EFFECTIVENESS OF NUCLEAR WEAPONS AS AN INSTRUMENT OF DETERRING POTENTIAL ENEMIES IN THE 21ST CENTURY

Ifeanyi M. OSUOZA
Centre for Strategic and Development Studies,
Ambrose Alli University, Ekpoma, Edo State
mikeosuoza@yahoo.com

ABSTRACT

Countries procure or embark on the development of nuclear weapons because they believe that active deterrence depends on the ability to demonstrate the depth of commitment to national security. There is the wide belief that with enough nuclear power, a country may not need to bargain – i.e. some things it wants it takes and those it already has it keep by sheer strength, without trying to appeal to an enemy's wishes. The big question is can nuclear weapons be seen as instrument of attaining victory when warfare is never worth the cost. Thus, this paper is an assessment of the effectiveness of nuclear weapons as an instrument of deterring potential enemies in the 21st century with the view to determining what lessons this phenomenon holds for African countries who may clamour for such weapons. The study finds that both the victimiser and the victims are affected with the effects of nuclear weapons detonation. The paper therefore recommends that countries of the world should show commitment in the fight against nuclear weapon production, testing, transfer, and proliferation by ratifying treaties meant for the purpose, as it will help to avert the horrific consequences of nuclear weapons if used in future wars.

Keywords: Potential Enemies, Deterrence, Nuclear Weapons, Peace and Security

INTRODUCTION

Countries procure or embark on the development of nuclear weapons because they believe that active deterrence depends on the ability to demonstrate the depth of commitment to national security. So, possession of nuclear warheads shows how much a nation is committed to deter potential enemies. Thus, military planners in some countries now talk about winning a nuclear war. This is because the potency of a nuclear weapon is incomparable. According to Schelling (2008), nuclear war heads are incomparably more devastating than anything packaged before. The difference between nuclear weapon and bayonets is not in the number of people they can eventually kill, but in the speed with which it can be done. In effect, deterrence works only where the cost of attack vastly exceeds the expected yields, as is manifestly the case with nuclear weapons (Overy, 2008). That Japan was defenceless by 1945, points to the potency of nuclear power. Thus, deterrence only describes the effect produced by nuclear confrontation (Overy, 2008). In other words, deterrence is the effect, but it is produced by credible and devastating war capability made possible with nuclear weapons.

These qualities of nuclear weapons make them desirable by nations so as to be feared and respected by other nations and possibly take anything with force. As a matter of fact, there is the wide belief that with enough nuclear power, a country may not need to bargain – i.e. some things it wants it takes and those it already has it keep by sheer strength, without trying to appeal to an enemy's wishes. In nuclear weapons states, leaders are convinced that nuclear weapons ensure their safety. Thus, nations acquire and/or develop nuclear power because it has drastically enhanced the importance of war and threat of war as technique of influence, deterrence and intimidation.

The big questions are, does the acquisition of nuclear weapons actually deter potential aggressors? Does a country or group of individuals actually feel deterred or intimidated knowing that another country has enough nuclear war heads? Can nuclear weapons be seen as instrument of attaining victory in warfare? These issues and some others are going to be

addressed in this paper. This study is out to assess the effectiveness of nuclear weapons as instrument of deterrence. In doing this, the study utilised secondary data.

Conceptual Clarification

Here, concepts that will make the comprehension of this paper difficult are explained. Such concepts include:

Capability

This has to do with the potential ability to act on one's deterrent threats. Some time, hollow gestures or threats that can somehow be circumvented or defeated carry little deterrent value.

Counterforce

This is a nuclear strike against the enemy's military forces and weapons rather than his cities and civilians.

Credibility

This is concerned with making the opponent believe that deterrent threats will actually be executed if defined red lines are crossed.

First-Strike

This means first offensive move or attack in a nuclear war. First-strike has an element of surprise attack designed to eliminate the ability of the enemy to retaliate.

Strategic Defence Initiative (SDI)

Strategic Defence Initiative SDI seeks to psychologically control fear of nuclear attack by early detection, interception and demobilisation of enemy's missile attack in the space. This is also known as STAR wars (Green, 1985).

Threat

Threat is any act or behaviour or position capable of raising fear or anxiety of one being in a position to lose life, liberty and core values (Akpuru-Aja, 2009). For the purpose of this study, threat could be defined as any act that constitutes danger to security of lives and properties. Threat could be real or imagined. It is real threat when there is clear evidence that a nation is in danger of possible aggression from an enemy. Threat is imagined when there are no clear

evidence of possible attack from an enemy. As a matter of fact, threat is imagined because the fact is not clear or certain.

