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Moderation and Modernism in India's Nuclear Policy: Post 1974 Era

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Abstract

India, after its first nuclear explosion in 1974 moved to modernize and moderate nuclear policy as security environment in the region deteriorated further due to China, pursuing a strategy of containing India by using Pakistan as a surrogate, had supplied technology nuclear materials and warhead designs for the Pakistani bomb. Clearly with Chinese help Pakistani detonated six nuclear devices as follow up of India's repeat detonation in the second week of May 1998. This development changed the security environment in South Asia forever and this time India convinced the international community that it would not become a destabilising nuclear force in the international system. Thus, in the post-1998 era India adopted two concepts, (i) No first use for attack or war and (ii) Credible minimum deterrence. As a step further in the direction India also signed with the US a nuclear deal under which it agreed to separate its civil and military nuclear facilities under international safeguard and supervision. The paper analyses the evolution of India's nuclear capability in regional and global contexts.

Keywords: India, policy change, second explosion, no first use, security.

Introduction

India, after its first nuclear explosion in 1974 moved to modernize and moderate nuclear policy as security environment in the region deteriorated further due to China, pursuing a strategy of containing India by using India's explosion of May 1974, marked a watershed in Indo- American nuclear relations and in anger the US had halted temporarily the nuclear fuel shipment to Tarapur nuclear power plant until India had reassured the United State that no American-sold nuclear material or equipment would be used to make explosives (Chellaney, 1993). Although no evidence was produced that the blast involved a breach of contract with any foreign country with which India had nuclear collaboration, yet India was isolated in the Western nuclear community. 'India's post-1974 position on the nuclear question has become unsustainable. No one regards India's objections to the NPT absolutely valid and substantial – as the real reason why it refuses to sign the treaty' (Bidwai, 1991). This caused serious setbacks to India's nuclear programme. No one contended that any material or equipment supplied to India by America had been used in manufacturing a nuclear device. It was more to do with India emerging as a nuclear-capable Third World country. On the other, as earlier, India believed that the West's pre-occupation with forcing some countries to foil their attempt to enter the nuclear club is bound to be ineffective unless non-proliferation is linked to universal disarmament.

India's decision to develop nuclear energy or to go nuclear in the future is mainly caused by its protest against the discriminatory non-proliferation treaty, but it may be a response to Pakistan and Chinese nuclear power development and lastly, it may even have been a deliberate attempt to join the nuclear club. It all started with Chinese aggression against India in 1962 with China becoming a nuclear power in October 1964. In a debate in the Indian Parliament as to whether India should become a nuclear weapon country or not. While speaking on the capital outlay of the Department of Atomic Energy in the Lok Sabha on 23rd March 1963, a member of the Jana Sangh Party strongly pleaded, ''India should manufacture atomic weapons in view of the threats posed by the Chinese on the borders. He contended that China possessed atomic weapons and it would be impossible

for India to defend its sovereignty and territorial integrity without the nuclear power'' (Rahamathulla, 1980). But there were other members in the Parliament who were of the opinion that India should not manufacture atomic or nuclear weapons. However, the people of India, on the contrary, felt that India needed to manufacture nuclear weapons as it would not violate the Test Ban Treaty of 1963, and underground explosions were allowed nor would it be going against the spirit of non-alignment.

Further, the threat to India had increased with the maturing of the Sino-American relationship. Pakistan connections with China was already well-established. It was furthering renewing its connections with America. All this was a grave threat to South Asia, ''Islamabad's willingness to recognize China but not India as the predominant power in South Asia aggravates India's fear of China as a hegemonistic power that is in the occupation of its territory'' (Subramanian, 1984). In the context of strategic, political and military implications of Pakistani nuclear capability suggested that India should also formulate a response to safeguard its security and national interests. India will have to follow such a policy that would serve it best without being sentimental or pseudo-moralistic in approach. India has to be more concerned about the explicit of the ominous United States-Pakistan strategic consensus than the mere fact of United States arms supply to that country. (Singh, 2006). Pakistan's keen desire for a nuclear bomb was there much before India tested her nuclear device. In Z.A. Bhutto's calculations:

(i) Pak bomb will be a status symbol not only for Pakistan but for the entire Islamic world;

(ii) That it would fetch aid and oil supply from the sympathetic Muslim states; and

(iii) It would give Pakistan enough leverage to put India into the defensive (Nagar and Sharma, 1990).

