NEAR EAST UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES

INTERNATIONAL LAW PROGRAM

NUCLEAR WEAPONS AND THEIR IMPACTS ON PROLONGING AND DEEPENING CONFLICTS

KHALAT MOHAMMED RAOOF

MASTER'S THESIS

NICOSIA

2018

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THESIS SUPERVISOR

ASSOC. PROF. DR DERYA AYDIN OKUR

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2018

“Dear young people who have never experienced war,

‘Wars begin covertly. If you sense it coming, it may be too late.’

Within the Japanese Constitution, you will find Article 9, the international peace clause. For the past 72 years, we have not maimed or been maimed by a single human being in the context of war. We have flourished as a peaceful nation. Japan is the only nation that has experienced a nuclear attack. We must assert, with far more urgency, that nuclear weapons cannot coexist with mankind. The current administration is slowly leading our nation to war, I’m afraid. At the ripe age of 78, I have taken it upon myself to speak out against nuclear proliferation. Now is not the time to stand idly by. Average citizens are the primary victims of war, always. Dear young people who have never experienced the horrors of war – I fear that some of you may be taking this hard-earned peace for granted.

I pray for world peace. Furthermore, I pray that not a single Japanese citizen falls victim to the clutches of war, ever again. I pray, with all of my heart.

The letter from one of the survivors of the atomic blast in Hiroshima and Nagasaki

TAKATO MICHISHITA

78 / NAGASAKI / 4.7 KM

ACCEPTANCE/APPROAVAL

We as the jury members certify " Nuclear Weapons And Their Impact On Prolonging And Deepening Conflicts" prepared by Khalat Mohammed Raoof defended on 26 December 2018 has been found satisfactory for the award of degree of Master.

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DECLARATION

I Khalat Mohammed Raoof, hereby declare that this dissertation entitled **"Nuclear Weapons and their Impact on Prolonging and Deepening Conflicts"** has been prepared myself under the guidance and supervision of "**Assoc. Prof. Dr. Derya Aydin OKUR"** in partial fulfilment of The Near East University, Graduate School of Social Sciences regulations and does not to the best of my knowledge breach any Law of Copyrights and has been tested for plagiarism and a copy of the result can be found in the Thesis.

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Date: 26th of December 2018

Signature:

Name: Surname: Khalat Mohammed Raoof

DEDICATION

….. To my parents ……

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my supervisor Assoc. Prof. Dr. Derya Aydin OKUR whose astonishing insights have immensely shaped the success of this study.

ABSTRACT

NUCLEAR WEAPONS AND THEIR IMPACT ON PROLONGING AND DEEPENING CONFLICTS

The study examines the effects of nuclear weapons on prolonging and deepening conflicts. This follows observations which have been made which showed that there are various ideas which have been given about the potential effects of nuclear weapons. The study managed to highlight that nuclear weapons have been relatively used in international armed conflicts and have been having severe negative effects on people, animals and the environment with potentially huge losses of lives. It was established that the decision to consider whether nuclear weapons have an effect of deepening and prolonging conflicts depends on the use to which NWs are being put to. When nuclear weapons are used to by deterrent states to promote peace, conflicts are minimised but when they are used as demonstration of status quo, they can invoke regional tensions and spark conflicts among states. It was also established that it is impossible to prevent the use of nuclear energy as the world is now facing a lot of changes and challenges in terms of energy requirements and climate change. The study further highlighted that a peaceful use of nuclear energy is possible but efforts to totally curb the production even acquisition and use of nuclear weapons is impossible. Nuclear weapons states were also established to be having a significant influence on efforts to curb conflicts and unnecessary use of nuclear weapons. Recommendations were made that there is need for international organisations to ensure that nuclear weapon states exercise good-faith towards disarmament so that they do not dissuade other nuclear weapon states from disarming as well as well as demotivate non-nuclear weapon states, from ceasing efforts to develop, acquire or own nuclear weapons.

Key terms: *Conflicts, deepening, impact, non- nuclear weapon states, nuclear weapon states, nuclear weapons, prolonging*

ÖZ

NÜKLEER SİLAHLAR VE UZATMAK VE DERINLEŞEN ÇATIŞMALARA ETKİLERİ

Çalışma uzatarak ve çatışmaları derinleşen nükleer silahların etkilerini inceler. Bu, nükleer silahların potansiyel etkileri konusunda verilmiş çeşitli fikirler vardır gösterdi yapılmıştır gözlemleri izler. Çalışma nükleer silahların nispeten uluslararası silahlı çatışmalarda kullanılmıştır ve insanlar, hayvanlar ve hayatımızın potansiyel büyük kayıplarla çevreye ciddi olumsuz etkilere sahip edildiğini vurgulamak başardı. Bu karar nükleer silahların NWS koymak ediliyor için kullanımına derinleştirilmesi ve çatışmaları uzatan bir etkiye bağlıdır olup olmadığını dikkate almak olduğunu kuruldu. nükleer silah barışı desteklemek için caydırıcı devletler tarafından kullanıldığında, çatışmaların en aza indirilmiştir ancak statükonun gösteri olarak kullanıldığında, bunlar devletler arasında bölgesel gerilimleri ve kıvılcım çatışmaları çağırabilirsiniz. Aynı zamanda Dünya artık enerji gereksinimleri ve iklim değişikliği açısından değişiklikler ve zorluklar bir çok karşı karşıya olduğu nükleer enerjinin kullanımını önlemek için imkansız olduğunu kuruldu. Çalışma ayrıca nükleer enerjinin barışçıl kullanımı mümkündür ancak tamamen bile edinimi ve nükleer silahların kullanımını üretimini frenlemek için çabalar imkansız olduğunu vurguladı. Nükleer silah sahibi ülkeler de çatışma ve nükleer silahların gereksiz kullanımından önleme çabalarında üzerinde önemli bir etkiye sahip olması kuruldu. Öneriler orada onlar da silahsızlandırma diğer nükleer silah devletleri vazgeçirmeye kalmaması uluslararası kuruluşlar nükleer silah devletler silahsızlanma yolunda iyi niyetli egzersiz sağlamak için ihtiyaç yanı sıra çabalarını durdurması gelen, nükleer silah sahibi olmayan devletler saptırmak olduğunu yapılmıştır geliştirme, satın alma veya kendi nükleer silahlar.

Anahtar Kelimeler: Çatışmalar, derinleşen, etkisi olmayan nükleer silah devletler, nükleer silah devletler, nükleer silahlar, uzatma

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ABBREVIATIONS

CTBT: Comprehension Test Bann Treaty

IACs: International Armed Conflicts.

IAEA: International Atomic Energy Agency

Ibid: Ibidem

ICC: International criminal court

ICJ: International Court of Justice

ICL: International Criminal Law

IHL: International Humanitarian Law

NIAC: Non- International Armed Conflict.

NIACs: Non-international Armed Conflicts

NNWS: Non-Nuclear Weapons States

NPT: Non-Proliferation of Nuclear Weapons Treaty

NWFZ: Nuclear Weapons Free Zones

NWs: Nuclear Weapons States

pp: Pages

SORT: Strategic Offence Reduction Treaty

START: Strategic Arms Reduction Treaty

UN: United Nations

Vol: Volume

INTRODUCTION

Background to the Study

It is often believed that conflicts are a natural phenomenon that cannot be avoided and that it is a common feature that affects every aspect of life from individuals, corporations and states[1]. In international law, the most devasting type of conflict is between states as it often involves the use of armed weapons of various intensity. An example of the notable weapons that have been used in armed conflicts between states are NWs. NWs tend pose a lot of devastating effects not only on people but also on the environment which make it impossible for both plants and animals to bear fruits and survive[2]. A notable example can be drawn from the Hiroshima nuclear disaster which claimed thousands of lives and left the air contaminated for a period of more than one month[3].

Care has often been placed towards examining the effects of armed conflicts and insights reveal that the use of NWs has had the most devasting effects[4]. Thus, considerations and concerns have been mainly towards dealing with the use of NWs. But what makes it worse is that the magnitude of damage that is caused by NWs is so severe and intense and either people or states as a whole are reluctant to hear that there is a state that is trying to develop or acquire NWs.

The major concern that surrounds the use of NWs is however, built on the premise that NWs will help fuel conflicts between states[5]. This idea has been causing a lot of debates even though efforts have been placed towards ensuring that nuclear weapon

---

[1] Wallensteen Peter, 'Comments Invited Human Security and the Challenges of Armed Conflict By' [2007] East Asia Vol. 1.

[2] Suzanne Maloney, 'Thinking the Unthinkable: The Gulf States and the Prospect of a Nuclear Iran' (2003) Vol. 3.

[3] Ibid.

[4] Stephen Philip Cohen, 'Nuclear Weapons and Nuclear War in South Asia: An Unknowable Future' [2004] South Asia in the World: Problem Solving Perspectives on Security, Sustainable Development, and Good Governance, edited by Ramesh Thakur, and Oddny Wiggen. Tokyo: United Nations University Press 39.

[5] Ibid, 1.

states disarm to the best possible level. Some ideas suggest that it is good to own NWs because they help to preserve citizens of a nation from possible calamities and threats from other states[6]. This idea has also been supported by other ideas which suggest that the ownership of NWs will make a state as powerful as other states like the USA[7]. But other strongly disagree with all these ideas and suggests that the world will never be at peace and that conflicts will continue to emerge so long as there are nuclear weapon states[8]. Also, some still continue to suggest that it is not bad to own NWs but it is how a state uses them that makes a difference[9]. With all these ideas needing a sound and tangible explanations, this study is therefore devoted to the examination of these issues on a much wider scope.

Research Problem

There are different ideas that can be given about the effects of NWs and all these ideas seem to disagree about the need to develop and use NWs. for instance, it is argued that NWs are necessary because they help to enhance the security and defence systems of a state[10]. But yet there are also ideas which argue that the need to protect a state by using NWs poses threats to world peace and security[11]. Yet more, it is refuted that even owning NWs weapons is not a good thing because it triggers other non-nuclear weapon states to begin efforts to produce or acquire NWs[12]. Hence, there is no common agreement as to whether a state should own NWs or not. Moreover, other ideas also contend that the ownership of NWs can prevent other states from engaging in activities that threaten world peace and security since they can easily be threatened by nuclear weapon states[13]. A notable example includes the

[6] Gates Scott and others, 'Development Consequences of Armed Conflict' (2012) 40 World Development 1713.
[7] Robock Alan and Toon Owen, 'Local Nuclear War, Global Suffering.' (2010) 302 Scientific American 74
[8] Ibid, 2.
[9] Ibid, 4.
[10] Ibid.
[11] Spanish Offficial, 'Multilateral: Treaty for the Prohibition of Nuclear Weapons in Latin America (with Annexed Additional Protocols I and II). Done at Mexico , Federal District , on 14 February 1967 MULTILATÉRAL: Traité Visant l ' Interdiction Des Armes Nucléaires En Amé'
[12] Ibid.
[13] Dunworth Treasa, 'The Treaty on the Prohibition of Nuclear Weapons' (2017) 21 ASIL Insights 1

role that is played by the United States of America (USA) which is often considered by people as the 'international police' and acts as a deterrence against the production and acquisition of NWs. Despite all these ideas, there are still concerns which suggest that the ownership and use of NWs will help fuel conflicts[14] while others consider this as not true citing that states that own NWs are in a strong position to deter the use of NWs or related matters that can fuel conflicts[15]. Hence, it cannot be agreed as to whether NWs help to fuel and deepen conflicts or not. This study, therefore, seeks to examine whether NWs have a tendency to prolonging and deepening conflicts or not.

Aims of the Study

The main emphasis of the study is to examine if the ownership and use of NWs prolong and deepens conflicts or not. The study also places efforts towards attaining the following aims;

- To determine whether nations with nuclear weapons have been using them to impose political dominance on other states or not.
- To examine the role that can be played by other states who do not have nuclear weapons to regulate the usage and effects of nuclear weapons.
- To examine how the international community such as the international court of justice has been reacting to efforts to regulate nuclear weapons?
- To determine if the effectiveness of the available regulations in regulating NWs disasters.
- To determine if nuclear weapon states have been complying with the relevant regulations by international organisations and other state players to govern the development, ownership and use of NWs.

[14] Ibid.
[15] Ibid.

Importance of the Study

The study is of paramount importance as it helps to offer strategies that can be used to govern the development, acquisition, ownership and use of NWs so as to help minimise conflicts. The study will also help identify possible limitations that surround the use of existing laws, treaties and other efforts to prevent the escalation of NWs disaster or armed race. In doing so, possible strategies that will help preserve peace can easily be adopted.

Structure of the Study

The study will be structured into five parts. The first part gives general insights about conflicts and NWs while the second part looks detailed insights about conflicts and NWs and how they are interrelated and the devasting consequences that have been experienced as a result of the use of NWs. The third part looks at the impacts of NWs while the fourth part looks at how international laws regards and treats NWs. The last part looks at possible conclusions that can be drawn from the study as well as suggestions that can be given.

CHAPTER ONE

INSIGHTS ABOUT CONFLICTS AND NUCLEAR WEAPONS

1.1 Conflicts in International Law

In international law, conflicts can be defined as disagreements that exist between individuals in a state against each other or against their state officials or disagreements that exists between two or more states[16]. In addition, in international law, the term conflict is usually restricted to armed and non-armed conflicts. From this definition, it can thus be noted that conflicts have diverse elements and each element has its own governing laws that help to address any form of dispute that may arise. Also, this helps to clarify whether the intervention of international organisations such as the United Nations (UN) is justified or not. There are several ideas that are tied to the definition of conflicts in international and such ideas tend to have huge implications in a wide number of issues and aspects. In this study, the definition of conflicts in its diverse nature will be restricted to the use of NWs.

1.2 Types of Conflicts

Basically, as noted from the above explanation that conflicts in international law are either classified as armed conflicts and non-armed conflicts with the former involving the use of arms[17]. However, due to the magnitude of impact, the international law usually places focus on the study of armed conflicts. In this respect, armed conflicts

[16] Michael Horowitz, 'The Spread of Nuclear Weapons and International Conflict' (2009) 53 Journal of Conflict Resolution.
[17] Ibid.

are either classified as international armed conflicts (IACs) or non-international armed conflicts (NIACs).

IACs can be defined as conflicts between two or more states that involve the use or arms whereas NIACs can be defined as conflicts between states that do not involve the use of arms[18]. Conflicts that occur within a state are also known as interstate conflicts and occur between two or more ethnic groups or between an ethnic group and a legitimate government.

In this study, a major focus will be placed on IACs to be specific because the use of NWs makes the conflicts to be classified as an IAC. The Geneva Convention (1949) lays down a description of IACs and Art. II of the Convention states that conflicts between states that are in anyhow surrounded by the use of armed force should be classified as IACs[19]. Once classified as an IAC, the Geneva Convention can easily be applied and other relevant international organisations can also take a stance to regulate the conflicts.

In relation to the use of NWs, the 'first shot' principle asserts that any nation that has fired the first shot has necessitated an IAC irrespective of the fact that the other state did not respond or not[20]. Hence, the use of NWs by another state in response to the 'first shot' principle is justified. This is the problem with most legal concepts because they tend to conflict with other statutory instruments. This can also be supported by arguments that have been given surrounded concepts such as occupation with difficulties being experienced as to whether an occupation has actually taken place and the form of judgement that must be given on the accused as well as the necessary grounds upon which the accused should be trialled[21].

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[18] Gow, Melanie, Kathy Vandergrift, and Randini Wanduragala, *Right to Peace: Children and Armed Conflict* (2000)
[19] Ibid, 20.
[20] ICJ, Case Concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America), Judgment (Merits), 27 June 1986.
[21] Ibid.

1.3 Definition and Types of Nuclear Weapons

A nuclear weapon can be defined as a nuclear-powered weapon that is used by states to inflict disastrous on a city and capable of killing millions of people during a single moment[22]. But also, there is law and legal definition according to 18 USCS § 832[23], but we need to have a short knowledge about scientific of a nuclear weapon and then point to definition maybe clearer to understand,

- **The science of nuclear weapons:** An atom is the sours power for each of nuclear reactions and nuclear weapons, and this energy derives from spitting (fission)or joining (fusion) of the atom.[24]

The atomic scientists chose the isotopes of uranium-235 and plutonium-239 because they are easier subject to fission. Fission occurs when the neutron hits any peer nucleus, dividing the nucleus into parts which causes them to release a lot of energy. A chain reaction occurs when the fission process results in the production of more energy through the continuous decomposition of atoms [25]

1.4 Law and Legal Definition of Nuclear Weapons

First, it is important to note that a material that contains plutonium, uranium, enriched uranium, and uranium 233, is known as a nuclear material.[26] Secondly, a nuclear weapon is defined by 18 USCS § 832, as a weapon that uses nuclear energy.

