



Emerging Nuclear Powers and International Non-Proliferation Regime

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Introduction

Since the realization by nuclear-technologically-advanced nations that nuclear trade for the peaceful use of nuclear technology is in their commercial interest they have been prepared to transfer nuclear material to the less nuclear-technologically developed states. Simultaneously, they have been cognizant of the dual use of nuclear technology. They do recognize that transfer of nuclear technology and material for the electricity generation, increasing the yield of agriculture products, and medical treatment gradually makes the recipient state become a nuclear weapon state. This dual-use puzzle of nuclear technology sharing had alarmed the United States and its like-minded nations at the outset of nuclear era, especially so after the former Soviet Union nuclear weapon test in 1949. Deliberations started to devise an apparatus which permits the transfer of nuclear technology for the peaceful purposes, but disallows the recipient state to employ the technology for military use.

President Eisenhower's famous "Atoms for Peace" speech in December 1953 had not only laid the firm foundation for nuclear commerce, but also had restarted serious deliberations to prevent the nuclear technology recipient states from using the acquired nuclear technology for military purposes. The United States Congress legislated the famous 'US Atomic Energy Act of 1954' and international community agreed in 1957 to constitute International Atomic Energy Agency (IAEA) as a watchdog. Though one usually traces the roots of International Non-Proliferation Regime (INPR) from the United Nations General Assembly's first resolution adopted on January 24, 1946, which called for the elimination of all atomic weapons and all other major weapons adaptable to mass destruction,¹ but the practical process for the INPR was started in mid-1950s. It was a process to discourage or abandon the emerging nuclear powers from developing nuclear weapons.

Theoretically, voices were raised in favor of complete nuclear disarmament at various nuclear policy discussions at different forums but in practice the nuclear disarmament was not the agenda of the negotiators of the contours of INPR, since

the very beginning to date. The IAEA institutionalization and the realization in the early 1960s about the possibility of nuclear weapon states' number mushrooming alarmed the Great Powers. They adopted a consensual Nuclear Non-Proliferation Treaty (NPT), which entered into force on March 5, 1970. The NPT was established as a strong legal norm against the horizontal spread of nuclear weapons. The Treaty however, also contains Article VI, which obliges all parties to pursue negotiations in good faith on nuclear disarmament. In reality, this article has failed to eliminate the nuclear weapons stockpiled in the arsenals of the United States, Russian Federation, United Kingdom, France and China. Importantly, it has not even dissuaded them from the vertical proliferation of nuclear weapons. It has been reported that long-term nuclear force modernization or upgrade programs have been underway in all nuclear armed states.² Nevertheless, INPR has an impressive record in preventing or at least slowing down the horizontal proliferation.

Emerging Nuclear Powers

The 'emerging nuclear powers' is a complex connotation. In natural sciences nuclear power refers to a 'nuclear capacity to produce electricity'. In social sciences, nuclear power conveys the 'nuclear weapons capacity in the state's arsenal'. The critical examination of the evolution of nuclear technology reveals that the nuclear power was used for military purposes during its inception and later nuclear power was employed for electricity generation. The former brought a dramatic shift in the *real-politik* and questioned the validity of the Clausewitzian conceptualization of war. Nuclear Deterrence became a permanent feature of Great Powers nuclear posture. The latter application of nuclear technology makes it equally attractive for both developed and less developed states. For instance, presently, nuclear power for electricity production is under serious consideration in over 45 countries which do not currently have it.³

International Non-Proliferation Regime: Philosophy and Key Components

The International Non-Proliferation Regime is an integrated network of treaties and other standard-setting arrangements, which provides a comprehensive framework for the behavior of states, and international organizations and other actors in the nuclear power realm.⁴ The primary objective of the INPR has been to prevent the proliferation of nuclear weapons as a byproduct of nuclear cooperation for the promotion of peaceful use of nuclear technology. In simple words it prevents the proliferation of nuclear weapons and makes peaceful use of

nuclear technology accessible. In the words of Trevor McMorros Tate non-proliferation regime's "guiding norm is that the spread of nuclear weapons to more states would pose a serious danger to international security and should therefore be prevented, even while more is done to exploit the peaceful component to nuclear energy. This implies, in practice, that the nuclear powers should help the developing states with their peaceful nuclear program but seek to avert horizontal proliferation."⁵ Hence, the nuclear powers negotiated numerous agreements and treaties to prevent the horizontal proliferation as a byproduct of the transfer of nuclear technology for peaceful use to the non-nuclear weapon states.

The International Non-Proliferation Regime is an integrated network of treaties and other standard-setting arrangements, which provides a comprehensive framework for the behavior of states, and international organizations and other actors, in the nuclear area. J. Mohan Malik has listed many treaties, agreements and cartels, which collectively constitute INPR. He pointed out that:

The NNP regime consists of several components. These are the Vienna-based International Atomic Energy Agency (IAEA), founded in 1957; the 1963 Partial Test Ban Treaty (PTBT) banning the testing of nuclear weapons in the atmosphere, outer space, or under water; the 1968 Nuclear Non-Proliferation Treaty (NPT) which was extended indefinitely in 1995; the London-based Nuclear Suppliers' Group (NSG), formed in 1974, which requires IAEA safeguards on all of its participants' nuclear exports; the 1987 Missile Technology Control Regime (MTCR) aimed at halting the proliferation of nuclear-capable ballistic missiles and other unmanned delivery systems; the 1996 Wassenaar Arrangement (a successor to the Cold War era's COCOM) covering conventional weapons and dual-use exports; and the Zangger Committee which covers nuclear-related exports. The 1996 Comprehensive Test Ban Treaty (CTBT), which is yet to come into force, further constrains all states from conducting nuclear tests. In addition, the nuclear weapons free zones (NWFZs) in Latin America, the South Pacific, and Africa have further strengthened the regime. In 1995, the Association of Southeast Asian Nations (ASEAN) proposed the establishment of a NWFZ in Southeast Asia, and in 1997 the five Central Asian states issued the Tashkent statement proposing a NWFZ for Central Asia.⁶