Theoretical Framework

The study employed game theory to explain why weak states; including terrorist groups do not yield to nuclear deterrent threats of stronger states. Game theory is a branch of applied mathematics that provides tools for analyzing situations in which parties; called players, make decisions that are interdependent. This interdependence causes each player to consider the other player's possible decisions, or strategies, in formulating his own strategy. A solution to a game describes the optimal decisions of the players, who may have similar, opposed, or mixed interests, and the outcomes that may result from these decisions. Games theory originated with the work of Von Neumann and Morgenstern (1944).

Because game theory arose from the analysis of competitive scenarios, the problems are called *games* and the participants are called *players*. Game theory deals with any problem in which each player's strategy depends on what the other players do.

Game theory is an appropriate tool for examining deterrence for a number of reasons. First, game theory captures the strategic interactions between aggressors and a targeted government, where actions are interdependent and, thus, cannot be analyzed as though one side is passive. Second, strategic interactions among rational actors who are trying to act according to how they think, their counterparts will act and react, characterize the interface among aggressors (e.g., between the weak and the strong) or among alternative targets (e.g., among targeted governments, each of which is taking protective measures). Third, in conflict situations, each side issues threats and promises to gain strategic advantage. Fourth, opponents abide by the underlying rationality assumption of game theory, where a player maximizes a goal subject to constraints. Fifth, uncertainty and learning in a strategic environment are relevant to all aspects of terrorism, in which the weak or the strong or both are not completely informed.

Applying games theory to international politics has given countries the opportunity of weighing other country's actions before reacting. One good area where countries have applied game theory is in the area of nuclear deterrence. One expects to see that with the possession of nuclear weapons, some countries would have become untouchable, but this has not been the case. Nuclear weapons countries have been attacked in the past with conventional weapons because the aggressor thought about the impossibility of retaliation with a nuclear weapon. Hence, America was attacked on their own soil on September 11th 2001 even with her massive load of nuclear war heads.

For the nuclear weapons countries, it is not an easy task too, because they need to apply game theory to weigh options and possibly predict what the outcome of their action might be should they use nuclear weapons on any country, especially in this era of *Nuclear Taboo.* For instance, had U.S leaders wished to use nuclear weapons in Vietnam, there was neither lack of warheads nor any shortage of suitable targets. Ports, landing places, supply lines; bridges, railways and airfields could all have been hit decisively with relatively low-yield weapons. Many thought that the United States should or would employ nuclear weapons in any subsequent similar war. One popular lesson the US Army (along with some political leaders) learned from the Korean stalemate was 'never again a land war in Asia', whose real meaning, administration insiders with access to military planning understood, was 'never again a land war against China without nuclear weapons' (Ellsberg, 2002). Given this context, one of the remarkable features of the Vietnam War is how little serious consideration US leaders gave to nuclear options. Although they made some veiled nuclear threats, top political leaders did not come close to using nuclear weapons. That United States chose to lose a humiliating and destructive war against a small, non-nuclear adversary while all its nuclear weapons remained on the shelf is a matter of game theory application.

Balance of power paradox is a game pattern which the weaker nation has always used to dare stronger nations even in the face of nuclear threat. Balance of power paradox helps leaders of weak states to believe that strong states will not be able to execute deterrent threats

because of international or domestic constraints that will become highly salient as deterrence begins to fail. Although the leaders in weak states understands their inferior position, that they would lose an all-out war, and that aggression on their part significantly increases the probability of a war (Russett, 1967), however, they believe that because of a variety of more pressing political and strategic reasons, the strong will not be able to bring their full power to bear to interfere with the weak's initiatives. The leaders of weak states actually accentuate the outcome of Waltz's cost-benefit calculation about the merits of Superpowers intervention in the periphery. They often seem to believe that interventional and domestic political constraints will prevent Great Powers from intervening effectively in limited wars or responding forcefully to provocations (Wirtz, 2012). One possible explanation is that the strong states will sometimes fight to manipulate their reputation for toughness. However, there are theoretical reasons to believe that such attempts are likely to prove counterproductive (Jervis, 1984), and empirical results confirm that states that have fought in the past are not better at deterring rivals than those states that have not (Huth and Russett, 1984).

Nuclear Weapons and Nuclear Deterrence: An Overview

Nuclear weapons also known as atomic weapons are instruments of immense military and political power. Nuclear weapons unleash the power of atom – one of the smallest particles of matter – to create a huge explosion. This power was understood for many years before the Second World War but it was only during that war that scientist began to think of using this destructive force to create a weapon. By the middle of the war, American and German scientist engaged in a 'race' to produce the first atomic bomb (Connolly, 2002). Both countries knew that whoever won that race would certainly win the war. Although the scientists knew such a weapon would be extremely powerful, they could not be sure about how powerful it would be. USA managed to develop such a bomb in 1945. It had enough material to make several, including one for a test (Connolly, 2002). Within weeks, USA used two such of such bombs against Japan and as all world's scientist predicted, the war was over within days.

