal Law (ICL) is a body of international rules designed both to proscribe certain categories of conduct (war crimes, crimes against humanity, genocide, torture, aggression, international terrorism) and to make those persons or states engaged in such crimes criminally liable. To do this, the ICL draws on customary and conventional international humanitarian law, human rights law and other domestic laws, thus, making it a **‘hybrid branch of law’**. For any crime to be considered an international crime, there must be a culpable act or *actus reus*, along with the frame of mind to commit such act,

9. Gro Nystuen, Stuart Casey Maslen, and Annie Golden Bersagel, *Nuclear Weapons Under International Law* (Cambridge: Cambridge University Press, 2014).

10. International Criminal Court.

For any crime to be considered an international crime, there must be a culpable act or *actus reus*, along with the frame of mind to commit such act, better known as *mens rea*. And for a crime to be judged a crime against humanity, the *actus reus* and *mens rea* must occur as part of a widespread and systematic attack on the civilian population, whether in time of conflict or during peace-time.

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Use of Nuclear Weapons as an Act of Genocide

The term genocide, also known as the crime of crimes, was first coined in 1944 by Raphael Lemkin in his book *Axis Rule in Occupied Europe*.¹² In 1946, genocide was proclaimed as a crime under international law by UN General Assembly Resolution 96(1). There was a formal prohibition of this crime in the form of the 1948 Genocide

Convention. This prohibition was recognised as a general principle of law in 1951 and attained the status of a norm of *jus cogens*.¹³

Coming to the case of nuclear weapons, in its 1996 Nuclear Weapons Advisory Opinion, the ICJ remarked that the 1948 Genocide Convention is a “relevant rule of customary international law which the court must apply.” The court mentioned the definition of ‘crime’ under Article 2 of the Genocide Convention which has attained the status of customary law. The Article said:¹⁴

Genocide means any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such:

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- 11. The intention or knowledge of wrongdoing that constitutes part of a crime, as opposed to the action or conduct of the accused.
 - 12. United Nations.
 - 13. *Jus cogens* (from Latin: compelling law; from English: peremptory norm) refers to certain fundamental, overriding principles of international law.
 - 14. The 1948 Genocide Convention.

- Killing members of the group;
- Causing serious bodily or mental harm to members of the group;
- Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
- Imposing measures intended to prevent births within the group;
- Forcibly transferring children of the group to another group.”¹⁵

Crimes against humanity are those crimes that shock humanity and are said to occur under the Rome Statute, when “certain acts are undertaken as part of a widespread or systematic attack against a civilian population where the perpetrator has the knowledge of the attack.”

In the context of *actus reus*¹⁶ of the crime of genocide, the main consequences of a nuclear attack are widespread death and injury, as per the acts prescribed under points (a) and (b) in the Article, but the radioactive fallout provoked by a nuclear strike can be covered under point (c). The elements of crimes of the Rome Statute of the ICC interpret the term ‘conditions of life’ to include such deprivation of resources that are required to live a healthy life. Hence, the ICC elements for crime in each of the points (a) and (c) state that the conduct must have manifested against a group and resulted in destruction. The second part of this requirement covers situations where a nuclear or biological weapon is used without the pattern of similar conduct.

Use of Nuclear Weapons as a Crime Against Humanity

According to Cryer et al., many acts which do not constitute genocide will constitute crimes against humanity.¹⁷ In its 1991 resolution, the UN General Assembly ‘reaffirmed’ in an introductory statement that “the use of nuclear

15. Nystuen, et al., n. 9.

16. An action or conduct which is a constituent element of a crime, disproportionate to the mental state of the accused.

17. Robert Cryer, *An Introduction to International Criminal Law and Procedure* (Cambridge: Cambridge University Press, 2010).

weapons...would be a crime against humanity.”¹⁸ As per Antonio Cassese, crimes against humanity are those crimes that shock humanity and are said to occur under the Rome Statute, when “certain acts are undertaken as part of a widespread or systematic attack against a civilian population where the perpetrator has the knowledge of the attack.”¹⁹ To be recognised as a crime against humanity under international criminal law, certain elements are to be considered:

- There must be one or more attacks.
- The acts of the perpetrators must be part of the attack.
- The attacks must be widespread and systematic and directed against any civilian population.
- The perpetrators must know that the acts constitute part of a pattern of widespread or systematic crimes directed against a civilian population.