1.5 Types of Nuclear Weapons

1.5.1 Pure Fission Weapons

These types of weapons are only used in fission reactions which built by using U-235 or PU-239 isotopes as the fissile material. the examples of pure fission weapons are

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[22] Ibid.
[23] 18 U.S. Code § 832 - Participation in nuclear and weapons of mass destruction threats to the United States,
Legal Information Institute.
[24] Joseph Siracusa, Nuclear Weapons, Avery short introduction (Oxford University Press 1998).
[25] Nils-Olov Bergkvist, *Nuclear Explosions 1945 -1998* (2000).
[26] Ibid

(little boy & fat man) two bombs dropped on Japan cities of Hiroshima and Nagasaki in 1945.[27]

- **Little boy:** Comprised of 15,000 tones and weighed 9.700 pounds and is the same that was used to bomb Hiroshima, Japan on August 6, 1945. Its effects were so ravaging that it claimed the lives of 140,000 individuals and had a distance coverage of effects of 5 square miles[28].
- **Fat man:** Was used to bomb Nagasaki, Japan on August 9, 1945 and weighed about 10,800 pounds. In terms of effects it claimed an estimated total of 80,000 civilians. Fortunately, enough, its effects could not spread to Kokura because of weather conditions. It is however, more powerful that the 'little boy' and can inflict harm of several kilometers in distances.

1.5.2 Thermonuclear Weapons or (Hydrogen Bombs)

This is a fissionable nuclear bomb that is that has huge destructive power which is composed of Helium atoms which are formed of a composition of tritium and deuterium hydrogen isotopes and provides a lot of thermal energy and causes a lot of destructive[29] The first was conducted on the first of November, 1952 by the US through Ivy operation and was targeted at Small island Eniwetok[30].

1.5.3 Neutron Weapons

There were developed by Samuel Cohen and were famously known as the 'enhanced radiation warhead [31]. It produces at least blast and heat but with a huge number of mortal rays and it also a tactical nuclear weapon rather than a strategic one. The neutron weapons might mostly use against tanks and infantry formations

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[27] Ibid.
[28] Science Museum, Nuclear Weapons (Los Alamos national laboratory 2003)
Available at <www.sciencemuseum.com>Accessed 13 November 2018.
[29] "How do nuclear weapons work?" (2003) 3 Campaign for Nuclear Disarmament, Vol. 2., p.6.
[30] Ivy was the operation that U.S. tested hydrogen bomb for first time in 1952 which was more powerful than all the high explosives used in two World Wars according to president Harry S. Truman's publicly declaration for intention to develop the hydrogen bomb in Jan 31, 1950.
<Available at nuclearweaponarchive.org> Accessed 13 November 2018.
[31] Ibid.

on the battlefields but might not be the nearby country centre[32], as the inventor of the bomb in an interview in 1982 called his bomb" the sanest and moral weapon ever devised "devils" but not effect on infrastructure".[33]

1.6 History of Nuclear Weapons, Using and Testing

1.6.1 History of Nuclear Weapons

Since an atom is the only source for each nuclear reactions and nuclear weapons so it's necessary to point the history and exploring atoms. the first knowledge of atom goes back to ancient Greek philosophers that developed the idea of "All matter is composed of the indivisible called atom". the word also came from the Greek word "atomos" means indivisible. After that scientists reached the result that atom contains large quantities of energy in 18th and 19th centuries. At first, they began with the discovery of fission in 1934 which was by Enrico Fermi who showed "neutrons could split many kinds of the atom", and after that, they reached to first self-sustaining of chain reactions in 1939 that was the road to Manhattan project and building the first nuclear bomb.[34]

The development of the first world and American atomic bomb was done by foreign scientists with most of them being prominently Einstein of Austria[35], Oppenheimer[36] of Germany, Szilard of Hungary and Fermi of Italy[37]. Much of the contributions were made by Femi and improvements were made by a German physicist Otto Han in 1938, realized that the energy of fission can be used to produce a nuclear explosion[38].

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[32] Ibid, 34.
[33] Ibid.
[34] The History of Nuclear Energy, U.S. Department of Energy Office of Nuclear Energy, Science and Technology Washington, D.C. 20585
[35] Albert Einstein (1879-1955) was an Austrian theoretical physicist and winner of the 1921 Nobel Prize in Physics. he was beginner of Manhattan project by his famous letter to warn from Germans capability to achieve nuclear weapon. After World War II, he worked to control nuclear proliferation.
[36] Julius Robert Oppenheimer was German born migrated to America, and he was theoretical physicist and professor of physics at the University of California, Berkeley.
[37] Hans M Kristensen and Matthew G McKinzie, 'Nuclear Arsenals: Current Developments, Trends and Capabilities' (2015) 97 International Review of the Red Cross 563.
[38] How to build Nuclear Bombs and other Weapons of Mass Destruction, Frank Barnaby.

It is after the effects of the nuclear explosion that corporations agreed to launch petitions to the US President Roosevelt against the use of nuclear explosion bombs and the undesired consequences that came with the use of proposed German nuclear bombs which has a capacity to destroy the entire city[39]. This had a positive effect on the USA which began to initiate similar efforts to produce its own through an atomic research project known as the Manhattan Project.

Manhattan project:

Efforts by Albert Einstein were highly backed by the assertion that the USA stands to gain by engaging in the research and development of chain reactions and that the use of uranium made it feasible to produce huge quantities of power [40]. Consequently, the USA began to produce nuclear weapons secretly under the disguise of the Manhattan project in 1942 during world war II[41]. Efforts were later stepped up and huge funds were allocated and this saw the program being extended to include Berkeley with notable activities being conducted at California, Chicago and Colombia University with additional three projects being set at the oak ridge, Tennessee[42]. One can however, contend that the Manhattan project was a huge consumer of American citizen's funds after it was noted that it was chunking cost nearly US$ 2 billion but it however could employ employed more than 130,000 people[43].

and cost nearly US$ 2 billion. Americans project for development of Atomic bomb began in 1939 with the support of President Franklin Roosevelt so secretly he even no informed his fourth-term deputy, Harry Truman about it. Truman made a decision to test a first nuclear bomb for that Alamogordo in New Mexico selected as the state

[39] Franklin Delano Roosevelt was 32nd president of USA, and was born in Jan 30, 1882, He was only president of USA who elected four times, serving 12 years from March 4, 1933 to April 12, 1945 until his death.
[40] The Manhattan project, making the atomic bomb, National Security History Series. F. G. Gosling Office of History and Heritage Resources Executive Secretariat Office of Management Department of Energy January 2010
[41] Joseph M. Siracusa Nuclear Weapons: A Very Short Introduction, (2001) Unpublished Article, pp. 28-41.
[42] Ibid
[43] Ibid.

of reaction, so the scientist team in the morning of July 16, 1945, tested the first nuclear bomb successfully, soon after the first nuclear weapon used against Japan and dropped on Hiroshima on August 6, 1945, and two days after the second bomb dropped on Nagasaki.[44]

1.6.2 Testing and Using

There are some purposes behind testing nuclear tests, for technical points for example how well the nuclear weapon work, how they behave in different situations and how adjacent structures react to nuclear explosions. the other is a political purpose that directs a political statement for national, scientific and military priority. The history of nuclear testing goes back to the United States first nuclear bombs testing in morning 16/July/1945 in Alamogordo, New Mexico. for years after US testing, Russia tested its own in 29/August/1949 these two countries come at the top of nuclear testing among other nuclear states.[45] The nuclear states that signed for non-proliferation treaty (NPT) tests:

- The USA implemented 1,032 tests from1945 to 1992.
- The Soviet Union carried out 715 tests from 1949 to 1990.[46]
- The UK carried out 45 tests from 1952 to 1991[47].
- France carried out 210 tests from 1960 to 1996.
- China carried out 45 tests from 1964 to 1996.[48]

The nuclear states out of (NPT) tests:

- India carried out two tests in 1998, and It had also carried out a test called a peaceful nuclear explosion in 1974.)
- Pakistan carried out two tests in 1998.
- North Korea announced that it carried out 6 nuclear tests from 2006 to 2016.[49]

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[44] Ibid.
[45] What is Neutron bomb? by Anne Marie Helmenstine, Ph.D. (Updated March 23, 2017)
[46] Ibid.
[47] Ibid, 44.
[48] Ibid.
[49] Ibid.

1.6.3 Using

The United States of America is one and the last country used a nuclear bomb in the war against its enemy until now that carried out against Japan by a decision from President Harry Truman in 1945 over Hiroshima and Nagasaki. The question is why Japan was a target to attack by a nuclear bomb? Everything goes back to attacking Pearl Harbor Iceland by Japan in 7/December/1941.

- **Pearl Harbor battle:** During WWII Japan wanted to invade lands to provide all that in need to in oil and other goods to keep their war efforts alive. at that time president Roosevelt had moved naval fleets to Pearl Harbor, Hawaii, in 1938 he felt that this position of fleets in Pacific would deter Japan from invading lands they wanted. although diplomats from Japan and the United States during spending months of negotiation, their goal to provide a compromise that would be acceptable to both sides never been reached any agreement.

  The whole thing started after Iceland. Was attacked by Japan in 1941 but the USA was forced to intervene when an attack was launched against it and the American president had to declare war against Japan and decided to resort to the use of a nuclear bomb[50].

  - **Hiroshima:** Hiroshima is located on the Japanese island of Honshu, which is called the capital of Hiroshima Prefecture and overlooks the Hiroshima Bay. Hiroshima in Japanese, the meaning is the city of ancient citadel because of its citadel with a great history. Hiroshima is a relatively modern city. It became a stable city in the late 16th century, where built basically for the military to protect the Japanese state. where the not large number of the population lived there until the end of the 19th century. Despite this, the city was so immersed that most of the world's population was not heard until the middle of the twentieth century, specifically August 6, 1945, when the United States dropped the world's first nuclear bomb on it.[51]

[50] Ibid, 11.
[51] Ibid.

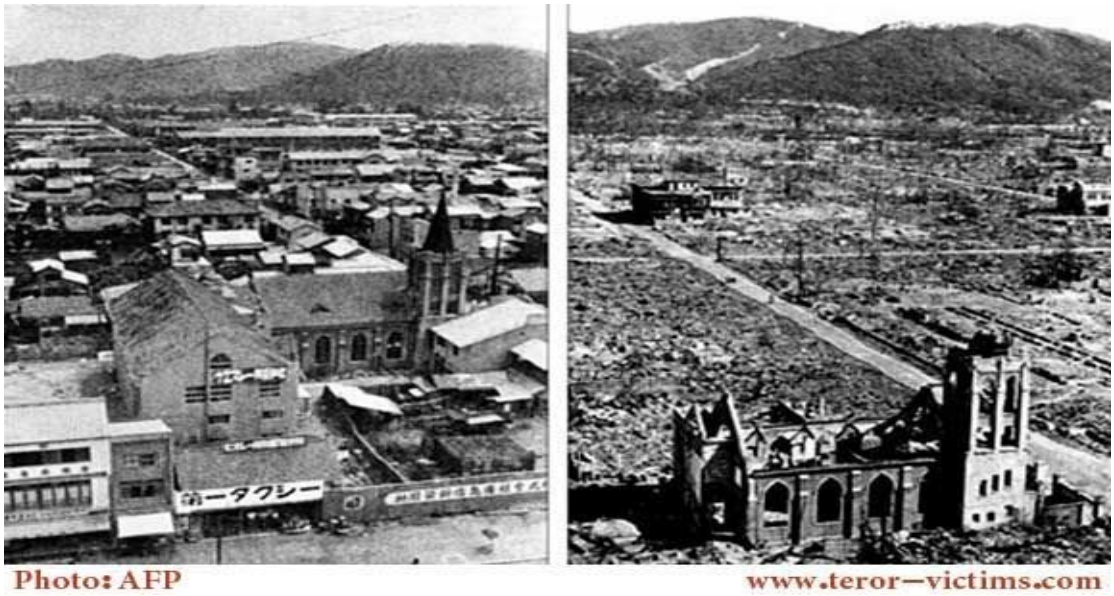

Figure 1.1: Hiroshima city before and after the attack

Source: Hersey (n.d)

- **Attacking:** Us president Harry Truman formed a committee of war advisors led by Henry Stimson minister of war about using a nuclear bomb against Japan. "There was a wide assent supporting the decision to strike among the members of the committee in that time, Stimson was very insistence that nuclear bomb be used" according to Sam Rushay, the Supervisory Archivist at the Harry S. Truman Presidential Library in Independence, Missouri, peaches to CNN and he also said that Hiroshima was one of four potential targets that Truman left it up to the military to decide which city to strike, Kyoto (old capital), Hiroshima (urban industrial area), Yokohama (industrial center), Kokura Arsenal (military industrial complex). Hiroshima was chosen as a target because of its military importance.[52] So Hiroshima was the essential target of the first atomic bomb using. The mission went smoothly in every respect. The weather was good, and the staff and equipment functioned perfectly. In every detail, the attack was carried out exactly as planned, and the bomb performed exactly as expected.

  At around 2:00 on the morning of August 6th, the Enola Gay, which was carrying an atomic bomb (Little Boy), started on the long flight from Tinian. At about 7:00

[52] Ryan Brown, Why did U.S bomb Hiroshima? CNN politics 3 (1998) Vol. 1

o'clock, the Japanese radar net detected aircraft heading toward Japan, and they broadcast the alert t throughout the Hiroshima area. There was no sign of bombers, so the people began their daily work because they thought that the danger had passed.[53]around 8:15 morning an atomic bomb dropped on the city, it was known as "Little Boy", a uranium gun-type bomb that exploded with about thirteen kilotons of force. At the time of the bombing, Hiroshima was home to 280,000-290,000 civilians as well as 43,000 soldiers. Between 90,000 and 166,000 people are believed to have died from the bomb in the four-month period following the explosion, while the city of Hiroshima has estimated that 237,000 people were killed directly or indirectly by the bomb's effects, including burns, radiation sickness, and cancer.[54]

- **Nagasaki:** Nagasaki located at the western tip of Japan, its Prefecture has flourished as a result of repeated interaction with many people from different cultures and through the positive acceptance of those cultures. Nagasaki acted as a bridge between Japan and mainland Asia for centuries and served as the only gateway to the Western world during ‘Sakoku’, the two-century-long period of Japan’s national isolation. The history of Nagasaki reveals how Japanese traditional culture coexisted and harmonized with different cultures. The Prefecture faced tragic events, such as the persecution of the Christians and later the atomic bombing in WW2, as well as multiple natural disasters. Despite this, Nagasaki’s history shows the Prefecture’s strength to overcome and to rebuild itself as one of Japan's most intriguing and attractive tourist destinations.[55]

[53] Hiroshima & Nagasaki, (n.,d) <available at www3.nd.ed> Accessed 13 January 2018.
[54] Curtis LeMay Paul, Bombings of Hiroshima and Nagasaki, by Tibbets, June 5, 2014
[55] Ibid.

Figure 1.2: Nagasaki before and after the nuclear bombing

Source: Hersey (n.d)

However, Nagasaki had never aims to large scale bombing prior to the explosion of the atomic bomb there. The original target was the city, Kokura but it couldn't be reached because of weather Nagasaki selected as an alternative target, there were number of high explosive bombs were dropped on the city on August 1st, 1945, a few of these bombs hit in the shipyards and dock areas in the. southwest portion of the city. Several of the bombs hit the Mitsubishi Steel and Arms Works and six bombs landed at the Nagasaki Medical School and Hospital, with three direct hits on buildings there. While the damage from these few bombs was relatively small but it created considerable concern in Nagasaki and a number of people,[56] and many people were evacuated to rural areas for safety, it cussed that the victims were fewer than that because the bomb was more powerful than the bomb dropped on Hiroshima.

So, three days after the United States dropped an atomic bomb on Hiroshima, a second atomic bomb was dropped on Nagasaki on August 9 – a 21-kiloton plutonium device called as "Fat Man." On the day of the bombing, the population estimated 263,000 were in Nagasaki, including 240,000 Japanese residents, 9,000 Japanese soldiers, and 400 prisoners of war, thus reducing the population in the city at the time of the nuclear attack. It is estimated that between 40,000 and 75,000 people died immediately following the atomic explosion, while another 60,000 people suffered

[56] John Hersey, Hiroshima, EFL Publishers <available at www.eflclub.com> Accessed at 13 January 2018.

severe injuries. Total deaths by the end of 1945 may have reached 80,000.[57]after attacking by second bomb Japan darkly surrounded unconditionally.

1.6 Countries with Nuclear Weapons

Today, nine countries have nuclear weapons and many more can achieve those easily, but only five states are officially recognized as nuclear weapons owned by the 1968 nuclear Non-Proliferation Treaty (NPT). Those are the United States (1945), Russia (1949), the United Kingdom (1952), France (1960) and China (1964). Three other countries that never joined the NPT but are known to nuclear weapons owner are Israel (n/a), India (1974), Pakistan (1998), and North Korea (2006). And there are two additional countries that present immediate proliferation concerns are Iran and Syria.[58]

Those nine countries together have around 15,000 nuclear weapons. The Russia and United states measure amount estimated 1,800 of their nuclear weapons on high-alert status – ready to be launched within minutes of a warning. Most weapons are many times more powerful than the bombs dropped on Japan in 1945. A single nuclear warhead, if explode on a large city, could kill millions of people, with the continue effects for many years.[59] Here we try to point each country's amount of nuclear-owning sequent by history of developing and with detail.

