



## **Chemical and Biological Weapons: Weaknesses and Challenges of the United Nations Disarmament Mechanism**

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### **Abstract**

War is as old as the origin of man and has always been fought from ancient times between societies, kingdoms, empires and nation states; this has led to the development of different strategies, tactics and weapons of warfare overtime. One of such weapons to have emerged in the course of the history of human warfare is the Nuclear, Biological and Chemical weapons known as weapons of mass destruction (WMD). The devastating effects these weapons have produced cannot be underestimated; their application in the two World Wars had serious human and environment consequences. The establishment of the League of Nations which later transcended into the United Nations was to maintain global peace and to checkmate the excesses of some nations that have engaged in the production of WMD's whose usage can lead to a global catastrophe. But has the UN been able to achieve this set goal? Using historical antecedents, analytical approach from secondary sources, this paper looks at the history of biological and chemical weapons from ancient times, how it has been developed and used in contemporary times by countries such as Syria, the effects it had, and also mechanism put in place by the UN to disarm nations from developing, acquiring and stockpiling these deadly weapons. Finally the work concludes that for the UN to succeed in its effort there is a need for the international body to enlighten nations about the dangers of acquiring and stockpiling these weapons. However, efforts towards mobilizing nation states to agree on disarmament of these weapons they have stockpiled would not be easy; but it is important to keep educating these nations on the dangers and security threat these weapons pose to the existence of mankind.

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**Keywords:** Chemical & Biological Weapon, weaknesses, Challenges, UN, Disarmament

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### **Introduction**

Biological and Chemical weapons, are weapons that rightly fall under the category of 'weapons of mass destruction' (WMD). Designed to terrify as well as destroy, they have the potential to kill thousands and thousands of people in a single attack, and their effects may persist in the environment and in human bodies for an indeterminate period of time. They are weapons that were designed to complement the conventional weapons of 'Bullets and Bombs' in human warfare, especially in cases where bullets and bombs cannot reach the enemy in his or her hideout. Therefore, the advantage of biological and chemical weapons is that the gases will travel by air and penetrate through corners and places where persons are hiding. The challenges of this weapon is the devastating long-time effects and sometimes uncontrollable consequences these weapons when used has on man, plants, animals and the entire environment; these effects are very deadly and should be avoided by all means necessary. Example is the ....

It can argued that little progress has been made towards freeing the world of this deadly menace created by man, but paradoxically, despite the end of the Cold War the past decade has seen more setbacks than successes in trying to free the world of these weapons, and this is because nation states have failed to comply with the disarmament and non-proliferation commitments. The danger is, terrorist groups have emerged that recognize no restraints, and the United Nations who is supposed to be the global watchdog that would checkmate the production and usage of these weapons by nation states, during its World Summit of 2005 could not agree on a single recommendation concerning the disarmament and non-proliferation of these weapons. Despite having a vanguard knowledge of the dangers posed by these weapons; it is in this familiarity that President H.W Bush on the 9<sup>th</sup> of February 1989 while addressing the house of congress declared that the spread and even use of these sophisticated weaponry (WMD) threatens global security as never before, that chemical weapons must be banned from the face of the earth never to be used again.<sup>i</sup> Therefore, it is time for all governments to revive their cooperation and to breathe a new life into the disarmament program of the United Nations. The gearshift now needs to be moved from reverse to drive.<sup>ii</sup> Because if allowed, the continuous development of these weapons could lead to the total wiping and annihilation of mankind on the face of the earth which could be referred to as the 'Armageddon'.

### **Conceptual Clarification**

- **Chemical weapons:** Are those weapons capable of disseminating chemicals that are harmful to man and the environment in general, which could be gaseous, liquid or solid, and when employed there direct toxic effects on man, animals and plants would lead to death. Though chemical warfare agents are therefore distinct from biological weapons,<sup>iii</sup> these weapons are human-made toxic gas, liquid, or solid agent produced by mixing various chemicals (precursors) in specific ratios to cause physical or physiological effects on human, animal, or plant populations.
- **Biological weapons:** (on the other hand) resembles their chemical counterparts in as much as they are capable of being dispersed in the air and travel with prevailing wind. Able to penetrate any area where the air can circulate, they may contaminate terrain, clothing, food, water and equipment. Primarily effective against living organisms whether humans, animals or plants; Biological weapons are defined as living organisms whatever their nature, and are created in human laboratories to infect and cause diseases or death in man, animal or plants, this depends on their effect and ability to multiply in the person, animal or plant attacked. They include living organisms like Bacteria, Virus and Rickesttsia.
- **Disarmament:** Disarmament is a central means for addressing today's sources of insecurity and violence. Disarmament is at the heart of the system of collective security set out in the United Nations Charter. It is a tool to help prevent armed conflict and to mitigate its impacts when it occurs and an essential tool to secure our world and our future. Peace and security are the central reasons why the United Nations pursues disarmament.