According to the ICC, the term ‘widespread’ has been defined as all-encompassing or the “large scale nature of an attack” which is massive, frequent and carried out collectively, with considerable seriousness and directed against a multiplicity of victims. Hence, with relevance to an isolated use of a nuclear weapon against a civilian population, the ICC asserted, “Accordingly, a widespread attack may be the ‘cumulative effect of a series of inhumane acts or the singular effect of an inhumane act of extraordinary magnitude.’”²⁰

Use of Nuclear Weapons as a War Crime

A war crime is generally defined as a serious violation of international humanitarian law. For any crime to be qualified as a war crime, there must be an armed conflict in progress [International Armed Conflicts and Non-International Armed Conflict (IAC and NIAC)], the relevant conduct of

18. UN General Assembly Resolution 46/37D, adopted on December 6, 1991, by 122 votes to 16 with 22 abstentions, eighth preambular paragraph.

19. Such acts include murder, extermination, enslavement, forcible transfer of population, imprisonment, torture, rape, sexual slavery, enforced sterilisation, sexual violence, persecution, enforced disappearance, apartheid, and other inhuman acts. The Rome Statute of the ICC, Rome, July 17, 1998, in force July 1, 2002, 2187 UNTS 90, Art 7 (1) (a-k) (hereafter, Rome Statute).

20. International Criminal Court.

indiscriminate violence, and it must have a connection with the ongoing conflict. Apparently, there are several possible uses of a nuclear weapon that constitute a war crime, because the nature of this weapon itself is necessarily indiscriminate, causing superfluous injury and unwanted suffering. Apart from this, a nuclear weapon can be termed as a war crime because it is also directed against the civilian population, thereby violating the rule of distinction. Hence, during an ongoing armed conflict, if a state uses overwhelming force against another state by employing nuclear weapons, then it is actually constrained under *jus in bello* and, thus, commits a war crime, even if the latter state is unwilling to respond.

International Environmental Law

Nuclear weapons are possibly the most ruinous weapons ever. The results of such a massive explosion will not just obliterate humanity but also have an immense impact on nature. The inconceivable effect of the use of nuclear weapons on humankind was first perceived by the ICJ in its 1996 Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons.²¹ The ICJ rendered nuclear weapons as potentially catastrophic as their destructive power cannot be contained in either space or time. These weapons, as the ICJ quoted, have the potential to destroy all civilisation and the entire eco-system of the planet, since the radiation released by their explosion is destructive enough to affect health, agriculture, natural resources and demography over very wide areas. The use of nuclear weapons would also be a serious danger to future generations, as it might damage the environment, food and marine eco-system, causing genetic defects in future generations. As indicated by the court, though international law does not particularly preclude the use of nuclear weapons in relation to the protection of the environment, it emphasises that important environmental factors should be taken into account while assessing what is necessary and proportionate in the pursuit of legitimate military objectives. Therefore, it is certain that widespread and long-lasting damage to the environment resulting from the

21. ICJ Advisory Opinion on the Threat and Use of Nuclear Weapons 1996.

The protection of the environment under the law of armed conflict is specifically regulated under four treaties. These are the 1976 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques – better known as the Environmental Modification (ENMOD) Convention; the 1977 Additional Protocol 1 to the 1949 Geneva Conventions; Protocol III to the 1980 Convention on Certain Conventional Weapons; and the 1998 Rome Statute of the International Criminal Court (ICC).

use of nuclear weapons is a favourable argument in condemning the use of nuclear weapons.

To view the environmental consequences of the use of nuclear weapons, the following rules of public international law in this area should be considered.

Protection of Environment under Treaty Law

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to the 1980 Convention on Certain Conventional Weapons; and the 1998 Rome Statute of the International Criminal Court (ICC).

- ENMOD: This convention is not very relevant in this context because its Article 1 prohibits the use of environmental modification techniques as such, irrespective of any use of nuclear weapons.
- The 1980 Convention on Certain Conventional Weapons or the Incendiary Weapons Protocol is also not very relevant for the discussion, as it does not include nuclear weapons within its scope of incendiary weapons.
- The ICC Statute leads to individual criminal responsibility rather than state responsibility and is, therefore, not relevant here.

22. ICRC.

- The 1977 Additional Protocol 1 to the 1949 Geneva Conventions: The Additional Protocol 1 to the 1949 Geneva Conventions was negotiated in Geneva between 1974 and 1977 to develop and reaffirm International Humanitarian Law (IHL), Amongst the 102 Articles of the protocol, two provisions specifically govern environmental protection during international armed conflict. These are Article 35(3) and Article 55. According to Article 35(3):²³

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.

In the last few decades, escalating concerns for the protection of the environment have materialised. This concern for protection should be the interest of not only the nuclear weapon states but all mankind in general, as the environment is the only practical sphere where creation resides, be it the perpetrating states or the victims.

Article 55 (**protection of the natural environment**) states:²⁴

1. Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population.
Attacks against the natural environment by way of reprisals are prohibited.