International Atomic Energy Agency

The International Atomic Energy Agency (IAEA) was established in 1957 to promote the peaceful use of atomic energy. Simultaneously, it has been ensuring that nuclear recipient states should not misuse the nuclear energy assistance for their military programs. Trevor McMorros Tate pointed out that “The IAEA was not the supranational body with the discretionary powers that had been envisioned, but its creation and the Atoms for Peace proposal marked the start of the evolution of the non-proliferation system.”⁷ The promulgation of Nuclear Non-Proliferation Treaty (NPT) in 1970 increased the responsibility of the IAEA safeguards mechanism. It was entrusted to ensure that non-nuclear weapon states should not use their nuclear programs for military purposes. It introduced a comprehensive monitoring mechanism—comprehensive safeguards on the recipient states nuclear facilities—to avoid the diversion of nuclear material from a peaceful use nuclear facility to a military facility. This process was made further stringent with the establishment of Nuclear Suppliers Group (NSG) in 1975. Despite, the NSG stringent and comprehensive safeguards apparatus the Iranian and North Korean nuclear imbroglios exposed the deficiencies in the IAEA comprehensive safeguards procedures. Moreover, India had also misused its civilian nuclear facility (CIRUS) for manufacturing an atomic device. Nevertheless, IAEA is an important international institution, which facilitates the peaceful use of nuclear technology and concurrently acts as a watchdog to prevent the exploitation of nuclear technology for military purposes.

Non-Proliferation Treaty

As noted earlier Nuclear Non-Proliferation Treaty was concluded in July 1968 and entered into force on March 5, 1970. NPT divided its member states into two categories i.e. Nuclear Weapon States and Non-Nuclear Weapon States. The former are those states, which conducted nuclear explosions prior to January 1, 1967. Today, NPT has 189 parties including five nuclear weapon states, which are also the permanent members of UN Security Council. NPT was a first breakthrough on the prevention of horizontal nuclear weapons proliferation. It was negotiated to prevent further spread of nuclear weapons (Art-I and II) and to ensure *via* international safeguards that nuclear programs of the non-nuclear states are peaceful in nature (Article III). The Treaty legitimately encourages the nuclear trade among member states for the purpose of exploiting the peaceful

benefits of nuclear energy with the IAEA safeguards (Article IV and V) and also promises to ultimately make the world free from nuclear weapons (Art. VI).⁸

The NPT has also helped the international community in creating a few nuclear related cartels. All these treaties and export control measures collectively constitute the Non-Proliferation Regime (NPR) which plays an effective role in controlling further spread of the nuclear weapons. Although, the primary concern of the treaty was to prevent the further spread of nuclear weapons, it not only promised to extend peaceful nuclear cooperation with NNWS, but also looked at the possibility of a total nuclear disarmament without any specific time frame or definitive framework.⁹ Despite that the NPT has so far remained partially successful in preventing an all out spread of nuclear weapons, but in no way it is close to achieving its aim of general nuclear disarmament. The nuclear weapon states seem determined to hinder the execution of Article VI of the Treaty.

Nuclear Suppliers Group

The Indian nuclear explosion on May 18, 1974, enraged the United States and its like-minded nuclear supplier states. They constituted NSG in 1975 that entered into force in 1978 to reinforce the nuclear export control mechanism. Its primary objective was to ensure that a commercial competition among the nuclear supplier nations would not undermine the recipient state's IAEA safeguards commitments. According to the original/previous NSG nuclear trade guidelines, to be eligible for importing Part I items from an NSG member the recipient state must have comprehensive IAEA safeguards covering all its nuclear activities and facilities. The IAEA safeguards measures, such as inspections and remote monitoring, are supposed to deter and detect misuses of civilian nuclear facilities and materials to build nuclear weapons. In the case of Part II goods, IAEA safeguards are only required for the specific nuclear activity or facility that the imported material is destined for. This arrangement had effectively obstructed horizontal nuclear weapons proliferation by ensuring comprehensive safeguards on the recipient states' nuclear facilities.

The NSG comprehensive IAEA safeguard apparatus was undermined in 2008 due to its parties' consensual ratification of India specific amendment clause on the behest of United States. On September 6, 2008 the 45 members of NSG agreed in Vienna to exempt NPT hold-out on India from its guidelines that required comprehensive IAEA safeguards as a condition of nuclear trade. Perhaps, NSG waiver would not only facilitate numerous foreign firms to supply sophisticated

nuclear technology to India having declared eight unsupervised thermal power reactors,¹⁰ but will also roll back three decades of nuclear trade restrictions on India. Moreover, India's immunity set a precedent that opens a door to facilitate nuclear trade between nuclear suppliers and recipients states without paying serious attention towards the IAEA comprehensive safeguards mechanism.