There is the steady increase in the number of nuclear weapons. More than 50, 000 of them are in the hands of the United States, Russia, Britain, France, China, India, Pakistan, Israel and South Africa. The two superpowers have 95 percent of them, with the United States possessing the majority of these. Currently the United States has about seven thousand deployed strategic nuclear weapons, shown in Table 1, each with a yield equivalent to a hundred thousand tons of TNT or more (Oelrich, 2005). In addition, North Korea has conducted underground tests of nuclear weapons in 2006 and 2009 and is now a nuclear weapon state. Iran is seeking to develop nuclear weapons and to become a nuclear weapon state (Lewin, 2010). As of 2008, there are eight countries that are said to be nuclear powers. Even adding South Africa, which had possessed nuclear weapons but then renounced them, and North Korea, which announced that it had carried out a nuclear test in October 2006, the number is no more than 10. Nuclear weapons are easy to use on the battlefield because, they are tremendous multipliers of the firepower in existing weapons. A single 100-pounds nuclear artillery shells more than equal the destructive effect of the least 8000 conventional shells. This saves 350 tons of conventional shells, plus the wear and tear on the guns, time, transportation, etc. Beyond the equalling blast effect on conventional shell, nuclear explosives also have radiation. Only 7000 nuclear weapons belonging to the Western forces would survive to be used and only two or three nuclear weapons per enemy battalion would be required to assure destruction (Dunnigan, 1988). In addition to the potentials of nuclear weapons, four to five thousand tactical nuclear weapons used in densely populated central Europe would leave more than 50 million dead or dying civilians (Dunnigan, 1988).

Deterrence is defined most economically by Glenn Snyder as ‘‘the power to dissuade (Wilson, 2008). Alexander George and Richard Smoke also define it as ‘‘simply the persuasion of one’s opponent that the costs and/or risks of a given course of action . . . outweigh its benefits.’’ Thomas Schelling calls deterrence ‘‘a threat . . . intended to keep an adversary from doing something’’ (Wilson, 2008). It is from this point of view that Oelrich (2005) opined that deterrence is a matter of trying to nudge a potential adversary’s cost/benefit

calculations in such a way to push him away from making an undesired decision. Deterrence also means the credible threat of retaliation in case of an attack. Retaliation aims to impose costs that are greater than any gain, thereby deterring the initial attack. In recent time it encompasses the threat of pre-emptive self-defence (Bock, 2007). Deterrence comes from having enough weapons to destroy the other's cities.

Nuclear deterrence began its life in 1946, after the bombing of the two cities of Japan (Hiroshima and Nagasaki), as the threat to destroy cities. This is why Brodie (1984) made the expectation of ''huge devastation of . . . peoples and territories'' one of the central tenets of deterrence. Nuclear deterrence is using the threat of nuclear attack to dissuade potential aggressors. Nuclear deterrence has relied on what today might be called a ''shock and awe'' strategy: threatening to devastate enemy cities in order to coerce. Certainly, when nuclear war was being discussed between India and Pakistan, for example, there seems to be an emphasis on the possibility of attacks against cities (McKinzie, Mian, Nayyar, and Ramana, 2001). Destroying cities, whether in the early stages or the latter is central to nuclear war. Nuclear deterrence is based, in part, on the threat of nuclear war. Thus, the ultimate nature of nuclear deterrence is based on showing a determination to use nuclear weapons. Nuclear weapons guard against the most dangerous threat which a country's citizens could face; that of a nuclear attack. For some nuclear weapons country, nuclear deterrence is the last line of defence against such an attack.

Reasons why Stronger States often fails to deter Weaker States or Competitors

Strategic Surprise

Strategic Surprise allows weaker states to achieve objectives that they cannot realistically achieve in a war against a stronger state. According to Handel (1983), weaker states were often attracted to strategic surprise as an option when they contemplated challenging stronger opponents. Strategic Surprise transforms war into an act of administration, allowing the weaker opponent to achieve objectives that are literally impossible to attain when facing a fully prepared and engaged opponent (Luttwak, 1987). Relying on Strategic Surprise to

overcome an opponent, Iraq under the Saddam Hussein administration had the *fait accompli* to reach some sort of compromise peace with the American government. Before occupying Kuwait, Saddam Hussein told the American ambassador to Iraq that the West in general and the U. S. in particular did not have the stomach for a bloody fight to counter Iraqi ambition in Kuwait. Even after the U. S. opposition to the Iraqi occupation of Kuwait was obvious, Saddam Hussein still believed that America casualty aversion would lead America under the leadership of George Bush to reach a compromise settlement (Freedman and Karsh, 1993). That Saddam Hussein undertook actions that were bound to pit against the interest of the West (America) that possessed overwhelming military and financial resources seems to make mockery of the very tenants of deterrence.