Both provisions aim to protect the natural environment during an armed conflict in different ways. While Article 35(3) intends to protect the intrinsic value of the environment by laying down a basic rule on the means and methods of warfare, Article 55 aims to protect the environment

²³ Additional Protocols to the Geneva Conventions of August 12, 1949.

²⁴ Ibid.

as a civilian object due to its significance in the health and survival of the population. To answer the question of whether both these Articles specifically apply to the use of nuclear weapons or not, it can be noted that since the text of the protocol is of a general character and does not refer to any specific weapon, it might as well be assumed that it applies to any kind of weapon as such. Further, state parties to the protocol are divided on whether this protocol applies to nuclear weapons or not. While some states opine that Article 35(3) applies to all weapons, including nuclear weapons, others hold that these new rules do not apply to the use of nuclear weapons.²⁵ To end this confusion, the court elaborated on the question of the applicability of Additional Protocol 1 of 1977 to nuclear weapons. It observed:

The fact that certain types of weapons were not specifically dealt with by the 1974-1977 Conference does not permit the drawing of any legal conclusions relating to the substantive issues which the use of such weapons would raise.²⁶

Protection of Environment During Armed Conflict Under Customary International Law

Apart from Article 35(3) and Article 55, there are three other rules of customary international law that too protect the environment. These are Rules 43, 44 and 45 of the International Committee of the Red Cross' (ICRC's) 2005 Customary International Humanitarian Law Study (CIHL Study)²⁷

Rule 43: "The general principles on the conduct of hostilities apply to the natural environment:

- "No part of the natural environment may be attacked, unless it is a military objective.
- "Destruction of any part of the natural environment is prohibited, unless required by imperative military necessity.

25. Ibid.

26. Nuclear Weapons Advisory Opinion, para 84.

27. ICRC.

- “Launching an attack against a military objective which may be expected to cause incidental damage to the environment which would be excessive in relation to the concrete and direct military advantage anticipated is prohibited (IAC and NIAC).”

Rule 44: “Methods and means of warfare must be employed with due regard to the protection and preservation of the natural environment. In the conduct of military operations, all feasible precautions must be taken to avoid, and, in any event, to minimize, incidental damage to the environment. Lack of scientific certainty as to the effects on the environment of certain military operations does not absolve a party to the conflict from taking such precautions (IAC/arguably NIAC).”

Rule 45: “The use of methods or means of warfare that are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment is prohibited. Destruction of the natural environment may not be used as a weapon (IAC/arguably NIAC).”

Hence, both the Articles of the 1977 Additional Protocol 1 forbid the use of methods and means of warfare that might cause widespread, long-term and unaccountable damage to the environment. Both rules should be considered by those nuclear weapon states that have become party to the 1977 Additional Protocol 1, including France and the UK. Keeping in mind the destructive effects of nuclear weapons, it can be said that the use of a nuclear weapon during an armed conflict will cause widespread, long-term and severe damage to the environment and will, hence, be contrary to the provisions stated under Article 35(3) and Article 55. Apart from that, Rules 43 and 44 of the ICRC’s 2005 Customary International Humanitarian Law Study should also be considered by all nuclear states during an armed conflict. Since both rules provide partial protection to the environment, any intention of use of nuclear weapons must be assessed against these customary rules. Hence, the rules of law of armed conflict on protecting the environment during an ongoing armed conflict provide important restrictions for a nuclear weapon state on employing nuclear weapons. In the last few decades, escalating concerns for the protection of the environment have materialised.

This concern for protection should be the interest of not only the nuclear weapon states but all mankind in general, as the environment is the only practical sphere where creation resides, be it the perpetrating states or the victims. So, keeping in mind the importance of the environment as a living space that influences the quality of life and health of all species in this world, living or unborn, all people across the globe should unite in eradicating this devastating menace.

INTERNATIONAL DISARMAMENT LAW AND NUCLEAR WEAPONS

Nuclear Weapons Free Zones

The most important legal disarmament obligations applicable on nuclear weapons are those that establish Nuclear Weapons Free Zones (NWFZs). These zones that cover large geographical areas and a number of states, often represent an underestimated legal and political dynamics with regards to disarmament as well as non-proliferation. In this context, it can be stated that Article VII of the 1968 nuclear Non-Proliferation Treaty (NPT) has supported the establishment of NWFZs as a regional component of the non-proliferation regime. According to the UN General Assembly, an NWFZ is an agreement which a group of states has freely established by a treaty or convention that bans the use, development, or deployment of nuclear weapons in a given area, that has mechanisms of verification and control to enforce its obligations, and that is recognised as such by the UN General Assembly (UNGA).²⁸ Hence, the most essential elements of an NWFZ are: the complete absence of nuclear weapons; and, secondly, the presence of an international verification and control machinery.²⁹ Till now, five treaties, establishing NWFZs have been concluded:³⁰

- The 1967 Treaty of Tlatelolco for prohibition in Latin America and the Caribbean.
- The 1985 Treaty of Rarotonga on the South Pacific NWFZ.