The revision in NSG trade laws would have serious repercussions for the nuclear non-proliferation regime (NNPR). The waiver to India from NSG rules would legitimize a nuclear weapon state (United States) transfer of nuclear technology to a non-nuclear weapon states (India). Though India in May, 1998 tested nuclear weapons and declared itself as a nuclear weapon state, but the Non-Proliferation Treaty (NPT) Article IX, clause 3 states: "For the purpose of this Treaty (NPT), a nuclear-weapon state is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967. Thus, India is a non-nuclear weapon state. Nuclear analysts have a consensus that the Indo-US nuclear deal would improve Indian nuclear infrastructure, which will have positive impact on the Indian nuclear weapons program. Daryl G. Kimball also pointed out: "nuclear fuel sales to India for Indian power reactors may marginally help increase India's energy output, but at the same time it will free up India's limited domestic uranium supplies to be used exclusively for bomb-making."¹¹ Thus, New Delhi continues to produce fissile material and expand its nuclear arsenal.

The NSG alteration in its trade laws as well as Indo-US nuclear deal would have encouraging rather than discouraging influence on the Indian nuclear weapons program. This encouraging attitude is a violation of the Article 1 of the NPT. Secondly, India did not confer a legally binding commitment to pursue nuclear disarmament in reciprocity to the waiver of the NSG. Though, New Delhi made promises to respect and honor the principles of nuclear nonproliferation regime, yet it remains averse to signing Comprehensive Test Ban Treaty (CTBT) draft and is also distancing from Fissile Material Cut-off Treaty (FMCT) negotiations at the Conference on Disarmament. Thirdly, India's history of violating its peaceful nuclear use agreements to build nuclear weapons provide little confidence in India's promises regarding the nuclear arms control, especially if the consequences of noncompliance are not made clear by India's potential nuclear supplier states.

Preceding discussion signifies that India specific exemption from NSG rules and safeguards standards does not qualify India to be in the nuclear nonproliferation

mainstream. Hence, the agreed arrangement between NSG and India would further undermine the values of NSG, weaken the already beleaguered NPT, and hasten the demise of twentieth century nuclear non-proliferation regime.

International Non-Proliferation Regime's Fragility

The INPR seems very fragile in the prevalent global politics. Therefore, its relations with the Emerging Nuclear Powers are very complex. Fragility of the INPR is due to interplay of five factors. The Regime was constituted during the 20th century Cold War period, whereas 21st century's global politics' dynamics are different from the previous century. Bipolarity has given way to preponderance of a sole super power, United States- cum multi-polarity. This transformation in the global politics has not succeeded in replacing the anarchy from the international system. The end of bipolarity and emergence of China as a major power intensifies the insecurity of a few nations located in Asia. The North Korean nuclear weapons capability caused a serious anxiety in the Korean Peninsula in particular and North East Asia in general. Similarly, the Middle Eastern security architecture is also altering. Iran is inching towards mastery in developing uranium enrichment which is causing insecurity for the Arab nations, especially Gulf Cooperation Council (GCC) members. The South Asian strategic environment is also sustaining nuclear arms race between India and Pakistan.

Second, INPR is not analogous to totally prohibitory regimes. This feature of the regime not only permits the sustainability of the nuclear arsenals of the existing nuclear powers but also encourage the emerging nuclear powers to develop nuclear weapons to pursue their political objectives. That is why the nuclear disarmament is not receiving an affirmative response from the members of Conference on Disarmament at Geneva. Sverre Lodgaard has pointed out that one of the basic and fundamental problems in disarmament is that it is viewed by some as an endeavour to establish the supremacy of the western world.¹² Interestingly, the New START Treaty between the United States and Russian Federation is viewed by many security observers as a disarmament treaty. It is however a mere arms control treaty which neither bans research and development of nuclear capable delivery systems nor prohibits the qualitative evolution of nuclear weapons. For instance, in 2011, the United States military requested "Congress to approve 213 billion dollars for the modernization of nuclear weapons and their delivery systems over the next 10 years. That is in addition to average annual spending of 54 billion dollars on nuclear maintenance."¹³ Similarly, Chinese and Russians have been modernizing their

nuclear weapon programs. In the Middle Eastern context, Iran is not ready to give up its stance on the Uranium enrichment program. Similarly, Islamabad seems determined to avoid FMCT negotiations whilst India is keeping up its nuclear weapons policy. North Korean nuclear weapons program is also gradually advancing and is creating a domestic lobby within both Japan and South Korea in favor of indigenous nuclear weapons program.

Third, the efficacy of nuclear weapons in the great powers military doctrines provides credibility to the nuclear weapons as sophisticated military hardware. The countries “appear determined to retain their nuclear arsenals indefinitely” reported in 2013 yearbook published by the Stockholm International Peace Research Institute.¹⁴ Therefore, the militarily insecure nations as well as prestige conscious nations are reluctant to denuclearize, which is imperative for the INPR. This attitude of nuclear weapon states has practically eroded the vitality of Conference on Disarmament (CD). The CD is central to disarmament. For sixteen years, regrettably, it has been failing to live up to its responsibility. Its failure to negotiate arms control and disarmament agreements/treaties, especially deadlock on four core items on its agenda, have frustrating impact on the anti-proliferationists.¹⁵ Ambassador Laura E. Kennedy, the United States representative at the CD stated on January 22, 2013: “We begin the New Year with renewed commitment to the goal of a world without nuclear weapons – a goal which my President has made a hallmark of his international security agenda.” Interestingly, everyone understands the gap between theory and actuality. What President Obama promised on April 5, 2009, at Prague is realistically unachievable. The United States is not prepared to destroy completely its nuclear weapon arsenal. Similarly, all the other nuclear weapon states are convinced about the significant role of nuclear weapons in their military doctrines.

