

SPREAD OF NUCLEAR WEAPONS IN ABSENCE OF GLOBAL GOVERNANCE

Dr. Yogesh Kumar Gupta,

Asst Prof, (Pol Sc),
Motilal Nehru College,
University of Delhi

ABSTRACT

The absence of global governance has resulted in vertical and horizontal spread of nuclear weapons. The mechanisms like Non proliferation treaty and the Comprehensive test ban treaty have failed to transform themselves as nuclear weapons control regimes. Result is that in the post cold-war period, three developing countries, India, Pakistan and North Korea have gone overtly nuclear. Incidentally all of these belong to Asia. Acquisition of nuclear weapons by these Asian countries and others continued desire to get them, inter alia, reopened the debate on the factors that motivate countries to go nuclear. It must be noted here that out of the eight nuclear weapons states who have gone overtly nuclear at least four out of them are modern liberal democracies. So what international theory did they follow while deciding their nuclear programme?

This study intends to understand the external factors that motivate countries to go nuclear, along with suggesting new mechanisms to stop further proliferation of these weapons. Also can a global regime be formed now to safeguard these weapons of mass destruction from reaching in the hands of non state actors who are desperate for them?

INTRODUCTION

In the history of warfare, nuclear weapons are relatively recent arrival in the armories of nations. It is only sixty-five years since the first atomic bombs were used in a conflict. According to Timothy Garden, "Actually speaking, the investment in financial and scientific terms that was needed to design and build the nuclear weapons was of a different order of magnitude than earlier weapons development. Even today, when the processes are well understood, producing a nuclear weapon is not a trivial task."ⁱ It is for this reason that many nations like South Africa have been seen dismantling their nuclear programme in between.

Nuclear weapons however, have spread both, vertically and horizontally. Though, the pace of their proliferation have remained slow.

In the post cold-war period, three developing countries, India, Pakistan and North Korea have gone overtly nuclear. Incidentally all of these belong to Asia. Acquisition of nuclear weapons by these Asian countries and others continued desire to get them, inter alia, reopened the debate on the factors that motivate countries to go nuclear. Generally speaking, reasons to go nuclear have varied with country, time, place and leadership.

Broadly, the term spread of nuclear weapons or nuclear proliferation refers to the process whereby

states acquire nuclear weapons and (those who already possess them) try to improve the quality and quantity of such weapons through their nuclear policy.

Lewis Dunn and William Overhault have identified four factors that motivate countries to go nuclear. These are, "the strategic military or security calculations, influence and prestige, bureaucratic factors and economic consideration"ⁱⁱ. According to Stephen M. Meyers, there are three factors or incentives that motivate countries to go nuclear: "They are international power- prestige incentives, military and security incentives and domestic-political incentives"ⁱⁱⁱ.

The above made statements by Lewis Dunn William Overhault and Stephen M. Meyers, clearly divide the determinants of a country's nuclear policy in to two parts. While strategic military or security calculations, influence and prestige along with considering nuclear weapons as deterrent and proving once superiority form the external determinants, bureaucratic factors, economic consideration and domestic-political incentives form the internal or the domestic part of it.

In order to have a comparative overview of the determinants of nuclearisation, it is essential to look at the specific factors that have made each country go nuclear.

But before touching upon these issues, it becomes inevitable to understand some of the theories given for proliferation of nuclear weapons. As these theories may be helpful to understand the arguments of various nuclear weapons states given by them to support their case for nuclear weapons acquisition.

THE DETERRENT THEORY

Nuclear weapons as deterrents

There has been a long debate over the issue of nuclear weapons having a deterrent effect or not. Here are some arguments or theories referred as deterrent theories.

According to D. Yost, "Deterrence is a strategy by which governments threaten an immense retaliation if attacked, such that aggressors

are deterred if they do not wish to suffer great damage as a result of an aggressive action. Weapons of mass destruction (WMDs), conventional weapons strength, economic sanctions, or any combination of these can be used as deterrents." He argues further, "Mutually Assured Destruction (MAD) is a form of this strategy, which came to prominence during the Cold War when it was used by the US to characterize relations between the United States and Soviet Union. Both nations were prepared to fight a full scale nuclear and conventional war, but were not willing to risk the carnage of a full scale nuclear war".^{iv}

There has been much debate in the academic study of International Relations as to the advisability and rationality of nuclear proliferation. Gallois, an advisor to DeGaulle, argued that the mere possession of a nuclear arsenal was enough to deter other nations from waging a war, and as a result he argued that the spread of nuclear weapons would increase international stability. Gallois argued that the retaliation threatened if one actor is attacked, is so great that aggressors are deterred if they do not wish to suffer great damage as a result of an aggressive action; it becomes irrational to attack.^v

Harvey examined twenty-eight crises worldwide, involving superpowers from 1948-1988, and concluded that nuclear weapons had, in fact, made them behave exceedingly carefully, which he argued was proof that deterrence theory was a practical and implementable theory.^{vi}

Thus, Deterrence by denial is a strategy whereby a government builds up or maintains defense and intelligence systems with the purported aim of neutralizing or mitigating attacks. Aggressors are deterred if they choose not to act, perceiving the cost of their action to be too high in relation to its likelihood of success.