28. UNGA Resolution 3472 (XXX)B, UN Doc. A/RES/3472 (XXX) B, December 11, 19745.

29. Ibid.

30. Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean

- The 1995 Bangkok Treaty on the Asian NWFZ.
- The 1996 Pelindaba Treaty on the African NWFZ.
- The 2006 Semipalatinsk Treaty on an NWFZ in Central Asia.

All these five treaties have entered into force. Mongolia has also unilaterally declared itself a nuclear-weapon free state,³¹ and Antarctica is a WMD free state as a result of the 1959 Washington Treaty that demilitarised the continent and moved it towards peaceful processes. Together, these zones cover the entire southern hemisphere, with an unstable region in the northern hemisphere. As a powerful mechanism of disarmament in an unstable region, a probable WMD free zone in West Asia would serve a vital purpose if ever it was adopted.

NPT

The other most relevant legal instrument that specifically deals with nuclear weapons is the NPT. However, it can be said that though the NPT has served the very important purpose of nuclear non-proliferation in the non-nuclear weapon states since its inception in 1968, it was not efficient enough in regard to nuclear disarmament by the nuclear weapon states, in spite of the fact that the disarmament obligations with the NPT were not mere political aspirations but, rather, legally binding, to which the nuclear weapon states were not compliant. Further, the NPT doesn't contain any rule that would totally prohibit or eliminate the use of nuclear weapons.

Armed Non-State Actors and the Use of Nuclear Weapons, i.e. Nuclear Terrorism and International Law and International Humanitarian Law

On the other hand, coming to the subject of non-state actors and nuclear terrorism, it can be safely stated that there exists an extensive and detailed framework that can prevent and outlaw, to a considerable extent, nuclear material from falling into the hands of non-state actors, thus, preventing nuclear terrorism.

31. Nystuen, et al., n. 9.

In this context, the treaty regime that addresses nuclear terrorism includes Security Council (UNSC) Resolution 1540 and other related UNSC Resolutions—a series of treaties that address the threat from nuclear terrorism. The most comprehensive treaty is the 2005 International Convention for the Suppression of Acts of Nuclear Terrorism, also known as the Nuclear Terrorism Convention. The convention entered into force on July 7, 2007, in accordance with its Article 25 (1), and as of September 2018, the convention has 115 signatories and 114 state parties, including the nuclear powers: China, France, India, Russia, the United Kingdom, and the United States. Most recently, Benin ratified the convention on November 2, 2017.³²

Today, as we know it, IHL also directly applies to non-state armed actors by Article 3, common to the four Geneva Conventions of August 12, 1949, and by the two protocols to the conventions and other customary and conventional rules governing the conduct of hostilities.

Protocol 1 makes the law concerning international conflicts applicable to conflicts fought for self-determination against alien occupation and against colonialist and racist regimes.

This protocol came as a product of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts that ended on June 10, 1977. The protocol is remarkable in the sense that it has brought under the ambit of the jurisdiction of the Law of Armed Conflict, the irregular forces like the non-state actors. Along with it, Protocol 2, also additional to the Geneva Conventions, is concerned with the protection of victims during a non-international armed conflict.

Another approach of IHL to nuclear terrorism also states that customary IHL binds armed actors who are party to an armed conflict, since common Article 3 is asserted as a customary international law and, hence, applies to any entity involved in a conflict. Furthermore, the doctrine of legislative jurisdiction also states that the rules of IHL legally bind private individuals, including armed groups, by implementing such rules into national legislation.

32 UN Nuclear Terrorism Convention.

Lastly, it can also be considered that when non-state armed groups exercise effective power and operate within the territory of a state, they are bound by the obligations of the state; but, at the same time, it can also be argued that contrary to the 1977 Additional Protocol II to the Geneva Conventions, there is no need of state control for its applicability since every non-state group doesn't always seek to replace the state.³³

Hence, in the context of non-state actors' access to nuclear material, it can be asserted that although IHL cannot provide direct answers to most questions raised by terrorism simply because the applicability of IHL over anything outside armed conflict is still debatable, the vast expanse of the prevalent treaties and UNSC Resolutions forms a broad framework that can prohibit non-state actors' access to nuclear material. But, nevertheless, along with the existing legal mechanisms, an efficient government policy, political will and international cooperation might help to get rid of this extremely fearful menace.

