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Strategic Importance Of Nuclear Weapon Against Other Wmds

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Abstract :

War and peace occupy very indispensable place in strategic analysis and international relations. Different theories and perspectives including realism, liberalism, social constructivism as well as feminism have been highlighting war as an important factor behind drastic changes in global affairs. Consequently, national security also forces states to advance its defensive and offensive capability. In this way, countries have acquired chemical, biological as well as nuclear weapons too. Chemical weapon convention and biological weapon convention have explicitly banned the use of both types of weapons in warfare. But NPT prevents further proliferation by new country but it does not impose any time bound restriction on NWS to relinquish all its nuclear weapons. This article strives to explore the strategic importance of nuclear weapon as compared to biological and chemical weapons. Efficient and effective solutions diminishing adverse impacts of chemical and biological weapons reduce strategic importance of these WMDs. But world has no credible solution to drastically reduce the devastation of successful nuclear attack. This article uses qualitative data analysis to comparatively analyze strategic importance of WMDs.

Keywords : Strategic Stability; Nuclear Proliferation; Biological and Chemical Weapon; Deterrence ; Arms Race; Environmental Impact; Great Power.

Introduction

As Hans J Morgenthau, in his book “Politics among Nations”, has contended that international politics is nothing but struggle for power. Countries are in relentless struggle to maximize its power in the cost of other’s acceptance (Morgenthau 1948: 13-14). Furthermore, Neorealist Kenneth Waltz has argued that a state goes for war when achievements of war are more than the loss incurred in it in the anarchical situation due to lack of sovereign authority over states at the global level (Waltz 2001: 7-8). Moreover, Political realism has mentioned the importance of 3S- Statism, Self-Help and Survival in international relations. In other words, every state have to be self-sufficient for its own national security and state is occupying its prominent importance in global engagements as well.

In fact, liberal theories have also highlighted the importance of peaceful settlement of disputes. Consequently, it has also recognized the prevalence of conflicts in international level. Moreover, Social constructivist theory also accepts the social narratives propagated at global level as the prime cause of war. “Anarchy is what states make of it” as explicated by social constructivist Alexander Wendt, categorically highlights the importance of social narratives behind international relations. Social acceptance of lack of well

recognized global institutions leaves a scope for power politics, which may led to war as well. Marxist theorists accepted war as an instrument to promote the interests of bourgeois states. Immanuel Wallerstein has talked about semi-periphery, core and satellite states. Radical feminist theorists have highlighted the patriarchy as the cause of war and women as the survivor of such aggressive activities. Thus war and instability have been remarkably conceived in all perspectives as an indispensable part of international relations.

It is noteworthy that a number of global, bilateral, and multilateral treaties as well as negotiations have been conducted along with the establishments of the League of Nations as well as United Nations Organization in the aftermath of World War-I and World war-II respectively with the sole objective to promote global peace and security, but world has been relentlessly facing severe devastations of war from time to time for instance, Arab-Israel wars, India-Pak wars (1948, 1965, 1971, 1999 etc.), India-China war (1961), Armenia-Azerbaijan conflict on the issue of Nagorno-Karabakh region, Iran-Israel war, Gulf wars, etc. In fact, forms and manifestations of war have been changed with the advancement of weapon technology as well as changes in the rules and regulations accepted globally, but war has always been inevitable in the politics of power struggle.

Thus, in different ways, theorists of international relations have accepted the war as an important phenomenon in the ambit of international relations. States want to strengthen its national security and strive to promote national interests. But in the way of promotion of national interests, power struggle takes place. In order to be victorious in power struggle and emerging as the regional power, great power, or super power, countries always strive to enhance its defensive and offensive capability. For which, countries have been acquiring, as per its economic, technical and strategic capability, weapons of immense lethality.

That is the reason why countries have resorted to the development and acquisition of nuclear, chemical and biological weapons. Due to their potential to cause immense damage to humanity, United Nations has recognized chemical, biological and nuclear weapons as weapons of mass destruction (WMDs) in 1948 (Heywood 2011: 264).

Despite the fact that UN has recognized three weapon systems into the same category of WMD, strategically these do not fall into same place. However, globally, nuclear weapons have been emerging as strategically more advanced weapons than other WMDs.

Nuclear Weapon Development and Proliferation

Nuclear weapon has been introduced in the globe by the success of Manhattan project of the US in 1945 (Heywood 2011: 263-264). In fact, it has emerged as a scourge to humanity with the manifestation of catastrophe in the nuclear attacks over Hiroshima and Nagasaki on August 6 and 9, 1945 respectively. It has crossed the line of cruelty of humans against humanity itself. Nuclear weapon acquisition and decisive attack on Japan, which had ended the Second World War, has culminated into emergence of the US as the superpower.