GAME THEORY AND NUCLEAR WEAPONS

A decision-making approach based on the assumption of actor rationality in a situation of

competition. Each actor tries to maximize gains or minimize losses under conditions of uncertainty and incomplete information, which requires each actor to rank order preferences, estimate probabilities, and try to discern what the other actor is going to do. In a two-person zero-sum game, what one actor wins the other loses; if A wins 5, B loses 5, and the sum is zero. In a two-person non-zero or variable sum game, gains and losses are not necessarily equal; it is possible that both sides may gain. This is sometimes referred to as a positive-sum game. In some games, both parties can lose, and by different amounts or to a different degree. So-called n-person games include more than two actors or sides. Game theory has contributed to the development of models of deterrence and arms race spirals, but it is also the basis for work concerning the question of how collaboration among competitive states in an anarchic world can be achieved: The central problem is that the rational decision for an individual actor such as a state may be to "defect" and go it alone as opposed to taking a chance on collaboration with another state actor. Dealing with this problem is a central concern of much of the literature on international regimes, regional integration, and conflict resolution.^{vii}

Deterrence theory and game theory have been used in proliferation analysis: this led to the notion of MAD in which a full-scale use of nuclear weapons by two opposing sides would effectively result in the destruction of both the attacker and the defender.^{viii}

MAD is effectively a form of the Nash equilibrium, in which both sides are attempting to avoid their worst possible outcome: nuclear annihilation.^{ix}

Sagan and Waltz argue that MAD logic should work in all security environments, regardless of historical tensions or recent hostility. They see the Cold War as the ultimate proof of MAD logic – the only occasion when enmity between two Great Powers did not result in military conflict. This was, they argue, because neither Washington nor Moscow would risk nuclear armageddon to advance

territorial or power goals, hence a peaceful stalemate ensued.

BALANCE OF POWER THEORY AND NUCLEAR WEAPONS

As a theory, balance of power predicts that rapid changes in international power and status—especially attempts by one state to conquer a region—will provoke counterbalancing actions. For this reason, the balancing process helps to maintain the stability of relations between states. A balance of power system functions most effectively when alliances are fluid, when they are easily formed or broken on the basis of expediency, regardless of values, religion, history, or form of government. Occasionally a single state plays a balancer role, shifting its support to oppose whatever state or alliance is strongest. The theory is very close to Classical Realism.

In terms of spread of nuclear weapons the balance of power theory can be first applied to Former U.S.S.R. Who tried to balance America with respect to its nuclear capability.

THE FIRST NUCLEAR WEAPON STATE

United States of America

At an initial stage, the impetus behind the atom bomb project in United States came from a fear of the consequences of a unilateral German success in military exploitation of atomic energy. The German atomic threat, however, did not materialise.^x However, once the U.S. project was well underway, the responsible officials expected a substantial return on their investment. For them, whenever the atomic bomb was available it would be a weapon that should be used against the enemies of the United States, notwithstanding, the arsenals enemies had available with them. Henry Stimson, U.S. Secretary of War from 1939 to 1945 made it clear that, "the common objective throughout the War should be to produce the atom bomb and use it"^{xi}.

The immediate question that arose all around the world, after bombardment of Hiroshima and Nagasaki, was: Why did America use the bomb? Was it to win the Second World War, which it would have won anyway? What was the motive then, behind the use of nuclear bomb against a country, which was already going down the barrels? Taking into consideration the American position in July 1945 vis-à-vis its adversaries, makes it hard to believe that winning the war was the motive behind the dropping of nuclear bomb. On the contrary, its other objectives like proving its superiority in the international system and to have a demonstrating effect, seems to have motivated it for the decision.

Quest for Superiority

The United States of America kept itself away from the Second World War till the Pearl Harbor incident took place. However, soon after entering in the war, it realized that, with all its military as well as economic strength it could dominate the world. The former U.S.S.R., its main adversary ideologically, was not powerful enough at that time and other allied powers like Britain were quite happy to play a secondary role to it. Putting all the factors together, that was the right time and a great chance for U.S. leadership to establish the country's supremacy not only amongst the axis nations but also within the allied powers. Atom bombs were dropped on August 6 and August 9, 1945, on two cities of Japan-Hiroshima and Nagasaki. The action was taken to achieve superiority in the international system. It exhibited that the U.S. has acquired the status of being the only superpower. Not just that, the use of bomb, apart from causing bloodshed, created terror in the hearts of other nations those were not with the US or didn't want to be with it. Monopoly over the atom bomb also gave U.S. tremendous bargaining power during post Second World War settlements.