It is also to mention here that the danger of nuclear war exists more amongst the smaller nations than amongst the superpowers. The smaller nations can be provoked into using nuclear weapons as the last alternative to national demise. In a war between India and Pakistan, it is more likely that Pakistan would be the first user of nuclear weapons. The Indian armed forces feel that when the Pakistanis are outnumbered they may use nuclear weapons to prevent the defeat of Pakistan.

Emphatic Policy of Indira and Rajiv Gandhi

In the meantime, Indira Gandhi returned to power in 1980 and her government asserted that it would be vigilant in protecting the national interests. It was necessary for India to be in touch with the latest technology. India would be committed to the peaceful use of atomic energy but would keep its nuclear option open. Despite India's problems with the United States over fuel and spare parts supplies to Tarapur, India did not accept the international safeguards. During this period the development of missile technology in India grew. After Indira Gandhi's sudden demise, Rajiv Gandhi, her eldest son became the next Prime Minister of India, who too adhered to the peaceful uses of atomic energy for the development of the country. India's first medium-range missile Agni was developed during this period. It was the most impressive achievement in self-reliance in the field of the indigenous production of a ballistic missile. The development of ballistic missile capability put a long chain of missiles in the future, such as Prithvi, Agni, Trishul, Nag and Akash etc. But Agni is one hundred percent indigenous whereas Prithvi is 90 percent indigenous. Missile Agni has even the potential of being developed into an inter-continental ballistic missile (ICBM) (Singh, 2001). In nutshell, India has been periodically testing nuclear-capable missiles and has made known its determination to secure its assets in space.

On the policy front, both Indira Gandhi and Rajiv Gandhi expressed India's views in clear terms. India has always believed in the peaceful uses of nuclear energy. Indira Gandhi addressed the 38th Session of the UN General Assembly in New York on 28th September 1983, and exposed the dangers of Nuclear war Scientists, scholars and some notable soldiers have vividly described the outcome of a future nuclear war. Imagine a hundred or thousand Hiroshimas at one time ..... We can all live only if we all combine in the struggle for peace (Bhansali, 19873). In June 1988, the then Prime Minister Rajiv Gandhi made a seminal speech at the UN General Assembly and proposed a world free of nuclear weapons, an end to be achieved through an 'Action Plan for Ushering in

a Nuclear-Weapon-Free and Non-Violent World Order (Dikshit, 2010). He proposed a three-stage process of total disarmament with the account on a regime that was global, universal and non-discriminatory. Rajiv Gandhi's Plan was ranked among the bolder initiatives to rid the world of nuclear weapons along with Mikhail Gorbachev's call made two years earlier for the abolition of nuclear weapons. Although USSR welcomed the proposal, the US immediately rejected the Rajiv Gandhi Plan. India, however, must continue to push for the acceptance of its ideas.

Regional Context of Nuclear Power

Especially, in the regional context, growing relations between China and Pakistan in nuclear technology and India's tense relations with Beijing and Islamabad, New Delhi continued its policy to keep the nuclear option open. But as a side effect, India's retention of the option has encouraged Pakistan to continue its weapon programme. Even if India has its own nuclear weapons, Pakistan armed with nuclear weapons could do much damage to India. By March 1987, it became clear that Pakistan possesses nuclear weapon capability. Dr. Abdul Qadir Khan, a doyen of the Pakistani Nuclear establishment in an interview with a British newspaper, The Observer, admitted that his country already has an atomic bomb and would be prepared to use it, if its existence was threatened (Seth, 1988). A short while later in a Time magazine interview, President Zia-Ul-Haq confirmed more or less that Dr. Khan had said and revealed, ''you can virtually write today that Pakistan can build a nuclear bomb whenever it wishes……Once you have acquired the technology, which Pakistan has, you can do whatever you like''. At the time, it was clear that the Pakistani nuclear programme was based on two main pillars. Firstly, nuclear espionage and smuggling, and secondly, nuclear collaboration with its strategically, China. In the development of Pakistan's nuclear programme, China has played a central role. Probably China feels that nuclear-armed Pakistan would be a crucial counterweight to India. The development of Pakistan's nuclear weapon capability reminded the declaration of Z.A. Bhutto in 1966 as foreign minister, If India built a nuclear bomb, Pakistan would follow suit even if Pakistani had to eat grass to succeed in that venture'(Chellaney, 1993). Pakistan had also refused to sign the Non-proliferation Treaty of 1968, simply because its arch-rival, India, had pledged not to accede to it.