But, in just four years, Soviet Union has ended the nuclear weapon monopoly of the US by conducting its first nuclear explosion in 1949 (Sakharov et al: 2014). In the era of ideological confrontation of cold war, a bipolar nuclear arms race was also taking place. Both countries- US and USSR immensely increased its nuclear arsenals, "balance of terror" has been established, but nuclear weapons capability to inflict catastrophic collateral damage had forced both countries to conclude a number of treaties to prevent nuclear escalations.

Furthermore, as an indispensable part of global nuclear non-proliferation regimes, nuclear non-proliferation treaty (NPT) has recognized five countries- US, Soviet Union, France, China and UK as nuclear weapon states (NWS) and it has explicitly prevented further proliferation of nuclear weapons by other states. It has envisaged that NWS will strive to destroy their nuclear arsenals and promote nuclear weapon free world.

NPT has been emphasizing to prevent further proliferation by non-NWS, but it has undoubtedly bifurcated entire world into two categories. First category is of those countries, which are already recognized as nuclear weapon state and NPT has not imposed any binding time-bounded restriction to relinquish their nuclear weapon status. Rest of the world has been thrown into second category, which has no scope for nuclear proliferation even for self-defense or credible minimum deterrence. Thus NPT has paved the way for the emergence of NWS as elite group in global affairs.

In post Cold War era, regional security challenges, animosities in the neighbourhood and conflicts with superpowers or nuclear weapon states, as well as wish to be part of elite club of nuclear weapon states, and so on have stimulated other countries including India, Pakistan, and North Korea to acquire nuclear weapons even by defying global sanctions including economic embargoes as well as separation from global mainstream. After the acquisition of nuclear weapons by India and Pakistan in 1998, era of decentralized nuclear decision making was started instead of just bipolar confrontation of cold war.

Israel has neither signed NPT, nor it has declared its nuclear weapon status, but it is speculated that, in 1966-67, Israel had most likely developed its maiden nuclear weapon. And most importantly, the US has also accepted by 1975 about possession of nuclear weapons by Israel (Nayan 2012: 40-43). In fact, Israeli nuclear weapon status has become more significant in strengthening multi-polar nuclear status of the globe. North Korea has left the NPT in 2003 even after a long process of “Six Party Talks” to convince it for giving up nuclear weapon acquisition program. Undoubtedly, North Korean rivalry and existential threat from the United States has been the leading cause behind nuclear proliferation by North Korea but demonstration effect against South Korean economic development as well as wish to be part of elite group of NWS have also been concluding factors.

Chemical Weapons

Chemical weapon is the use of toxic chemical compounds to devastatingly kill or very brutally incapacitate the enemy. Fritz Haber, a German chemist, is considered as the “father of chemical weapon”. Chemicals as the weapons had been historically used by Athenian military to pollute the drinking water of Kirrah city with hellebore plants. Use of Chlorine and other chemical agents in modern warfare was manifested in the First World War (1914-18). World has witnessed its use in Civil war of Syria, Iran-Iraq war, as well as enormous stockpiling during cold war rivalry. In chemical weapons, chemical agents are deployed in place of warheads. There are multiple types of chemical agents- choking agents which damage lungs, blood agents obstructing supply of oxygen through blood, nerve agents which cause paralysis, and blister agents cause skin burn, pain in eyes and lungs etc.(Schneider, nd).

It is noteworthy that catastrophe of chemical weapons was explicitly seen during first World War, in which, Germans with extensive use of Chlorine at Ypres of Belgium killed about five thousand Algerian and French army personnel. Chemical weapon’s use in WW-I causing nearly 91,000 fatalities has manifested the real face of weapon of mass destruction.

For getting rid of such devastations, multiple negotiations and treaties have been concluded, which have been started with the international agreement between France and Germany in 1675 to prohibit the use of poisonous bullets. Furthermore, in 1874, *Brussels Convention on the Law and Custom of War* was concluded to prevent the deployment of poisonous chemicals and use of arms inflicting unnecessary suffering. Although this convention could not come into existence, yet it has unmasked the relentless global efforts to prevent the debacles caused by chemical weapons. Moreover, second Hague convention has re-emphasized the complete ban on poisonous weapons in 1907 (OPCW, nd).

Furthermore, in 1925, *Geneva protocol to prohibit the Use of Asphyxiating, Poisonous or other gases and Bacteriological Methods of warfare* was signed to prevent the use of chemical weapons in International as well as intra-national wars. This protocol has also provided the base to conduct the investigation of the use of chemical weapons during Iran-Iraq war between 1980 and 1988 (Zanders, 2022: 65-66). But all steps to prevent the proliferation of use of chemical weapons could not be succeed, rather world has witnessed enormous use of this WMD in Second World War.

So in order to prevent such catastrophe in future, negotiations in UN Conference on Disarmament for chemical weapon convention (CWC) was started in 1980. Consequently, CWC was finalized in 1993, which is being implemented by Hague based Organization for the Prohibition of Chemical Weapons (OPCW). CWC prohibits the acquisition as well as deployment of chemical weapons.

