



REVIEW ARTICLE

INDIA'S NUCLEARIZATION PROCESS: POKHRAN I AND II

*Dipmala Roka

Rajiv Gandhi National Fellow, Department of Political Science, North Bengal University,
Darjeeling, West Bengal, India

ARTICLE INFO

Article History:

Received 12th January, 2013
Received in revised form
23rd February, 2014
Accepted 25th March, 2014
Published online 23rd April, 2014

Key words:

India, China,
Pakistan,
Pokhran I and II,
Security,
Threat perception,
Nuclear ambiguity.

Copyright © 2014, Dipmala Roka. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

India's nuclear policy has evolved gradually rather than dramatically, India became a nuclear weapon state after testing five nuclear device in 1998. The self-imposed restraint for 24 years, after having demonstrated nuclear capability in 1974, is unique in the world. Various factors influenced India's pursuit of a nuclear development programme. Ultimately it was concern of national security that played the critical role in turning it to a military oriented project. In particular, security dilemma involving itself, China, and Pakistan. Based on in-depth historical process-tracing studies this paper is an attempt to explain changing contour of India's nuclear policy and postures and analyses the factors that led it down the road to Pokhran I and II.

INTRODUCTION

The nuclear era had already begun by the time India attained independence in 1947. A very grim situation was prevailing at international level for newly independent countries after World War II with regard to national security and independent conduct of foreign policy in wake of stand taken by U.S and its Western Bloc allies that "if you aren't with us you're against us". That situation forced developing countries to either surrender their national interest and conduct of independent foreign policy by joining one of the two power blocs or pursue independent stand by remaining non-aligned (Nair, 2002, p.49) Indian leaders then took the crucial decision to opt for self-reliance, freedom of thought and action in conducting its foreign policy.

Indian nuclear policy is the product of the international environment. India found itself in midst of world divided into two power blocs, with the process of decolonization and disintegration of imperialism and the emergence of national states in the third world. It was against this background that India's nuclear policy has taken shape (Sisodia, 1985, p.116). India's nuclear policy was formulated to meet the fundamental problem of the country. India's first P.M Jawaharlal Nehru considered nuclear power vital for the reconstruction and rehabilitation of an industrially and economically weak nation like India (Pathak, 198, p.8). Indian nuclear history can be divided into the following four phases:

- Phase I- from the formation of the Atomic Energy Commission in 1948 to 1964, when Nehru died and China exploded their first device.
- Phase II from 1964 to 1974, from the second Indo-Pak war to India's testing of the Peaceful Nuclear Explosive (PNE)
- Phase III the period 1974 to 1995, when no tests were conducted and the government changed hands several times; and
- Phase IV from 1995 to 1998, when the path to testing was taken culminating in the tests themselves in 1998.

Phase 1947-1964 India's indigenous efforts in nuclear science and technology were established remarkably early. The first step was taken by Dr. Homi Jahangir Bhabha¹ in March 1944 with the establishment of the Tata Institute of Fundamental Research (TIFR). The new government of India passed the Atomic Energy Act², on 15 April 1948, leading to the

¹Homi Jahangir Bhabha was undoubtedly the father of Indian nuclear research and the architect of India's nuclear strategy and diplomacy. In the 1930's, Bhabha studied with the eminent nuclear scientist Lord Ernest Rutherford. He also associated himself with other great experts in the field like Niels Bohr, James Franck, Enrico Fermi and WB Lewis. On his return to India, Bhabha convinced the Tatas to finance the establishment of a centre for research to study nuclear physics. Thus India's nuclear programme predates the dawn of independence. The Tata Institute of Fundamental Research (TIFR) was established in Bombay on 19 December 1945, four months after Hiroshima and months before India became independent Bhabha was already in command of India's nuclear future. He dominated the Indian nuclear scene till his unfortunate demise in an air crash twenty years later. Cited in Itty Abraham, *The Making of the Indian Nuclear Bomb*, (New Delhi: Orient Longman, 1999).

²Prime Minister Nehru introduces the Atomic Energy Act before India's *Constituent Assembly of India (Legislative Debates)*, 2d sess., vol. 5, April 6, 1948, pp. 3315, 3328, 3333-34, cited in George Perkovich, *India's Nuclear Bomb: The Impact on Global Proliferation*. (Berkeley: University of California Press, 1999), p. 18.

*Corresponding author: Dipmala Roka, Rajiv Gandhi National fellow. Dept of Political Science. North Bengal University. Darjeeling. West Bengal. India.

establishment of the Indian Atomic Energy Commission (IAEC) not quite one year after independence.