The region of which India is a part is the only region in the world in which three rival nations, sharing disputed frontiers, deeply hostile to each other and facing each other with nuclear capability. In South Asia, there is hostility between India and Pakistan on the one hand and between India and China on the other. The situation has reached the post-proliferation stage with India and Pakistan both possessing weapons-grade fissile material and the means of delivering nuclear arms. The situation further aggravated as in the nineties the Chinese continued to provide technical assistance to Pakistan. Apart from statements on the part of Pakistan's government about its nuclear explosive devices, the Reagan administration had convincing evidence that China was helping Pakistan to operate its Kahuta uranium-enrichment plant and had given Pakistan a nuclear bomb design. China had given Pakistan enough weapons-grade uranium to fuel two nuclear weapons. In the circumstances, it is most unlikely that India would use nuclear weapons against a non-nuclear Pakistan. This would be because of India's conventional superiority. But Pakistan too gained nuclear capability around the mid-1980s. An American estimated Pakistan had established the manufacturing capacity to produce five to six bomb quantities of enriched uranium in 1985. As per the estimates of SIPRI, by 1992 Pakistan had enriched uranium sufficient for six to ten bombs (Alam, 1998). Again by the time, the Indian nuclear option had come under increasing siege with the five declared nuclear powers joining hands for the first time to enforce non-proliferation as a global norm. These nuclear powers had begun targeting India through the Comprehensive Test Ban Treaty (CTBT) and the proposed Fissile Materials Cut-Off Treaty (FMCT). It was this pressure that prompted two previous governments—Narasimha Rao in late 1995 and, Atal Bihari Vajpayee in May 1996, to order a nuclear test, although they retreated from their plan at the eleventh hour. H.D. Devegowda and I.K. Gujral governments also seriously considered nuclear testing. Earlier, with the assumption of BJP-led government in New Delhi the induction of nuclear weapons came on top of the highly emotional domestic debate.

Coming Of Vajpayee and Re-evaluation of Nuclear Policy

Atal Bihari Vajpayee, the leader of the new coalition, pledged to exercise all options, including the nuclear option. The Party in its election manifesto believed that the time has come to re-evaluate the country's nuclear policy and induct nuclear weapons. Again on 19th March 1998, Atal Bihari Vajpayee became the Prime Minister of India as a head of the BJP-led a coalition government and fulfilled the promise of the nuclear test made in the election manifesto. After 24 years India had conducted successfully on 11th and 13th May 1998 five nuclear tests, three and two respectively. Going by numbers, most experts have projected the Indian capability to build nuclear weapons to be somewhere between 15 to 60 Hiroshima-type warheads. One recent estimate has put India's weapons-grade plutonium stocks by the end of 1995 at about 330 kg approximately. This study suggests that this stockpile may be translated into 60 warheads at 6 kg per weapon (Hoodboy, 1999). In another study made earlier India's stocks put at 200 to 250 kg until 1988, which translated into a little over a dozen weapons (Albright and Zamora,1989). The Indian Prime Minister in an announcement said, ''today at 3.45 pm conducted three underground nuclear tests in the Pokharan range. The tests conducted were with the fission device, a low-yield device, and a thermonuclear device. The measured yields are in line with expected values.'' The opposition leaders, the former Prime Ministers: V.P. Singh, P.V. Narasimha Rao, Inder Kumar Gujral, and other prominent leaders were stunned by Vajpayee's daring gamble but at the same time unwilling to differ with him (Ramachandaran,1998). Vajpayee's government had perhaps tested India's nuclear weapons in order to enhance the country's security in the face of mounting evidence of Sino-Pak collaboration in the development of nuclear weapons and missile. This time Pakistan not only criticised bitterly India for explosions but as expected, evened its nuclear test account with India by exploding five nuclear tests on 28th May 1998. Islamabad exploded one more test on 30th May 1998 and became ahead of India in this regard. Shamshad Ahmed, Pakistan's Foreign Secretary in a statement said that Pakistan was willing to enter into talks to resolve all issues, including prevention of nuclear proliferation in the region. Pakistan's decision to exercise nuclear options is only for self-defense and to deter aggression (Singh,2001). In general, Pakistan had two basic compulsions for this nuclear tit-for-tat. First, Islamabad had to prove to India in particular and the world at large that its nuclear capability was not a fib but very real. Second and by far more vital to the survival of Nawaz Sharif government, was the dire need to reply to India's test with an exactly identical display of nuclear prowess.