In order to cope with chemical attack, special protection gears including chemical detectors, special masks, vapour removals and so on are used by advanced militaries. Modular field hospitals are also developed and established in the chemical weapon affected areas to provide effective supports to victims.

Biological Weapons

In this category of warfare, virus, bacteria, fungi or other toxic substances, which are produced from living organism, are used to harm humans, animals or plants. Among these agents, which are capable of secondary transmission, cause epidemic and pandemic too. Like other weapons of mass destruction, it does not discriminate among people. In order to cope with devastation of biological weapon, which was already witnessed during first world war, countries have signed Geneva protocol in 1925 to ban biological and chemical warfare. Although Japan, which had already signed Geneva protocol, had widely developed and used biological weapons in its attack over China during second world war. (Schneider, nd). In order to prohibit the use, stockpiling and transfer of biological weapons, Biological Weapon Convention (BWC) was opened to sign in 1972.

It is noteworthy that deployment of biological weapon could be traced back to the 1500-1200 BC. Tatar army spread plague in 1346. Germany has used *Anthrax* and *Glanders* in the first world war. Moreover, in the race of biological armament, the US developed and deployed brucellosis between 1954 and 1969.

In order to get rid of attack of biological weapons, biological weapon sensors as well as other medical equipments and vaccinations are effectively used.

Strategic Importance of Nuclear Weapon:

Although nuclear, biological and chemical weapons are conceived as weapons of mass destruction due to lethality of these weapons as compared to other conventional weapons. Most of the countries have relinquished and accepted the prohibition on chemical or biological weapons, but in case of nuclear weapons, effective global development on the issue of nuclear disarmament is yet to be witnessed. Rather, countries are relentlessly advancing the technology of nuclear arsenal as well as missile systems to enormously increase its devastating capability. This is due to following reasons:

- 1) **Great Power Status**- in the contemporary world, nuclear weapon, which is a doubtless scourge to humanity, is developed and acquired by great powers, which was further even recognized by NPT. Possession of nuclear weapon further strengthens the attack and deterrence capability, which ultimately enhances the great power status as well. It is noteworthy that NPT, on the one hand prohibits further nuclear weapon development by any other country, simultaneously, on the other hand, it does not impose any time-bound restriction on nuclear weapon states (NWS) for their nuclear disarmaments. So indirectly, even NPT protects the special status of NWS. It can not be ignored that the existence of even single nuclear weapon can threaten the security and survival of any non-NWS. But as compared to nuclear weapons, development, acquisition as well as deployment of biological and chemical weapons are slightly easy. Even chemical weapons are regarded as “nuclear weapon of poor”. Any country or even non-state actors can develop it, which causes its loss of categorization as the special category weapon.
- 2) **Elitism**- unsuccessful attempts of disarmament regimes towards nuclear weapon free world have bifurcated entire globe into categories of nuclear armed countries and countries which do not have nuclear weapons. Unlike chemical and biological weapons, development of nuclear weapons is also very complicated and costly process, which furthers the elite status of countries due to possession of advanced technology as well as modernized special category weapon.
- 3) **Catastrophe**- undoubtedly chemical and biological weapons are also very lethal but it is less threatening due to some credible solutions for coping with these weapons, but there is no reliable solution against nuclear attack. If nuclear weapons are used, it will definitely vapourize the humanity. Biological weapons can be controlled through proper medical advancements including proper vaccinations as well as effective tracing of spread of toxic pathogens. Similarly, effect of chemical weapons can be diminished through the use of advanced masks as well as medical facilities with alarm systems. But there is no credible solution for getting rid of successful nuclear attacks as carried out by the United States in Hiroshima and Nagasaki during second world war.