During the early years of independence, India pursued what Nehru called "a peaceful nuclear programme", implying that the programme was developed not to manufacture nuclear weapon, but instead to provide energy to the people. According to Prof. V. Suryanarayan the peaceful use of nuclear energy was the official policy of the Government of India. This point was highlighted in bilateral agreements with Canada, UK, USA and USSR in particular, Canadian assistance in the initial phase contributed substantially to India's nuclear efforts.³ A careful reading of Nehru's speeches and policy declarations clearly reveal that he did not foreclose the nuclear option for ever. It goes to the credit of Jawaharlal Nehru that he laid the strong foundations of atomic research, so that when the country decided to exercise the nuclear option, it could do so without much difficulty. In IAEC first meeting Prime Minister Nehru declared: "We must develop this atomic energy quite apart from war - indeed I think we must develop it for the purpose of using it for peaceful purposes. ... Of course, if we are compelled as a nation to use it for other purposes, possibly no religious sentiments of any of us will stop the nation from using it that way."⁴ This note of ambivalence in Nehru's speech foreshadowed his policies on nuclear research for the next decade. Nehru took a prominent role in international politics, founding the Non-Aligned Movement, and advocating nuclear disarmament. However, he refused to foreclose India's nuclear option while other nations maintained nuclear arsenals and supported programs designed to bolster India's weapons potential.

The AEA placed all uranium and thorium reserves in the country under state control and facilitated the conduct of all nuclear research and development activities in 'secret.'⁵ The Indian Government created the Department of Atomic Energy (DAE) in 1954 to further stimulate nuclear research and atomic energy development. Nehru and Bhabha, Chairman of the IAEC, became its first minister and secretary respectively, which underscored that the Indian Government was determined to build the nuclear programme on a priority basis. In addition, the Atomic Energy Establishment, Trombay (AEET, renamed as Bhabha Atomic Research Centre or BARC in 1967) was established in 1954 in order to expedite the building of a nuclear infrastructure. Its primary objectives were to create skilled manpower and basic infrastructure in order to facilitate nuclear R&D and transfer of nuclear technology. (Kapur, 1993, p. 226)

In 1958, Chinese announcement to develop nuclear weapons,⁶ came out at a time when the Sino-Indian relation was gradually deteriorating, eclipsing the spirit of Hindi-Chini Bhai Bhai. It immediately made an impact on some quarters of the

Indian political circles. An indication of this can be found in two Lok Sabha motions introduced for discussion on 10 March 1959, which suggested enlarging India's nuclear research 'to the field of defence.' However India's worries regarding China greatly increased over the border disputes with leading to large scale troop deployments by both sides in early 1962.

Following India's humiliating defeat by China in the Indo-Chinese border war⁷ of October-November 1962, the first formal demand for the development of nuclear weapons was made in Parliament, by the Jana Singh Party⁸, in December 1962. Subsequently the right-wing Hindu nationalist *Bharatiya Jana Sangh* demanded the production of nuclear weapons by India as part of India's long-term defence efforts against China.⁹ Despite such demands from Opposition political parties, the Indian Government still remained firm not to embark on a military nuclear programme.

Phase II: from 1964 to 1974 Smiling Buddha (Pokhran I)

Nehru died on 27 May 1964 and was succeeded by Lal Bahadur Shastri who took office on 2 June. That summer the expectations of a Chinese nuclear test steadily increased, confirming Dean Rusk's anticipation,¹⁰ the Chinese test finally came on 16 October 1964. Indian Prime Minister Shastri declares that the test threatened world peace¹¹ and reiterate his opposition to India following the same path. Against the backdrop of the still sore wound of 1962 defeat, the Chinese test set off an unprecedented nuclear debate in India¹². Notwithstanding Shastri's 'no policy change' stance,¹³ various political parties including a majority of the All India Congress Committee members,¹⁴ the Indian media, many influential public opinion-makers and a majority of the Indian polity reacted sharply demanding the manufacturing of nuclear weapons by India. In the last week of November 1964, Lok

⁷On the Sino-Indian Border War, see John W. Garver, *Protracted Contest: Sino-Indian Rivalry in the Twentieth Century* Seattle: University of Washington Press, 2001; Neville Maxwell, *India's China War* (Bombay: Jaico Publishing House, 1970).

⁸Raja Menon, *A Nuclear Strategy for India*, Delhi: 2000, p. 73.