[57] Ibid.
[58] Ibid, 12.
[59] Nuclear Arsenals, (The International Campaign to Abolish Nuclear Weapons 2001) 23.

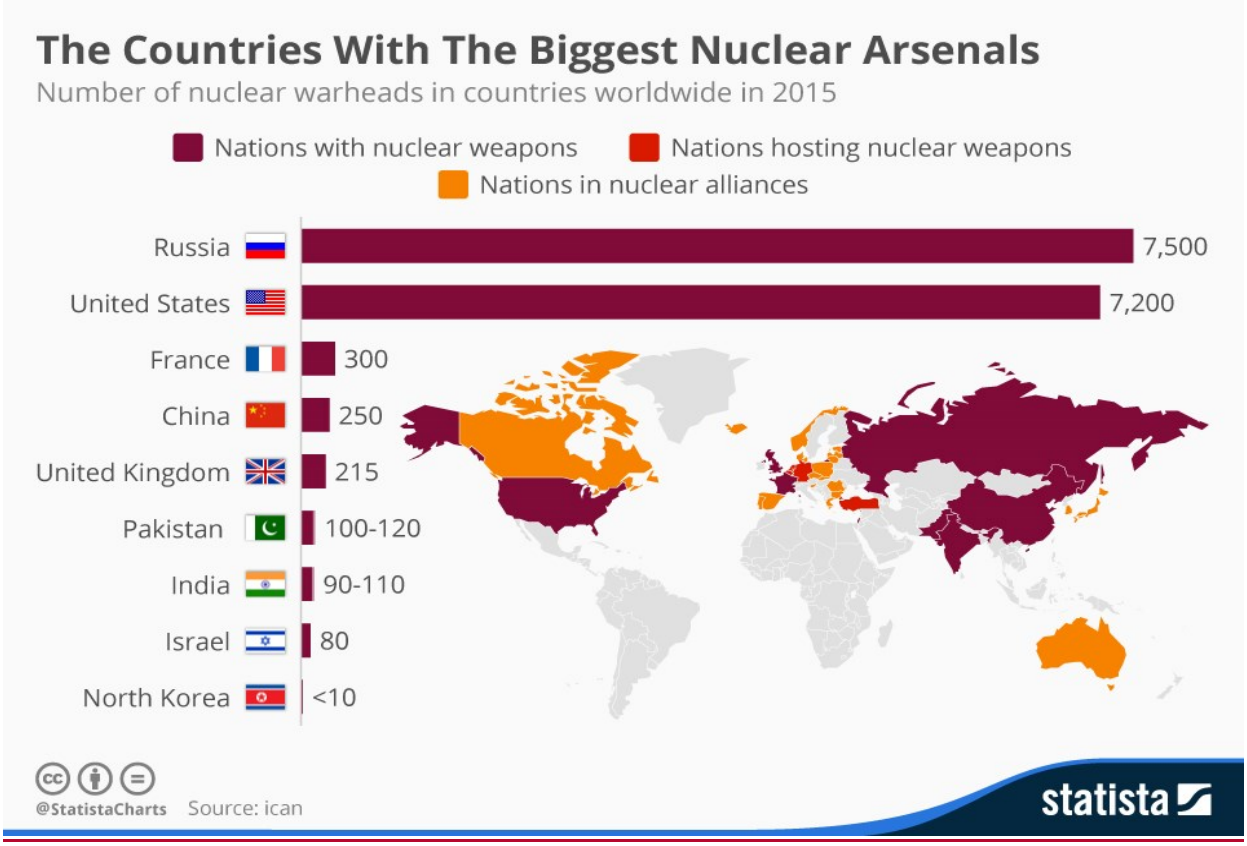

Figure 1.3: Countries with the biggest nuclear arsenals

Source: ICAN

1.7 States are Officially Recognized as Nuclear Weapons Owners by the 1968 Nuclear Non-Proliferation Treaty (NPT):

the nuclear nonproliferation treaty (NPT)formed in 1968 for stopping a spread of nuclear weapons by international regimes, today 189 parties joined the (NPT) and it has universal supporter. The parties of the treaty recognized as nuclear weapon states (NWS) like US, Russia, UK, France and China. and nonnuclear weapon states (NNWS). but there are India, Pakistan and Israel, whom are nuclear weapon states but never signed the treaty, while North Korea withdrew from the treaty in 2003.[60] It is a very short introduction to (NPT), here the purpose is to point the states who signed the treaty we will talk about the treaty in next chapters with the detail.

[60] Ploughshares Fund, The NPT, 1 (1998) Vol. 2.

1.7.1 United States of America (1945)

The united states of America are the first country has nuclear weapons on the day of President Franklin D. Roosevelt who formed the Manhattan project to develop nuclear weapons quickly fear of Nazis capability to build the bomb. now its nuclear arsenals estimate 6,800 warheads. And it was the first country who used them in war and It spends more on its nuclear arsenal than all other countries combined.[61] According to the Federation of the American Scientists, as of February 2018, the United States has 4,000 stockpiled strategic and non-strategic nuclear warheads and an additional 2,550 retired warheads awaiting dismantlement.

The United States also deploys an additional 150 tactical (non-strategic) nuclear warheads based in Europe. While Russia maintains totally has more nuclear arsenals, the United States has a much larger number of strategic warheads and delivery systems while Russia has a larger number of non-strategic (or tactical) nuclear warheads[62]. On 8 December 1953 US president, Dwight Eisenhower gave new address “Atoms for peace” knowledge as his famous address to (UNGA). He proposed the establishment of the International Atomic Energy. this would a stockpile of fissionable uranium, which would be made available for the development of nuclear energy for peaceful uses.[63] The main strategic Arms control agreement of US:

- **START I**

The negotiation between unaided states and Soviet/Russian started in May 1982 after the US deploying intermediate-range missiles in Europe. It was part of efforts by the USA to establish negotiations which would focus on the use of intermediate-range missiles and strategic weapons. This led to the signing Soviet Strategic Arms Reduction Treaty (START I) in 1991 by the USA. It began operational in on the 5th of December 1994 but

[61] Ibid
[62] Arms Control Association, Arms Control and Proliferation Profile: The United States (2003) Vol. 6.
[63] Ibid, 15.

the number of states involved grew to include Ukraine, Kazakhstan, Belarus, Russian and USA.[64]

- **START II**

This was aimed at reducing the number of strategies arsenals and warheads to levels below 3500 as well as focusing on the use of NWs that have a destabilizing effect and was signed by Boris Yeltsin and George Bush in 1993[65]. The major difference between START 1 and START II lied in the establishment or accounting of the number of warheads which is presumed to have been stiffer and broader under START II as opposed to START I[66]. also, its effectiveness can be said to been noticeable after or through the withdrawal of the US from ABM the treaty[67].

- **SORT:**

The U.S.-Russian summit held in Moscow and St. Petersburg on 24-26 May 2002, capped the process of rapprochement between the two States that began in earlier summits in Ljubljana, Genoa, Crawford, and Shanghai, with both aspiring to leave behind the impasse of the Cold War. a number of documents were signed on a set of issues ranging from arms control to collaboration in the economic, energy, and information technology areas. The most distributed event of the summit was the signing of the Treaty of Moscow. This document was largely a result of compromise: The United States urged that the two countries did not need a treaty at all but agreed to insistent Russian suggestions to hold one. At the same time, the United States did not compromise on its top priority, freedom of choice on the fate of its decommissioned warheads, while Moscow gave up its earlier suggestions for the guaranteed destruction of warheads.so the SORT treaty

[64] Ibid.
[65] U.S.-Russian Nuclear Arms Control Agreements at a Glance, Fact Sheets & Briefs, Published on Arms Control Association <available at https://www.armscontrol.org>. Accessed at 13 January 2018.
[66] Ibid.
[67] Ibid.

signed in 24 May 2002, and Entry into Force on 1 June 2003 for 31 December 2012 duration the Treaty shall remain in force and may be extended by agreement of the Parties or superseded earlier by a subsequent agreement.[68]

- **New SATRT**

  It was signed in 2011 and advocated that all states with NWs reduce their stock to levels below the 1550 mark, bombers, SLMBs and 700 ICMBs, to levels below 700 units before the end of February 2018.

  In April 2010, the United States and Russia signed a successor agreement to the original Strategic Arms Reduction Treaty (START) accord. The 2010 agreement, called as New START, commenced on Feb. 5, 2011. It requires that both sides reduce their arsenals to 1,550 deployed strategic nuclear weapons on no more than 700 ICMBs, SLMBs, and bombers by Feb. 5, 2018 and both sides met the limits by the deadline[69] But efforts was placed to ensure that all parties would oblige through effective monitoring but the US has 72 long-range bombers, 488 ground-based long-range missiles and 14 submarines[70].

1.7.2 Soviet Union/Russia 1949

After united states Soviet/Russia developed its nuclear program and had tested the first nuclear bomb in 1949. the spies played main role in developing the Soviet/Russia nuclear program. It has the largest arsenal of any country estimated 7000 warheads and is investing heavily in the modernization of its warheads and delivery systems.[71] Considerable support towards proliferation was offered by Moscow through its stance towards bilateral arms control initiatives, regimes and treaties especially those that are aimed at proliferation. Despite, its efforts to curb proliferation, it Moscow has been having a lot of fuel cycle facilities, ten nuclear power stations, thirty three nuclear

[68] Strategic Offensive Reductions Treaty (SORT), Building safer world 2 (NTI 1998) 13.
[69] Ibid, 72..
[70] Ibid, 18.
[71] Ibid, 20.

power reactors and nuclear power infrastructure is considered to be making plans to increase its operational capacity of its existing nuclear reactors and this includes efforts to build new reactors[72].

1.7.3 The United Kingdom: 1952

It was the third country that developed its nuclear program while it had an agreement with US signed between Churchill and Roosevelt in 1943. The British promptly advanced on an independent step for the bomb and tested a plutonium implosion bomb in 1952. [73] Today UK is one of five states owner nuclear weapon and member of (NPT), its arsenals estimated 215 warheads[74].

British nuclear delivery vehicles: consist of four submarines armed with long-range submarine-launched ballistic missiles; British officials have stated that each submarine will carry no more than 48 warheads[75].

1.7.4 France: 1960

France had been participated in nuclear research before World War II and resumed its nuclear program, devoted to basic and peaceful scientific research, in the 1950s. after three of its former allies acquired the atomic bomb, a secret Committee for the Military Applications of Atomic Energy was formed and a development program for delivery vehicles was launched.

So, the French nuclear weapons drive succeeded in 1960 when testing started by plutonium bomb explosion in Sahara Desert of Algeria, and until now France conducted a total of 192 tests and currently possesses approximately 300 warheads. It preserved a navy fleet of four nuclear-armed submarines in Scotland, each carrying 16 Trident missiles[76].

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[72] Babbage Maria, 'W Hite E Lephants : U P the B Omb and the I Mplications for N Uclear' (2004) 15 1
[73] white, 'General Assembly' (2006) 17871 1 Available at <papers3://publication/uuid/187C36A1-6342-4FD4-80C3-E7620A6AC29A>. Accessed on 13 January 2018.
[74] Ibid.
[75] Ibid, 20.
[76] Ibid, 23.

France and UK signed bilateral "Lancaster agreement" in November 2010, permitted for joint projects "to test the safety of their nuclear warheads" without performing actual nuclear explosive tests, where scientists from both countries will conduct work on the safety and security of their respective nations' warheads. A joint Technology Development Center will also be established in Aldermaston, UK, to develop simulation technology for the centre at Valduc. The Valduc facility became operational in 2014 with construction costs split equally between France and the United Kingdom[77].

French nuclear delivery vehicles: France has four submarines armed with long-range submarine-launched ballistic missiles and 60 mid-range and 10 short-range aircraft capable of carrying supersonic missiles.

1.7.5 China 1964

The next state joined the nuclear club was China, when it signed a secret agreement with the Soviet Union through nuclear technology and began developing nuclear weapons in the late 1950s with substantial Soviet assistance. on October 16, 1964, Chinese first nuclear test conducted in Lop Nor. It was a towering shot involving a fission device with a yield of 25 kilotons. Uranium 235 was used as the nuclear fuel, and in less than 32 months China detonated its first hydrogen bomb on June 14, 1967. It's arsenals estimated 270 warheads. They are deliverable by air, land and sea. It appears to be increasing the size of its arsenal at a slow pace.[78]

Chinese nuclear delivery vehicles:

China has six different kinds of land-based missiles, only two of which can reach the United States. It is believed that many of these forces are not on alert and would, therefore, require hours or days to launch. China developed one submarine with mid-range submarine-launched ballistic missiles that may never have been deployed; China also has a small number of bombers that capable of carrying nuclear bombs.

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[77] Ibid, 24.
[78] Cold War: A Brief History, Chinese Nuclear Weapons. Atomic Archive. Available at http://atomicarchive.com. Accessed on 13 January 2018.

now It is developing both new missiles and submarines, continuously but at a slow rate.[79]

1.8 Nuclear States not Recognized by the 1968 Nuclear Non-Proliferation Treaty (NPT):

The 1968 treaty of (NPT) listed five nuclear weapons states - US, Russia, UK, France and China. subsequently, India openly demonstrated its nuclear capability in 1974, there are three other nations with nuclear weapon capability- Pakistan, Israel and North Korea, the list may grow.[80]

1.8.1 India 1974

In 1950 while peaceful technology sharing under the Atoms for Peace has become “the bedrock” for the Indian nuclear program, as Homi Sethna, president of the Indian Atomic Energy Commission from 1972-83, acknowledged. More than 1,000 Indian scientists have participated in US nuclear energy research projects from 1955-1974, and the US helped India in building and fueling the "Tarapur" reactors by Signing the "Atoms for Peace" program agreement and, and today it has 110 - 120 warheads, India carried out its first test called “peaceful explosions” in 1974 it had the initial efforts been aimed at producing the bomb. India had two tests in 1988 it’s while the first prime minister, Jawaharlal Nehru, called for an end to all nuclear weapons testing. India participated in the negotiation of the NPT, but refused to join, criticizing it as discriminatory.[81]

1.8.2 Israel 1979

In 1949 Israeli defence ministry established a department for nuclear research and development at the Weizmann Institute at Rehovoth, one of the first efforts of the department was to create a process for the production of heavy water for natural uranium-fueled reactors. In June 1952 Israel formed its secret Atomic commission and

[79] Ibid, 63.
[80] Ibid, 67.
[81] Ibid.

its relationship with France was central to develop nuclear weapons capability in 1953 when France was still working into its Owen nuclear weapon.[82]

The French-Israeli cooperation resulted in the construction of a reactor and reprocessing facility at Dimona, Israel. The country has not publicly conducted a nuclear test, it has a policy of ambiguity in relation to its nuclear arsenal estimated 80 warheads, comprising bombs, missile warheads, and possibly non-strategic (tactical) weapons – has never been officially confirmed or denied. At the same time, Israel officially declared that it will not be the first state to introduce nuclear weapons into the Middle East. The state has insisted on maintaining this policy even after its nuclear secrets were leaked to a British.[83] As a result, Israel neither confirming nor denying its existence, there is little public information or debate about it.[84]

1.8.3 Pakistan 1998

Pakistan's program began in the mid-1950s with Islamabad's participation in the Atoms for the Peace initiative. India's 1974 testing of a nuclear "device" gave new momentum to Pakistani nuclear aspirations. An independent nuclear deterrent seemed necessary because Pakistan's conventional forces were significantly weaker than its neighbour's, as was proven by Pakistan's defeat in the 1971 war with India. The French suspended their contracts with Islamabad in 1977 in response to United States pressure. However, Pakistani nuclear program was revitalized in 1975 when Dr Abdul Qadeer Khan, a German-trained metallurgist, returned to the country. Previously employed by a contractor at the European Urenco enrichment consortium, Khan used stolen centrifuge designs to develop a large, safeguarded centrifuge plant at Kahuta.[85] Pakistan carried out two tests in 1998, and It is making substantial improvements to its nuclear arsenal and associated infrastructure. It has increased the size of its nuclear arsenal in recent years to 120-130 warheads.[86]

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[82] Frank Barnaby, 'The Nuclear Non-Proliferation Treaty For How Long Should It Be Extended?' (1995) 20 Interdisciplinary Science Reviews.
[83] Ibid.
[84] Ibid, 69.
[85] Ibid.
[86] Ibid.