For the last few years a debate has started about Conference on Disarmament’s relevance or practicability in the twenty-first century. On January 22, 2013, while delivering the message of the Secretary-General Ban Ki-Moon’s to the CD; Mr. Kassym-Jomart Tokayev, Director-General of the United Nations Office at Geneva stated: “As in previous years, your last Session failed to produce a program of work. It is essential to end this continued stalemate to avoid jeopardizing the credibility of the Conference and the machinery of disarmament.” In reality, Secretary General expressed his disappointment on the working of CD and also reiterated his last year’s warning that CD has been becoming irrelevant and sooner the international community could completely lose its faith in its

functioning and may opt for other forums to address or resolve the items on CD agenda.¹⁶ Although the UNGA agreed to establish an open ended working group to examine ways of “Taking Forward Multilateral Nuclear Disarmament Negotiations” in its 67th session in 2012, yet the prospects of multilateral nuclear disarmament are limited.

Fourth, the double standards and discriminatory approach of the major powers in the nuclear affairs are perilous for the INPR in the twenty-first century. Although, the *de jure* members of the nuclear club—United States, Russian Federation, United Kingdom, France and China—always reiterate their commitment to execute Article VI of the Nuclear Non-Proliferation Treaty in reality these nations are not ready to implement the said article of the Treaty. The execution of INPR components resulted in the division of states into two blocks — nuclear have and have nots — which has thwarted denuclearization initiatives theoretically and practically. Since the beginning of twenty-first century a few major powers’ policies have been institutionalizing the double standards at the regional level, which is distancing the newly emerging powers from the INPR. For instance, presently, the Obama Administration has been advocating and lobbying for India’s membership to the four multilateral export control regimes. In November 2010, the US supported India’s candidature for membership of the Nuclear Suppliers Group (NSG), the Missile Technology Control Regime (MTCR), the Australia Group and the Wassenaar Arrangement. Later, France also endorsed the US move. It was followed by the Russian Federation support for the membership of those régimes of which Russia is a member. Many more countries are expected to support India’s candidature given its rising global status with the assistance of the United States.

The double standards and discriminatory approach of the United States and its likeminded states has hardened Pakistan’s stance on the FMCT at the Conference on Disarmament, which is viewed by many analyst as a perilous act of CD member for nuclear arms control and disarmament. Islamabad has resented Washington’s endeavors to make India a party to the multilateral export control regimes. On August 4, 2011, Ambassador Zamir Akram, while presenting Pakistan’s official stance on FMCT pointed out that his country was not living in a vacuum. It therefore had to take into account its strategic environment while entering into the negotiations of a treaty at the international fora. He stated, “From our perspective, these realities are the discriminatory policies pursued by some major powers regarding nuclear cooperation, which have created insecurity and imbalances. And for these reasons Pakistan has been compelled to make a

stand against this kind of nuclear exceptionalism, selectivity and discrimination.” One understands the logical justification of Islamabad’s opposition to FMCT however, it is not in the interest of international nuclear non-proliferation regime.

Fifth, the scientific revolution in the nuclear technology has made nuclear know-how and material accessible to developing nations since the last decade of the twenty century. In addition, nuclear commercialism has also boosted the nuclear trade. These developments gradually deteriorated INPR apparatus to prevent the horizontal proliferation. Undoubtedly, INPR encourages the peaceful use of nuclear technology, but it also necessitates that the supplier nation ensures, before the transfer of nuclear technology or material, that the recipient state should be having comprehensive safeguards on its nuclear facilities. The comprehensive safeguard mechanism was devised to keep a check on the recipient state, so that it could not use the nuclear technology for military application. The practice to ensure comprehensive safeguards has been losing its worth since 2005. The Indo-US deal manifested that political and economic benefits have higher value than INPR. Consequently, today, many nuclear supplier nations instead of honoring the norms of INPR have been giving preference to their trade and industry.

The Indo-US nuclear deal and NSG waiver to India in September 2008 have set a perilous precedent in the nuclear realm. Since then the NSG members could transfer both nuclear technology and materials to a recipient state which is neither party to NPT nor having IAEA comprehensive safeguards on its nuclear facilities. For instance, Australia’s ruling Labor Party agreed to sell uranium to India on December 4, 2011. This approval has facilitated India’s access to the world’s 40% known uranium reserves. Australia’s willingness to export uranium to India certainly reinforces India’s nuclear industry.¹⁷ Importantly, uranium export to India contravenes Australia’s obligations to regional nuclear weapon free zone treaty.¹⁸ Australian National University, treaty law expert Don Rothwell has pointed out that the South Pacific Nuclear Free Zone Treaty, known as the Rarotonga Treaty, stops Australia trading nuclear material with India. Australia lifted decade-long ban on its uranium export to India due to two reasons. India’s growing economic market is very attractive for the Australian business community. The proponents of uranium sale believe that it would provide more jobs to the Australian unemployed youth. Secondly, Australia wants to establish long-term strategic relations with India to combat the expanding role of China in the Southern Asia. The then Australian Prime Minister Julia Gillard had claimed

that the decision to export uranium to India would boost trade and enhance Australia's relationship with the world's largest democracy. She stated: "Selling uranium to India... (will mean) strengthening our strategic partnership with India in this, the Asian century." The Australian uranium sale would boost the nuclear commercial trade and industry at the cost of nuclear non-proliferation regime.