⁹G.G. Mirchandani, 'India and Nuclear Weapons,' in *Perspectives of India's Nuclear Policy*, (Ed.) T.T. Poulouse (New Delhi: Young Asia Publications, 1978), pp. 55-6.

¹⁰On 29 September 1964, American Secretary of State, Dean Rusk, revealed that the United States expected China would conduct a nuclear test in the near future. This revelation sparked a nascent nuclear debate in India, in Chakma Bhumitra, *Towards Pokhran II: Explaining India's Nuclearization Process* (Cambridge University Press, 2005)

¹¹US Embassy (New Delhi) to State Department, cable no. 1203, 16 October 1964, p. 1, Nuclear Non-Proliferation Policy FOIA files, India, National Security Archive, Washington, DC, in George Perkovich, *India's Nuclear Bomb: The Impact on Global Proliferation* (Berkeley, CA: University of California Press, 1999), p. 490. The Hindustan Times, 17 October 1964.

¹²Three alternative motions on nuclear policy were introduced for debate: one called for immediate production of an atomic bomb; a second one called for embarking on 'nuclear-based defence installations in the country'; and a third concerned reorienting foreign policy in light of the Chinese bomb. (Chakma, 2005, p. 201) Those who advocated nuclear weapon argued that India needed to regain her lost prestige that a deterrent would be effective and cheap, and as an acute security threat had emerged, India should put herself into the core of power system. It would be important to show that India was ahead of China. Counter arguments built on the negative impact on economy, and inability of such weapon to solve any problem (Cohen, 2001, pp. 160-161). The question was between domestic consideration and identity as a great power, between Gandhian tradition and Cold war realism. Also within the Congress Party view were expressed about abandoning nuclear abstinence and acquiring nuclear weapon (Subrahmanyam, 1998, p. 27; Ganguly, 1999, pp. 154-155)

¹³The *Hindustan Times*, 20 December 1964.

¹⁴A pressure on the Prime Minister came during the All India Congress Committee (AICC) meeting on 7 and 8 November 1964. At the AICC meeting, one hundred delegates submitted a petition to the party leadership urging that India acquired 'an independent nuclear deterrent to protect herself against any possible threat from China.' *The Hindu Weekly*, 8 November 1964.

³David Hart, *Nuclear Power in India: A Comparative Analysis*. London: Allen and Unwin 1983.

⁴Raj Chengappa, *Weapons of Peace: The Secret Story of India's Quest to be a Nuclear Power*, New Delhi: Harper Collins Publishers 2000.

⁵To note that the Chairman of the IAEC had the power to formulate and implement policies with regard to country's nuclear programme in 'total secrecy' and was responsible only to the Prime Minister. Criticisms of the lack of accountability in India's nuclear programme can also be found in Itty Abraham, *The Making of the Indian Atomic Bomb*. (New Delhi: Orient Longman Limited, 1999).

⁶For a historical background of the Chinese nuclear programme, see John Wilson Lewis and XueLitai, *China Builds the Bomb* Stanford (Calif.: Stanford University Press, 1988), pp. 35-72.

Sabha held its first debate on foreign affairs after the Chinese nuclear test. Jana Sangh introduced a motion in the Lok Sabha, which called for manufacture of nuclear weapons. Shastri won a voice vote against the motion, but he secured it assuring the parliament members that his policy would not jeopardise national security. In his speech for the first time he mentioned that India's nuclear programme would entail 'peaceful nuclear explosives.'¹⁵ This change was subtle, but critical. By it, Shastri in fact adopted a 'nuclear option' strategy embracing a middle ground -the third option.¹⁶ This strategy was considered to be the pragmatic posture at that time given that there were obvious moral, economic and political reasons for not embarking on an explicit nuclear weapons programme. More importantly, this policy change paved the way to undertake the 'Subterranean Nuclear Explosion Project' (SNEP), which Shastri authorised in November 1965.¹⁷ However, this initiative's importance lay in the fact that it had the implied option to go nuclear from a PNE foundation. Indeed, it was the beginning of a new era in India's nuclear programme, which eventually culminated with the 1974 nuclear explosion. This explosion provided India the capability and the option to produce nuclear weapons if it so desired. (Chakma, 2005, p. 203)