1.8.5 North Korea 2006

North Korea was harbouring plans to get the bomb early on and may have been prodded by the South Korean nuclear project. North Korean nuclear aspirations are also linked to the need for development assistance and, more importantly, prestige. Even when negotiating the halt its nuclear program, the North demands that the world call it a nuclear state to increase its international importance. North Korea acceded to the NPT in 1985 and after South Korea announced that no US nuclear weapons existed on its territory, signed the IAEA protection agreement. In 1991 the state joined the United Nations and entered into a denuclearization agreement with its southern neighbour. Because of these positive developments, no alarms sounded when a nuclear fuel reprocessing facility appeared at its Yongbyon plant in 1989. Tensions reemerged only when the IAEA inspections uncovered troublesome information on the North's programs. [87]

North Korea detonated a nuclear weapon in October 2006. On May 25, 2009, the country conducted a second nuclear test it has a fledgeling nuclear weapons program. Its arsenal probably comprises fewer than 10-15 warheads. in violation of UNSC resolution 1718. The state pulled out of multilateral talks on its nuclear activities.[88] North Korea has Nodong missiles, which can reach Japan, and is increasing its missile capability through its development of a satellite launch vehicle. It has not successfully launched a long-range missile, and it is not known whether it has developed a nuclear warhead that can be delivered by missile.[89]

1.9 Countries that Gave up of Developing Nuclear Weapons:

Let's start with the question, is there any country had nuclear weapons and gave up to develop them? The answer is yes, there are several states gave up to grow them, for example here in South Africa, Kazakhstan, Belarus, Ukraine, Brasilia and Argentina.

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[87] Ibid 79
[88] Ibid 79
[89] Worldwide Nuclear Arsenals, By Union of concerned scientists, fact sheets

1.9.1 South Africa

South Africa is famous for being the only nation to develop nuclear weapons, only to scrap their nuclear weapons program completely. During the 1970s and 1980s, South Africa built as many as six nuclear bombs. By 1991 they had none. There are several causes for South Africa's disarmament like:

1) The removal of Cuban troops from Angola.
2) Downfall of the Soviet Union.
3) Easing international tensions.[90]

1.9.2 Ukraine, Kazakhstan and Belarus

These three states made a decision to cede all their existing nuclear weapons stock within period of ten years and would not make petitions in Lisbon, May 23. The three NWS together with Russian and the US to further reduce the stock of NWs in 1991[91]. This can be said to have been another4 major contribution towards efforts to preserve peace and promote corporation among NWS. Hence, it can be applauded as a huge achievement made by START as well as international legal efforts to curb unnecessary and excessive use of NWs. This forms a base upon which treaties and NWs regimes can be judged in terms of effectiveness and hence it can be concluded in regards to this aspect that START among other legal laws that govern the use of NWs can be said to have played a major role towards dealing with problems that are associated with the use of NWs.

1.9.3 Brasilia and Argentina

Presidents Fernando Collor de Mello of Brazil and Carlos Saul Menem of Argentina signed an agreement to open negotiations with the International Atomic Energy Agency to set up a system of international safeguards and inspections and promised to begin inspections of each other's nuclear installations within 45 days in a Meeting

[90] South African Nuclear Weapons, by Gil Kornberg, March 17, 2017
[91] Ken Booth, ''Loose Nukes' and the Nuclear Mirror: The Dangers and Opportunities Resulting From The Break-Up Of The Soviet Union' (1992) 13 Arms Control.

on the Brazilian side of the Iguassu Falls. Presidents Fernando Collor de Mello of Brazil and Carlos Saul Menem of Argentina promised that their nuclear potential, the most advanced in Latin America, would be used for "exclusively peaceful ends the accord comes when both countries are putting aside some of their traditional nationalism and looking to their Latin American neighbors, the United States and other rich countries to help improve their economic situations through trade and investment. The trip that President Bush is to begin Sunday to five South American countries Brazil, Uruguay, Argentina, Chile and Venezuela -- is expected to focus on his promise to create a hemispheric free-trade zone.[92]

Neither Presidents said anything about eventually signing the Nuclear Non-Proliferation Treaty, which has always been viewed in the two countries as an assault on national sovereignty.

[92] Nancy Rice, 'Reining In' Special Education: Constructions Of "Special Education" In New York Times Editorials, 1975-2004' (2006) 26 Disability Studies Quarterly.

CHAPTER TWO

USING NUCLEAR WEAPONS UNDER INTERNATIONAL LAW

2.1 Introduction

The issue of nuclear weapons is one of the important issues in international public law. It is the focus of the various branches of this law, including an international humanitarian law which aims to organize and regulate the war by banning destructive means and methods of warfare that cause unjustified pain. By banning activities that cause extensive damage, large fission and long-term damage to the territory of other countries or that cause harm to future generations.

To highlight the Advisory Opinion of the International Court of Justice on the Legality of the Threat or Use of Nuclear Weapons which is the most important advisory opinion of the International Court of Justice as the first time the Court has analysed the principles of international humanitarian law in some detail of the principles of international humanitarian law, and in addition to emphasizing the unique advantages of nuclear weapons and their conflict with the rules and principles of international humanitarian law[93].

In this chapter we try to clarify the possibility of using nuclear weapons under public international law, international humanitarian law, international criminal law and international environmental law. This will also include looking at their roles in prohibiting the use of nuclear weapons, the legality of using these weapons in the framework of international public law or its use in the case of self-defence. Also, we

[93] R. R. Baxter, 'Conventional Weapons Under Legal Prohibitions' (1977) 1 International Security.

want to show the UN organs (General Assembly, Security Council, International Court of Justice) of the use of nuclear weapons opinion on the use of nuclear weapons.

2.2 Nuclear weapons in International Humanitarian Law (IHL)

The IHL is a law that is composed of a certain group of rules that seek to preserve humanitarian reasons, objectives as a well as opinion during periods and incidences of conflicts. In other words, it seeks to control the means and methods that are used in hostile activities that surround an armed conflict[94]. In other words, it seeks to protect captured combatants, non-combatants, wounded people as well civilians and non-military objectives. The challenge is that the IHL does not to some extent prevent the use of armed weapons but rather controls the use of weapons during a conflict. the IHL also considers that the principle of proportionality be applied when launching attacks in an armed conflict.

The rules have been embodied in the Geneva Convention (1977)'s Additional Protocol and these rules tend to apply in any situation involving armed conflicts[95]. NWs involve the emission of radiation and heat over a huge space of area and this questions the idea that NWs can be used to target military objectives. This can be evidenced by the Nagasaki and Hiroshima bombs with ranges of 10 to 20 kilotons which had a target of killing almost every person within that specific area.

The magnitude of effects posed by NWs trends to vary with climate and terrain of the area, level of explosion, that is in air or on the ground, type and size[96]. This makes it difficult to control the effects of NWs as prescribed by the IHL. This is because some of the radioactive particles can actually be transmitted by air to nearby locations thereby inflicting serious harm on civilians.

The effects on NWs can be linked to a number of things and all these can relate to human rights violations whether it is food or shelter, it must be noted that NWs through

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[94] Ibid. 154.
[95] The Court defined the prevailing view on the historical development of humanitarian law that the law relating to the conduct of hostilities (called Hague law) began in a set of treaties, while the law protecting victims (called Geneva convention) and later connected together in two Additional Protocols of 1977 to be one legal group.
[96] Nuclear Tests (Austl. v. Fr.), 1974 I.C.J. 253 (Dec. 20).

their effects can limit access to a wider number of things such as fertile land, water[97]. There are also concerns that NWs tend to affect future food production and global climate conditions[98].

When it comes to the aspect of proportionality, it can be argued that the use of NWs tends to disregard this aspect and go on to inflict unnecessary damages. This is similar to what was observed with the Hiroshima and Nagasaki nuclear attacks in which the damages inflicted covered several kilometres and went on to destroy a significant number of civilian properties. It is always important to ensure that the use of NWs is always in compliance to proportionality assessment but with the magnitude of damages posed by NWs, this is relatively impossible to do as infrastructure, buildings and civilian homes are easily destroyed from just a single attack. In addition, the long terms effects of continued exposure to radiation can cause harmful diseases such as cancers.

The effects of NWs must also be related to the magnitude of damage inflicted on the environment. Hence, a lot of environmental laws are highly applicable to govern and refute the use of NWs. This is because the use of NWs is always contrary to efforts to preserve and protect the environment. It can be noted that efforts to minimize incidental damage to the environment are impossible when the armed conflict involves the use of NWs.

Moreover, efforts to spare civilian objects and ordinary civilians from the effects of NWs are basically impossible. This is because they are location cantered as so long as the civilian objects and ordinary civilians fall within that geographical area, then it is imminent that they will suffer the consequences. No way can a NW once launched be diverted to limit damage to civilian objects, injury to civilians and loss of civilian life.

for more focuses on the legality of the use of nuclear weapons under international humanitarian law (IHL) we have known about core of three rules: distinction, proportionality and precautions in attacks. The rule of distinction prohibits the use of a weapon that cannot distinct in its effects between military targets and civilian persons

[97] Ibid, 184.
[98] Ibid.

and objects. It is unlawful to use weapons whose effects are incapable of being controlled and therefore, cannot be directed against a military target. The rule of proportionality prohibits the use of a weapon whose potential collateral effects upon non-combatant persons or objects would likely be disproportionate to the value of the military advantage anticipated by the attack. The rule of necessity provides that a state may only use such a level of force as is necessary to achieve the military objective of the particular strike.[99]

2.2.1 The rule of distinction

The item of the principle of distinction did not take an explicit international legal character until after the conclusion of the first Additional Protocol to the Geneva Conventions of 1977, Article 48 of its which states on that "the parties to the conflict shall discriminate between the civilian population and combatants, between civilian objects and military objectives, And then directed its operations against military targets only, in order to ensure respect and protection of the population.[100]

The use of nuclear weapons is a clear violation of the principle of discrimination in all its aspects. It is not possible to use nuclear weapons against a specific military target without causing civilian casualties and civilian objects to be destroyed. Nuclear weapons are by nature indiscriminate weapons that do not discriminate between civilians and combatants. To the ICJ on the legality of the threat or use of nuclear weapons outlines that States should not make civilians the object of attack, and should therefore never use weapons that are incapable of distinguishing between military objectives and civilian objects.[101]

2.2.2 The rule of proportionate

The purpose of this rule is to prohibit the use of weapons which by their very nature cause excessive or unjustified suffering to combatants, to the extent that they exceed

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[99] Dean Granoff and Jonathan Granoff, 'International Humanitarian Law and Nuclear Weapons: Irreconcilable Differences' (2011) 67 Bulletin of the Atomic Scientists.

[100] Article 48 of additional protocol of Geneva convention 1977.

[101] The advisory opinion of international court of justice (ICJ) on the legality of the threat or use nuclear weapons 1996, op.ci, p.35, para 78.

the military advantage to be achieved through military operations. The International Court of Justice has defined this principle in the legality of the threat or use of nuclear weapons" its humanitarian rule which prohibits the use of means and methods of warfare that cause tragedies and human suffering beyond the legitimate goal". [102]

The rule of proportionality is directly related to the rule of distinction. While it focused on the scope and means of attack so as to account for the least amount of damage to persons and property protected, proportionate to the weight of the military one advantage expects to win against the inevitable and incidental loss of civilians and civilian property that will result from the attack.[103]

The use of nuclear weapons is also violation of the principle of proportionate in all its aspects. There is no doubt that the use of nuclear weapons results in much more pain and suffering than conventional weapons and other weapons of mass destruction. This is known after the atomic bombs were dropped on Hiroshima and Nagasaki. After studies on the disastrous effects of the nuclear war that caused cancer disease between the combatants and civilians or even coming generations, The United Nations General Assembly has affirmed in many international resolutions the use of weapons that exceed the rule of proportionality, cause unwarranted pain, and constitute a threat against humanity. Rate Tokyo court also in the case of Shimoda in 1963 that the use of nuclear weapons is contrary to the fundamental principle in international humanitarian law and is the principle of not causing the suffering is not justified to them.[104]

2.2.3 The rule of Necessity

The rule of necessity or military necessity is one of the basic rules of international humanitarian law, which is based on the idea that the use of methods of violence and

[102] Ibid 99.
[103] Ibid 101.
[104] The summary of the case is in April 1954, five Japanese people filed an appeal to the Tokyo court demanding that the Japanese government compensate them for the damage they had sustained as a result of the bombing of Hiroshima and Nagasaki. A court ruled on December, 7 in this case, they gave in appeal that the bomb dropped on the two cities was violation of laws of war.

force in war stands at the point of conquering aggression and achieving war. It is the defeat of the enemy and victory. Does not agree with the rules and principles of international humanitarian law on the basis that the achievement of the objective for which the war necessitated not placing restrictions on its method or the weapons used in it, and this explanation is due to the German jurist went to that the law of war loses the power of its obligation when Impede the obligation to achieve .[105](Article 23 (c) of the Hague Convention IV of 1907 on the principle of military necessity, noting that "a state is prohibited from carrying out any activity that would destroy the enemy's property or take over it unless destruction and eviction is imperative Necessities of war".

Conclusions can be made about the three rules surrounding the use of nuclear weapons that there are no "new rules" provided for by 1977 Additional Protocol I which has not become international Customary law does not seem to seriously compete with international humanitarian law applicable to nuclear weapons or not, because the three rules states that are no unlimited right to choose and use means of war, rules of distinction and proportionality, and the principle of military necessity, It forms part of a familiar international law group and, as such, all applicable to nuclear weapons[106].

It is cleared to us that the use of nuclear weapons is a clear violation of the principles and rules of international humanitarian law through the three rules that we have mentioned. but proving this issue is not enough for our study because we did not mention the rules of war law declaration under international humanitarian law completely, how to use nuclear weapons in the context of the law and the conditions for its provision. Let us discuss this in our next subject when we clarify the legality of the use of nuclear weapons.

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[105] William Gerald Downey, Jr. *The American Journal of International Law* Vol. 47, No. 2 (Apr., 1953), pp. 251-262 (12 pages).

[106] Dieter Fleck, 'Gro Nystuen, Stuart Casey-Maslen And Annie Golden Bersagel (Eds), Nuclear Weapons Under International Law' (2015) 20 Journal of Conflict and Security Law.

2.3 Nuclear Weapons in International Criminal Law (ICL)

This law is defined as a set of customary legal rules aimed at defending peace, justice and civilization by imposing sanctions against all violators of international law or taking a number of measures that would prevent such crimes in the future. This law is otherwise defined as a set of legal rules relating to punishment for international crimes in violation of international law. This law regulates reactions to international crimes through punishment by taking severe measures against criminals who threaten the international social order and expose it to danger and damage. It is also known as one of the branches of criminal law that regulates a range of criminal problems at the global or international level. The concept of international criminal law is broader because it is closely related to a number of international or organized crimes within the framework of international law, For example, crimes against humanity and war crimes[107]. International criminal law (ICC) involves the most serious crimes of concern to the world community: its violations can lead to imprisonment. "Basic" crimes are genocide, war crimes and crimes against humanity.[108]

This topic discusses the use of nuclear weapons as an international crime, focusing on genocide, war crimes and crimes against humanity:

2.3.1 Use of nuclear weapons as an act of genocide

The term "genocide" did not exist before 1944. This term has a very special meaning, as it refers to mass murder committed against certain groups of people with the intention of destroying their entire existence. the word of genocide formed by Polish Jewish lawyer[109] from the Greek word "geno" which means a race and with Latin word "cide" means killer.

A genocide committed by a particular government against a group of people on a different areligious, ethnic, national or political basis classified by the United Nations

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[107] Lascu, Liviu Alexandru. "Is the plea agreement practice of the International Criminal tribunals a pathway to negotiated justice within national jurisdictions?" *Union of Jurists of Romania*. Law Review 3.2 (2013).

[108] Fact sheet: International crimes, open society foundation

[109] Raphael Lemkin (1900-1959) a Polish Jewish lawyer sought to describe Nazi policies for organized murder, including the extermination of the European Jewish people. He formed the term "genocide" 1944.

in 1948 as an international crime. The most famous genocide, the Srebrenica massacre, the Sabra and Shatila massacre, genocide in Rwanda, ethnic cleansing in Rwanda, and the Nazis in Germany.[110] Genocide can be defined by limiting its components, which article II of the 1948 Convention on the Prevention of Genocide attempted to do. That article provides that genocide shall include all the following acts, committed with the intent of the total or partial destruction of a national, racial, racial or religious group, as follows[111]:

a) The killing of members of a group.
b) Causing serious bodily or mental harm to their members.
c) Intentionally subjected to conditions of life intended for their physical destruction in whole or in part.
d) The imposition of measures aimed at preventing the birth of children.
e) The forcible transfer of children from one group to another.

Article 6 of the Statute of the International Criminal Court has the same definition as the 1948 Convention and states that the purpose of the genocide is for any act mentioned above committed with intent to destroy a national, ethnical, racial or religious group, in whole or in part[112].

Moreover, the consequences of the use of nuclear weapons as the most dangerous weapons of mass destruction are known, that is, the perpetrator knows that his actions involve the killing of individuals and that the harmful effects caused by nuclear radiation are immediate or urgent, and the nuclear dust that is caused by the nuclear explosion and its successor Radioactive residues that cause severe damage, deadly fatal diseases, and reproduction disabilities. These effects are not limited to the living conditions, especially after the destruction of the environment, money and property, forcing the population to move to other areas and change their places of residence.