Strategic surprise also enables the utilisation of minimal resources to produce an overwhelming strategy and political effect. For instance, Al-Qaeda surprisingly destroyed the World Trade Centre with the aid of box cutter and mace in about two hour at the cost of a few hundred thousand dollars and about twenty personnel (NCTA, 2004). Another point of reference is the surprise attack of Israel by Egypt in the 1973 Yom Kippur war, because Egypt lacked the military capability to defeat Israel in a direct confrontation. For Israel, it made "no sense" for a weaker opponent to launch a surprise attack, thereby starting a war that they were doomed to lose (Uri, 2005).

The cost of Executing deterrent threats

Although it might make perfect strategic and political sense for a strong nation to issue a deterrent threat against the weak to prevent some unwanted action, would it actually be in the interest of the stronger party to carry out that threat in the face of deterrent failure? To answer this question, one must bear in mind that the cost of executing deterrence threats may outweigh the potential gains. Thus, deterrence can fail because the weak can come to believe that they can alter the incentives faced by the strong in the event of deterrence failure. They can come to believe that incentive to retaliate may lose their salience when politicians focus on the material and political cost of executing a deterrent threat or begin to question the relevance of

existing military options to reverse a deteriorating position on the ground at acceptable cost. Nalebuff (1991) corroborated this fact when he demonstrates that a central component of threat credibility lies in rival perceptions about the hidden costs of action. The lower the hidden costs, the greater the actual strength of a state and the greater its willingness to implement threats. The key to maintaining credibility is the proper manipulation of rival perceptions about hidden costs through the judicious use of threats and aggression. Too much or too little of either can damage a state's reputation and invite aggression.

Although the strong face an immediate trade-off between the cost of deterrence failure and the cost produced by the long-term erosion of the credibility of their deterrent threats, the weak can come to believe that they can alter this calculus in their favour (Wirtz, 2012).

Sophistication of Conventional Weapons. Conventional weapons might with repeated attacks destroy hard nuclear targets such as missile silos but the mission requires high confidence of destruction on the first strike. According to Gartzke and Jo (2009) nuclear weapons matter most in deterrence situations where the conventional capabilities of the nuclear state are relatively weak; they matter least when the nuclear power possesses significant conventional forces. In a nutshell, the same revolution in accuracy that has transformed *conventional* warfare has had equally momentous consequences for *nuclear* weapons and deterrence. Very accurate delivery systems, new reconnaissance technologies, and the downsizing of arsenals from Cold War levels have made both conventional and nuclear counterforce strikes against nuclear arsenals much more feasible than ever before. Thus, it was widely held in defence circles that the more successful the conventional defence, the greater the incentive would be for a nuclear-armed power to rely on nuclear weapons (Çetiner, 1998).

Dissatisfaction with the Violation of a Country's Core National Interests

National interest is the sum total of the values which a nation pursues or projects objectively in its interactions with other nations in the international arena for the common goal of the country. National interest can be used to refer to such concepts as "self-preservation", self-defence", and even "survival". There are two levels of national interest, the secondary and

vital (Morgenthau, 1962). Secondary interests are concerned with those security issues which a country may seek to compromise. Vital interests are concerned with those security issues meant to be preserved, which concerns the very life of the state and there can be no compromise or hesitation about going to war. Thus, a state dissatisfied with the manner in which her vital interest is violated will not hesitate to go to war even though her opponent is militarily more equipped. Dissatisfaction offsets 'perceptions of insufficient capability' thus leading to aggression even in the case where smaller states face more powerful rivals (Zinnes, North and Koch, 1961).

The Spectre of Nuclear Escalation

Both nuclear Weapon States and non-nuclear Weapon States are all aware of the destructive nature of nuclear weapons i.e. the possibility of escalation to a wide nuclear holocaust. Escalation is easily accomplished nuclear weapons because they are all wide area weapons. The effect of nuclear weapons is not only unpredictable, but also takes a larger toll among local civilians than troops. Nuclear weapons produced enormous quantities of lethal radioactive fallout and hence caused millions of civilian casualties (Keir, & Daryl, 2013). Nuclear weapons have radiation which lingers and attack friend and foe indiscriminately (Dunnigan, 1988). With each side in a battle throwing several thousand nuclear weapons at each other, soon there will be no one left to fight, nor will there be anything left of the battle area (Dunnigan, 1988).