- 4) **Deterrence Capability-** chemical and biological weapons, which are undoubtedly very lethal weapons, may provide some deterrence against conventional weapons, but lethality of nuclear weapons have the capability to deter any type of attacks including attacks of WMDs as well as conventional weapons over nuclear armed countries. It is noteworthy that many countries including India have adopted the policy of massive nuclear retaliation in case of chemical or biological weapon attack over India or Indian security forces anywhere in the globe (MEA, 2003). Moreover, Pakistan's nuclear doctrine rejects "No First Use" doctrine and accepts mutual assured destruction (MAD). Rejection of no first use doctrine provides Pakistan a operational freedom for the use of nuclear weapon at any condition even before any attack over it (Nayan, 2022). Moreover, the US has also accepted that nuclear attack options are open in retaliation of a strategic non-nuclear attack too. In other words, the US can resort to nuclear retaliation in the event of attack with chemical or biological weapons (Nuclear Posture Review, 2022). Thus, it can be concluded that biological and chemical weapons have capability to inflict severe damage, but strategic importance of nuclear weapon in the field of deterrence capability is second to none. Nuclear weapon can deter biological and chemical attacks but not vice versa. Thus, there is no credible alternative of the nuclear weapon, which also causes hurdles in the way of nuclear disarmament. Moreover, even reliable deterrence capability of nuclear weapon forces other countries to acquire de-facto nuclear status.
- 5) **Demonstration Effect:** it is noteworthy that production, transfer and deployment of chemical and biological weapons are prohibited under CWC and BWC respectively, so possession of these weapons can attract global sanction as well as pre-emptive attack from super powers as well. For instance, in the second gulf war, the US had attacked Iraq on the ground of claim that Iraq was possessing such WMDs. In that situation too, the US had already innumerable nuclear weapons, which could be deterred only by danger of nuclear retaliation. However, Hegemony school scholars have contended that Iraq war was to strengthen the regional hegemony of the United States and to spread the democratic values in the gulf (Stieb 2023: 12-13). Thus, even possession of biological and chemical weapons or false claims regarding this can attract attack from hegemonic nations. But possession of nuclear weapon demonstrates the massive nuclear retaliation capability. So when any country acquires nuclear weapon, it is considered as non-penetrable due to its credible nuclear deterrence. Such demonstration ascends the strategic importance of the nuclear armed country. Moreover, when any country successfully acquires nuclear weapons, balance of terror condition prevents even great powers to launch attack against newly nuclearized nation. For instance, North Korea has acquired nuclear weapons after its withdrawal from NPT in 2003 even by defying multiple global sanctions (Heywood 2011: 276). It has direct rivalry with the US, but it is nuclear deterrence, which prevents full-fledged war to denuclearize North Korea.
- 6) **Balancing the weakness in Conventional Weapons-** it is noteworthy that existence of nuclear weapon, without any doubt, creates credible deterrence against any type of large scale and strategic attack. Failure in matching the conventional armament by rival nation creates security vulnerability, which culminates into strategic instability and mounting security dilemma. But acquisition of nuclear weapon balances that imbalance in the conventional arsenals with its effective use of deterrence capability. Such balancing is not effectively possible with other WMDs, because other's deterrence capability is not as effective as that of nuclear weapon.
- 7) **Environmental Impact-** WMDs pose very adverse impact on ecological balance and biological diversity. Chemical weapon does not only inflict very painful impact on victims, but it also causes imbalance in the environment of the targeted area. For instance, mustard gas imbalances soil nutrients and such toxicity of soil led to crop failure as well as desertification, which ends with the loss the humanity too (Doran 2015: 5). Similarly, biological weapons damage the genetic codes as well. So when pre-designed biological weapon is used, it harms all the species of the same genus in the area of attack. Thus prevailing biological diversity is drastically uprooted. But it is noteworthy that in the event of attack with biological and chemical weapons, there is high chance that entire ecosystem would not be damaged, but when nuclear weapon poses very unthinkable damage to entire ecosystem, it vaporizes each and everything. Extremely high temperature in the area of nuclear attack, devastation and catastrophic collateral damage make situation very horrifying. Innocent future generations have to face negative impacts of nuclear radiation. Thus, chemical and biological weapon are threatening but there is chance of survival, which is not possible in the event of successful nuclear attack.

Conclusion:

In fact, war is an indispensable part of analysis of international relations. Different theories and perspectives of global politics have regarded its importance in different way. Promotions of national interests and ensuring national security have always been occupying prime area of strategic analysis. Security and survival is influenced by the development of weapons of mass destructions. But acquisition of nuclear weapons affects entire strategic scenario very effectively and fluently. Chemical and biological weapons have the capacity to inflict huge damage on rival, but technological and medical advancement have initiated a hope to effectively reduce the adverse effect of these weapons.

But in the event of nuclear attack, there is no credible and efficient solution to cope with its unthinkable catastrophe. Nuclear weapon would definitely destroy the humanity. Chemical and biological weapons can deter conventional warfare, but these WMDs have no capability to prevent nuclear attacks through its deterrence. But nuclear weapon can deter attacks of biological and chemical weapon too. Which reflects the strategic importance of presence of nuclear weapon.

Presence of nuclear weapon hides the vulnerability due to weaknesses in the area of conventional warfare as well. As the balancer, it provides credible minimum deterrence. Special category weapon status of nuclear weapon as well as its ability to deter other WMDs have also expedited the disarmament of chemical and biological weapons by nuclear armed countries. But lack of credible alternative as well as immense credibility of nuclear weapons have been attracting new

countries to acquire it even by challenging global non-proliferation regimes. Sense of elitism and great power status with the possession of nuclear arsenal stipulates the efforts for nuclear proliferation. But such activities do not happen for chemical and biological weapons. Thus nuclear weapon is strategically more advanced.

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