Demonstrating Effect

The Japanese leadership's late decision to surrender in 1945, despite the blatant hopelessness of the position, was not so much based on a lingering sense of glory and honour as on a deep sense that constitutional essence of Japan, embodied in the personage of the Emperor, was at stake. However, that was an opportunity for United States to demonstrate its latest invention. In the

discussion amongst scientists connected with the Manhattan project, the value of the atomic bombs, to a surprise attack was a major theme. The key influences on the bomb's use were Stimson, Marshall, Oppenheimer, Groves, Bush and Conant. To them the bomb was not seen purely as an intensive form of strategic bombardment. As Oppenheimer writes, "The visual effect of an atomic bomb would be tremendous. It would be accompanied by a brilliant luminescence which would rise to a height of 10,000 to 20,000 feet"^{xii}. It was on this spectacular quality that those considering the use of bomb began to move away from the previous implicit, strategy of cumulative pressure to one of maximum shock. Basically a spectacular display was accompanied by maximum destruction, and the sole motive of this was "to have a demonstrating effect".

For America hence, external factors like, proving its superiority in the international system and to have a demonstrating effect, were the main reasons behind its nuclear programme.

THE FORMER SOVIET UNION'S NUCLEAR PROGRAMME

During the immediate post-war years, allies of second World-War U.S.A. and Former U.S.S.R. turned in to major adversaries. The Soviet leader Stalin hence, was determined not to allow the U.S. monopoly of the atomic bomb to influence the course of international affairs. A British journalist in Moscow wrote: "the news [of Hiroshima] had an acutely depressing effect on everybody. It was clearly realized that this was a new fact in the world's power politics, that the bomb constituted a threat to Russia."^{xiii} Within weeks, Stalin issued a decree that made the development of the atomic bomb a top priority. The Soviet leader was prepared to allocate huge resources to the nuclear programme at a time when his country lay in ruins. "If a child does not cry", he told Igor Kurchatov, the scientific director of the project, "the mother doesn't understand what he needs. Ask for anything you like. You will not be turned down"^{xiv}. If anything the Americans' possession of the weapon, made Stalin more obdurate. In September 1946 he told a British journalist James Bertram that, atomic bombs were meant to frighten

those with weak nerves. He went on to concede that the bomb of course, created a threat. But he warned monopoly ownership of the atomic bomb cannot last long and he was right, it didn't. "On August 29, 1949, USSR tested its first atomic bomb, well before American scientist's expectations."^{xv}

To Have a Deterrent Effect

It is a known fact that along with the motives like, maintaining balance of power, vis-à-vis U.S.A. and enhancing its status in international system, the first and foremost Soviet motive behind the acquisition of nuclear weapons was to deter the United States from using its nuclear capability against it. In fact, addressing a meeting of scientists, Stalin himself stated that, "although, the possibilities of a direct nuclear confrontation between the United States and the Soviet Union would be very less, seeing the destructive nature of the weapons. But that would happen only when, we would develop weapons of equal destruction to that of our adversary."^{xvi}

Balance Of Power

Achieving nuclear status became essential for Soviet Union to maintain its claim of being a Superpower in post Second World War scenario, when Cold War was at its peak. Eventual accumulation of such a stockpile by it therefore is often explained in terms of, action-reaction. Hence the Soviet nuclear proliferation should not be explained in terms of its security only, but also to maintain balance of power with the U.S.A. Actually, "the bombing of Hiroshima and Nagasaki demonstrated in a dramatic way the destructive power and the strategic importance of atomic bomb. It was Hiroshima that brought the atomic bomb purely into Soviet strategic calculations"^{xvii}. On December 3, 1945, the British Ambassador, Sir Archibald Clark Kerr, told the Foreign Secretary, 'the Soviet victory over Germans had made the formers leaders confident that national security was within their reach'. Then came the atomic bomb, he wrote, a blow, the balance which had now seemed set and steady was shaken. Stalin echoed this assessment. He said, in his remark to Vannikov and Kurchatov, "Hiroshima had destroyed the balance of power between U.S. and USSR"^{xviii}. However, the immediate threat he saw was not military, but that of atomic

diplomacy. Stalin was afraid, "that the United States would try to use its atomic monopoly in imposing post-war settlements"^{xix}