Scientific evidence indicates that a wide scale nuclear war would be followed by a considerable change in the climate of the world for at least several months. The wide range of consequences from blast and shock to thermal and initial radiation, combined with physical injuries and residual nuclear radiation (fallout), are included in the effects of a nuclear explosion (Çetiner, 1998). A series of illnesses like flash-blindness, caused by excessive light, or environmental depreciation, with the devastating effects on people's morale, like black rain or the greenhouse effect are among the outcomes of nuclear explosions. Black rain was observed after the nuclear attacks on Hiroshima and Nagasaki in the Second World War

(Çetiner, 1998). There is a threshold for severe climatic calamities. Approximately two or three hundred nuclear explosions over cities, generating smoke, or about 2,000 to 3,000 high-yield surface bursts at nuclear missile silos send fine particles into the atmosphere. These particles cause only minor effects until this threshold is reached. Beyond this threshold, the effects increase enormously (Carl, 1986). Prolonged effects subsequently emerge. Winds would spread the black cloud of smoke and dust from the areas of conflict, affecting the global atmosphere in many ways. Erno (1984) indicated that "a large-scale nuclear war would introduce huge amounts of soil and soot aerosols into the atmosphere ... these introductions would be certain to have dramatic effects on hemispheric weather conditions for a period of weeks or months." As for countries that were not targeted by nuclear weapons, they would also be affected in physical terms, as well as having suffering economically with a worldwide cessation of trade (Çetiner, 1998).

The fact that nuclear weapons affect both the victim and the victimiser, make them less desirable to use by countries in conflict. Sechser and Furhmann (2013) found that whatever deterrent benefits nuclear weapons may confer, they are poor tools to bring about changes in international relations. Besides, how can a state credibly threaten to impose a sanction that, if imposed, would subsequently result in its own destruction? Aware of this fact, some weak countries and potential aggressors are less/or not deterred with nuclear weapons.

Nuclear Weapons Taboo

Today the use of nuclear weapons has continuously been criticised by nations; including nuclear weapon countries. President Barack Obama had declared the desire for a 'world free of nuclear weapons' (Obama, 2009). Thus, a number of analysts have advocated a strategy of deterring nuclear terrorism by threatening potential state sponsors (as well as nations that do not effectively secure their nuclear weapons and material) with retaliation if they are identified as the source of a nuclear weapon or material used in an attack (Montgomery, 2010). Besides, series of treaties has been signed banning the production and

use of nuclear weapons. Below are some of the treaties banning the production and use of nuclear weapons:

1. The 1967 Treaty for the prohibition of Nuclear Weapons in Latin America and the Caribbean.
2. The 1985 South Pacific Nuclear-Free Zone Treaty.
3. The 1995 Treaty on the South-East Asia Nuclear Weapon-Free Zone.
4. The 1996 African Nuclear Weapon-Free Zone Treaty.
5. The 2006 Treaty on Nuclear Weapon-Free Zone in Central Asia.
6. In 1992, Mongolia declared its Nuclear Weapon free status, which is internationally recognised and prohibits, inter alia, the acquisition, possession, placement, testing and use of nuclear weapons on its territory.
7. The 1995 Antarctic Treaty, inter alia, prohibits any measure of military nature on the continent of Antarctica, including any testing of nuclear weapons.
8. The 1967 Treaty on principles governing the activities of states in the exploration and use of Outer Space including the Moon and other celestial bodies, inter alia, prohibits placing nuclear weapons in Orbit around Earth, installing or testing these weapons on the Moon and other celestial bodies as well as stationing these weapons in Outer Space in any other manner.
9. The 1971 Treaty on the prohibition of the emplacement of Nuclear Weapon and other weapons of mass destruction on the sea-bed and the ocean floor and in the sub-soil thereof inter alia, prohibits the emplacement of nuclear weapons on the bottom of the ocean and in the sub-soil thereof (UNODA, 2010).

As of 2007, the above nine treaties were at different stages with regard to their signature, ratification and entry into force, as well as with regard to the signature and ratification of their attached protocols requesting assurances from the nuclear-weapon States.