## **History of Biological and Chemical Weapons**

Chemical and Biological weapons have a historical pedigree stretching back over several millennia. In ancient warfare European, Indian and Chinese commentators described the recurrent use of poisonous smokes, with Thucydides recounting how the Peloponnesians had tried to reduce the town of Plateaa with sulfur fumes in the 15<sup>th</sup> century B.C. The Greeks and Romans also utilized a wide range of poisonous substance in military operations, notably the Athenians in dumping cartloads of poisonous ‘hellebore’ into the river that besieged city of Kirrha, near Delphi in Greece (C. 600BC). The contaminated water induced ‘violent diarrhea’, incapacitating so many defenders that the Athenians were able to overrun the city and slaughter its inhabitants. While the history of biological weapons can be traced back to 1346, when the besieged Genoese seaport of Caffa (now Feodosie) on the Crimean coast incurred a biological onslaught when plague stricken Mongols began hurling infected dead bodies over the wall of the city.

## **Why is the Disarmament of Biological and Chemical Weapons necessary?**

Biological and Chemical weapons are often regarded as the “Poor nations Bomb” because of their relative accessibility and simplicity in production, stockpiling and use. No fewer than seven states are suspected to have significantly advanced offensive biological warfare research programs: China, Egypt, Iran, Israel, North Korea, Russia, and Syria. Russia and possibly Iran, North Korea, Israel, and China are believed to have produced and stockpiled these actual weapons. But the continuous secrecy in the development of biological and chemical weapons has continued to limit the effort of the UN in its quest for disarmament.

The disarmament of these weapons would be needed because; first disarmament is pursued for many reasons, which include maintaining international peace and security; secondly to uphold the principle of humanity, protect civilians, promote sustainable development, and prevent and end armed conflict.<sup>iv</sup> But for a better and clearer understanding of why the disarmament of biological and chemical weapons is necessary, there is a need to look at the reasons and the intent of nation states and terrorist for acquiring, developing and stockpiling these weapons.

## **Why Nation States Develop, Acquire And Stockpile Biological And Chemical Weapons?**

The reasons and intention of states and terrorist to acquire Biological and Chemical weapons differ, the states want to own it because of its struggle to become a global or regional Hegemon; or to counter a threat and this is where the Balance of power comes, in other words when a nation-state perceives that another neighboring nation-state is becoming a threat to its existence or security by producing and stockpiling these weapons, it would want to counter by producing and stockpiling the same weapons and, this would lead to arms race and in International relation this is referred to as ‘Balance of terror’. According to S.K

Oni, Demonstration of superiority often leads nations to produce, stockpile, test and use weapons of Mass Destruction; in other words, the struggle to become a global or regional hegemon has made such nations to acquire (WMD's). For example during the cold war between the United States of America and the former Soviet Union, the continuous production of WMD to counter each other led to global arms race and the continuous invention and advancement of such weapons. Furthermore to strengthen this argument, Edward Speres in his book stated that:

The events of 1979, both Saddam's seizure of the presidency of Iraq and the Iranian revolution that overthrew the Shah, emboldened Saddam to attack Iran in September 1980. Localized victories in Iran were soon eclipsed when Israel bombed Iraq's nuclear reactor at Osiraq on 7 June 1981. Acquiring enhanced conventional armaments, ballistic missiles, and nuclear, chemical and biological weapons became crucial to securing Saddam's regime and fulfilling its foreign policy agenda. Nuclear weapons, as his biographers argue, had now become 'a personal obsession. A symbol of Iraq's technological prowess, a prerequisite for regional hegemony, the triumphal achievement of the self-styled Nebuchadnezzar (and) the ultimate guarantee of absolute security. 'Following this massive setback to his nuclear ambitions, and the failure to secure a decisive victory over Iran, Saddam invested heavily in his chemical and biological warfare programmes.