BUILDING UP OF INDEPENDENT DETERRENTS

THE GREAT BRITAIN

The independent nuclear deterrence concept became the official British policy in the late 1940s and early 1950s. Actually, after the U.S. strike in Japan and the fear of Soviet retaliation, the political leadership in Britain as a sign of the country's independence considered acquisition of nuclear weapons. The British Chiefs of Staffs also advised the Prime Minister "that possession of atomic weapons of our own would be vital for our security."^{xx} Taking into account his advise, on January 8, 1947, the Cabinet ad-hoc committee made the decision to restart the independent British nuclear programme. It has been argued that the best method of defence "against the new weapon is likely to be the deterrent effect that the possession of the means of retaliation would have on a potential aggressor. Therefore, it is essential that, the British production of nuclear weapons should start as early as possible. From the beginning, thus British planning did not focus on how atomic weapons might strengthen Britain's fighting power but on the fear of nuclear weapons in the possession of an enemy. Therefore, atom bombs were not seen as assets, but as a danger and the only way it was thought this danger could be checked, was through the threat of retaliation"^{xxi}. Britain, it was implied, needed nuclear weapons to shield her vulnerability to nuclear attack. A key characteristic of its nuclear policy from the very beginning, hence, was for nuclear deterrents to work, it had to be credible. The concept therefore, was not just of existential deterrents. Instead they have emphasised that deterrence lies in being prepared to use. In 1953 therefore, British Chief of Staffs stated that "it was vital to reduce the threat to United Kingdom by countering at source, Russia's capacity of long range attacks"^{xxii}.

Quest for a Great Power Status

The Maud Committee 1945 had recommended that Britain should carry out the nuclear programme independently.^{xxiii} According to Igor Sutyagin, "The decision to develop British nuclear bomb however, was mainly driven by Winston Churchill's feeling that United Kingdom must possess each sort of the most important weaponry which the United States and the Soviet Union possess to keep its great power status. It was believed even at a preliminary stage of the nuclear program that the possession of nuclear weapons would symbolise the Britain's role as the great power"^{xxiv}. Even though, it was considered by the United Kingdom leadership that there were the same threats to the U.K. interests and security as to those of the United States, NATO and European countries. Nevertheless, the general consideration of the Whitehall Cabinet was that Britain's ability to reach the purposes of nuclear deterrence independently of any allied powers (i.e. independently of the United States and their support) would strengthen Great Britain's international status as the great power.

FRANCE'S DESIRES FOR NUCLEAR WEAPONS

In 1954 at the latest the French Government decided that France should become a nuclear power and just six years later, on February 13, 1960, France conducted its first nuclear test in Reganne. The earliest rationale put forward by the French Government, for the need for nationally owned nuclear weapons at the end of December 1954 was that the armed forces which do not possess them, lose all effectiveness in the face of an adversary, who has them. "A great state" explains De Gaulle, "which does not possess nuclear weapons while other has them, doesn't command its own destiny"^{xxv}. Two key themes of French nuclear programme, therefore, were the need for independence and deterrence of a stronger power by a weaker power. It was based on nuclear sufficiency, that is, the smallest nuclear arsenal that could satisfy the needs of such a strategy.

Unreliability of Military Allies

In the spring of 1954, France failed to persuade President Eisenhower to threaten the use of nuclear

weapons, to release French forces in Dien-Bien-Phu.^{xxvi}

The following years saw France's further disenchantment with her European and American partners for security, in the context of, Suez crisis and France's attempt to hold on to Algeria. Having seen all this, the French drew their own conclusions. Beatrice Heuser says, "While Britain spoke in a rather circumspect manner about America's future reliability, displaying embarrassment at questioning the scruples of a friend, the French enjoyed the frank disclosure of unreliability of America's nuclear guarantees"^{xxvii}. As General Georges Catroux told the Defense Council of French Government, "those who have nuclear arms will act above all to serve their own interest. There will be states, which have the atomic bombs, (which won't use them among themselves). There will be states, which do not have the atomic bomb, and they will be the nuclear battlefields. Therefore, we need our own nuclear weapons for our own security and for our own negotiations and if possibility arises, for an atomic response"^{xxviii}. Thus from the beginning the French quest for an independent nuclear force was less a reaction to any perceived Soviet threat to France herself, than the quest for political weight, as conferred by nuclear weapons, vis-à-vis the Soviet Union on a global political stage and for independence vis-à-vis France's own allies.

Status Enhancement

For France, nuclear weapons were seen as a possible aid to national recovery, boosting morale and insuring that France returns to her proper rank amongst the nations. It was De Gaulle's belief that, nuclear weapons were the all powerful weapon system needed in modern times, and thus, key to France's renewed glory and prestige. In fact, status enhancement was announced as a principal, when France adopted its strategic rationale for acquisition of nuclear weapons.

CHINA

On October 16, 1964, Chou-En-Lai announced: "Comrades, Mao has asked me to tell you that, today afternoon China has detonated its first atomic bomb"^{xxix}. The Chinese motivation to go nuclear came from its threat perceptions, vis-à-vis U.S.A. and later on from even former USSR and its desire to upset American

Soviet superiority in conventional weapons. This, however, is an extremely simplistic explanation of the Chinese nuclear agenda.