As a follow up of the election manifesto, Vajpayee government re-evaluated India's nuclear in present national/ global context and issued a draft nuclear doctrine on 17th August 1999. According to a military dictionary, a nuclear doctrine is a set of published or unpublished principles concerning the physical or psychological employment of nuclear weapons. Apart from reflecting a country's threat perceptions and assets, these doctrines are too often infused with ideology and national ethos. They remain only the guiding force and are not necessarily binding in practice. These principles may be found in governmental documents, official statements, or strategic debates amongst top officials and strategists (Singh,2001). In the long run, there are various other factors like a nation's political commitment and resolve as also it's financial and technical capabilities that determine the nature and potential of its nuclear profile. But at the end, the exact nature of the nuclear assets as also their operational nuclear doctrine are shaped by a country's perceived security threat which in turn dictate a country's nuclear doctrine. However, any analysis of a nation's nuclear posture has to be understood in the context of its threat perceptions first and only later in relation to other available assets, even if these assets, like nuclear weapons, may be directly responsible for determining threat perceptions. Traditionally, nuclear forces have been known as a political weapon and not weapons of war. In the situation, any such comparison of numbers, range-yield, dates, etc., can serve only a very limited purpose of outlining each country's nuclear profile.

The need for re-evaluation of India's nuclear policy was felt at large about the kind of system that we have evolved for ourselves. While the world all around us is in rapid transition, our national security system is marked by a complete absence of flexibility, innovation or imagination. It seems to be stubbornly committed to outmoded structures and systems and shows a strange devotion to archaic thought processes. The reason is

simple; we have failed to put in place the systems, structures, procedures, and organisations that will enable efficient defense planning as well as effective operational employment of all the forces that we acquire (Prakash, 2010). Of late, the strategic environment has changed a great deal since 1998 and it is time for our Nuclear Doctrine to be urgently reviewed and revised. Not all the nuclear submarines, aircraft carriers, inflight refuellers or strike corps can provide us with security unless we reform the defense system.

Concept of Credible Minimum Deterrence

The Indian nuclear doctrine aims at providing India a credible minimum deterrent at an affordable pace of expenditure to create uncertainty in the minds of would-be nuclear intimidators, aggressors, and interventionists that those actions against this country would not be rational options (Subrahmanyam, 1999). The released document reflected the collective wisdom of India's strategic community as it represented the consensus view of the National Security Council Advisory Board (SCAB). Like the Chinese official statement of 16th October 1964. India's doctrine asserted its commitment to disarmament, no first use, and self-defense as its major pillars. But more than the Chinese statement, Indian doctrine talks of developing a 'credible minimum nuclear deterrence with high-degree of priority being laid on ensuring the safety and survivability of India's nuclear forces (Singh,1999). Broadly, commitment to disarmament, no more physical tests, no-first-use, and minimum credible nuclear deterrence can be described to be the five major elements of India's nuclear doctrine. From the basic principles of India's nuclear doctrine, other components may also be a derived-as-strategic triad, punitive retaliation in rapid response and shift from peacetime deployment to fully employable forces in the shortest possible time. In addition, Indian doctrines are not a copy of western doctrines because they do not subscribe to warfighting as the West did, they do not involve the delegation of powers and they rule out first use. If these basic differences are understood, then one would know that the Indian nuclear doctrine is as different from the western doctrine as 'chalk is from cheese'. In general, the nuclear doctrine of India is considered as eminently sensible, extremely logical and moderate having no risk and no possibility of an arms race in the region.