In addition, in 1961, the United Nations General Assembly approved a Resolution sponsored by Ireland calling on all states to conclude an agreement that would ban the further

acquisition and transfer of nuclear weapons. In 1965, the Geneva disarmament conference began consideration of a draft nuclear nonproliferation treaty. The conference completed its negotiations in 1968, and on July 1, 1968, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) was opened for signature. 187 countries signed the Non-proliferation Treaty which entered into force in March 5, 1970, including three of the five nuclear-weapon states; the Soviet Union, the United Kingdom, and the United States. NPT attempted to prevent the spread of nuclear weapons by restricting the transfer of certain technology and relies on an inspection regime to be carried out by the International Atomic Energy Agency (IAEA). The Limited Ban Test Treaty (LTBT) was signed in 1963 banning nuclear test in the atmosphere, under water, in outer space.

On December 8, 1987, Soviet leader Mikhail Gorbachev and U.S President Ronald Reagan sign the Intermediate-Range Nuclear Forces Treaty
in Washington (Drell and Goodby, 2012). Also, a Comprehensive Test Ban Treaty (CTBT) that ban all testing of nuclear warheads was opened for signature in 1998. It was originally viewed as crucial for halting development of new weapons and spread of nuclear weapons. On May 24, 2002, the Strategic Offensive Reductions Treaty (SORT), also known as the Moscow Treaty, was signed by Bush and Putin in Moscow on May 24, 2002. The treaty commits the two countries to having no more than 1,700–2,200 operationally deployed strategic nuclear warheads each by December 31, 2012 (Oelrich, 2005) and it was a numerically large reduction. In April 2010, Obama and Russian President Dmitry Medvedev signed the New Strategic Arms Reduction Treaty (New START). Later that year, a bipartisan majority of the Senate approved the treaty, which requires verifiable reductions in deployed U.S. and Russian strategic warheads to a level of 1,550 each by 2018 (Drell & Goodby, 2012).

Recently, the International Physicians for the Prevention of Nuclear War (IPPNW) together with other NGO's have drafted a model Nuclear weapon Convention (MWC). The MWC is a multi-lateral agreement to prohibit development, testing, production, stockpiling, transfer, use and threat of use of nuclear weapons. MWC outlines 5 phases for the elimination

of nuclear weapons. Nuclear weapon state would be obliged to cover the cost of the elimination of their nuclear arsenal and an international verification regime would be established (Kant, 1990). Besides, Tannenwald (2007) put together rationalist and constructivist explanations to provide a historically rich and well researched argument to explain how it is possible that 'nuclear weapons have remained unused by the US since 1945.

Tannenwald (2007) argues that normative ideas about morality and legitimacy have led to the development of a collectively held, self-reinforcing norm of non-use of nuclear weapons, or a nuclear weapons taboo. The taboo not only constrains the behaviour of nuclear states but also constitutes their identities and interests as civilised nations. As a result, the United States has not detonated a nuclear weapon in war (since 1945) because the resultant indiscriminate and horrific destruction is antithetical to the US national identity as a civilised nation. As a matter of fact, that the leading nuclear powers have little inclination and few real plans to ever use nuclear weapons, tells of how most nuclear arsenals have shrunk. Besides, no exchange is likely between adversaries with nuclear weapons (the argument goes) because a fight in which numerous cities are destroyed is unacceptable. Thus, aware of all these facts, most weak states are not deterred with nuclear weapons, and have remained the major reason why the fears of nuclear dangers have lost much of their political urgency.

CONCLUSION

It is obvious that nuclear weapons do not deter potential aggressors as states leaders have often believed. Instead, state have come to know that the best method of defence against the nuclear weapon is likely to be the deterrent effect that the possession of the means of retaliation would have on a potential aggressor, thus, the major powers have proactively promoted the development of nuclear weapons. Consequently, the Soviet Union succeeded in developing an atomic bomb in 1949, and subsequently the United Kingdom, France, and China one after another came to possess nuclear weapons. They have actually shown that in order to counter the nuclear weapons of other countries, the simplest solution for a country would be to possess its own nuclear weapons. In addition, North Korea is moving forward with the development

of nuclear weapons, and multinational efforts continue to be made to stop North Korea from possessing such weapons, this is because of the possibility that the possession of nuclear weapons by North Korea could lead Japan to go nuclear and this could spread throughout Asia, thereby resulting in chain-reaction-type proliferation. Our best scientists now tell us that nuclear war would mean the end of human history. What political or national goals could possibly justify risking a nuclear war that would likely cause the extinction of the human race?

The notion of "mutual destruction" must be replaced with a system of "mutual security". As a matter of urgency, governments of nuclear weapons states must get rid of their nuclear weapons, as they may be tempted to use them. Governments of various countries particularly Africa should exert greater efforts needed to deny non-state actors (terrorist) access to fissile material and disrupt terrorist networks.