Beginning of the Chinese nuclear programme

By 1953 the Chinese, under the guise of peaceful uses of nuclear energy, had initiated research leading to the development of nuclear weapons. The decision to develop an independent strategic nuclear force was made no later than early 1956 and was to be implemented within the Twelve-Year Science Plan presented. In September 1956 to the Eighth Congress of the CCP. The decision to enter into a development program designed to produce nuclear weapons and ballistic missile delivery systems was, in large part, a function of the 1953 technology transfer agreements initiated with the USSR. "In mid-October 1957 the Chinese and Soviets signed an agreement on new technology for national defense that included provision for additional Soviet nuclear assistance as well as the furnishing of some surface-to-surface and surface-to-air missiles. The USSR also agreed to supply a sample atomic bomb and to provide technical assistance in the manufacture of nuclear weapons. The Soviets provided the Chinese with assistance in building a major gaseous diffusion facility for production of enriched uranium."^{xxx} However, When Sino-Soviet relations cooled in the late 1950s and early 1960s, the Soviet Union withheld plans and data for an atomic bomb, abrogated the agreement on transferring defense technology, and began the withdrawal of Soviet advisers in 1960. Despite the termination of Soviet assistance, China committed itself to continue nuclear weapons development.

Perceived Nuclear Threat from an Adversary as well as from the Ally

According to John W. Garver, "China's perceptions of external threat that led to its research development, accumulation, and deliberation about possible use of nuclear weapons, had almost entirely to do with, first the United States and later USSR"^{xxxi}. A possible American resort to nuclear attack was always very much in Chinese mind during its various international faces off with U.S. like in the Korean

War, Taiwan Strait crises in 1958 and Vietnam War of 1965. for example, In July 1950, at the very beginning of the Korean War, President Truman ordered 10 nuclear configured B-29s to the Pacific, and "he warned China that the US would take 'whatever steps are necessary' to stop Chinese intervention and that the use of nuclear weapons 'had been under active consideration.'"^{xxxii} In 1952 President-elect Eisenhower publicly hinted that he would authorize the use of nuclear weapons against China if the Korean War armistice talks continued to stagnate. In 1954, the commander of the US Strategic Air Command General Curtis LeMay stated his support for the use of nuclear weapons if China resumed fighting in Korea. LeMay stated, "There are no suitable strategic air targets in Korea. However, I would drop a few bombs in proper places like China, Manchuria and Southeastern Russia. In those 'poker games,' such as Korea and Indo-China, we . . . have never raised the ante - we have always just called the bet. We ought to try raising sometime."^{xxxiii} Finally, in January 1955, US Navy Admiral Radford also publicly advocated the use of nuclear weapons if China invaded South Korea.

China's determination to develop nuclear weapons was also followed from its beliefs: that, its alliance with Soviet Union did not provide adequate security. In fact, in "1960s some Chinese leaders were beginning to fret about possible Soviet Union intervention in China and the unforeseeable consequences that might ensue"^{xxxiv}. These perceived threats by China to its security were reflected soon after 1964 nuclear test. A Chinese journal *Current Affairs* published from Beijing wrote, "Atomic bomb is no longer monopolised by U.S.A. and Soviet Union, as it too had it now and if any one, dares to use the bomb, she naturally will get the retaliation deserved"^{xxxv}.

To Upset American /Soviet Superiority in Conventional Weapons

Chinese think tank worked for the atomic bomb with an idea that, "a self reliant strategy of dissuasion by nuclear deterrents would better serve China's national security interest, then the alternatives of dissuasion by conventional deterrence or dissuasion by conventional

defence. It also emphasised nuclear rather than conventional forces as the means for fulfilling the requirement of its deterrent strategy, because the revolutionary implication of this new military technology suggested that, such forces would provide for a more robust yet still affordable means for dissuading powerful foes^{xxxvi}.

Prestige

China's leaders ardently and early on embraced the pursuit of international status via nuclear weapons. Chinese Premier Mao always claimed that he had a vision to make China a world power. Garver says, "An interest therefore, in bolstering China's international prestige also contributed to Beijing's decision to pursue nuclear weapons. Its policy proved to be right, and that steady development of Chinese nuclear arsenal was rewarded by its inclusion in the top tier of world powers^{xxxvii}."

The Making of Pakistan's Nuclear Weapons Policy

"If India builds the bomb, we will eat grass or leaves, even go hungry, but we will get one of our own. We have no other choice",^{xxxviii} said Zulfikar Ali Bhutto, former President of Pakistan.