### **Why Would Terrorist Organisations want to Develop, Acquire and Stockpile Biological and Chemical Weapons?**

Terrorist on the other hand, would want to acquire biological and chemical weapons because they would want to incite terror and mass disruption using this weapons which have deadly effects on human lives and the environment; as a result this will help in inciting fear that a terrorist organization hope to achieve, this fear would make easy for the state the state recognize their capabilities). Example of the use of biological and chemical weapons by non-state actors occurred in the United States when biological agents were used in 1984, 2001, 2003 and 2004 in local incidents, including some that produced a few fatalities. Also other states in the past also had to cope with bioterrorist threats too. While none of these incidents resulted in many casualties, the risk will remain in the years ahead that biological or toxin weapons could be used by terrorists. Another example of the notorious use of chemical weapons outside the U.S occurred in 1995, when Aum Shinrikyo used sarin nerve gas in an attack in a Tokyo subway, killing 12 people and sending thousands to hospital.<sup>v</sup>

Though expressions of interest by non-state actors in acquiring biological weapons does not prove the existence of a weapon programme by terrorist, nor does it constitute evidence of a credible capability to deploy such weapons on a large scale. This is because despite the considerable technical and financial resources (reportedly at a value of over \$1 billion worth) the Japanese Aum Shinrikyo cult failed in its several attempts to use biological weapons on at least ten occasions. However, past failures by terrorists offer a fragile basis for confident predictions that bio-terrorist events could occur in the future. The bioterrorist threat merits revitalized national and international efforts to prevent such attacks and to

substantially improve measures to protect the public against these deadly and indiscriminate weapons.<sup>1</sup>

Furthermore, the 'Weapons of Mass Destruction Commission' (WMDC) argued that it is not just only the intention of states and terrorist to acquire biological and chemical weapons that is pushing for the call of disarmament, but rather all nuclear, biological and chemical arms are the most inhumane of all weapons. Designed to terrify as well as destroy, they can, in the hands of either states or non-state actors, cause destruction on a vastly greater scale than any conventional weapons, and their impact is far more indiscriminate and long-lasting; Secondly, so long as any such weapons remain in any state's arsenal, there is a high risk that they will one day be used, by design or accident. Any such use would be catastrophic.<sup>2</sup>

### **The Use of Biological and Chemical Weapons in Contemporary Times by a Nation State**

The first lethal Chemical warfare agents used in modern warfare were chlorine and phosgene, introduced in 1915 and 1916 by German Army. These were (and are) widely used in industrial chemicals whose toxicities are well known. Released in clouds from cylinders or delivered by artillery shells, they poisoned unprotected troops. If a high enough concentration was achieved, their mode of action was via the lungs, and both are among the category now referred as choking agents. Classical poisonous were also used such as Hydrogen Cyanide, known as 'blood gas' during the war.<sup>3</sup> Also the Japanese carried out direct experiment on Chinese and American prisoners of war, infecting them with Anthrax, Plague, Cholera and other diseases; they also tried spreading the plague and cholera, on a small scale in other Chinese cities.<sup>4</sup> Until the late 1970's Biological Weapon agents seemed to have rather low military value. In fact, they have occasionally been used for warfare purpose in the past. The only clear-cut case in this century has been that of the Japanese development and use of BTW agents in the Japanese-China war and the world war respectively.<sup>5</sup> But for the purpose of this paper focus on Syria.

### **THE USE OF CHEMICAL WEAPON BY SYRIA**

CIA intelligence report to Washington was that Assad's regime was preparing to use chemical weapons on the Syrian rebels, and on the 3<sup>rd</sup> of December, 2012 President Obama declared in a speech to the National Defense University that "*the world is watching, Assad and those under his command, 'the use of chemical weapons would be totally unacceptable. And if you make the tragic mistake of using these weapons, there will be consequences and you will be held accountable.*" But few months later, an incident that took the world by surprise occurred on 19 March at approximately 0700 hours, in the Haret Al-Mazar neighborhood, which consists of a one-story building surrounded by a farming area. The location is close to the shrine of Sheikh Ahmad Al Asali located at the southern part of the

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Khan Al-asal village; in the vicinity was a position held at the time by the armed forces of the Syrian Arab Republic in the Aleppo governorate. During the ongoing shelling of the area, deaths, with no signs of wounds but persons exhibiting symptoms of intoxication were suddenly observed and reported to survivors and first responders... One survivor stated that *“the air was static and filled with a yellowish-green mist and filled of a strong pungent smell, possibly resembling sulfur.”*<sup>vi</sup> A different incident associated with the alleged use of chemical weapon was in Jobar on the 24<sup>th</sup> of August 2013, narrated as follow:

On August 2013, a group of soldiers were tasked to clear some buildings under the control of opposition forces. Around 1100 hours, the intensity of the shooting from the opposition subsided and the soldiers were under the impression that the other side was retreating. Approximately 10 meters away from some soldiers, an improvised explosive device reportedly detonated with a low noise, releasing a very badly smelling gas. A group of 10 soldiers was evacuated in armored personal vehicles to the field medical point with breathing difficulties and with, not further specified, strange symptoms.<sup>vii</sup>

### **Failure of the United Nations in the case of Syria’s Use of Chemical Weapons**

Embarrassing for the Obama administration, US allies continued to assert that chemical weapons had been employed. On the 25 of March 2013 both Britain and France informed the UN that the Syrian regime had used chemical weapons on several occasions since December, and copies of these confidential letters were leaked to the *New York Times*. At a conference in Tel Aviv on 23 April 2013 Brigadier Itai Brun, Commander of the research division of the Israeli Defence Force Intelligence Directorate declared that the Damascus regime *‘has used deadly chemical weapons against armed rebels on a number of occasions in the past few months, probably ‘Sarin’.*<sup>viii</sup>

Despite intelligence assessments about what had happened and who was responsible, and the purported duty of upholding the ‘international taboo against the use of chemical weapons’, the call fell upon stony ground.<sup>ix</sup> The UN lead inspection team concluded that indeed Chemical weapon had been used but this was its aim; that the UN mission led by Sellström included experts from the World Health Organization and the OPCW. After the Ghouta attack, it had a twofold mandate; first to report on the alleged use of gas in Eastern and Western Ghouta, determining whether and to what extent chemical weapons had been used, (but) not who used them. <sup>x</sup> From this statement one can clearly deduce and see the failure of the UN mission, why is priority given to the extent of the use of the weapon, and less attention is given to the person, organization or nation that used it? The 1925 Geneva Convention was not signed by the extent of use of such weapons but rather by nation states that all agreed not to use these deadly weapons. To make matters worse, rather than placing sanctions on Syria as a means of deterring her, the ‘Technical Secretariat’ requested voluntary financial contributions from the OPCW states parties to support the destruction of Syria’s chemical weapons (receiving €50.3million by 24 August 2015) but this was the same mission who in 16 October 2013 resolved that it had neither sufficient nor credible preliminary evidence to investigate nine of the allegations, all brought by France, Britain and the United States. Though risk assessments in the midst of the civil war restricted the mission to two site visits, at Jobar and Bahhariyeh, but the inspectors failed to find

primary evidence at either site, stating that each sites had been corrupted by mine clearing activities.<sup>xi</sup> so why is money given to the Assad regime to destroy the stockpile of chemical and biological weapons after claiming that it could not find enough evidence? Even more recently the UN Secretary General Anthonio Guterres, stated that, “for its part, the (UN) Security Council has failed to live up to its responsibilities and re-accountability for chemical weapon use in Syria. With respect to small arms and light weapons,”

### **Mechanism Put In Place by the UN to Disarm Nations with Biological, Chemical and WMD**

The United Nations is the Global organization responsible for checkmating global armament; though there is no article of the UN Charter dealing specifically with the disarmament of weapons of mass destruction. However, Article 11 of the UN Charter authorizes the General Assembly to consider ‘the principles governing disarmament and the regulation of armaments’ and empowers it to make recommendations with regard to such principles to the member states or the Security Council, or both. Article 26 gives the Security Council the responsibility ‘for formulating disarmament plans to be submitted to the members of the United Nations for the establishment of a system for the regulation of armaments’. To checkmate the excesses of armament the United Nation came up with an institution to handle global disarmament, which is the “United Nations Office of Disarmament Affairs” which is all so known with the acronym UNODA.

United Nations Office of Disarmament Affairs was established in January 1998 as the Department for Disarmament Affairs which was part of the Secretary General’s programme for reform in accordance with his report to the General Assembly (A/51/950). It was originally established in 1982 upon the recommendation of the General Assembly’s second special session on disarmament (SSOD II). In 1992, the name was changed to Centre for Disarmament Affairs, under the Department of Political Affairs. At the end of 1997, it was renamed Department for Disarmament Affairs and in 2007, it became the United Nations Office for Disarmament Affairs.