The core of deterrence, especially for a country which commits itself to no-first-use is its ability to carry out punitive unacceptable retaliation. This is not cold war language but the appropriate language to communicate to the nuclear warriors who believe in the use of nuclear weapons first. Unless one opts to allow its society and nation to be destroyed in a cold-blooded first strike by the adversary and not do anything to deter him, it is logical to make it clear to such nuclear adversaries the consequences of his restarting to a first strike. The word unacceptable damage does not carry today the connotations of the Mutual Assured Destruction (WMD) age of Robert MacNamara and Zbigniew Brezinski. It is now recognised that one bomb on one city is unacceptable. Therefore, those who believe in wielding nuclear weapons to intimidate other nations and in the first use of nuclear weapons have to be deterred by spelling out the consequences of their actions (Subrahmanyam, 1999). In fact, over the years the role of nuclear weapons has undergone a subtle but important change in deterrence strategy. The principles of nuclear deterrence are beginning to alter in a way that could profoundly impact on the still-evolving post-Cold War security order. The ongoing change in affecting the face of deterrence, but not its primary purpose. Deterrence will still centre on achieving strategic objectives not through military victory in a nuclear conflict, but with the threat of war. Since the threat has to realistically-based on ready, deliverable nuclear weapons, the symbiosis of deterrence and use will remain the key reality of the nuclear world. For India, the changing face of deterrence and the emerging triangular strategic offense/defense relationship among the US, China, and Russia carry important implications. In a complex world marked by conflicting trends, it is apparent that each deterrent relationship will be different from the other, premised on principles at variance with classical deterrence theory. The concept of mutually assured destruction is losing relevance. Hence, deterrence has to be constructed on principles radically different from notions of qualitative or quantitative.

Although the concept of minimal deterrence is admittedly imprecise in quantitative terms, its foundations are as much psychological as logical since it hinges on how much damage would be "unacceptable" to your adversary. Nevertheless, certain basic aspects of minimal deterrence are clear. Firstly, it does not call for a boundless open-ended arsenal. It does not even require that your offensive weapons match in number or strength those of your adversaries. It only demands that you have enough capability, in the second strike to

inflict "unacceptable damage" to the other side, should they be so foolish as to initiate a nuclear attack on us. In the context of damage that the simplest fission weapon can do has been explicitly demonstrated in the holocaust of Hiroshima and Nagasaki. Today major cities are densely populated and if a fission weapon equal to that dropped in Japan, can kill at least double strength or over 150,000 people (Rajaraman, 2009). Surely, this should be "unacceptable damage" to even a remotely responsible leadership in any modern country. Some people's argument of Jihadi militants taking over in Pakistan and such a fanatical leadership willing to accept such damage are in the category of rare possibility. But any leadership that finds such a huge civilian fatality "acceptable" is in any case beyond pale of rationality. It cannot be relied upon to feel deterred by the prospect of even a much larger attack. Deterrence has no meaning in that situation and building a larger, thermonuclear weapon is not the answer to such an irrational, suicidal adversary. In short, a thermonuclear hydrogen bomb is not crucial for minimal deterrence. Standard 20kT fission weapons will be more than suffice. Pokharan I and II have exploded those successfully. The first and foremost aim of our nuclear arsenal is only to deter others from attacking us and not to wage nuclear wars or to maximize casualties on the other side as an end in itself.

India's Policy of 'No First Use'

In India's policy of no-first-use and retaliation only the survivability of our arsenal is crucial. This is a dynamic concept related to the strategic environment, technological imperatives and needs of national security. The doctrine aims at clearly stating in unambiguous terms that any threat of use of nuclear weapons against India shall invoke measures to counter that threat and that any nuclear attack on India and its forces shall result in punitive retaliation with nuclear weapons to inflict damage unacceptable to the aggressor. With this aim in view, several experts consider that there are good reasons for creating a nuclear triad, which simply refers to the three legs that comprise most nuclear forces, the land-based international ballistic missiles (ICBMs), strategic bombers, and submarine-based long-range missiles. All nuclear powers have had, or aspire to create such nuclear triads. Despite their individual advantages and disadvantages taking together, they tend to cancel out the various disadvantages to create a robust, safe, and relatively invulnerable deterrent force (The Times of India, 2003). For example, landbased strategic bombers are large and soft targets. Land-based missiles are similarly vulnerable because their locations cannot be kept secret from energy spy-satellites. But land-based missiles, usually deployed in underground soils, can be hardened to a certain degree so that they can survive anything but a direct hit. Likewise, a submarine-based nuclear deterrent force has also advantages and disadvantages: Submarines, especially nuclear missile submarines which rarely come to the surface, are notoriously difficult to detect and track, which makes them the most invulnerable leg of the nuclear triad. Thus, a nuclear triad, which includes all the legs of the triad, reduces the dangers, vulnerabilities, and insecurity associated with any single leg. Because India will never see any merit in using nuclear weapons to strike first, it is fundamentally crucial for us with our defensive doctrine and a no-first-use philosophy to ensure survivability of the nuclear arsenal to enable retaliation. It is this capability which will deter the aggressor from taking recourse to war and hence provide deterrence and peace and tranquillity so essential to the development of the nation.