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[110] Aljazeera Encyclopaedia (Aljazeera.net, 2018)
Accessed from http://www.aljazeera.net/encyclopedia> on 25 March 2018.
[111] 'What Is Genocide?' (Encyclopedia.ushmm.org, 2018) Accessed from
<https://encyclopedia.ushmm.org/content/en/article/what-is-genocide> accessed 25 December 2018.
[112] General Assembly Resolution 260, Art. (VI) 9 December 1948.

Dangerous effects are a clear expression and embodiment of acts that are legally prohibited by the crime of genocide.

2.3.2 The use of nuclear weapons as a crime against humanity

The International Criminal Court has established crimes against humanity in the Statute of the Court as "for the purposes of this Statute, any of the following acts constitutes a crime against humanity when committed as part of a widespread or systematic attack against any civilian population and knowledge of the attack: Expulsion of the population, forcible transfer of population, imprisonment or severe deprivation of any other form of physical freedom in violation of the basic rules of international law such as, torture, rape ...)[113].

killing as images of crime against humanity is to be exercised when possessing and using weapons of mass destruction, including nuclear weapons, on the grounds that genocide can be a manifestation of the meaning of this crime, and deportation and forcible transfer of population might be a result of the use of such weapons.

2.3.3 the use of nuclear weapons as war crimes

Article 8 of the Fundamental status on War Crimes, which the Court is competent to consider, states' use of poisonous weapons, gassing (poisonous gases) or gases and all other liquids, substances and devices or the use of weapons, missiles, materials or methods of warfare which by their very nature, violate international armed conflict law. Weapons, missiles, materials and methods of warfare with a comprehensive prohibition and to be included in an annexe to the Statute of the Court by an amendment consistent with the provisions of the Statute[114].

The use of nuclear weapons makes destruction and extends to large areas and vast areas of difficult than the possibility of providing the protection required for these categories of protection under international conventions, and it can be said that the use of nuclear weapons and chemical and biological war crime requires the

[113] General Assembly Resolution 260, Art. (VII) 9 December 1948.
[114] General Assembly Resolution 260, Art. (VIII) 9 December 1948.

prosecution of the perpetrators and punish them. These acts are internationally prohibited[115].

2.4 Nuclear weapons in International environmental law

In order to prevent the dangers and threats of nuclear weapons from the environment, efforts have been made in the international community to find solutions that enable countries to exploit nuclear energy without destroying it. Established committees and bodies specialized in nuclear energy matters, enacted legislation in accordance with international norms and the requirements of justice. The committee of the International Atomic Energy Agency (IAEA) in 1957 created significant progress towards achieving "nuclear safety" by imposing control and control over dealing with nuclear energy and its waste and limiting the nuclear armies of states[116].

The Geneva Convention of 1949 and its four Protocols, and The Hague Convention Respecting the Laws and Customs of War on Land of 1907 are among the most important fingerprints of the international community in the application of international humanitarian law, including protection of the environment and humanity. Prohibiting the use of weapons that cause unnecessary suffering and restricting the freedom of belligerents to choose the means of war. The Treaty on the Prohibition of the Status of Nuclear Weapons and Other Weapons of Mass Destruction at the Bottom of the Oceans and in the Grounds of 1971, whose parties have undertaken not to stockpile or throw nuclear or other weapons into the ground or ocean floor. The agreement gave any party the right to control this and to refer to the Security Council if necessary[117].

The 1976 Convention on the Use of Environmental Change Technologies for Military Purposes followed, prohibiting the military or hostile use of technologies that cause

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[115] Criminalize Use Of Nuclear Weapons – UNFOLD ZERO' (Unfoldzero.org, 2018) <http://www.unfoldzero.org/get-involved/criminalize-use-of-nuclear-weapons.> accessed 25 March 2018.

[116] Alessandra Pietrobon, 'Nuclear Powers' Disarmament Obligation Under The Treaty On The Non-Proliferation Of Nuclear Weapons And The Comprehensive Nuclear Test Ban Treaty: Interactions Between Soft Law And Hard Law' (2013) 27 Leiden Journal of International Law.

[117] Ove Bring, 'Regulating Conventional Weapons In The Future Humanitarian Law Or Arms Control?' (1987) 24 Journal of Peace Research.

extensive, excessive or long-term environmental change. And even prohibited the assistance of any other party. Followed by the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, which criminalizes trafficking in hazardous wastes and gives States the right to prohibit their entry into their territories[118].

2.5 The legality of use or threat of Nuclear Weapons in principle of self-defence:

For at least two centuries it was absolutely recognized that international humanitarian law applies equally to all parties to a conflict, regardless of which one behaves from a position of self-defence; This has been confirmed by the practice of States over a long period of time and recognized by legal writings worldwide. The only creative point was whether the limitations of the law of self-defence - necessity and proportionality in the general sense - applied in armed conflict, in addition to the specific limitations of humanitarian law. Most experts argued that the limitations of the law of self-defence applied in addition to the limitations of humanitarian law, as was written in the guide, while other experts argued that when the need for self- defence was raised, the only restrictions applied were the restrictions established by humanitarian law.[119] In its general analysis of the law, in paragraphs 41 and 42 of its advisory opinion, the Court stated that it also considers that the limitations of these two areas of law apply equally, "The practice of the right of self-defence to the police of necessity and proportionality is one of the norms of customary international law, but at the same time, the proportionate use of force in accordance with the law of self-defence must also satisfy the requirements of the law applicable in armed conflict, which includes, in particular, the principles and rules of humanitarian law [120]".

If the opinion had continued to apply this statement, the ruling did not raise that controversy and criticism in the academic circles. Regrettably, it is enough to look at paragraph 2E of the conclusion that is now known, which, in the first part of which

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[118] Ibid

[119] International committee of Red Cross (ICRC) 316-28-02

[120] Michael J. Matheson, 'The Opinions Of The International Court Of Justice On The Threat Or Use Of Nuclear Weapons' (1997) 91 The American Journal of International Law.

states that the use of nuclear weapons would generally be contrary to humanitarian law, went on to say in Part II that " Can conclude unequivocally whether the use or threat of use of nuclear weapons is lawful or unlawful in the extreme case of self-defence when the survival of States themselves is threatened. " As already stated, the actual views of the judges themselves do not in fact correspond to this part of the advisory opinion[121].

The only way to make the statement in paragraph 2E consistent with the pronouncements made by the Court in paragraphs 41 and 42 is what Judge Higgins stated in her positive and analysis that she considers that nuclear weapons are not inherently weapon arbitrary and that their use in certain extreme circumstances does not conflict with The rule of proportionality or the rule of prohibiting unnecessary suffering for combatants. However, the majority of judges have already found that nuclear weapons are inherently illegal under humanitarian law and Judge Higgins has declared a dissenting opinion. The only other explanation is that, in certain cases, humanitarian law is not applied in self-defence cases, which is not only flagrantly inconsistent with the statement in paragraphs 41 and 42 but also seriously resembles the application of the rejected doctrine that the end justifies the means[122]. The doctrine that in extreme circumstances it is possible to disregard the application of the rules of humanitarian law to counter the danger has been rejected by the Nuremberg Tribunal in the cases of Pelios, Melch and Krupp.

[121] Nicholas Grief, 'Legality Of The Threat Or Use Of Nuclear Weapons' (1997) 46 International and Comparative Law Quarterly.

[122] (Icj-cij.org, 2018) <https://www.icj-cij.org/files/case-related/95/095-19960708-ADV-01-14-EN.pdf> accessed 25 March 2018.

2.6 The opinion of UN organs (General Assembly, Security Council, International Court of Justice) of the use of nuclear weapons

2.6.1 General Assembly

The United Nations General Assembly has been continuing to play an active role in standing up against nuclear weapons. It urges States, through its resolutions and recommendations, to conclude an international convention explicitly prohibiting the use of nuclear weapons. The resolution issued by the members of July 24, 1947, which established the Atomic Energy Commission to work for the elimination of nuclear weapons and all kinds of weapons that caused genocide. The resolution also pointed out that there must be firm action to ban the use of nuclear weapons and that the use of energy descendants limited to peaceful purposes exclusively[123].

The United Nations General Assembly has not only issued many international resolutions condemning the use of nuclear weapons and urged States to reach an international convention prohibiting the use of nuclear weapons:

2.6.2 First: Resolution of the General Assembly of the United Nations No. 1653 of 1961

The resolution was issued on November 24, 1961, in which the General Assembly expressed its concern that the negotiations for prohibition had not yielded satisfactory results, because that the nuclear arms race had reached a dangerous stage of the competition[124]. It also states that these weapons cause human and civilian pain and destruction far beyond the pain and destruction caused by the weapons expressed, which is accordingly announced:

1. The use of nuclear weapons and thermonuclear weapons is contrary to the spirit and purposes of the Charter of the United Nations and therefore constitutes a direct violation of the Charter.

[123] https://www.un.org/disarmament/wmd/nuclear/ united nation office for disarmament affairs.
[124] 1653 declaration of prohibition nuclear and thermonuclear weapons November 24, 1961.

2. The use of nuclear weapons and thermonuclear weapons is used to widen the scope of war and to cause the destruction and destruction of humanity without any discrimination.
3. The use of nuclear weapons and thermonuclear is a war directed not against aggression but also against all humanity because the peoples of all the world are not participating in the war at all.
4. Any country should use nuclear weapons and thermonuclear weapons constitute a direct violation of the Charter.[125]

2.6.3 Second: General Assembly resolution 64/33 issued of 1978

This resolution was adopted at the thirty-third session of the United Nations General Assembly, in which it declared that it was essential that the human race halt the nuclear arms race in all its aspects. Eliminating the threat of nuclear war is the most urgent task at present. It is the nuclear-weapon States, especially the two main Powers (the United States and the former Soviet Union), who bear the responsibility to take steps[126].

2.6.4 Third: General Assembly Resolution 36/100 of 1981

This resolution was issued under the title of Preventing the Nuclear Disaster. The General Assembly affirmed that states and politicians who use nuclear weapons would commit the greatest crime against humanity. There would be no justification or amnesty for the politicians who make the decision to be the first to use these weapons. Finally, the General Assembly affirmed the commitment of the leaders of the nuclear-weapon States to act in such a way as to eliminate the danger of nuclear conflict and to continue the international negotiations to stop the nuclear arms race, leading to the complete elimination of nuclear weapons[127].

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[125] Ibid

[126] The UNITED NATION disarmament. Vol .23, New Work United Nation publication. (No.A.99.IX1), 1998, P.107.

[127] General Assembly Resolution 36/100 of 1981, Official Records, Thirty-sixth Session, Plenary Session, December 1981 (A\REC\36\100).

2.6.5 Fourth: Resolutions of the General Assembly of the United Nations from 1982 to 1995

These resolutions were related to the necessity of concluding an international convention prohibiting the use of nuclear weapons, most notably Resolution No. 71/50 of 1995, which included an annex to a draft convention prohibiting the use of nuclear weapons[128]. The General Assembly, in its conviction that a threat to the use of nuclear weapons, A major threat to the survival of mankind and the conclusion of the multilateral international agreement will strengthen international security, so decided to request the conference to begin negotiations to conclude the International Convention on the use or threat of use of nuclear weapons, The decisions made by the General Assembly dealing with nuclear weapons indicate that there is a basis for the use of nuclear weapons in the debate between supporters and opponents on the legality of the use or threat of use of nuclear weapons. These countries have also stated that the non-use of these weapons since 1945 is not based on the existence of a customary rule. There were no circumstances in which the use of these weapons would be beneficial. In light of this division, the Court noted in its advisory opinion use of nuclear weapons or the threat of using them in1996 as a general rule[129]. Decisions of the General Assembly, even if they do not enjoy the legal obligation, sometimes have the effect of establishing the rules.

2.6.6 Security council

This draft resolution was presented by the United States of America, the former Soviet Union, the United Kingdom, France and China, the five permanent members of the Security Council. The Security Council recognized in this resolution the legitimate interest of non-nuclear-weapon States parties to the Nuclear Non-Proliferation Treaty That the Security Council and the five permanent members of the Council should take immediate measures in accordance with the provisions of the Charter of the United Nations, and in paragraph 8 of the resolution urged all States to continue negotiations in good faith on effective measures related to nuclear disarmament, The conclusion of

[128] A series of resolutions and decisions adopted by the General Assembly, fiftieth session, New York, 1995
[129] Ibid 122.

the Treaty on General and Complete Disarmament in International Control is effective. In fact, Resolution No. 984 of 1995 did not reduce the concern of non-nuclear-weapon States about providing negative assurances and ensuring that they do not use or threaten to use them[130].

2.6.7 International court of justice (ICJ)

United Nations General Assembly and the World Health Organization launched requests to the International Court of Justice (ICJ) in 1996, against the devasting effects of NWs. Such requests are rational and require huge attention especially considering that they have been part of the most dominating issues in the academic fraternity[131]. This section looks at how the ICJ has been handling matters pertaining to the use of NWs and how it regards efforts by North Atlantic Treaty Organization (NATO) and the USA towards NWs. The basic argument that will be laid in this section is that the ICJ is possibly not willing to change its stance towards NATO and USA's approach towards NWs. However, this section will seek to highlight that the ICJ has a significant influence on the conventional use of force and advisory opinion mechanism with the sole aim of highlighting the illegalities that surrounded by the use of NWs[132]. It was noted that efforts by the WHO-led to the ICJ being involved in matters involving the use of armed conflicts and towards dealing with environmental effects and health posed by NWs. The question was however based on the need to determine whether the use of NWs was justified under international law or not. It was however concluded that the ICJ has the capacity to exercise its discretion to decline to provide an opinion because of the unusual character of the question that had been presented.[133] Such requests were based on what is termed a hypothetical question and this did not relate to other requests that had been previously made to the ICJ. For example, in the 1971

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[130] Security Council Resolution 984 (1995), New York: United Nations, A\RES\984.11, P2April 1995.
[131] Ibid, 173.
[132] Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996, p. 226, International Court of Justice (ICJ), 8 July 1996, available at: http://www.refworld.org/cases,ICJ,4b2913d62.html [accessed 6 March 2018]
[133] Ibid,

Namibia case, the Court dealt with the dispute over the South African occupation and administration of the territory of Namibia.

There are also concerns about the effects of NWs on the environment and such is governed by the international environmental law whose principles that are often violated through the use of NWs[134]. But questions were placed why these rules were not applicable during periods of war and the USA provided answers to these questions citing that these were evaluated based on the concepts of proportionality[135]. Also, it is believed that all the applicable environmental laws were also embodied in the concepts of proportionality[136]. But it reality, it can be noted that there were actually no existing laws that would govern the use or NWs against environmental damage but rather a military advantage served by the method of warfare.[137]

The international court of justice Advisory opinion on legality of use or threat Nuclear Weapons On the basis of the request made by the United Nations General Assembly to the International Court of Justice in its resolution 49/75, the International Court of Justice issued its advisory opinion on 8 July 1996, which concluded that "the threat or use of nuclear weapons will generally Contrary to the rules of international law applicable in armed conflicts and to the principles and rules of humanitarian law in particular.[138]

The most important consequences of the advisory opinion of the ICJ on the legality of the use of nuclear weapons can be summarized as follows:

1. The Court has not settled its position on the question of the legality of the threat or use of nuclear weapons in the case of legitimate defence. The Court concluded that, at the present time, international law and the facts held by the Court cannot be determined if the use or threat of use of nuclear weapons in

[134] Ibid, 174.
[135] Ibid.
[136] Ibid.
[137] Bergkvist N-O, *Nuclear Explosions 1945 -1998* (2000).
[138] The follow-up to the Advisory Opinion of the International Court of Justice on the Legality of the Threat of Nuclear weapons,

the case of legitimate defence, when the right of a State to remain subject to the prohibition;

2. The most important effect of the Court's advisory opinion is its declaration that there is no law governing the subject, thus ignoring the 1968 Nuclear Non-Proliferation Treaty (NPT), and disregarding the commitment of 183 States at the time to apply a comprehensive warning on the consequences, acquisition, stockpiling, testing and use of nuclear weapons[139]
3. The Court has developed an unknown situation in relation to the existence of the State in the extreme circumstances of self-defence, in which the survival of the State itself is in jeopardy, the meaning of the maximum circumstance has not been clarified from the circumstances of self-defences, That the existence of the State is in real danger, but that the existence of the State is at risk only, that is, the potential danger.
4. The Tribunal has tended to favour the political nature of the matter before it under the dictates and guidance of the major nuclear Powers, making the Court's discretionary opinion politicized and thus repeatedly circumventing the principles of international humanitarian law, sometimes noting that: "There are no international legal norms guaranteeing the illegality of the Court The use of nuclear weapons "and at other times considered that the use of nuclear weapons took into account and guaranteed many principles such as the rights of neutral States, the rights of civilians, civilian objects and the environment during international armed conflicts[140]

2.7 Conclusion

The lack of agreement on a comprehensive nuclear-weapon-bans treaty is entirely consistent with chemical and biological weapons, and humanitarian principles may have some impact on the negotiation of comprehensive CBW treaties. However, these

[139] IHL Advisory Opinion and ICJ Legality of a Threat or Use of Nuclear Weapons. <https://www.icrc.org/ar/publication/Ihl-advisory-opinion-icj-legality-threat-or-use-nuclear-weapons#> accessed 25 December 2018.
[140] Ibid 121

fundamental principles have always been inferior Strategic security concerns The major military forces in the world are ready to relinquish the possession of chemical and biological weapons, but are not yet ready to do so for nuclear weapons. Humanitarian principles have continued to affect the negotiating parties each of the three categories of weapons[141].