INTERNATIONAL HUMAN RIGHTS LAW AND INTERNATIONAL HUMANITARIAN LAW

International Human Rights Law (IHRL) came into being with the adoption of the Universal Declaration of Human Rights (UDHR) by the UN General Assembly on December 10, 1948.³⁴ It is generally believed to be the foundation of modern IHRL, which is a body of international law promoting human rights across borders at the social, regional and domestic levels. This branch of law is made up of treaties, international agreements between sovereign states, customary laws and non-binding mechanisms such as declarations.

There is an innate relationship between IHL and IHRL. This is often debated by scholars and practitioners of international law, where the pluralist scholars believe that IHRL is distinct from IHL, while the constitutionalists believe that IHL is a fragment of IHRL. However, the ones believing in the separation between the two sets of laws advocate that IHL is that part of human rights law that is applicable during an armed conflict.

33. Protocols to 1949 Geneva Convention.

34. UDHR.

What is considered an arbitrary deprivation of life during an ongoing conflict is determined by the application of *lex specialis*, which is the law applicable in armed conflict—better known as IHL.

Hence, though the possible use of nuclear weapons is mostly discussed under IHL and disarmament and arms control law, it can be stated without doubt that IHRL is also very relevant here, since a possible threat or use of a nuclear weapon not only condemns the right to life—which is the most fundamental of all human rights—but also undermines the right of mankind to live with dignity. Most states across the world have included international human rights standards in their Constitutions

and national legislations. The texts of all human rights treaties require states to ensure that violations do not take place, and that they include positive preventive measures. Human rights violations are scrutinised by the UN General Assembly, Human Rights Council and Security Council as well as by other regional bodies. Therefore, it is necessary to analyse the possible effects of nuclear weapons on the environment and population in the light of IHRL.

Applicability of IHRL to Nuclear Weapons

It is now an undisputed fact that³⁵ both IHRL and IHL apply during an armed conflict in terms of treaties, agreements and UN resolutions that go along with this issue. Though few states opine that only IHL applies in armed conflict, their approach, in many conditions, was inconsistent when they openly supported resolutions insisting that other countries respect human rights during an ongoing conflict. Hence, the relationship between IHL and IHRL becomes clear from what the ICJ states in its 1996 Nuclear Advisory Opinion, where it emphasises the fact that since the International Covenant on Civil and Political Rights (ICCPR) does not cease even in times of war, the right not to be arbitrarily deprived of one's life also applies during hostilities. But what is considered an arbitrary deprivation of life during an ongoing conflict is determined by the

35. ICRC.

application of *lex specialis*, which is the law applicable in armed conflict—better known as IHL. Thus, whether a particular loss of life can be considered an arbitrary deprivation of life or not can be decided with reference to IHL, and not directly from the provisions under IHRL. Hence, the ICJ stated that when there are situations of matters exclusively falling under either of the above-mentioned branches of law, then the court takes into consideration both the branches of the law to arrive at a proper conclusion. Hence, it can be safely stated that IHRL applies at any given time and has the scope to intervene in any possible threat or use of nuclear weapons.

Since the right to life is a fundamental charter law that is also enshrined in the very preamble to the UN Charter, the Human Rights Committee has raised a concern on whether or not a possible use of nuclear weapons is at all compatible with the right to life and peaceful living.

Violations of Human Rights by a Possible Use of Nuclear Weapons

As Louise Doswald-Beck has observed, “[t]he enormous destructive effect of a nuclear detonation, as well as the long-term radioactive effects, is likely to result in the finding of a violation of some or all” of a range of human rights.³⁶ In this regard, she cites, *inter alia*, the rights to life, to humane treatment, to a healthy environment and to the highest attainable standard of health.³⁷

The Right to Life

The right to life which is often described as “a fundamental human right; a right without which all other rights would be devoid of meaning”, should be respected under human rights treaties, as the ICJ had also observed in 1996. This right, as recognised by the ICCPR, is both a treaty and a customary norm, and, at its core, may even amount to a preemptory norm of international law.

36. Stuart Casey Maslen, “The Use of Nuclear Weapons and Human Rights” in Stuart Casey Maslen ed., *The Human Cost of Nuclear Weapons* (ICRC, 2016), pp. 663-680.

37. *Ibid.*

While the main opinion of the ICJ comprised considering IHL as a means to interpret the right to life, Judge Weeramantry, in his dissenting opinion, decided to address the issue of the right to life within the ambit of human rights law instead of looking at the details of what constitutes a deprivation of life during an armed conflict. He remarked, “*When a weapon has the ability to kill billions of lives as per the WHO, the value of human life is reduced to a level of worthlessness that totally belies human dignity as understood in any culture*”.³⁸ Hence, such an act by a state is in complete contradiction with its recognition of the basic human rights and dignity on which world peace dwells, and the respect for which is assumed by the UN.