Within eighteen years of their independence, India and Pakistan fought their second war in 1965 over the disputed territory of Kashmir.¹⁸ In the midst of the intense nuclear debate, this war impacted substantially on India's nuclear perception. For New Delhi, the most disturbing aspect of this conflict was Beijing's diplomatic support to Islamabad and its threat to open a second front along India's Himalayan borders. On 8 September 1965, China sent an open diplomatic note to India threatening 'grave consequences' if India proceeded with military action against Pakistan, (Barnds, 1970, p. 206) it persuaded many Indians, including bureaucrats and politicians, to conclude that an independent Indian nuclear capability was the only means to prevent future Chinese nuclear blackmail an intimidation. The petition referred to the bitter experience of weapons denial by Western governments during the war and emphasised that the security of the country must no longer depend on the 'mercy or whim of so-called friendly countries.' The petitioners concluded that 'India's survival both as a nation and as a democracy, in the face of the collusion between China and Pakistan, casts a clear and imperative duty on the Government to take an immediate decision to develop our nuclear weapons.' (Mirchandani, 1968, p. 39) After Shastri and Bhabha,¹⁹ the official policy changed as well for P.M. Indira Gandhi, the question on PNE's was secondary, and she had to consolidate Congress' in the face of domestic

problems. Despite Saharabhai opposition,²⁰ and Indira Gandhi's reluctance, a group of scientist continued their work on nuclear explosive. A study to design nuclear explosive with plutonium was lunched at Bhabha Atomic Research Centre (BARC) in late 1967 or early 1968. The first serious strategic development that brought a change in Indira Gandhi's nuclear stance was the Chinese test of a thermonuclear weapon on 9 May 1966. This enhanced China's capability to hit targets deep into India. In reaction to this development, the Prime Minister announced in the Lok Sabha that in addition to 'peaceful' uses of atomic power, India would increase nuclear technological know-how and 'other competence.'²¹ It was interpreted, however, as a subtle, but crucial, change in her nuclear policy. The Prime Minister also asserted that there was no question of a country like India depending upon others to defend itself.²² She also resisted growing non-proliferation pressure from the major powers as was reflected in India's decision not to sign the Nuclear Non-Proliferation Treaty (NPT) in 1968.²³

In late 1971, a crisis in East Pakistan erupted, with a resulting India-Pakistan war²⁴, within twenty four years of their independence, ending with the creation of a new nation: Bangladesh. The result was that India won the limited war with Pakistan. However, this war left significant strategic and nuclear implication for India. The U.S. (Nixon-Kissinger) infamous "tilt"²⁵ with the subsequent sending of a nuclear capable aircraft carrier –the USS Enterprise and nine supporting warships to the Bay of Bengal was alarming for the Indians and left long-lasting scars in the Indian thinking about their security questions. Even more frightening to India was the prospect that a US-Pakistan-China strategic triangle would develop in near future. Indeed it generated substantial strategic pressure on India at the crucial stage of war. Such a potential brought India closer to Soviet Union, which assuaged fears about possible pressure on the northern borders from China and the two countries signed a Treaty of Peace, Friendship and Cooperation on 9th August 1971. Thus the third Indo-Pak war prompted India to pursue a more robust defence and nuclear

²⁰The new AEC chairman Vikaram Sarabhai, was similarly chosen for political and domestic purposes rather than reflecting on technological preferences of the political leadership Saharabhai himself questioned the morality, political and military utility of nuclear weapons and took the decision to stop the NEP project. (Perkovich, 2000, pp.84-85)

²¹'A Subtle Change in Emphasis,' *The Statesman*, 11 May 1966.

²²'Congress MPs demand N-bomb,' *The Indian Express*, 12 May 1966.

²³'Indian negotiator V.C. Trivedi adopted the stance advocating non-proliferation and nuclear disarmament as long as it was universal - that no club of permanent nuclear powers should be permitted. As long as existent nuclear powers resisted disarmament, they left other nations no choice but to pursue the same option as they saw necessary. The quid pro quo was clear - India would not eschew nuclear arms unless the existing nuclear states also did. This fundamental logic led to India refusing to sign the Nuclear Non-Proliferation Treaty and voting against it on 12 June 1968. The other major reasons for India's non signature were China's decision not to sign the NPT and India's new reluctance to commit itself to a complete or permanent future abstinence. Behind the curtains of criticism of the NPT from the moral high ground, however, India intensified nuclear preparation at the ground level.' 'Statement by Indian representative (Trivedi) in the First Committee of the United Nations General Assembly' 31 October 1966, in Jain, Nuclear India, Vol. II, p.187.

²⁴Ashis Nandy, 'The Bomb, the NPT and the Indian elites,' *Economic and Political Weekly*, Vol. 7, No. 31-33 (August 1972), p. 1539. Karsten Frey, *India's Nuclear Bomb and National Security* (London: Routledge, 2006), p. 169.