According to Samina Ahmed, "Three interlinked determinants are primarily responsible for the directions of Pakistan's nuclear weapons policy--the India factor, the international environment, and Pakistan's internal bargaining processes. In the past, Pakistan's relations with India, the role of influential regional and extra-regional actors and the security perceptions and institutional interests of Pakistan's politically dominant military directed its nuclear decisionmaking. These factors influenced Pakistan's decision to pursue a nuclear weapons program, its adoption of an ambiguous nuclear posture, and the subsequent abandonment of ambiguity for an overt nuclear weapons policy in May 1998. In the future, the formulation of Pakistani nuclear policy will also be influenced by its relations with India, the response of the international community to Pakistan and India's nuclear ambitions, and by the perceptions and organizational preferences of Pakistan's nuclear decision making apparatus."^{xxxix}

Achievement of a Status as a Regional Power Coequal with India

From its inception, Pakistan's nuclear policy has been India-centric in nature, revolving around perceptions of threat from and hostility towards India with which it has fought three wars. As a result of this adversarial relationship, Pakistan has consistently attempted to challenge or undermine India's standing within the South Asian region and in global forums. Nuclear weapons are perceived as one of the means of advancing Pakistan's regional interests and its standing in the international arena vis-à-vis India. The issue of prestige is also an important motivating factor since Pakistan is adamant on matching India's nuclear accomplishments.

Although the India factor dominates Pakistan's nuclear decision-making, the international environment and the role of regional and extra-regional actors in particular the US and China also influence Pakistan's nuclear directions. In the 1980s, for instance, Pakistan exploited an informal alliance with the US to attain nuclear weapons capability with the assistance of its neighboring ally and India's adversary, China. Increased US pressures in the post-Cold War environment placed some constraints on Pakistan's nuclear weapons program which was ostensibly capped but in actuality developed even further with Chinese military and technological assistance.

INDIA'S NUCLEAR PROGRAMME

The Indian nuclear programme is guided by the regional threats it has faced. The country has fought four direct wars with Pakistan and one with China. Their threat becomes even more concerning due to their defence and nuclear nexus. Indian security analysts hence, see country's nuclear programme as a response to threats she has faced from her neighbors.

ISRAEL'S NUCLEAR BOMB

Israel is an example of a covert nuclear weapon state. According to Tom Engelhardt, "Israel is a country that is often quietly forgotten when nuclear weapons are

discussed. It first developed these weapons in the 1960s with French help, and had a limited capability by the time of the Yom Kippur/Ramadan war of October 1973. It has since built up substantial nuclear forces including aircraft-delivered free-fall bombs and up to 100 warheads carried by variants of the Jericho land-based ballistic missile with a range of up to 1,800 kilometers. The total arsenal is likely to be around 200 warheads, including fusion (H-bomb) weapons. Israel may also have tactical artillery shells and may be developing a warhead for use on a submarine-launched cruise missile."^{xi}

Its nuclear capability hence, is arguably the most secretive weapons of mass destruction programme in the world. To quote Waltz, "It is now clear that Israel has had a nuclear weapon capability for many years. Most authorities assume she, either has them in hand, or she can quickly assemble them."^{xii}

It is believed that, Israel went for nuclear weapons because, it had lived in fear of its adversary's present or future conventional strengths"^{xiii}. The country is surrounded by Arab states who question the very existence of Israel and with whom it has fought many wars in the past. Thus, it is Israel's threat perception vis-à-vis the Arab states which has guided Israel's nuclear programme.

Justifying Israel's nuclear programme the Former Israeli Prime Minister Shimon Peres opined, "The suspicion and fog surrounding this question are constructive, because they strengthen our deterrent".^{xiii}

Unlike Iran and North Korea – one countries whose alleged nuclear ambitions have recently come to the fore front is Israel who has never signed the Nuclear Non-Proliferation Treaty, designed to prevent the global spread of nuclear weapons. As a result, it is not subject to inspections and the threat of sanctions by the United Nations nuclear watchdog, the International Atomic Energy Agency.

NORTH KOREA

According to Robert S. Norris, Hans M. Kristensen, and Joshua Handler, "North Korea has apparently become the world's ninth nuclear power"^{xiv}. Its

nuclear programme is no more a secret. The fact that North Korea (the Democratic People's Republic of Korea, or DPRK) was threatened with nuclear weapons during the Korean War, and that for decades afterwards U.S. weapons were deployed in the South, may have helped motivate former president Kim Il Sung to launch a nuclear weapons program of his own. Rinn-Sup Shinn, opines in the C.R.S. report published in 1993, that "North Korea is undergoing a wrenching phase of adjustment to an uncertain post-Soviet world. Its government is reined in by two major constraints: fear that any political or economic reform would have the same fatal consequence for itself as it had for the former Soviet Union and other erstwhile allies; and fear that the United States, South Korea, and other "enemies" would stop at nothing to overthrow the communist regime of the North".^{xiv}

However, with the collapse of the Soviet Union, North Korean leaders recognized the need for a new security relationship with a major power since Pyongyang could not afford to maintain its military posture. North Korean leaders therefore sought to forge a new relationship with the United States, the only power strong enough to step into the vacuum left by the collapse of the Soviet Union. From the early 1990s, throughout the first nuclear crisis, North Korea sought a non-aggression pact with the United States. The U.S. though, rejected North Korean calls for bilateral talks concerning a non-aggression pact, this led to a diplomatic stalemate. Could be an immediate reason for D.P.R.K's nuclear programme.