Existing nuclear powers should give up their nuclear weaponry, as this would help to eliminate a key source of threat that might be experienced by other states. This would also help to arrest the momentum toward proliferation of nuclear weapons.

Nuclear weapons states must adjust their deterrence strategies need to minimise the potentials for death and destruction while still denying their weaker opponents the opportunity to achieve their objectives.

Nuclear weapon countries and other countries that have the material to produce nuclear weapons should divert such material into the production of goods that will improve the living condition of human beings, as well as sustain the human race.

Countries of the world should show commitment in the fight against nuclear weapon production, testing, transfer, and proliferation by ratifying treaties meant for the purpose. This will help to avert the horrific consequences of nuclear weapons if used in future wars.

A strong international verification body should be established to check the violation of all treaties relating to nuclear weapons production and proliferation.

REFERENCES

Akpuru-Aja, A. (2009). *Policy and strategic studies: Uncharted waters of war and peace in international relations*. Abakaliki: Willrose and Appleseed publishing Coy, 41.

Ashley J. T. (2013). No Escape: Managing the Enduring Reality of Nuclear Weapons. In Ashley, J. T., Abraham, M. D. and Tanner, T. (Eds.). *Asia in the second nuclear age.* Seattle and Washington DC: The National Bureau of Asian Research.

Ayam, J. (2012). Deterrence and Appeasement. In Agara, T (ed.). *Theoretical perspective in strategic studies.* Ekpoma: Fata Super Sytem Limited, Ambrose Alli University Press, 71 – 72.

Bock, A. M. (2007). Negotiate with Terrorists! Or: Why Terrorism cannot be deterred. *Review Essay IPG*, 1, 156 – 162

Brodie, B. (1984). The development of nuclear strategy. In Steven E. Miller, S. E. (ed.). *Strategy and nuclear deterrence: An international security reader.* Princeton, NJ: Princeton University Press, 4.

Byers, R. B. (1985). Deterrence under attack: crisis and dilemma. In Byers R. B. (ed.), *Deterrence in the 1980s: crisis and dilemma.* London: Sage.

Carl, S. (1986). Nuclear war and climatic catastrophe: Some policy implications. In Lester, G. (Ed.). *The long darkness: Psychological and moral perspectives on nuclear winter*. New York, p. 26.

Çetiner, Y. T. (1998). Is nuclear deterrence morally acceptable? *Journal of International Affairs*, 3(1).

Cirincione, J. (2004). A global assessment of nuclear proliferation threats. A paper prepared for the weapons of mass destruction commission, June, 3. Retrieved 1st October, 2014, from http://www.un.org/disarmament/education/wmdcommission/files/No10.pdf.

Connolly, S. (2002). *War and conflict.* Oxford: Reed Educational and Professional Publishing Ltd, 36-37.

Drell, S. D. & Goodby, J. E. (2012). Nuclear Deterrence In a Changed World. *Arms Control Today*, 8 – 13, June.

Ellsberg, D. (2002). Secrets: A memoir of Vietnam and the pentagon papers NY: Viking, 63.

Erno, M. (1984). Techniques for manipulating the atmosphere. In Westing, A. H. (ed.). Environmental warfare a technical, legal and policy appraisal, London, 18.

Freedman, L. and Karsh, E. (1993). The gulf conflict: Diplomacy and war in the new world order. Princeton: Princeton university press, 52 and 236.

Gartzke, E. and Jo, D. (2009). Bargaining, nuclear proliferation, and interstate disputes. Journal of Conflict Resolution April, 53:209-233. Retrieved 2nd October, 2014, from

http://belfercenter.ksg.harvard.edu/files/uploads/Gartzke_Jo_Bargaining_Nuclear_Proliferation_and_Interstate_Disputes.pdf.

Green, J. (1985). *The A-Z of nuclear jagon.* London: Routledge and kegan Paul, 38 – 165.

Handel, M. (1983). Crisis and surprise in three Arabs-Israeli wars. In Knorr, K. and Morgan, P. (eds.). Strategic military Surprise. New Brunswick, transaction publishers, 113.

Huth, P. and Russett, B. (1984). What makes deterrence work: Cases from 1900 to 1980. *World Politics* 36(4), 496–526.

Jervis, R. (1984). Deterrence and perception. In Miller, S. (ed.). *Strategy and Nuclear Deterrence*. Princeton, NJ: Princeton University Press, 57–84.

Jervis, R. (1989). *The meaning of the nuclear revolution: Statecraft and the prospect of Armageddon*. Ithaca, NY: Cornell University Press.

Kant, I. 1990). Foundation of the metaphysics of morals. New York: MacMillan publishing. Retrieved 3rd September, 2012, from http://www.ippnw.org.