The draft of India's nuclear doctrine issued in August 1999 was subsequently formalised with some modifications in 2003. It explicitly stated that the country is pursuing nuclear deterrence though this was qualified as a minimal one. It also warns that "nuclear retaliation to a first strike will be massive and designed to inflict unacceptable damage" (Ramana, 2008). Unacceptable damage, in plain English, means that these nuclear weapons would be dropped on cities, each killing lakhs or millions of innocent people. But India, unlike the cold warriors of the fifties, embarked on making nuclear weapons not as a warfighting arsenal or for use in a massive first strike, but only as an instrument of minimal nuclear deterrence. This deterrence was to be achieved with "……sufficient nuclear weapons to inflict destruction and punishment that the aggressor will find unacceptable…." (Rajaraman, 2009). This policy has been repeatedly underlined and reiterated several times by the government of the day, despite efforts by hawks bent on adopting a more aggressive nuclear posture. Even very recently S.M. Krishna, India's Minister for External Affairs asserted that there would be no revision of India's no first use nuclear doctrine and said minimum credible deterrence would be maintained in view of threats and challenges. "On the nuclear doctrine, I would only like to say that there is no change in our policy. We are committed to universal, non-discriminatory nuclear disarmament and we remain firm on the commitment", he said.

In fact, since the time India became a declared nuclear power state in May 1998, there has been a concerted campaign, particularly by non-proliferation lobbies in western countries, echoed by analysts in China and Pakistan, to spread the notion that India's strategic programme has been driven by considerations of prestige and propaganda, rather than by any real security threats. Even some Indian commentators also consider that India's dominant objective is political and technological prestige, while for every other nuclear weapon state it is deterrence (Saran, 2013). Only as a followup of the policy of nuclear doctrine India adopted in January 2003 formally at a meeting of the Cabinet Committee on Security, it has taken a series of graduated steps to put in place a triad of land-based, air delivered and submarine-based nuclear forces to conform to its doctrine of no-first-use and retaliation only. Currently, at least two legs of the triad are fully operational. These include a modest arsenal, nuclear-capable aircraft, and missiles, both in fixed underground silos and those mounted on mobile, rail and road-based platforms. Land-based missiles include both Agni-II (1500 km) as well as Agni-III (2500 km). The range and accuracy of further versions, for example, Agni-V (5000 km) has been tested successfully only recently and will improve with the further acquisition of technological capability and experience. Further work for the third leg of the triad is in progress. We need a minimum of three Arihant class nuclear submarines so that at least one will always be at sea. The submarine-based Sagarika missiles have been developed and tested but are still relatively short in range. It is expected that a modest sea-based deterrent will be in place by 2015 or 2016.

Conclusions

Over the years, in the post-1974 period, India's nuclear policy and power evolved gradually in the context of the regional security environment and global contexts. India's nuclear policy has its root in the kind of pacifism and peace we nurtured into likewise, the transition of the nuclear policy from the inceptive years till today has also gone significant changes. Especially after 1998, when a structured refurnished nuclear policy took place, India pronounced itself a Nuclear Power State. In addition, India was never a dominant force in Asia keeping in mind the nuclear context, hence in order to have an effective deterrence against both China and Pakistan, India declared itself a nuclear state. Given the difficult neighbourhood and increasing threat of nuclear warfare, India's nuclear doctrine acts as a deterrent, and plays a de-escalating role, creating space for a diplomatic solution to critical issues.

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