Since the right to life is a fundamental charter law that is also enshrined in the very preamble to the UN Charter, the Human Rights Committee has raised a concern on whether or not a possible use of nuclear weapons is at all compatible with the right to life and peaceful living. In this context, General Comment 6 of Article VI of the ICCPR states that it is the supreme duty of states to prevent conflicts, acts of genocide and other acts of mass violence that cause arbitrary loss of life. Their effort to prevent the danger of war and to strengthen international peace and security would constitute the most important condition and guarantee for safeguarding the right to life.³⁹

The right to life also has significant procedural elements associated with it. The European Court of Human Rights (ECtHR) has held that this right includes a duty on the state to investigate alleged violations of the right to life: The obligation to protect the right to life under Article 2, read in conjunction with the state’s general duty under Article 1 of the European Convention on Human Rights to “secure to everyone within their jurisdiction, the rights and freedoms defined in [the] Convention”, requires by implication that there should be some form of effective official investigation when individuals have been killed as a result of the use of force by, *inter alia*, agents of the state, and all states have the fundamental duty to take appropriate steps to protect the right to life and to investigate arbitrary or unlawful killings and punish offenders. The governments of states under this law are required

38. ICJ, “Advisory Opinion on the Legality of the Use or Threat of Nuclear Weapons”, 1996.

39. ICCPR.

to enact laws that criminalise unlawful killings and that the laws must be supported by a law enforcement machinery for the prevention, investigation and punishment of breaches of the criminal law.

The right to life is mentioned in the ICJ 1996 Nuclear Weapons Advisory Opinion, wherein it has observed that the protection of the ICCPR does not cease in times of war, except by operation of Article 4 of the covenant whereby certain provisions may be derogated from in a time of national emergency. But respect for the right to life is not, however, such a provision. Accordingly, therefore, the court has accepted that, in principle, human rights law also forms part of the *jus in bello*, the law applicable in armed conflict. Thus, all the provisions of the ICCPR will potentially apply during armed conflict, subject to the possibility of derogation from full observance of some in a time of grave national emergency. In a recent development, on this exclusive right, the UN Human Rights Council (UNHRC) adopted the new General Comment No. 36 (2018) on Article 6 of the ICCPR, on the right to life, on October 30, 2018, that stated that the threat or use of nuclear weapons is “incompatible with respect for the right to life” and may amount to a crime under international law.⁴⁰ Paragraph 3 of this General Comment emphasises that the right to life, as mentioned in Article 6 of the ICCPR, is an entitlement of individuals “to be free from acts and omissions that are intended, or may be expected, to cause their unnatural or premature death, as well as to enjoy a life with dignity”.⁴¹

The Right to Humane Treatment

Apart from the right to life, a possible nuclear explosion might also adversely impact the right to freedom from cruel, inhumane or degrading treatment, as set out in the 1966 ICCPR, the 1984 Convention against Torture, and the three main human rights treaties. Though the scope of this right is not similar to that of the prohibition against the use of means or methods of warfare of a nature likely to cause superfluous injury or unnecessary

40. Alyn Ware, “UN Human Rights Committee Concludes that the Threat or Use of Nuclear Weapons Violates the Right to Life”, November 23, 2018.

41. *Ibid.*

suffering granted by the customary and conventional IHL, it certainly implies a major violation of human rights.

According to Doswald-Beck,⁴² the radiation that emanates from a nuclear explosion is extremely adverse because, apart from causing innumerable deaths, it also damages the human immune system and prolongs human suffering. The detonation might also make people blind just from looking at the initial flash and often renders unending suffering to people who are not killed immediately. Severe burns can result from a nuclear explosion which might go beyond third-degree burns—in which all the layers of the skin are destroyed—to fourth-degree burns, in which the injury extends into both muscle and bone. Both can be fatal. Burns place a huge burden on medical resources, often requiring specialist treatment. These are all inevitable and, therefore, entirely predictable consequences of the use of a nuclear weapon. In most instances, such use will amount to a violation of the right to humane treatment.