[141] Ibid

CHAPTER THREE

THE IMPACT OF NUCLEAR WEAPONS

3.1 Introduction

Nuclear weapons have numerous and severe effects as highlighted in the introductory part of the study. Nuclear weapons are fundamentally different from conventional weapons because of the vast amounts of explosive energy they can release and the kinds of effects they produce, such as high temperatures and radiation. The impacts of a nuclear explosion depend on many factors, including the design of the weapon (fission or fusion) and its yield; whether the detonation takes place in the air (and at what altitude), on the surface, underground, or underwater; the meteorological and environmental conditions; and whether the target is urban, rural, or military[142]. The world had seen many effects after drooping nuclear bomb over Hiroshima and Nagasaki in 1945, despite killing and injuring thousands of peoples there was big impacts of environment and human's health, the weapons cause many kinds of diseases and sicknesses addition of destroying everything and collapse economies and infrastructures. Therefore no doubt that the owner of the weapon with those powers has a mass power and domination over others and this made causes conflicts between states who have and nuclear weapon with whom does not or states have them but don't want to another state to have or develop them. Sometimes there was

[142] ICJ, 'Legality of the Threat or Use of Force of Nuclear Weapons' (1996) Vol 3..

already conflict between two sides but nuclear weapon or nuclear power had made it deeper and more prolonged. it's our subject to a point in this chapter.

3.2 The Impact of Nuclear Weapons on the behaviour of States and its Adversaries

One of the most notable effects of a nuclear weapon is on the behaviour of States and how they will continue to behave in the future. Generally, the decision to acquire nuclear weapons by a state might be based on the need to deal with a particular dispute[143]. This is usually because the decision to acquire nuclear weapons is possible because a state's security position would have been compromised. Hence, acquiring nuclear weapons is believed to be the best way to safeguard the nation and make sure that it is free from threats of war that may compromise the security of the nation as well as the lives of its citizens[144]. There are, however, suggestions that the acquisition of nuclear weapons can be done for status quo reasons[145]. This implies that a nation may acquire a nuclear weapon so that it can be regarded as one of the powerful nations in the world that has nuclear weapons. All these motives for acquiring or possessing nuclear weapons tend to have important implications for the behaviour of a state whether in the short term or long term. This section, therefore, seeks to examine how the ability to possess nuclear weapons will influence the behaviour of both the state that has acquired nuclear weapons and the behaviour of those that do not have nuclear weapons possibly in response to the acquisition of nuclear weapons by another state. This section also seeks to look at how such actions influence the number of adversaries to a state.

Foremost, it is often believed that nuclear danger is the main reasons why nations choose to own nuclear weapons[146]. This action of responding to nuclear danger is therefore what governs the behaviour of a state. In most cases, when the nuclear danger is so high, states are sometimes forced into acquiring and possibly using a nuclear weapon either by testing or launching an attack as a counter response to

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[143] Ibid.
[144] Ibid.
[145] Clarion Project Report, 'Fact Sheet the Iranian Nuclear' (2006) 1.
[146] Ibid.

security threats. When a state is at a point of danger, it may be forced to overlook the dangers of nuclear weapons[147]. The dangers of nuclear weapons are believed to have been highly evident during the cold war and this is thus considered to be a learning curve for all the nations that desire to use nuclear weapons or possibly risk to cause a nuclear warfare[148]. This is because the magnitude of damage, number of casualties that were recorded and the level of repercussions suffered were so high. For instance, the number of people who died as a result of nuclear-related cold war incidences is believed to have surpassed the 5000 deaths mark[149]. This can also be evidenced by the number of people who were displaced and became homeless, the environmental damages that were experienced and the economic drawbacks that were suffered in the process[150]. These kinds of effects are what is known as the Cold War learning process[151]. Hence, previous experience in nuclear-related effects is considered as well to be a principle element that governs the behaviour and conduct of states towards the use and effects of nuclear weapons.

The behaviour towards owning and using nuclear weapons is often influenced by the responsibility that often comes with nuclear weapon ownership. It is not an easy thing to own a clear weapon and the decision to even start thinking of owning nuclear weapons tends to attract international attention and retaliation from other powerful and neighbouring states[152]. This is because by owning a nuclear weapon, other nations will consider that security status as being compromised and hence will fight against the ownership of such nuclear weapons[153]. Other nations are more likely to engage in retaliate behaviour to own a similar or possibly more advanced nuclear weapon.

When a nation faces retaliate responses from other states as a result of it owning nuclear weapons, it might be forced to step up its nuclear ownership programs and thus further pushing towards another nuclear conflict and threatening world peace.

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[147] Nuclear Abolition Forum, 'International Humanitarian Law And Nuclear Weapons Examining the Humanitarian Approach to Nuclear Disarmament' (2004) 3 Vol. 1.
[148] Ibid.
[149] Ibid.
[150] Ibid.
[151] Johns Lionel S and Et Al., 'The Effects of Nuclear War'
[152] Jusad Bellum, 'ICJ ' S Advisory Opinion On Nuclear Weapons' (2006) Vol. 1.
[153] Ibid.

This kind of response is usually associated with hostile behaviour against any state that tries to interfere with that state's nuclear weapons programs[154]. But what is of more concerned is that the behaviour of other states is more likely to change as they will even start to consider to own nuclear weapons. On a broader angle, the state that is now in possession of nuclear weapons can even threaten other nations because of its improved military capacity and this can stir tensions in that specific region which can possibly lead to an international armed conflict[155].

The behaviour and response to tensions tend to change with the level of military capabilities and develop a state has attained[156]. States with nuclear weapons can even feel that they are now powerful and can change their approach and response to tensions, disputes and conflicts. States with more nuclear or military power are often considered to be always capable of taking a more proactive approaching towards handling disputes[157]. This is because they have a better position to leverage themselves in any tension or dispute related circumstance. As a result, its behaviour towards preventing the effects of another nuclear war may differ. Hence, deductions can be made that nuclear weapons have a significant impact on the behaviour of both states owning nuclear weapons and those that do not have nuclear weapons. Deductions can also be made that nuclear weapons tend to influence how a state handles tensions or disputes with other states and this influence possible outcomes of the tensions or disputes escalating into a nuclear war.

3.3 The Impact of Nuclear Weapon on International Conflicts

The term of international conflict usually means conflict between two states for example India and Pakistan or state with a group in another state for example US with Taliban in wAfghanistan, or conflicts between people and organizations in different nation-states it also applies to inter-group conflicts within one country when one group

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[154] International Attomic Energy Agency, 'Treaty on the Non-Prolifiration of Nuclear Weapons' 11 <http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc140.pdf.< Accessed 13 November 2017.
[155] Ibid.
[156] Ibid.
[157] Ibid.

is fighting for independence or increased social, political, or economic power for example, Sudan/South Sudan, Iraq, and Syria[158].

The main purpose here is the role of a nuclear weapon in any kind of these conflicts, does it have any role? Haw and/or where? So we take a brief conflict between India and Pakistan as an example for clarifying the doubt and answer the question. First, it needs to point to the history of the conflicts between those countries and the main reasons then discuss a playing role of a nuclear weapon in deepening and prolonging of conflicts between them.

Nuclear weapons have a tendency to change the landscape of international conflicts. This is mainly because the nature of influence rests on who owns the nuclear weapons, who do not have nuclear weapons and who does not want a particular state to have nuclear weapons. It is in respect of these aspects that examinations will be made on how nuclear weapons affect international conflicts.

The question of who owns the nuclear weapons tend to affect or influence international conflicts. First of all, ownership of nuclear weapons is determined by the motive behind such ownership[159]. Which implies that motives behind the ownership of nuclear weapons influence the impact of nuclear weapons on international conflicts. That is, a state may decide to own nuclear weapons so as to improve its military and security position. This usually occurs when such a state has been facing possible security threats or is foreseeing security challenges from other states[160]. The greater the level of threats the more a state will desire and possibly step up efforts to own and use a nuclear weapon through testing activities as has been noted with North Korea which has been engaging in a series of nuclear tests. This has stirred international conflicts in the region with South Korea launching similar tests and weaponry exercises. Other nations such as Japan also raised alarms to such tests. There are also circumstances

[158] Cate Malek, International Conflict, (2003), <available at www.beyondintractability.org>Accessed 13 November 2017.
[159] Don Mackay, 'The Testing of Nuclear Weapons under International Law' [2014] Nuclear Weapons Under International Law 292
[160] Ibid.

which are associated with the ownership of nuclear weapons for status quo as noted above. Such circumstances are more likely to cause leverage and uncooperative behaviour by the state which owns or now owns nuclear weapons as it feels that it is now on a better level to with other political and economic powerhouses to negotiate and hence the chances of international conflicts whether the armed or non-armed conflict will be high[161].

Usually, states that do not have nuclear weapons are considered to be non-influential when it comes to nuclear weapons regulations and control exercises[162]. This is because most nuclear weapons agreements and regulations have been made relatively by states which have nuclear weapons. Examples include the Iran Nuclear War Agreement signed between Iran and the United States[163]. Hence, the influence of nuclear weapons on international conflicts depends on how these nations use these weapons and respond to tensions and disputes. Thus, any potential between these nations is by all chance going to lead to an international conflict. This will trigger a response from their allies and thus worsen the situation to a possibly an international armed conflict. States which do not have nuclear weapons usually cooperate with the imposed measures by those nations which have nuclear weapons by circumstances are so high when non-nuclear owning states have been retaliating to imposed measures or dictated moves by states owning nuclear weapons and this has been triggering international conflicts, notably international non-armed conflicts.

When it comes to the idea of who does not want a particular state to own a nuclear weapon, observations will be made that this context tends to stir a lot of international conflicts. Firstly, major economic powerhouses such as the USA have been considered to be against the move of other states owning and using nuclear weapons[164]. Hence, they will oppose such a move either by international verbal abuse or threats and sanctions. All these have been well known for causing international conflicts. In fact, by their nature, they already consist part and parcel of international

[161] Atwood David and Munro EJ, 'Security in a World without Nuclear Weapons: Visions and Challenges' (2013) Vol. 101.
[162] Ibid, 123.
[163] Dunworth Treasa, 'The Treaty on the Prohibition of Nuclear Weapons' (2017) 21 ASIL Insights 1
[164] Ibid.

conflicts. Also, neighbouring countries will also strongly oppose such efforts and can start to engage other nations as part of efforts to ensure that they can have their own weapons. This will spoil into an international armed conflict that attracts other nations who are against the idea of continued nuclear weapon development and ownership[165].

3.3.1 India / Pakistan Conflict

The conflict between India and Pakistan is one of the most complex situations in modern international politics. Despite the ideological, cultural, and religious difference between them, and both states have nuclear arsenals at their disposal made the situation even more complex. Both of India and Pakistan actually became independent from Great Britain simultaneously in 1947 as the result of a long negotiation process, those areas that were more than 75% Muslim were to become known as Pakistan, while the rest of the land was to be India. The region of Kashmir, however, was known as a “Princely State”, and was left free to decide which country to join.[166]

The first war started at the time when Pakistan sent emissaries trying to convince Kashmir to join Pakistan, and India saw this as an invasion, and war erupted. This first war for Kashmir was not the last, there are two other war and several skirmishes. The second war between India and Pakistan began in 1965 when Pakistan attempted to create a rebellion in Kashmir and Jammu by crossing soldiers of the border as plain clothed civilians. India, once it discovered the plot, responded in force, with a full-scale military assault on West Pakistan, though the war lasted less than 20 days, thousands were killed and the war featured one of the largest tank battles in history. Another war erupted in 1971 when India moved to aid Bengali rebel forces in East Pakistan, prompting West Pakistan to marshal a large-scale attack against India. The war, though only lasting 13 days, resulted in the highest amount of death of all the conflicts between the two states, and an untold amount of horrific atrocities against innocent civilians.

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[165] Ibid, 125.
[166] Ibid, 127.

India tested its first nuclear weapon in May of 1974, calling the test as a “peaceful nuclear explosion. The operation was under name of “Smiling Buddha”, the nuclear testing was very close to the Pakistani border and sent a clear message to the Pakistani government from India. Pakistan promptly bought a nuclear facility from the French and began its own nuclear program soon after, finally tested its own nuclear weapon on May 28th, 1998. Both India and Pakistan now had nuclear weapons[167]. Now that both India and Pakistan have nuclear arsenals, conflicts between them were palpable. In 1999, Pakistani troops crossed the Line of Control and occupied the Indian territory of the Kargil district. India retaliated with a large military offensive to root out the Pakistani invaders. This quickly escalated into a larger conflict, becoming the first and only war in history between two states that owner nuclear weapons, formally known as the Kargil War. Luckily, a great deal of international pressure led to both sides deescalating the conflict and the conflict quickly ending after a few months without becoming a full-scale war.[168]

In another side, both India and Pakistan spent a mass amount of money and energy for achieving nuclear submarines When we talk about nuclear submarines, means two different, but related, things: what powers the subs, and what kinds of weapons they carry. The US, Russia, the UK, France, and China have nuclear-powered submarines that are also armed with nuclear weapons. Israel is thought to have submarines that are armed with nuclear warheads, but they’re powered by diesel-electric generators. That matters because those types of submarines, unlike the nuclear-powered ones made by America and other major world powers, are noisy and thus easier to track and can generally stay underwater for only a week or two at most. [169] India has spent billions of dollars to join that exclusive club and came close to disaster. The $2.9 billion Arahant nearly sank a few months after its commissioning when a hatch was left open and seawater flooded the propulsion compartment.

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[167] UN, ‘United Nations Conference to Negotiate a Legally-Binding Instrument to Prohibit Nuclear Weapons: Second Season’ [2017] Item 9, A/CONF.229/2017/L.3/Rev.1 Draft treaty on the prohibition of nuclear weapons 2017.
[168] Ibid.
[169] Ibid.

The embarrassing mishap, blamed on “human error,” was hushed up by the ministry of defence. Even India’s senior political leadership was kept in the dark. The boat has been undergoing extensive repairs since February 2017, according to a January 8 report in the Hindu newspaper, which was the first to report the entire saga. Meanwhile, India’s “other” nuclear submarine, the INS Chaka an Akula-class submarine on loan from Russia primarily for training purposes and in February, Russia sent India a $20 million bill for repairs. And Pakistan, also announced last year that it had successfully test-fired a submarine-launched cruise missile capable of carrying a nuclear warhead. That was a clear message that the country wanted to start arming its submarines with nukes. It had already signalled that it was willing to put nukes on some of its surface ships.

The problem is that putting nukes at sea safely weakens the chain of command and control over the weapons, which means the risk of an accidental exchange of fire or full-on nuclear war between India and Pakistan will increase exponentially.[170]

There are those who are vocally opposed to the nuclear weapon situation in the Pakistan and Indian situation as well. Opponents of the “stability-instability paradox” believe that it encourages small conflict greater than it deters large-scale conflict, and was a direct cause of the terrorism in the Kashmir province, and for the conflict that erupted in Kagil. Critics also emphasize that situations that result from the “stability-instability paradox” are dangerously associated with the concept of “brinksmanship”. Brinksmanship, the concept of pushing a hazardous situation until it teeters on the point of becoming an extremely dangerous one. The “Stability-Instability Paradox” can result in “brinksmanship” because states, such as Pakistan and India, may push the boundaries of the “nuclear threshold”, and may accidentally cross the line, which could be devastating. [171]

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[170] Ibid, 131.

[171] Mackay Don, ‘The Testing of Nuclear Weapons under International Law’ [2014] Nuclear Weapons Under International Law 292

3.4 The Dangers of Nuclear War

The dangers that are posed by nuclear weapons place concerns on the need to deal with nuclear weapons usage and possibly regulate ownership of nuclear weapons. It, however, impossible to talk about the dangers of nuclear weapons without looking at the Hiroshima incidence which involved the attacked of a military base in Hiroshima in 1945[172]. The incidence went on to kill thousands of civilians and its effects lasted for month three months[173]. With such an incidence forming a strong base upon which the dangers of nuclear war can be established, it is therefore imperative that nuclear wars tend to pose a lot of adverse and undesired negative consequences on the human race. Human beings are the ones that suffered a lot from nuclear war. With issues ranging from severe death tolls, a lot of humans lost their lives as a result of the nuclear attacks. This is because nuclear weapons have a tendency to kill people in and above the radius of more than 500 metres

The other thing is that nuclear wars have been considered to be a prime cause of climate changes with Nuclear Winter being the dominant effect[174]. Nuclear winter was induced by increases in nuclear energy being released into the atmosphere[175]. Furthermore, nuclear weapons have also been noted to be causing a lot of smoke and anomalous cold as a result of the fire that is produced by the nuclear weapons[176]. As a result, ideas are still being put forward that the potential world war III is more likely to involve the intense use of nuclear weapons[177].