Keir A. L. & Daryl G. P. (2013). The new era of nuclear weapons, deterrence, and conflict. *Strategic Studies Quarterly, Spring*, 3 – 14.

Lewin, D. (2010). Game changer: The IAEA's report on Iran's nuclear activity. November. Retrieved from http://www.henryjacksonsociety.org/cms/harriercollectionitems/IAEAREPORT.pdf, on 26th August, 2015.

Litwak, R. S. (2000). *Rogue states and U.S. foreign policy: Containment after the Cold War.* Washington, D.C.: Woodrow Wilson Center Press.

Luttwak, E. (1987). *Strategy: The logic of war and peace*. Cambridge: Harvard University Press, 8.

Mahnken, G. T. and Maiolo, J. A. (eds) (2008). *Strategic studies: A reader.* New York, NY: Routledge, 181.

McKinzie, M., Mian, Z., Nayyar, A. H. and Ramana, M. V. (2001). The risks and consequences of nuclear war in South Asia. In Kothari, S. and Mian, Z. (eds.). *Out of the nuclear shadow*. New Delhi: Lokayan and Rainbow Publishers, 185-196.

Miller, S. E. (2001). The flawed case for missile defence. *Survival*, 43(3), 103–104.

Montgomery, E. B. (2010). *Understanding the threat of Nuclear terrorism*. Washington DC: Center for Strategic and Budgetary Assessments, April.

Morgan, P. M. (2012). The state of deterrence in international politics today. *Contemporary Security Policy*, 33(1), April, 85–107.

Morgenthau, H. J. (1962). *The Impasse of American Foreign policy.* Chicago: University of Chicago Press, 191.

National Commission on Terrorist Attack (2004). The 9/11 Commission report: Final report of the national commission on terrorist attack upon the United States. New York: Norton.

Nalebuff, B. (1991). Rational deterrence in an imperfect world. *World Politics* 43(3), 313–335.

Obama, B. (2009). Remarks by President Barack Obama, Prague, 5th April. Retrieved from http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered, on 15th November, 2015.

Oelrich, I. (2005). Missions for Nuclear Weapons after the Cold War. *Occasional Paper*, 3, January.

Overy, R. J. (2008). Air power and the origin of deterrence theory before 1939. In Mahnken, G. T. and Maiolo, J. A. (eds). *Strategic studies: A reader*. New York, NY: Rutledge, 135.

Payne, K. B. (2001). *The fallacies of cold war deterrence and a new direction.* Lexington: University of Kentucky Press.

Powell, R. (2003). Nuclear deterrence theory, nuclear proliferation, and national missile defense. *International Security*, 27(4),Spring, 86–118.

Record, J. (2004). Nuclear deterrence, preventive war, and counter proliferation. *Policy analysis*, 519, July 8, Washington, D.C: Cato Institute.

Robert, S. L. (2000). *Rogue states and U.S. foreign policy: Containment after the cold war*. Washington, D.C.: Woodrow Wilson Center Press.

Russett, B. (1967). Pearl harbour: Deterrence theory and decision theory. *Journal of Peace Research*, 4(1), 89–105.

Sechser, T. S. and Furhmann, M. (2013). Crisis bargaining and nuclear blackmail. *International Organization*, 67(1), January, 173-95.

Sagan, S. D. (1989). *Moving targets: nuclear strategy and national security*. Princeton, NJ: Princeton University Press.

Sagan, S. D. and Waltz, K. N. (2003). *The spread of nuclear weapons: A debate*. New York: Norton, 34.

Starr, S. (n.d). Consequences of a single failure of nuclear deterrence. Retrieved 3rd October, 2014, From http://www.psr.org/assets/pdfs/consequences-of-a-singlefailure.pdf.

United Nations Office for Disarmament Affairs (2010). Treaties establishing nuclear-weapon free Areas. Retrieved from www.un.org/disarmament/WMD/Nuclear/NWFZ, on 26th August, 2015.

Von Neumann, J., and Morgenstern, O. (1944), Theory of games and economic behaviour. New York: John Wiley and Sons, 5 – 297.

Wirtz, J. J. (2012). Deterring the weak: Problems and prospects. *Proliferation Paper*, 43, 7.

Woolsey, J. R. (2009). U. S. *Nuclear Deterrence in the 21st Century*. Washington, DC: Centre for Security Policy Press.

Zinnes, D., North, R. And Koch, H. (1961). Capability, threat and the outbreak of war. In Rosenau, J. (ed.). *International politics and foreign policy*. New York: Free Press, 469–482.