Emerging Nuclear Powers: wheeling and dealing

North Korea withdrew from NPT in 2003 and tested its nuclear devices in 2006 and 2009 due to its tense relations with the United States and its North East Asian allies. North Korea successfully conducted its third nuclear test on February 12, 2013. The seismic data revealed that the test was of 4.9 magnitude. North Korea's state-run News service—KCNA—reported that authorities tested a "miniaturized and lighter nuclear device with greater explosive force than previously." The announcement about miniaturization of a nuclear device was an important indication about North Korea's nuclear weapon capability. It indicated that the North Korean scientists had solved the problem of making a nuclear warhead small enough to fit onto a missile. Another dimension of this test was that the material used was highly enriched Uranium instead of Plutonium, which was used in two earlier tests. Thus, the 2013 test was technologically sophisticated with an increased yield. Indeed, it was more advanced than its earlier nuclear tests conducted in 2006 and 2009. The North Koreans withdrawal from NPT and subsequent nuclear explosions have not only dented the credibility of the INPR but also multiplied the insecurity of the North Eastern Nations.

Pyongyang, today, seems determined to accomplish its domestic and external objectives through the use of threat of war in the region. In March-April, 2013, North Koreans brinksmanship was intended to carry out three interlinked objectives. The North Korean ruling elite were apprehensive about the restart of the negotiations with Obama Administration. They wanted that Washington would adopt a flexible or a mild stance on the United Nations Security Council's imposed sanctions against Pyongyang. Second, it was a tactic to pressurize the newly elected President Park Geun-hye's government to change Seoul's policy towards North Korea. Third, it was a political gimmick to build unity inside the country without triggering a full-blown war. The North Korean dictator Kim Jung-un understands that an external threat brings harmony within the state and would also increase his popularity in the country. Therefore instead of showing flexibility in his stance or cave in to the US decision, in March 2013, to conduct flyovers of nuclear-weapons-capable aircraft in South Korea and continued show

of force with joint military exercises on the Korean Peninsula, hardened his stance. Amanda Rynes has observed “Kim Jong-un intensified his threats against the United States and South Korea, nullifying the 1953 armistice between the North and South and moving missiles to coastal launch sites in April 2013”.¹⁹ It’s not a new tactic of the North Korea ruling elite, it always beats the war drums to muster unity among its people and congregate the people behind the dictator.

The political ploy of the North Korean ruling elite caused a serious anxiety in Seoul and Tokyo in March-April 2013. North Korea announced to deploy its rocket and artillery units targeting United States bases on the mainland, Hawaii, and Guam in the last week of March 2013. This announcement necessitated for United States to reassure its extended deterrence commitment to its ally as well as to boost the morale of its 8,500 troops which were stationed in South Korea. The North Koreans military adventurism caused serious security concerns for the Japanese as well. Even though, 50,000 American troops were stationed in the area to safeguard Japan’s interest they were incapable to provide the defensive shield to Japan against the long missile strikes of North Korea.

The United States did demonstrate its determination to defend its allies in the region in response to North Korea’s war rhetoric. The United States Secretary of Defense, Chuck Hagel stated: “We must make clear that these provocations by the North are taken by us very seriously and we’ll respond to that.” On March 28, 2013, a nuclear-capable B-2 from the U.S. 509th Bomber Wing flew over Osan Air Base in Pyeongtaek, Gyeonggi Province. The strategic bomber B-2 flew from Whiteman Air Force Base, Mo. to South Korea. It participated in the Foal Eagle exercise. It was a strategic signaling, which was imperative to deter the adversary from an undesirable act. Nonetheless, this strategic signaling failed to restore complete confidence of the South Koreans on the United States defensive apparatus in the North East Asia. It is because; according to reports the North Koreans had sunk South Korean naval vessel “Cheonan” (2010) and had refused to admit their mistake. The United States had then failed to punish North Korea on the gruesome act of the Cheonan sinking. Similarly, Japan’s islands vulnerability to the Chinese and Russians ingresses was not appropriately addressed by the United States. Consequently, nearly two-third South Koreans had demanded of their government to revamp its defense policy. One poll survey revealed that majority of South Koreans wanted their ruling elite to acquire from United or develop indigenous tactical nuclear weapons for the defense of homeland.²⁰ It was also reported that Japanese have been seriously reviewing their pacifist clause in their constitution. Once Article 10 of Japanese Constitution

is amended it may gradually inch toward development of Nuclear Weapons. Indeed, emergence of pro-nuclear weapons lobbies in Japan and South Korea would immensely damage the INPR in the twenty-first century.