The Right to a Healthy Environment

As discussed in an earlier section of this article, a nuclear explosion may have a devastating impact on the natural environment and its species, apart from causing direct harm to the civilian population. Besides the ICJ's mention in its 1996 Nuclear Advisory Opinion, about the potential of nuclear weapons to destroy the entire eco-system, there are two other regional human rights treaties that set out the right to a healthy environment directly. Moreover, the right to the highest attainable standard of health is specified in many human rights treaties, including the International Covenant on Social, Economic and Cultural Rights (ICESCR). But to what extent, and which provisions might apply in the case of the use of nuclear weapons (as opposed, for instance, to their testing) is still unclear. However, this treaty specifies that state parties must refrain from using or testing nuclear weapons, if such testing

42. US Department of Health and Human Services, Radiation Emergency Medical Management, "Nuclear Detonation: Weapons, Improvised Nuclear Devices: Categories of Medical Effects", available at: www.remm.nlm.gov/nuclearexplosion.

results in the release of harmful gases and substances that are dangerous to human health.⁴³ The disruption of health services will be worse in the case of a nuclear fallout in comparison to attacks by conventional weapons, and provision of medical health will be difficult. In an ICRC report, it was pointed out that the scale of destruction and injuries, as well as the need for decontamination, will quickly overwhelm the available emergency response capacities. Again, there is also the very real problem of the exposure of assistance providers to radiation that will prevent or limit the aid they could give. Hence, there is no way in which a possible threat or use of nuclear weapons is at all compatible with basic human rights in the international or regional arena.

Human Rights Law Rules on the Use of Force

The human rights law's regulation of the use of force encompasses two core rules. First, any force used must be only the minimum necessary (the principle of necessity). Second, force used must be proportionate to the threat (the principle of proportionality).⁴⁴

These rules are cumulative, and violation of either means that human rights (in particular, the right to life and/or the right to freedom from inhumane treatment) have been violated. Their application must, however, be "realistic", indeed, human rights jurisprudence has shown that a "margin of appreciation" may be allowed to a state in exceptional circumstances, such as when it is confronting a terrorist attack, and must effectively balance protection and security. Nonetheless, the rules are specific and clear both in their normative content and in their practical application. They are not mere aspirations.

OBSTACLES IN APPLICATION OF HUMAN RIGHTS LAW TO THE CONDUCT OF HOSTILITIES

There are potentially two significant obstacles to the application of human rights law to the conduct of hostilities that must be addressed before the

43. ICESCR.

44. Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Christof Heyns, UN Doc. A/HRC/26/ 36, April 1, 2014.

While drawing an inference from the 1996 Advisory Opinion of the ICJ on the legality of use or threat of use of nuclear weapons, it can be stated, after a careful analysis of this Advisory Opinion, that the rules of proportionality and necessity apply equally to all uses of force, irrespective of the type of weapon, though no particular restrictions are imposed on nuclear weapons as such.

substantive content of the law is assessed: the first is the geographical limitations on the jurisdiction of human rights law; and, the second is the material scope of its application.

Geographical Limitations on the Jurisdiction of Human Rights Law

The main issue in applying human rights law to the use of weapons, including nuclear weapons, in armed conflict situations is the idea that physical geography limits the jurisdictional reach of that law. The US has been a major proponent of this idea, stating with respect to the International Covenant on Civil and Political Rights (ICCPR) in particular, that the duty accepted by each

state party “to respect and to ensure to all individuals within its territory and subject to its jurisdiction, the rights recognized” (Ritchie, 2012) means that only persons on its territory may formally enjoy the protection of human rights. The Human Rights Committee has explicitly rejected this position, both generally and with regard to the United States specifically (Fourth Periodic Report of the United States of America, 2014).⁴⁵

Scope of Application of Human Rights Law

The ICJ observed in its 1996 Nuclear Weapons Advisory Opinion that some have contended that a leading human rights treaty, the 1966 International Covenant on Civil and Political Rights, “was directed to the protection of human rights in peacetime, but that questions relating to unlawful loss of life in hostilities were governed by the law applicable in armed conflict”

45. Fourth Periodic Report of the United States of America, 2014.

(Casey, 2014). The court observed that the protection of the International Covenant on Civil and Political Rights does not cease in times of war, except by operation of Article 4 of the covenant whereby certain provisions may be derogated from in a time of national emergency. Respect for the right to life is not, however, such a provision. In principle, the right not arbitrarily to be deprived of one's life applies also in hostilities. Accordingly, therefore, the court accepted that, in principle, human rights law forms part of the *jus in bello*, the law applicable in armed conflict. Thus, all the provisions of the ICCPR will potentially apply during armed conflict, subject to the possibility of derogation from full observance of some in a time of grave national emergency.⁴⁶

While attempting to gauge the status of nuclear weapons under the provisions of the law, it was found that very heavy restrictions have been imposed on the use of nuclear weapons by the international legal regime, though there is no absolute and specific rule that directly condemns such use.