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[172] Ibid.
[173] Ibid.
[174] Ihee Kimura and Shigene Khomota, 'Hiroshima- Nagasaki' [2006] Etudes photographiques 1
[175] Ibid.
[176] Ibid, 72.
[177] Ibid.

CHAPTER FOUR

NUCLEAR WEAPONS AND DISARMAMENT CHALLENGES

4.1 Treaty on the Non-Proliferation of Nuclear Weapons

4.1.1 Origins of the NPT

Ever since the USA tested the first nuclear weapon in 1945 at Alamogordo, New Mexico, there have been significant concerns about the ravaging effects of nuclear weapons and how to curb their undesirable destructible consequences. Efforts to deal with the ravaging effects of nuclear weapons have also been surrounded with mixed feelings with some ideas arguing that it is important to curb the effects of nuclear weapons but care must also be taken to ensure that it also used to ensure and safeguard peace[178].

However, efforts to deal with the effects of the 1945 USA nuclear weapon were considered to have been fruitless. This follows a series of efforts that were put in place to curb the use of destructive weapons such as nuclear weapons by Baruch Plan in 1946 which was sponsored by the USA[179]. The Baruch Plan also placed efforts towards seeking ways of internalising the utilisation of nuclear energy. Its failure was brought to the limelight when the number of nations owning nuclear weapons

[178] Nikitin Mary Berth, 'The Nuclear Ban Treaty: An Overview' (2017) 2017.
[179] Ibid.

increased and by the year 1952, a total of three states were now in possession of nuclear weapons.

Despite, the challenges that were faced to curb the use of nuclear weapons, there was a considerable effort that was being put towards ensuring effective control of the unnecessary use of nuclear weapons. This can be evidenced by the establishment of the International Atomic Energy Agency (IAEA) and the Atoms for the Peace initiative, in the 1950s by Dwight Eisenhower the US president by then. Still, with such efforts being in place, it never stopped the use of nuclear weapons and it was noted that two nuclear weapons were detonated by the year 1964[180].

When there are preventive measures to curb the use of nuclear weapons and still countries are continuing to test and use nuclear weapons, one can still contend that such measures are not effective that more and increased effort should be towards strengthening the available statutes and measures to deal with the unrestricted use of nuclear weapons. Even though, by the year 1963, the then US President John Kennedy could foresee a world with more than countries that will be in possession of nuclear weapons[181]. As a result, the development and use of nuclear weapons were considered to be the biggest imminent form of threat to world peace[182].

Such efforts to deal with issues of nuclear weapons started back tracking in the early 1960s but the year 1961 saw new efforts being made towards preventing any move to transfer or acquire nuclear weapons. This was accomplished through the singing of the 1961 United Nations General Assembly Resolution[183]. This created a huge platform upon which other efforts to deal with issues surrounding the use of nuclear weapons could be addressed. For instance, the nuclear non-proliferation treaty of the Geneva disarmament conference which was coined in 1965 was built on the

[180] Ibid.
[181] Bell Miller S and Miller L. Nicholas, 'Questioning the Effect of Nuclear Weapons on Conflict' (2015) 59 Journal of Conflict Resolution 74.
[182] Ibid, 142.
[183] Babbage Maria, 'W Hite E Lephants : U P the B Omb and the I Mplications for N Uclear' (2004) 15 Vol. 1.

underlying foundation of the 1961 United Nations General Assembly Resolution[184]. By early July 1968 March 5, 1970, three of the five nuclear-weapon states and other 43 Parties, penned what was termed the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)[185].

4.1.2 The Three Pillars

The NPT was built on what can be termed the three pillars of non-proliferation, disarmament and peaceful uses and these are herein discussed as follows;

- *Non-proliferation:* This principle through Article I restricts efforts by any state to sell or give any nuclear explosive devices or weapons to other states[186]. It also regulates efforts that may trigger another state into buying or manufacture nuclear weapons.

  Proliferation also states that all non-nuclear-weapon states will be bind by a legal oath that they will not in any way own any nuclear explosive devices (NEDs) or nuclear weapons (NWs). This also included efforts to acquire NWs and all these stipulations were being regulated by Art II of the NPT which even went on further to state that non-nuclear-weapon states should not look for support to produce or acquire NWs[187]. The NPT placed further or stiffer restrictions on non-nuclear-weapon states to produce, acquire or expand efforts to own NWs as it forced them to that their ownership and use of NWs is towards promoting peace in compliance with IAEA standards as stipulated by Art. III of the NPT.
- *Peaceful Uses:* Are addressed under Art. IV and states that states should cooperate towards promoting world peace and hence should regulate the use of NWs in line with non-proliferation demands. This can thus be said to offer the right to state to produce and use NWs but on the condition that they will help safeguard and enhance world peace.

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[184] Ibid.
[185] Ibid.
[186] Ibid, 145.
[187] Ibid.

- *Disarmament:* Is simply efforts that were placed to ensure that states will stop the nuclear arms race and eventually disarm all their NWs.[188] Hence, the NPT through Art IV can be said to advocating good-faith towards establishing sounds efforts to disarm and stop the nuclear arms race.

The striking feature of these pillars is that they are well connected with each and they all mutually support each. Thus, efforts to disarm as built on these principles can create and boost cooperation towards promoting world peace by regulating the use of NWs. At the same time, they make it possible for those that own nuclear energy and weapons to positively use them in a way that will promote world peace. However, it must be noted that the ownership of NWs requires a more non-proliferation obligations. It can also be said that efforts to promote compliance and non-proliferation hinge on achievements made towards disarmament.

4.2 NPT Successes and Challenges

Ever since the year 1970 when 43 Parties agreed to the stipulations of the NPT, the number of states that agreed to the it grew to about 190 Parties and thus making it one the most complied to arms control agreement or non-proliferation treaty[189]. Drawbacks were however encountered when North Korea pulled out of the NPT while Pakistan, Israel and India refused to oblige to the requirements made by the NPT[190].

4.2.1 Successes

The NPT can be said to managed to achieve a great deal of success towards promote world security and peace. This is because it based its objectives on the idea that an increase in the production, acquisition and ownership of NWs would threaten efforts to strengthen world security and maintain world peace. Hence, it can be said to have strongly and effectively developed legal frameworks, international cooperation, export controls, safeguards and other measures to help prevent the proliferation of NWs. This can be traced to efforts and actions done by Russia and the USA soon after the

[188] Ibid, 145.
[189] Ibid, 147.
[190] Ibid.

Cold towards curbing the nuclear arms race which saw them lowering their level of ownership of NWs and this has had huge positive implications on world peace[191].

4.2.1.1 Security

As it stands, the NPT can be said to be a worldwide agreement that has a legal binding capacity to restrict the proliferation of NWs. More so, its values and norms that inscribed in the concepts of non-proliferation and broader non-proliferation that have to refute ideas that by the end of the 20th century more than 20 states will be in possession of nuclear weapons[192]. This is because it has huge effects against the proliferation of NWs and this reinforces efforts to keep each state secured and the world at large at peace. It also acts as a demotivator for states that do not have access to NWs to own them and as it tackles almost all the possible areas and opportunities that may be exploited by non-nuclear-weapon states to acquire or develop NWs. States. In addition, its efforts can be said to contribute the disputes settlements which can mostly now be done in a peaceful manner without the use of arms. It was noted that the approval of the NPT resulted in new measures being adopted to curb other states from embarking on efforts to develop new NWs. This can be evidenced by actions undertaken by South Africa which ceased its drive to develop NWs and complied to the NPT and it is now being considered to be a non-nuclear-weapon state[193]. This can also be supported by the handling of NWs to Russia by the successor states of the Soviet Union and this again represented a form of compliance to the NPT. Moreover, the NPT can be said to have contributed towards promoting peace and security as it advocated that non-nuclear-weapon states desist using NWs within their territories. Alternatively, it can be said to have resulted in the creation of the currently existing five nuclear-weapon-free zone treaties.

4.2.1.2 The Non-proliferation Regime

Global non-proliferation programs can be said to be built on the foundation of the NPT with notable examples such as the UN Security Council Resolutions (2009) and the

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[191] Wallensteen Patrick, 'Comments Invited Human Security and the Challenges of Armed Conflict By' [2007] East Asia 1.
[192] Ibid.
[193] Gilla Steven, 'The Nuclear' (1970) 169 1963.

International Atomic Energy Agency's (IAEA) being among the list. The IAEA is concerned with dealing with matters involving the bilateral and multilateral nuclear cooperation agreements[194]. Thus, there is a strong interrelationship that exists between the NPT and other statutory laws since Art. III of the NPT restricts the export of NWs to non-nuclear-weapon states and provides more room for non-nuclear-weapon states to oblige to efforts to preserve peace[195]. Art. III thus, seeks to ensure that all states confine to IAEA standards and obligations especially in line with the Nuclear Suppliers Group and the Zangger Committee which govern NWs export controls[196]. These two bodies have made it possible to restrict the transfer of NWs through exports and also made possible for to use nuclear energy in a peaceful way. Efforts was also placed towards improving the effectiveness of the NPT in curbing the irresponsible use of NWs through the UN Security Council Resolution 1540 (2004) which placed strong efforts towards curbing the development, transfer and use of weapons of mass destruction[197].

4.2.1.3 Peaceful uses

The NPT can be said to have contributed a lot in terms of preserving world peace and its inception and operational lifetime of more than 40 years, there has been a huge enjoyment of peace from the restricted use of NWs. This is because the restricted use of NWs has had positive contributions towards environmental management, water resources, medicine, disease prevention and food security. As a result, it can be said to have resulted in the improvement in the safety of the world population.

It has been noted that there are more than 30 states that have nuclear power reactors and this makes them capable or be in a strong position to cater for at least 20% of the world's electricity demands[198]. In addition, such an ability grew in 2009 when an estimated total of more than 50 power reactors was presumed to have been constructed and put into effective use[199]. As it stands, there are more than 70 states

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[194] Ibid, 155.
[195] Ibid, 157.
[196] Ibid.
[197] Swoboda Hillary and Marinus Wiersma J, *Peace and Disarmament: A World without Nuclear Weapons?* (2009).
[198] Bergkvist N-O, *Nuclear Explosions 1945 -1998* (2000).
[199] Ibid, 135.

are in the process of developing nuclear power energy programs and such is being done in compliance with civilised nuclear cooperation measures and guidelines.

4.2.1.4 Disarmament

Any effort to curb the increased development and use of NWs can be limited and prevented by the NPT and this is because the NPT stands as the sole treaty that regulates the use of NWs. In conjunction with Art. IV, the NPT makes a daunting task to develop new NWs. With this in mind, considerations can be made that the NPT contributed towards ensuring world peace following the end of the nuclear arms race between the Soviet Union and the USA[200]. Such was a major development towards efforts to deal with the continued increase and use of NWs and this was commended and considered to be a huge step towards improving the effective use of other treaties and laws that reinforce the use of the NPT[201]. Efforts to disarm are also done in line with stipulations made that states must demonstrate good faith towards disarmament. As a result, there are now two additional treaties that prohibit biological and chemical weapons. This was supported by observations made that nuclear weapon states were committed to reducing their NWs ownership levels[202]. Such can be evidence by measures undertaken by the USA to downsize its plutonium and uranium NWs stock and such has been achieved through a series of unilateral actions and negotiated agreements [203].

4.2.2 Challenges

When looking at ideas of challenges facing the NPT, considerations can be made based on the nature of the NPT which can be said to have been static a lot. For instance, one can easily point that the inception and use of the NPT have been subject to a lot of amendments and this has been necessitated by the amendments that were

[200] Ibid, 138.
[201] Ibid, 140.
[202] Ibid, 148.
[203] Ibid.

made to ensure that it remains valid and effective in dealing with issues pertaining to the use of NWs.

4.2.2.1 Noncompliance with Non-proliferation Obligations

Just like any other treaty, non-compliance is one of the key issues that affect the effectiveness of treaties and international laws. With regards to the NPT, considerations can be made that the major obstacle has been noncompliance with non-proliferation obligations by states that do not have NWs[204]. It is in most cases difficult to control non-nuclear weapon states and ask them to desist from developing or using NWs when there are states with NWs. It is therefore important for the international community to ensure compliance with the NPT is maintained at all costs so at top boost the effectiveness of the treat in dealing with existing and potential NWs issues.

- *North Korea:* Is on the nations that are considered to have imposed a huge challenge on the effectiveness of the NPT. This follows its decision to pull out of the NPT in 2003[205]. As it stands, it is still believed that North Korea has not managed to oblige to the stipulations of the NPT to adhere to IAEA standards as well as to halt all efforts to develop and produce NWs. UN Security Council Resolutions made a decision that North Korea be sanctioned for not obliging to the requirements of the NPT to halt all NWs production programmes as it even went on further to test NWs in 2006 and 2009[206].
- *Iran:* Has on the other hand been accused of secretly engaging in NWs production programmes and these programmes are presumed to have not been reported by Iran[207]. Enrichment accusations have also been levelled against Iran and contentions are high that Article XII.C. be used to charge Iran for noncompliance[208]. In doing so, the UN Security Council imposed three binding

[204] Ibid, 150.
[205] Ibid, 154.
[206] Ibid, 153.
[207] Nikitin Marry Bertha D, 'The Nuclear Ban Treaty : An Overview' (2017) 2017.
[208] Ibid.

resolutions against Iran's enrichment programmes and two as sanctions for non-compliance[209].

4.2.2.2 The Safeguards System

Safeguards have been in huge use to help prevent the continued use and development of NWs but soon after the 1990-1991 Gulf War, it was still observed that other states had continued to engage in NWs production activities as well as cessation of NWs activities[210]. This can be supported by observations made against Iraq which contend that Iraq acted against the application and the need to comply to safeguarded systems and went on further to pursue its NWs production agenda[211]. This exposed the limitations of the NPT as ideas and observations could be made that other nations were acting against the proposed safeguard systems. This can further be supported by allegations that were made against Libya was also engaging in similar acts but later abandoned them in 2003 and conformed to the prescribed IAEA standards[212].

the international community learned that, despite the application of safeguards, Iraq had an extensive nuclear weapons program. International efforts dismantled that program, and Iraq today has successfully reintegrated into the nuclear non-proliferation regime. Libya has done the same after its December 2003 decision to acknowledge and eliminate its nuclear weapons program. It has cooperated fully with IAEA efforts to verify the scope of its nuclear activities and to ensure that any remaining facilities are fully safeguarded. Iraq also made similar efforts to disarm.

The good part about this is that it resulted in improvements being made which saw an Additional Protocol being introduced in 1997 by the IAEA[213]. Thus, states were now obligated to declare their nuclear activities and the IAEA when then expanded to account for other nuclear-related activities which were not previously accounted

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[209] Ibid.
[210] *Marshall Islands v. India (Obligations concerning Negotiations relating to Cessation of the Nuclear Arms Race and to Nuclear Disarmament)* [2016] ICJ GL No 158.
[211] Johns Lionnel and Et Al., 'The Effects of Nuclear War'
[212]Agency IAE, 'Treaty on the Non-Prolifiration of Nuclear Weapons' 11 <http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc140.pdf< .Accessed 11November 2017
[213] Ibid.

for. It is believed that by the year 2010, that Additional Protocols were ratified by a total of 98 states[214].

On the other hand, criticisms can be levelled against the IAEA safeguards system that it is not capable of handling a huge workload and does not have the required resources to continue it monitoring exercise[215]. This can be evidenced by ideas which contend that there is a growing demand for peaceful uses of nuclear energy and this has caused an increase in the development of nuclear sites. This further places huge and increased obligations on the IAEA and yet its financial capacity has remained the same or possibly low.

4.2.2.3 Global Expansion of Nuclear Power

With the level at which sustainable development, energy security and climate change concerns are taking toll in the world economy, efforts have shifted towards nuclear power. It is believed that an increase in the availability of nuclear power will go a long way towards promoting sustainable development, security and peace in the international community[216]. When examined properly, this can be foreseen to cause the problem of nuclear proliferation. Also, some states may pursue the production and use of nuclear power programmes that possibly sustainable such as fuel reprocessing and fuel reprocessing and yet the IAEA regards them as 'sensitive areas'. This problem can be dealt with through what are termed developmental mechanisms such as international fuel banks which are mostly not complex but are cheap and can promote the peaceful use of nuclear technology[217].

4.2.2.4 Abuse of the Treaty's Withdrawal Clause

Though North Korea withdrew from the NPT, it can be noted that the withdrawal process must also be accompanied by the necessary procedures as outlined by the NPT's Art. X[218]. however, withdrawal clauses have been subject to abuse especially

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[214] Affairs F and Division T, 'Comprehensive Nuclear-Test-Ban Treaty' [2008] History
[215] Ibid.
[216] Maloney Suzzane, 'Thinking the Unthinkable: The Gulf States and the Prospect of a Nuclear Iran' (2013) Vol. 3.
[217] Karlsen Joakim, 'Peace on Earth ?' (2013) Vol. 4
[218] Ibid.

those that have been considered to be violating the treaty's obligations[219]. Also, withdrawal by one state can also trigger other states to withdraw from the NPT as well and this can in some circumstances result in the termination of the NPT.