The Middle Eastern security architecture is in transition. Israel's nuclear weapons program provides a legitimate argument to Iran to obstruct the creation of nuclear weapon free zone in the Middle East. Simultaneously Iran's advance in the field of uranium enrichment intensifies the security dilemma of Gulf Cooperation Council (GCC) countries. The Arab nations have expressed their serious concerns over the Iranian nuclear program and its standoff with the Western powers.²¹ They believe that Tehran's goal is not to acquire capability to generate indigenous nuclear-fuel for peaceful purpose but it is for nuclear weapons. The United States intelligence agencies also endorse the GCC countries stance. On February 16, 2011, the United States Director of National Intelligence James Clapper told the Senate Select Committee on Intelligence that "Iran is keeping open the option of developing nuclear weapons through the pursuit of various nuclear capabilities but that the intelligence community did not know if Iran eventually would decide to build nuclear weapons." He added that the intelligence community judges that Iran "is technically capable of producing enough highly enriched uranium [HEU] for a weapon in the next few years, if it chooses to do so." Importantly, Iran's heavy-water research reactor under construction at Arak (40MWt heavy water research reactor [IR-40] and heavy-water production plant) is apparently for civilian purposes but is similar in size and kind to the reactors used by India, Israel and Pakistan to produce plutonium for weapons.²²

The Iranian ruling elite always refute the judgment of the international community including GCC about the objective and nature of its nuclear program. The Iranian high-ups claim that they are only interested in the peaceful use of nuclear technology, which is their legitimate right, being a party to NPT. Being a party to the NPT Iran built its nuclear infrastructure with the assistance of nuclear supplier states. That is why Russian Federation assisted Iran to build its 1000 MWe light-water nuclear power reactor plant at Bushehr. Though the Bushehr power reactor is under the IAEA safeguards, yet the Europeans fear that it would be a source of weapons-usable plutonium for Iran. Its annual discharge rate of about 25 tonnes of spent fuel will, in theory, contain enough plutonium for a few dozen nuclear weapons.²³

The domestic situation of the GCC states could also instigate these states to develop their indigenous nuclear infrastructure.²⁴ The ruling elite in these states would be compelled to assure their people that the Arab nations are not inferior to the Iranians, and therefore they could endeavor to progress in the nuclear field. The probability of horizontal proliferation in the Middle East has been seriously debated by the nuclear proliferation experts. While acknowledging the possibility of GCC states pursuing nuclear technology, George Perkovich cited Iran as the main source for the Middle Eastern possible nuclear imbroglio. He also expressed his doubts about the probability of a nuclear free zone in Middle East due to Iran.²⁵ Kurt M. Campbell, Robert J. Einhorn and Mitchell Reiss also think that “the nuclear status of the Middle East can change in future and states like Egypt, Syria, Libya, Jordan, Saudi Arabia and even Turkey can incline towards a nuclear weapons programe, especially if pro-Islamic governments come into power in these states.”²⁶ They are convinced that pro-Islamic governments would change the nature of relationship of Middle Eastern Muslim states with Israel. The shift in the relationship would encourage these nations to seek nuclear weapon capability to deter Israel’s nuclear weapons potential.²⁷

Today, among the Middle Eastern nations, Egypt and Turkey have advanced nuclear programs. Brian Finlay, Johan Bergenas and Veronica Tessler pointed out that Egypt could utilize its existing nuclear infrastructure to build nuclear weapons and other states like Saudi Arabia, Jordan and Syria might move in the same direction.²⁸ Turkey’s nuclear policy, however, would not be influenced by Iran’s nuclear program. Being a NATO member, Turkey enjoys positive security assurances. In addition, its nature of relations with both Israel and Iran is different from the GCC nations. In the words of Mustafa Kibaroglu “except for the GCC states, other regional states have no trouble with Iran so only GCC states could seek for a nuclear weapon option in response to the Iranian nuclear bomb.”²⁹ On June 9, 2010, Turkey voted against the United Nations Security Council Resolution 1929, which was adopted by twelve Council members’ including P-5 affirmative votes.³⁰ The execution of UNSC Resolution 1929 has contributed constructively in convincing Tehran to seriously participate in the six-parties talks and engage United States on the subject of its uranium enrichment program for the relief in current international sanctions against it.

The Saudi leadership has reiterated at numerous occasions that ‘if Iran develops nuclear weapons, Riyadh would balance Tehran’s military might by developing its indigenous nuclear arsenal.’³¹ The Saudi’s balancing probability seems credible due to Riyadh’s military purchases. For instance, it purchased about 36 CSS-2

IRBMs from China in 1986. This purchase incited serious concerns in the US that these missiles could be used with nuclear warheads if Saudi Arabia tries to acquire or manufacture nuclear weapons. Consequently, the US coerced Saudi Arabia to sign NPT in 1988.³² Saudi Arabia presently has only the capability to deploy conventional warheads on the CSS-2 missiles. Nevertheless, in the recent years, again, Saudis expressed their desire to balance Iran's nuclear capability. It was reported that Saudi Arabia has planned to construct 16 nuclear power reactors over the next 20 years at a cost of more than \$80 billion.³³ More precisely, proliferation begets proliferation, and thereby Iran's nuclear weapon explosion could unleash nuclear arms race in the Middle East.

Pakistan and India: Emerging Nuclear Powers?

India has been engaged in mastering the nuclear technology since 1940s and preliminary work on Pakistan's nuclear program was initiated in mid-1950s. Despite both states' decades long nuclear programs, the categorization of their stature is a contested subject in the prevalent global politics. Whether both India and Pakistan are emerging nuclear powers or are they qualified to be declared as established nuclear powers? According to the social sciences perspective or *real-politik* parameters both India and Pakistan are established nuclear weapon states. Both tested their nuclear devices in May, 1998. The authenticity of both states nuclear explosions were accredited by the international scientific community.³⁴ Subsequently, New Delhi announced its Nuclear Draft Doctrine in August 1999 and Pakistan announced its National Command Authority in February 2000 and declassified a few aspects of its nuclear Doctrine through the official statements. Today, they have been developing tactical nuclear weapons in addition to the strategic nuclear weapons. In simple, words they are nuclear powers and have been engaged in a devastating nuclear arms race.