It was established to facilitate closer cooperation and effective interaction in all areas of disarmament, non-proliferation and arms control with UNOV, and with Vienna-based organizations and related specialized agencies, such as the IAEA, the CTBTO and the UNODC, as well as with other relevant regional intergovernmental organizations, such as the OSCE. The Office for Disarmament Affairs supports multilateral efforts aimed at achieving the ultimate goal of general and complete disarmament under strict and effective international control. The mandate for the programme is derived from the priorities established in relevant General Assembly resolutions and decisions in the field of disarmament, including the ‘Final Document of the Tenth Special Session of the General Assembly’, the first special session devoted to disarmament (resolution S-10/2). Weapons of mass destruction continue to be of primary concern owing to their destructive power and the threat that they pose to humanity. The Office also works to address the humanitarian impact of major conventional weapons and emerging weapon technologies, such as

autonomous weapons, as these issues have received increased attention from the international community.<sup>xii</sup> It fosters disarmament measures through dialogue, transparency and confidence-building on military matters, and encourages regional disarmament efforts; these include the United Nations Register of Conventional Arms and regional forums. While looking at the activities of the Centre for Disarmament Affairs, under the Department of Political Affairs, 'the Secretary General Mechanism (SGM) was also created'.

### **Challenges Faced By the UN Disarmament Mechanism in Its Efforts to Disarm Nations That Have Stockpiled Biological and Chemical Weapons**

#### ▪ **Secrecy by Nations**

A special problem arises from the right affirmed in the BTWC of states to retain biological agents and toxins for prophylactic, protective or other peaceful purposes. In the absence of any verification system of this provision, which some have called a loophole in the treaty, it becomes difficult for the international community to determine conclusively if a country's declared defensive programmes do not have an offensive military purpose. Russia and the United States; the countries that once possessed the largest bio-warfare programmes are often cited as retaining various weapon-related capabilities, along with a few other states in the Middle East and East Asia. However, the potential global threat posed by biological weapons is not limited to those states that once had programmes to develop such weapons. Another problem is that facilities to undertake research on or to produce biological agents are more difficult to detect and easier to hide than facilities to produce fissile material for nuclear weapons. The difficulties of detection enhance the risk of a surprise appearance of a new biological-weapon capability.

#### ▪ **Non Compliance**

The concept of general and complete disarmament emerged in 1959 as a one step settlement of the armament problem. It can be said to have been an effort for advanced on the comprehensive approach. General and complete disarmament was believed, would overcome all obstacles hitherto encountered in disarmament negotiations, especially the question of control and would eliminate the possibility that any state might gain military advantage over others. Based on the initiative of the Soviet Union, the United Nations general Assembly adopted resolution 1378 (XIV), in which it expressed the hope that measures leading towards the goal of general and complete disarmament under effective international control would be worked out in detail and agreed upon in the shortest possible time.<sup>xiii</sup> But nation-states till date have refused to comply with the UN to disarm always citing its sovereignty as the supreme.

#### ▪ **Lack of a Permanent Agency by the UN to Investigate**

The existence of an agency or body under the UN to investigate would have aided the UN to resolve so many un-resolved cases of the production and use of biological and chemical weapons. Currently what the UN has put in place only allows the secretary-general



to form an ad-hoc committee that can promptly investigate allegations brought to their attention concerning the possible use of biological (and chemical) weapons. This committee has only been used thirteen times. With the exception of an investigation into use of mycotoxins; it is also important to note that after investigation this ad hoc committee is disbanded. This provides some insight as to why the investigating institution or agency of the UN is currently underdeveloped. This lack of capacity for a formidable investigation institution or agency to rely upon, make the investigation more complicated.

## Conclusion

With the global body not been able exterminate the existence and use of weapons of mass destruction which include biological and chemical weapons, the existence of these weapons would influence other nation states to pursue and want to acquire these weapons. The challenge of having these weapons in existence is that; the destruction these weapons bring have uncontrollable consequences on the existence of man and his environment in general. Thus, there is a need for the UN to come up with means to highlight and sensitize nation-states on the dangers WMD such as chemical and biological weapons would create if used. Furthermore, with the current global challenges, if these weapons should fall into the hands of terrorist group or non-state actors, it is important to note that they would not hesitate to use it on mankind in order to achieve their demonic goals. Such sensitization or enlightenment of the dangers would help to discourage nation states from producing such weapon and those that have stockpile would also want to comply with the UN to achieve this feat of disarmament and demobilization of WMD's.

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