4.2.2.5 The Non-State Actor Threat

Ever since the widespread terrorist attacks that took place in the USA on September 11, 2001, there has been a significant outcry against the possession of NWs by non-state actors. One can argue and contend that if NWs are to fall in the hands of terrorists-non-state actors, the consequences will be so huge and devastating. This has attracted a lot of attention from the International Convention on the Suppression of Acts of Nuclear Terrorism, UN Security Council Resolutions 1540 and 1887, national efforts to prevent proliferation to non-state actors, and the IAEA's nuclear security program[220].

4.3 Deterrence Theory on the Impact of Nuclear Weapons

Efforts to examine the possible effects of nuclear weapons on the world can be examined using the deterrence theory. This theory contends that any party to a conflict can use its influence to deter another party from engaging in certain activities or from taking a certain a course of action[221]. Thus, when it comes to the issue of nuclear weapons, it can thus, be said that the deterrence theory seeks to examine how a state which is in possession of nuclear weapons can use them to prevent another state from taking a certain course of action. This theory also highlights that deterrence is nothing unless it yields the desired results. This implies that successful efforts to deter the use of nuclear weapons can be considered to be effective and fruitful is another state which is in possession of nuclear weapons desists from taking the intended course of action.

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[219] Ibid.
[220] Ibid, 173.
[221] Zagare, Frank C. "Reconciling Rationality with Deterrence: A Re-Examination of the Logical Foundations of Deterrence Theory." 2 (2004) Journal of Theoretical Politics 3

In other words, the deterrence theory looks at how a state will use its nuclear weapons to stop another state from either launching attacks using nuclear weapons or from using its nuclear advantage to take advantage of other states.

Since the main objective of the deterrence theory is to deter certain behaviour, it can be said that this theory deters wars, that is, it prevents war. This is because it dissuades other states from using nuclear weapons as they fear that other states will implicitly respond which can lead to a disastrous nuclear conflict with notable examples involving France and Australia over the testy of nuclear weapons[222]. However, deterrence requires that a state which is pushing for deterrence by in possession of the necessary back-up and ability to support its enforcement, especially in the event that it has been attacked. Thus, this theory can be said to be closely linked to the Mutually Assured Destruction (MAD), which contends that if two or more nations are to engage in a nuclear war, it will lead to the destruction of both nations[223]. Hence, deterrence can be said to be in two distinct parts which are;

1) Direct deterrence which is based on preventing an armed attacked from being launched from its territory.
2) Extended deterrence which seeks to prevent the use of nuclear weapons against another state.

What is more important about the deterrence theory is that it places emphasis on rationality through what is known as the rational deterrence. This is important because it highlights that it is important for states whether individually or collectively to consider whether their decision is rational before launching an attack[224]. Thus, any deterrence threat that is to be made then a credible decision has to be made based on what any state or international organisation consider as credible[225]. This implies that lack of credibility affects deterrence and little can be done to enforce deterrence when there is a lack of credibility. In addition, other states are less likely to intervene and enforce deterrence in the event that the decision has been considered to be lacking credibility.

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[222] Ibid 97
[223] Steinberg, Gerald M. (Aug.-Sept. 1994) “How failsafe is failsafe?” Technology Review Vol. 97, No.6 (Steinberg 1994)
[224] Ibid.
[225] Ibid, 196.

The decision to determine whether deterrence should be enforced is also based on four important factors and these are;

- **Military balance:** This is a huge element that has to be put into a lot of considerations. This is because deterrence is ineffective when states lack the necessary military capacity[226]. This can also occur when a state fails to accurately determine the military capacity of its opponent.
- **Bargaining power:** This is one of the most important things that influence deterrence and it is important to ensure that the state that is forcing towards deterring another state must be having significant bargaining and diplomatic power so as to discourage other states from engaging in potential attacks that may spill into a conflict. This is because opposing states can sometimes take the whole deterrence process as a 'bluff'
- **Reputation:** The reputation of a state plays an important role in influencing deterrence. States often look at another states' previous reputational experiences in similar conflict situations before deciding on enforcing deterrence[227]. For instance, if a state that is being forced into a point of deterrence has in the past proved to be in strong position to retaliate and attack when threatened, then this kind of reputation can actually stand as an ob sale towards enforcing deterrence.
- **Concerns and interests at stake:** Both parties often look at the stakes that are involved before deciding on whether to enforce deterrence or to retaliate towards the deterrence efforts. That is, if more things are at stake, then chances are high that the defending state is going to risk all it have to retaliate or act against the deterrence effort.

Important implications can be noted to exist when one looks at the deterrence theory. For instance, by arguing that a state has to use its nuclear weapons to stop other nations from carelessly using nuclear weapons or from oppressing or taking

[226] Ibid, 189.
[227] Ibid.

advantage of other states, deductions can be made that this theory is in actual fact in support of nations producing and owning nuclear weapons.

The other thing that can be looked at is that some analysts argue that this theoretical framework is not something on which we can base sound analysis and decisions on[228]. This is because the issue of rationality is mainly based on the perspective of states that are in possession of nuclear weapons. Yet in actual fact rationally is a subjective concept or principle and some states can actually be delusional or unstable which sees them engaging in the irrational use of nuclear weapons. This can be supported by what is currently being witnessed nowadays in which extremists' groups are engaging in radical terrorism. Honestly speaking, there is nothing rational about suicide bombing.

Also, malfunctions and accidental launches are bound to happen and hence this can actually contribute towards causing a nuclear war[229]. Moreover, the decision and control of nuclear weapons are assumed to lie in the hands of human beings whose judgement is considered to be infallible[230]. This can be evidenced by what took place in 1962 at the North American Air Défense NORAD after a false alarm was issued and yet the military had already prepared to launch an attack with nuclear readiness[231].

Either way, ideas which contend that nuclear weapons are necessary to promote world peace and stability have never been justified and proved right[232]. This is because nuclear weapons are believed to have been responsible for causing war and instabilities around the world.

4.3.1 The Role of Nuclear Disarmament Programs

There is a significant difference between disarmament programmes and prohibition programmes. It can be noted that disarmament programs are aimed at ensuring that NWS downsize their level of NWs[233]. Such has been the case when the USA

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[228] Ibid.
[229] Ibid, 170.
[230] David Edwards and Engdahl Osborne, 'How Does the Involvement of a Multinational Peacekeeping Force Affect the Classification of a Situation?' (2014) 95 International Review of the Red Cross 659
[231] Ibid.
[232] Ibid, 189.
[233] Ibid, 190.

downsized its NWs[234]. Such also managed to serve as a remarkable achievement in the world where the USA is considered a high esteemed superpower which often acts as the international police of the world. Other nations such as Libya and Iraq managed to follow suit and with such actions, it can be said that disarmament programs have had a significant influence on world peace and security. This is because so long as the number of states that are in possession of NWs remains high, then chances that any NWS will use it in other states will be so high. Thus, disarmament programs can be said to have managed to prevent the unnecessary future use of NWs.

4.3.2 The Role of Nuclear Prohibition Programmes

Nuclear Prohibition Programmes, on the other hand, seek to restrict any effort to produce, acquire or even use the NWs[235]. Such programs have the same effects as disarmament programs. In the sense that they all aim at preserving international peace and security the difference being that disarmament programs focus on reducing the number or level of NWs while prohibition restricts any single mode to develop, acquire and use NWs. Generally, they call be commended towards the roles they have played towards preserving international peace and security. Thus, disarmament programs and prohibition programmes can be said to be reinforcing each other in terms of effectiveness especially towards promoting international peace and security.

4.4 Treaty on the Prohibition of Nuclear Weapons

This treaty is the first international treaty on the nuclear arms risk adopted by the United Nations on July 7, 2017, after the approval of nearly two-thirds of UN member states despite the opposition of the United States, France, Britain and other nuclear powers, it has entered into force 90 days after its ratification by 50 States. It was approved by 122 votes and one vote against the Netherlands. One abstention was Singapore while the nine nuclear-weapon States did not vote or participate in the negotiations[236].

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[234] Ibid.
[235] UNODA united nations office of disarmament affairs
[236] Treaty on the Prohibition of Nuclear Weapons, by NTI

On September 20, 2017, dozens of states signed the Nuclear Non-Proliferation Treaty, but the United States, France, Britain and other countries boycotted the signing ceremony held on the side lines of the annual gathering of world leaders at UN headquarters[237].

"There are still some 15,000 nuclear weapons," said UN Secretary-General Antonio Guterich at the start of the signing ceremony. "We cannot allow these deadly weapons of destruction and destruction to endanger our world and the future of our children."

4.5 Nuclear Weapons Free Zones

The establishment of nuclear-weapon-free zones is one of the effective regional measures to promote nuclear disarmament and non-proliferation of nuclear weapons. This enhances confidence and security at the regional and international levels. Nuclear-weapon-free zones are widely recognized as practical, in order to create a world free of nuclear weapons, the treaties were signed to make some regional areas free of nuclear weapons to spare those areas from the effects and damage of the use of nuclear weapons.

[237] Treaty on the Prohibition of Nuclear Weapons, by nuclear heritage foundation

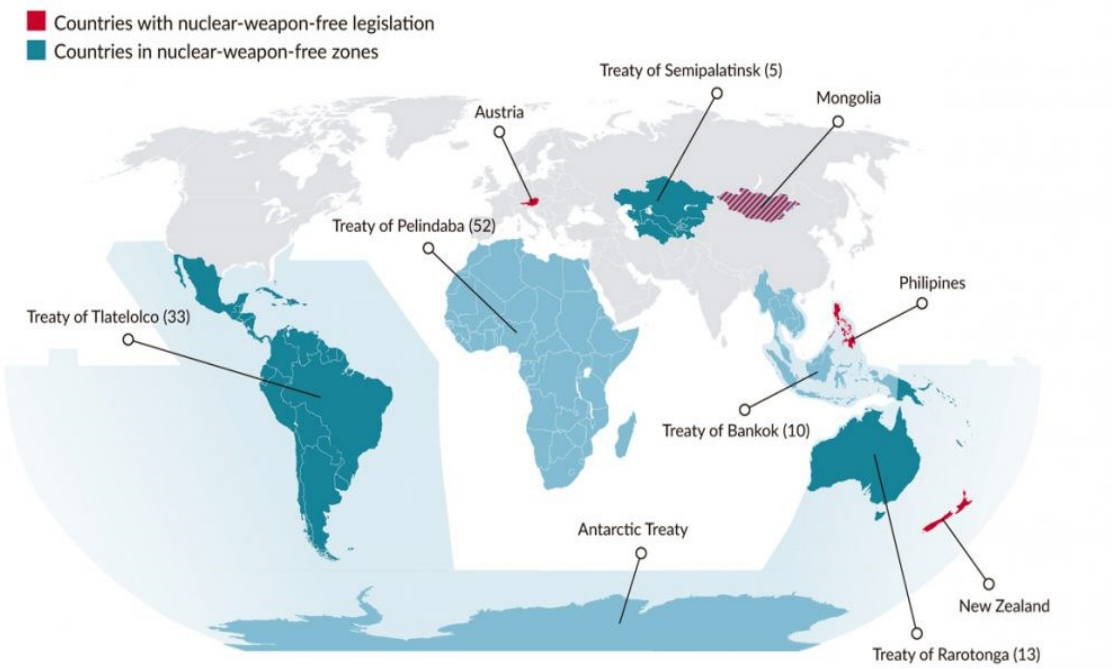

Figure 4.1: Nuclear free zone areas

Source: ICAN

The NWFZ is an area in which states cannot build, possess, transfer, deploy or test nuclear weapons. and they are one of the specific applications of demilitarized zones, and demilitarized zones mean the evacuation of a certain area of weapons, equipment, installations and military bases, and the prohibition of any military activity of any kind. However, NWFZ means only the demilitarization of a zone of nuclear weapons, in accordance with an international agreement between the parties of the region concerned.[238]

The nuclear-weapon-free zone can be defined such as came in UN General Assembly a Nuclear Non-Proliferation Treaty (NPT) as a general rule (an area recognized as established by any group of states for the free exercise of its sovereignty under a treaty or agreement. According to which:

[238] Nuclear-Weapons-Free Zones, Edited by Ramesh Thakur, Vice Rector (Peace and Governance) United Nations University Tokyo, Japan.

- Determining the system of complete nuclear-weaponization of the designated area, including the procedure for defining the boundaries of the area.
- Establishment of an international body to achieve and control to ensure compliance with obligations arising from that system).[239]

A number of agreements and treaties have been concluded while an attempt to dismantle nuclear weapons zones has been made. The agreements establishing these zones have been divided into two types, the non-populated -nuclear-weapon-free zones and the populated areas

First: Non-populated -nuclear-weapon-free zones of non-populated areas: They are represented in three treaties

- Antarctic Treaty (Treaty of Antarctica), 1959-1961
- The Outer Space Treaty, 1967
- Treaty on the Prohibition of the Status of Nuclear Weapons and Weapons of Mass Destruction in the Seabed, the Oceans and the Subsoil 1971[240]

Second, nuclear-weapon-free zones of populated areas

- Treaty on the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelocco) 1967
- Treaty on the Prohibition of Nuclear Weapons in the South Pacific States (Treaty of Rarotonga) 1985-2000
- Treaty on the Evacuation of Southeast Asia from Nuclear Weapons (Treaty of Bangkok) 1995-1997
- Treaty on the Evacuation of the Asia-Pacific Nuclear Weapons Region (Treaty of Semipalatinsk) 2006.
- African Nuclear Non - Proliferation Treaty (Treaty of Pelindaba) 1996.
- Establish a nuclear-nuclear weapon-free zone in middle east.[241]

[239] Resolution No. 3374
[240] Nuclear-weapon-free zones, by Rose MsRea
[241] Ibid

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

From the given insights if can be noted that the decision to consider whether NWs have an effect of deepening and prolonging conflicts depends on the use to which NWs are being put to.

Conclusions can also be made that the international organisation such as the ICJ does play an important role in regulating the unnecessary use of NWS but has to a large extent being considered as biased towards the favour of NATO and the USA.

It can also be concluded that nuclear weapon states such as the USA, Russia and France have to a large extent being capable of using their nuclear influence to deter other NWS from carelessly and irrationally using NWs. This also includes efforts which they have played to ensure that NNWS do not embark on efforts to start producing as well as acquiring NWS. However, it can be noted that some nations such as the USA, the ‘international police of the world’ have been accused of using NWs to impose political dominance on other states.

On the role that can be played by other states who do not have nuclear weapons to regulate the usage and effects of nuclear weapons, it can be said that their ability and effort to stop efforts to produce NWs played an essential role towards encouraging other states to do the same and provide a strong message that it is possible to leave a peaceful life without the use of NWs.

Conclusions can also be made that the available regulations are to a greater extent effective in regulating NWs disasters. This can be evidenced by the number of disarmament and prohibitions that have been registered to date. However, their effectiveness is limited by lack of compliance as some states such as North Korea can and do often not comply with the given regulations.

Conclusions can also be made on the other aspect that NWS have been complying with the relevant regulations by international organisations and other state players to govern the development, ownership and use of NWs.

Lastly, the idea that NWs are bad does not mean that they cannot be used for a justified and peaceful process. This follows observations that can be made that NWs can use their advantage to stop other nations from recklessly using NWs for the endangerment of the world. Hence, nations such as the USA which have NWs can use them to regulate the conduct of other nations who might be willing to destabilise the world through the uncontrolled and irrational use of NW.

5.2 Recommendations

In line with the above-mentioned conclusions, the following recommendations will, therefore, be made;

- There is a need for international organisations to ensure that nuclear weapon states exercise good-faith towards disarmament so that they do not dissuade other nuclear weapon states from disarming as well as well as demotivate NNWS from ceasing efforts to develop, acquire or own NWs.
- There is greater need to enforce compliance with treaties governing the ownership and use of armed conflicts such as the NPT through increased enforcement of IAEA standards.
- There also a need to improve the monitoring role of the IAEA so as to ensure that all states are complyi8nmg to prescribed NWs standards and regulations.

- Efforts must also be placed towards encouraging NNWS to ratify NWs treaties so as to boost cooperation and deal with possible disagreements as a result of possible functions that may form when a state is not part of a ratifying group.
- The ICJ is also further encouraged to widen its roles towards handling pending and exist NWs cases and effect sound and effective judgement which other states can consider as powerful so that its roles do not get compromised.
- NWS must also use their influence to continue deterring other states from posing challenges against international peace and security.

5.3 Suggestions for Future Studies

This study broadly covers issues pertaining to the prolonged and deepening role of NWs on conflicts in a much broader perspective. Efforts can be placed towards narrowing the study to a specific state such as the USA or any NWS such as Iraq or South Africa.

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