INTERNATIONAL HUMANITARIAN LAW AND NUCLEAR WEAPONS

While drawing an inference from the 1996 Advisory Opinion of the ICJ on the legality of use or threat of use of nuclear weapons, it can be stated, after a careful analysis of this Advisory Opinion, that the rules of proportionality and necessity apply equally to all uses of force, irrespective of the type of weapon, though no particular restrictions are imposed on nuclear weapons as such. This assumption might also apply to the debate on the threat or use of force by nuclear weapons by the same legal framework as the general threats of the use of force in general. At the same time, it is also relevant to state that the rules of IHL governing how to conduct hostilities when an armed conflict takes place are applicable and highly relevant for the potential use of nuclear weapons in an armed conflict. This is mostly true in particular for the rules on distinction, proportionality and precautions in

46. ICJ, "Advisory Opinion on Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory", 2004.

attacks as well as the prohibition on means of warfare of a nature causing superfluous injury and unnecessary suffering. Even in the cases of Tactical Nuclear Weapons (TNWs) (which are of smaller yield), the impact is known to be actually strategic. In this regard, the late Air Cmde Jasjit Singh had once stated,

Any nuclear weapon of any quality, mode of delivery or yield, used against any type of target, will result in a strategic impact to which the logical response would be the use of nuclear weapons, more often than not on an overwhelming scale.⁴⁷

Therefore, even if TNWs are used against a purely military target in a conflict in the future, the effect would be strategic and, hence, it would surpass the limitations set by the principles of necessity and proportionality under IHL. However, the deterrence theory rests on the threat of the ability to cause unacceptable damage, which may be beyond the principles of necessity and proportionality of IHL, but which is presumed to keep the use of nuclear weapons at bay. The difference in perspectives between deterrence realists and IHL idealists remains to this day.

CONCLUSION

Nuclear weapons form an important area of security issues in the post-Cold War era and are still relevant in any discussion on global security policy and international law. Though there is an argument that supports the claim that possession of nuclear weapons assures that they are solely for the purpose of self-defence and that they will never be used, there can be no denial of the fact that the production, maintenance and stockpiling of nuclear weapons are still prevalent in most parts of the world. Hence, to save humanity and the environment from the clutches of this global menace, legal regulations remain an utmost necessity because a possible potential attack might result

47. Brig Gurmeet Kanwal, "Tactical Nuclear Weapons: Lessons For India and Pakistan", <https://www.vifindia.org/article/2013/june/04/tactical-nuclear-weapons-lessons-for-india-and-pakistan.>, June 4, 2013. Accessed in December 2018.

in massive devastation and unending suffering for all the species of the world.

Keeping this in mind, this article has tried to analyse the prevailing regime of international law, in order to understand as to what extent nuclear weapons are restricted, or not, under the relevant legal regimes. It is found, after a thorough analysis, that there is a vast set of prevalent laws that might, even if not directly, apply to nuclear weapons. While attempting to gauge the status of nuclear weapons under the provisions of the law, it was found that very heavy restrictions have been imposed on the use of nuclear weapons by the international legal regime, though there is no absolute and specific rule that directly condemns such use. Apart from that, there are also relevant regulatory rules regarding the production, maintenance and stockpiling of nuclear weapons. These rules have also, to a large extent, prevented nuclear proliferation.

But in spite of the presence of such extensive legal mechanisms to prevent a possible nuclear explosion, it must be remembered that the success of these international mechanisms to move a step ahead towards nuclear disarmament not only depends on the ratification and implementation of the treaties and conventions but also on the efficacy of the major states of the world in complying with the provisions of such legal mechanisms. Therefore, it is essential for all the states to unite for this common cause. To materialise this commitment, all the states need to work towards replacing the inefficient political systems that operate within each of their territories. A new form of world politics needs to be introduced. Preventing nuclear use and complete eradication of WMDs must, thus, be seen as one part of an even larger strategy, one that is geared to the prevention of all forms of international violence. The international community should not only focus its attention to eliminate nuclear terror but should also work towards the larger aim of elimination of international violence. Only this step by the international community can probably help in eliminating the fear of an atomic catastrophe, thus, retaining the survival of mankind. It should be understood that amidst the play of global power politics, the capabilities of states to prevent either nuclear terror or an incident of nuclear terrorism

will be futile unless and until the world leaders put in enormous efforts to restrain their lure of superiority and primacy, and, instead, focus their entire attention on the emergence of a new sense of global obligation. For this to materialise, a universal nuclear regime is needed with an inclusive understanding wherein all states, all humans will be seen as one essential body and one whole community. This idea of oneness should not be based on the fanciful and mythical theories of universal brotherhood but rather on the idea that no matter how much individual states hate each other, they should be tied together to pursue the quest of survival. This state of peace—not Utopia, of course—can be achieved only if policy-makers and world leaders do away with their individual interests and private values and merge them with the interests of the nation. This shall hopefully offer a solution for the world to face such a massive menace together in the years to come.