India and Pakistan, on the basis of their existing nuclear capabilities could be termed as emerging nuclear powers in the non-military sphere. The peaceful use of nuclear technology in both states is very limited. India is dependent on the Nuclear Suppliers Nations (NSG) to increase its nuclear power capacity. Since it received waiver from the NSG in 2008 to materialize Indo-US nuclear deal, New Delhi has been approaching Berlin, London, Paris, etc for the purchase of nuclear reactors for power generation and sophisticated nuclear material to build two reprocessing plants as well as modernize its uranium enrichment facilities. Though, Pakistan is a nuclear weapon state, yet it has been facing a severe energy crisis. It lacks nuclear power infrastructure to produce adequate electricity.

Realistically, its nuclear infrastructure needs substantial foreign assistance to increase the nuclear power generation. Presently, unlike India, Islamabad is not qualified to receive NSG members' assistance to improve its nuclear energy capacity.

Conclusion

The twentieth century structured International Non-Proliferation Regime's overall record is a mixture of success and failure. Nevertheless, in the twenty-first century, it is gradually becoming a more fragile and a tenuous arrangement. The developments in the global politics in the aftermath of Cold War, the new strategic partnerships and increasing connectivity in the 21st century make many INPR arrangements vulnerable to the political, economic and strategic agenda of both Great Powers and Emerging Nuclear Powers. The state-specific criterion that was adopted by the NSG members in 2008 to accommodate India and in reciprocity benefit from its growing economic market dividends severely undermined the credibility of the INPR as well as has germinated pessimism about the future of the Regime. Since then, the emerging nuclear powers have been pursuing their nuclear related objectives with vigour and firmness. They intelligently twist INPR censoring clauses or preventive arrangements to their advantage without realizing that these acts would put the international non-proliferation regime in tatter.

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Endnotes

¹ Kofi A. Annan, "Foreword," in Jayantha Dhanapala with Randy Rydell, *Multilateral Diplomacy and the NPT: An Insider's Account* (Geneva: United Nations Institute for Disarmament Research, 2005), xiii.

² *BASIC Trident Commission Discussion Paper 1*, Published by British American Security Information Council (BASIC), November 2011.

³ "Emerging Nuclear Energy Countries," *World Nuclear Association*, May 21, 2013, accessed June 18, 2013, http://www.world-nuclear.org/info/Country-Profiles/Others/Emerging-Nuclear-Energy-Countries/#.Ub_oaPlvC1U.

⁴ In International Politics the Regimes are implicit or explicit principles, norms, rules and decision-making procedures around which actors' expectations converge in a given area of international relations. Regimes are intervening variables that facilitate cooperation between self-interested actors.

⁵ Trevor McMorris Tate, "Regime-Building in the Non-Proliferation System," *Journal of Peace Research* 27, no. 4 (November, 1990): 399-414.

⁶ J. Mohan Malik, "China and the Nuclear Non-Proliferation Regime," *Contemporary Southeast Asia* 22, no. 3, (December 2000): 445-478.

⁷ Mc Morris, (November 1990): 399-414.

⁸ United Nations Office of Disarmament Affairs, *Treaty on the Non-Proliferation of Nuclear Weapons (NPT)*, <http://www.un.org/disarmament/WMD/Nuclear/NPT.shtml>

⁹"The Global Nuclear Nonproliferation Regime", *Council on Foreign Relations*, Issue Brief, updated July 5, 2012, accessed December 18, 2012 <http://www.cfr.org/proliferation/global-nuclear-nonproliferation-regime/p18984>.

¹⁰ The NSG statement (released in September 2008) Article 2, Clause 1& 2 accepted the New Delhi's safeguards agreement agreed with IAEA on August 1, 2008. Agreement between the Government of India and the IAEA for the Application of Safeguards to Civilian Nuclear Facilities reveals that India would separate civilian nuclear facilities in a phased manner and to file a declaration regarding its civilian nuclear facilities with the IAEA, in accordance with its Separation Plan (circulated as INFCIRC/731).

¹¹ Daryl G. Kimball, "Text, Analysis, and Response to NSG: Statement on Civil Nuclear Cooperation with India," (September 6, 2008) <http://www.armscontrol.org/node/3340>.

¹² Sverre Lodgaard, *Nuclear Disarmament and Non-Proliferation: Towards a Nuclear-Weapon-Free World?* (New York: Routledge, 2011), 198.

¹³ Haider Rizvi, "U.S. Plan to Boost Nuke Spending Undercuts Nonproliferation, Activists Warn," (June 6, 2011),

http://www.nuclearabolition.net/index.php?option=com_content&view=article&id=416

¹⁴ Richard Norton-Taylor, "Nuclear states developing new weapons in defiance of treaty, report claims," *The Guardian*, (June 3, 2013), accessed on June 18, 2013,

www.guardian.co.uk/world/2013/jun/03/nuclear-states-developing-new-weapons-report.

¹⁵ These four core issues are: Nuclear Disarmament; Treaty Banning the Production of Fissile Material for Nuclear Weapons and other Nuclear Explosive Devices; Prevention of An Arms Race to Outer Space; and Negative Security Assurances.

¹⁶ See the message from United Nations Secretary-General Ban Ki-moon which was presented in the first plenary of Conference on Disarmament's 2012 session on January 24, 2012.