But perhaps the two most important factors in North Korea's attempts to obtain nuclear weapons and become militarily self-reliant were the Cuban Missile Crisis of October 1962 and the prospect of a US-Japan-ROK alliance following the 1965 establishment of diplomatic relations between the ROK and Japan. Kim Il Sung reportedly did not trust that the Soviets would live up to the conditions of the mutual defense pact and guarantee North Korea's security since they betrayed Castro by withdrawing nuclear missiles in an effort to improve relations with the United States. As a North Korean official explained to Soviet Premier Alexei Kosygin in

1965, "the Korean leaders were distrustful of the CPSU and the Soviet government, they could not count on that the Soviet government would keep the obligations related to the defense of Korea it assumed in the Treaty of Friendship, Cooperation and Mutual Assistance, Kim Il said, and therefore they were compelled to keep an army of 700,000 and a police force of 200,000."^{xlvi} In explaining the cause of such mistrust, the official claimed that "the Soviet Union had betrayed Cuba at the time of the Caribbean crisis."^{xlvii}

Despite these accusations against Former Soviet Union, the North Korean nuclear programme began in the 1960s With Soviet help. China also provided various kind of support over the next two decades, and by the late 1980s success was near. A milestone was reached with the construction of a 5-megawatt electric (MWe) reactor that began operating in 1986. More recently, Pakistan has played a substantial role in the progress of North Korea's nuclear program.^{xlviii} In November 2002, she even decided to remove U.N. seals from a nuclear power facility, which could provide fuel for a nuclear weapon in a matter of months. In fact, on February 13, 2003, I.A.E.A. published documents containing evidence that, North Korea could acquire nuclear weapons, as early as, "in next two months"^{xlix} this prediction has come through now. On 9-10-2006 the country's national T.V. network had announced Korea going nuclear. Though, this test by Pyongyang was met with severe criticism from all the sides. Never the less it is a fact now that one more country have gone overtly nuclear in the world in general and in Asia in particular. In April 2009, reports even surfaced that North Korea has become a "fully fledged nuclear power", an opinion shared by IAEA Director General Mohamed ElBaradei.ⁱ

IRAN'S NUCLEAR ASPIRATIONS

The Islamic Republic of Iran's nuclear program goes back many decades. In recent years global political change has caused Iran's program to fall under intense scrutiny and even occasioned charges that Iran is seeking to develop nuclear weapons. Iran, however, has

maintained that the purpose of its nuclear program is the generation of power; any other use is a violation of the Nuclear Non-Proliferation Treaty, of which Iran is a signatory.ⁱⁱ

The Iranian nuclear chronology starts with The United States and Iran signing a civil nuclear cooperation agreement as part of the US Atoms for Peace programme in 1957. The agreement, which provides for technical assistance and the lease of several kilograms of enriched uranium, also calls for cooperation on research on the peaceful uses of nuclear energy.ⁱⁱⁱ Since that time Iran with the help of U.S. Pakistan and nations has progressed in the field of nuclear research.

Though, some believe and have alleged that Iran has been trying to acquire nuclear weapons since the days of the Shah.ⁱⁱⁱⁱ In fact U.S. President George W Bush has called Iran along with North Korea the axis of evil because of their nuclear programme.

The controversy over Iran's nuclear programs centers in particular on Iran's failure to declare sensitive enrichment and reprocessing activities to the International Atomic Energy Agency (IAEA). Enrichment can be used to produce uranium for reactor fuel or (at higher enrichment levels) for weapons. Iran says "its nuclear program is peaceful, and has enriched uranium to less than 5%, consistent with fuel for a civilian nuclear power plant."^{liv}

After public allegations about Iran's previously undeclared nuclear activities, the IAEA launched an investigation that concluded in November 2003 that Iran had systematically failed to meet its obligations under its NPT safeguards agreement to report those activities to the IAEA. Although it also reported no evidence of links to a nuclear weapons program. The IAEA Board of Governors delayed a formal finding of non-compliance until September 2005, and (in a rare non-consensus decision) reported that non-compliance to the UN Security Council in February 2006. After the IAEA Board of Governors reported Iran's noncompliance with its safeguards agreement to the United Nations Security Council, the Council

demanded that Iran suspend its enrichment programs.

In exchange for suspending its enrichment program, Iran has been offered "a long-term comprehensive arrangement which would allow for the development of relations and cooperation with Iran based on mutual respect and the establishment of international confidence in the exclusively peaceful nature of Iran's nuclear program."^{lv} However, Iran has consistently refused to give up its enrichment program, arguing that the program is necessary for its energy security, that such "long term arrangements" are inherently unreliable, and would deprive it of its inalienable right to peaceful nuclear technology.