¹⁷ India had always criticized Australia's uranium trade with China and Russian Federation without taking into account that both these states were party to the Nuclear Nonproliferation Treaty and being a nuclear weapon states by virtue of the Article 9, clause 3 of the NPT, both states do not require comprehensive safeguards on their nuclear facilities. Therefore, Australian uranium trade with these states was neither the violation of NPT nor Nuclear Supplier Groups trade guidelines.

¹⁸ The uranium sale obviously increases indirectly India's capability to augment its nuclear arsenal. New Delhi would not only save its indigenous uranium purposely for manufacturing nuclear devices, but also increase its capability to generate more plutonium by using the nuclear reactor waste.

¹⁹ Amanda Rynes, "Overt pressure will not induce a nuclear rollback in North Korea," *Bulletin of the Atomic Scientists*, July 26, 2013, accessed on August 1, 2013, http://www.thebulletin.org/overt-pressure-will-not-induce-nuclear-rollback-north-korea?utm_source=iContact&utm_medium=email&utm_campaign=Bulletin%20of%20the%20Atomic%20Scientists%20-%20Newsletter&utm_content.

²⁰ The South Korean senior parliament member made a statement at the Carnegie Endowment Conference on April 9, 2013 at Washington, i.e. Two-third Koreans stated in favor of the acquisition of tactical nuclear weapons for their homeland defense in a recent poll.

²¹ During the high-profile Gulf Forum 2011 (The Gulf and the Globe) jointly organized by the Institute of Diplomatic Studies of the Ministry of Foreign Affairs, Saudi Arab and Gulf Research Center of the UAE at Riyadh from December 3-5, 2011, the Arab leaders had expressed their serious concerns over the Iran's hostility toward the West. They also claimed that Iran's nuclear obsession would destabilize the region. The leaders of GCC countries at the forum demanded that Iran should refrain from developing nuclear weapons.

²² "Iran's Nuclear, Chemical and Biological Capabilities—A net assessment," *Strategic Dossiers*, (London: International Institute for Strategic Studies, February 2011).

²³ Ibid.

²⁴ In 2008 UAE passed legislation through a white paper to pursue peaceful nuclear energy programme but permanently but was foregoing its right to uranium enrichment and plutonium reprocessing activities. UAE formally launched its nuclear programme in 2009 with signing a nuclear deal with South Korea amounting to 20 billion dollars. According to the deal South Korea has to establish four nuclear power reactors by 2020. The first reactor is scheduled to be completed by 2017. *NTI.Org (Nuclear Threat Initiative)*, "United Arab Emirates – Country Profile" updated February 2013, <http://www.nti.org/country-profiles/united-arab-emirates/>, accessed May 15, 2013, *BBC News*, "South Korea awarded UAE nuclear power contract", December 27, 2009, accessed June 12, 2012, <http://news.bbc.co.uk/2/hi/8431904.stm>.

²⁵ Dr. George Perkovich, "Nuclear Development in the GCC: Risks and Trends", *Gulf Yearbook 2007-2008*, (Gulf Research Centre): 228-229.

²⁶ Campbell, Kurt M., Robert J. Einhorn and Mitchell Reiss, *Nuclear Tipping Point: Why States Reconsider their Nuclear Choices* (Washington: Brookings Institution, 2004), 3-4.

²⁷ Ibid.

²⁸ Brian Finlay, Johan Bergenas and Veronica Tessler, "Beyond Boundaries in the Middle East: Leveraging Nonproliferation Assistance to Address Security/Development Needs With Resolution 1540," *The Stimson Center and the Stanley Foundation* (2010): 20-21.

²⁹ Mustafa Kibaroglu, "Good for Shah, Banned for Mullahs: The West and Iran's Quest for Nuclear Power," *Middle East Journal* 60, no.2 (Spring 2006): 221, 224.

³⁰ The United Nations Security Council adopted Resolution 1929 by twelve Council members' votes for the resolution, Brazil and Turkey voted against and Lebanon abstained on June 9, 2010. The Resolution 1929 was built on three previous rounds of UNSC sanctions on Iran by strengthening and expanding existing measures and breaking ground in several new areas. The primary objective of a fourth round of sanctions was to coerce Iran so that it would suspend its uranium enrichment, including plan to enrich uranium up to 19.9 percent for medical research centers; cessation of construction of the facility in Qom; full cooperation IAEA investigation into the military aspect of the nuclear program; and granting the agency full access to the entire country's nuclear facilities.

³¹ A controversy was raised by accusations of a defected diplomat working at the UN in 1994 Mr. Al-Khilewi, who seeking for a political asylum in the US fabricated charges that Saudi Arabia has secret nuclear ambitions. Zachary Keck, "The New Domino Theory: We're Wrong About an Iranian Nuclear Arms Race," *The Atlantic*, (April 5, 2012), accessed June 16, 2012, <http://www.theatlantic.com/international/archive/2012/04/the-new-domino-theory-were-wrong-about-an-iranian-nuclear-arms-race/255489/>.

³² "Saudi Arabia – Country Profile," *Nuclear Threat Initiative (NTI)*, updated December 2011, <http://www.nti.org/country-profiles/saudi-arabia/>.

³³ "Nuclear Power in Saudi Arabia," *World Nuclear Association*, June 2013. http://www.world-nuclear.org/info/Country-Profiles/Countries-O-S/Saudi-Arabia/#.Ub_rt_lvC1U.

³⁴ Farzana Shaikh, "Pakistan's Nuclear Bomb: Beyond the Non-Proliferation Regime," *International Affairs* 78, no. 1 (January 2002): 29-48. See also footnote 4.