FURTHER SPREAD OF NUCLEAR WEAPONS

Other than the countries discussed above, some more have desired to acquire nuclear weapons in the past but have either taken their nuclear programme back or have been forced by some nuclear have nations to withdraw. West still for some reasons though, alleges repeatedly that a few nations possess even now the weapons of mass destruction WMD. .

SOUTH AFRICA

The country has been a signatory of the Biological Weapons Convention since 1975, the Nuclear Non-Proliferation Treaty since 1991, and the Chemical Weapons Convention since 1995.

South Africa developed "a small finite deterrence arsenal of gun-type fission weapons in the 1980s. Six were constructed and another was under construction at the time the program ended."^{lvi}

How that test was cancelled has been well publicized. Soviet intelligence detected test preparations and in early August alerted the United States; U.S. intelligence confirmed the existence of the test site with an overflight of the Lockheed SR-71 spy plane.^[3] On 28 August, the Washington Post

quoted a U.S. official: "I'd say we were 99 percent certain that the construction was preparation for an atomic test."^{lvii}

This incident suggest clearly that South Africa had a well-advanced nuclear programme, which was discontinued, when the apartheid regime ended there.^{lviii}

IRAQ

Fingers are also pointed towards Iraq's nuclear agenda by U.S. and its allies. Dr. Chichi Hamza, who in 1980s was a senior Iraqi nuclear scientist, claimed to have said, "Iraq has been trying to obtain information about fissile material and weaponisation"^{lix}. In fact the country was attacked unilaterally by American lead forces on the issue of Iraq possessing nuclear weapons. No such proofs however, were found after the IAEA inspections there.

TAIWAN

Taiwan also obtained a nuclear reactor from Canada and started building other infrastructure in 1969, however, faced with non-proliferation pressures, on September 14, 1976, Taiwan decided, "not to purchase or build nuclear reprocessing facilities"^{lx}.

BRAZIL

In an interview to Washington Times, The President of Brazil, Luis Inacio Lula Da Silva, has said that, "Brazil should revive its nuclear weapons program it abandoned in 1994"^{lxi} this implies, that the country had a nuclear agenda before 1994.

LIBYA

There are reports that, Libya has also renewed its efforts to acquire nuclear weapons, after 1999, since U.N. sanctions were lifted from it. The Under-Secretary for Arms Control and International Security, John Bolton also said in Washington on May 5, 2002 that, "U.S. has no doubt that Libya is continuing its efforts to acquire a

nuclear weapon. He said the administration believes that with the sanctions lifted in 1999, Libya's access to nuclear technology was increased^{ixii}.

GLOBAL AUTHORITY

What is a global authority? And who is a global authority? These are the two very important questions if understood from an international political perspective. Do the world in general and the countries in particular recognize any international authority? The answer could be yes. However, this recognition comes only when there is no conflict of interest between the country and the global authority.

Another important question that comes to mind is why do we establish global authority if at all it is established. The answer is very simple, that is to achieve international peace and security.

The fourth question then which comes to mind is that is there a global authority at present. which could achieve complete international peace and could maintain international security. There is deference of opinion as far as the answer to this particular question is concern. While everyone will agree that there is an international organization exist in the name of United Nations but weather it has been a successful one or a failed one, in achieving its objectives always invites conflicting answers.

ROLE OF GLOBAL AUTHORITY IN STOPPING SPREAD OF NUCLEAR WEAPONS

The United Nations Charter clearly mentions disarmament as one of its main objectives to maintain international peace and security. This

objective was kept in the charter keeping in mind two world wars and with an expectation of a possible arms race specially spread of nuclear weapons there after. The first major step in this regard from United Nations was NPT. The NPT was a landmark international treaty whose objective is to prevent the spread of nuclear weapons and weapons technology, to promote cooperation in the peaceful uses of nuclear energy and to further the goal of achieving nuclear disarmament and general and complete disarmament. The NPT represents the only binding commitment in a multilateral treaty to the goal of disarmament by the nuclear-weapon States.

The second visible step which United Nations took to reduce weapons of mass destruction was BY establishing international atomic energy association [IAEA] which has worked as a watch dog of the organisation to see that weapons of mass destruction are not developed.

Comprehensive test ban treaty or [CTBT] is one more attempt from United Nations to end nuclear proliferation.

However, it is deplorable that despite these initiatives from the global authority in the name of United Nations the nuclear weapons have spread. Though their pace of proliferation may have remained slow.

CONCLUSIONS

The study makes it very clear that global regimes like United Nations could not be as effective as they should have been to stop nuclear proliferation. Even some of the non state actors are desperate to aquire these weapons. Therefore, the greater challenge before United Nations and for other organisations is to find ways that these weapons don't reach in the wrong hands.

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