²⁵On the 1971 War, see Robert Jackson, *South Asian Crisis: India, Pakistan, and Bangladesh* (London: Chatto and Windus, 1975); Tariq Ali, *Can Pakistan Survive? The Death of a State* (London: Penguin Books, 1982); Richard Sisson and Leo E. Rose, *War and Secession: Pakistan, India and the Creation of Bangladesh* (Berkeley: University of California Press, 1990).

²⁶Christopher Van Hollen, 'The Tilt Policy Revisited: Nixon-Kissinger Geopolitics and South Asia,' *Asian Survey*, Vol. XX, No. 4 (April 1980), pp. 339-61.

¹⁵ 'Nuclear Race Will Ruin Country's Economy—Shastri's Firm Stand: Many M.Ps. Plead for Change in Policy,' *The Hindu*, 28 November 1964

¹⁶ A third group advocated a middle course neither to undertake nor exclude a nuclear weapons programme. Instead of embarking on an explicit nuclear weapons programme, it favored a vigorous development of nuclear technology so that it would be possible to 'go nuclear' within a short period of time if required. This position subsequently came to be known as the policy of 'nuclear option.' (Chakma, 2005)

¹⁷ Raja Ramanna, *Years of Pilgrimage* (New Delhi: Viking, 1991), p. 74; Bhatia, *India's Nuclear Bomb*, p. 106.

¹⁸Sumit Ganguly, *The Origins of War in South Asia: The Indo-Pakistani Conflicts since 1947* (Boulder, Colo.: Westview, 1994).

¹⁹On 11 January 1966, just hours after Tashkent Declaration was signed formalizing the end of hostilities in the war with Pakistan, PM Shastri died of a heart attack. Just two weeks later on January 24, and the very day Shastri's successor Indira Gandhi was sworn in as Prime Minister, Dr. Homi Bhabha was killed while on a trip to Europe when the plane in which he was flying collided with Mount Blanc.

policy. After two years India conducted a PNE at the Pokhran test site on 18th May 1974, codenamed 'Smiling Buddha'. It is almost impossible to say with certainty, what were the prime motivating factors for the decision to go ahead with the Pokhran test. It seems that it is a complex mix of national security, scientific-technological ambition and momentum, interpersonal relations, desire to show prowess etc. What is clear is that in 1970, the Indian Government began to consider seriously the conduct of a nuclear explosion in view of China's nuclear activities. Sentiment for moving ahead gained momentum in the wake of the 1971 Indo-Pakistani War. The Pokhran test of 18 May 1974 was described by Indian officials as a "peaceful nuclear explosion" (PNE).

International reaction to the Indian blast was mixed. The Non-Aligned Movement member states applauded India's technological breakthrough. France sent congratulatory messages to the Indian Atomic Energy Commission. The United States imposed restrictions to limit India's access to nuclear material and technology. Upset over the involvement of the Canadian reactor to produce plutonium for the explosion, Canada immediately cut off aid to the Indian nuclear program.

Phase III: From 1975-1995. The Long Pause

For over two decades after 1974 nuclear explosion, India pursued a policy of nuclear ambiguity- neither conforming nor denying its pursuit of a military nuclear programme. At times, the programme was slowed down, but the development and perfection of nuclear weapon and missile delivery-related technologies were never stopped. However India's nuclear policy was confronted with a number of domestic, regional and global challenges. Indian political system went through a series of upheavals and unstable intervals during this period.

The brief Janata rule from 1977-1980, provides important insights about the change and continuity in India's nuclear policy. The new Prime Minister, Morarji Desai announced that he would reassess India's previous nuclear policy and promised that India would not conduct any further nuclear explosions including PNEs. (*The Statesman*, 25 March 1977) However at the same time the nuclear policy did not change completely. Desai maintained the rigid Indian line of refusing to sign the NPT "as long as those who possess atomic weapon and go on doing the explosions do not give them up".²⁶ Desai's moral stand point emphasised both practical and normative costs over any military or security argument (*Subrahmanyam, 1998, pp.33-34*). However Desai's anti- nuclear stance was subsequently moderated afterward. Two critical factors explain Desai's subsequent deviation from his initial nuclear policy, in the context of China's modernisation of its nuclear arsenal, and Pakistan's growing nuclear potential. During Desai's time in office, Pakistan was in a serious clandestine endeavor to acquire a nuclear weapons capability. Pressure was mounting on the Janata Government to respond to the looming Pakistani nuclear threat with a similar Indian programme. This incident caused substantial strategic concerns in India about Pakistan's 'Islamic Bomb'.²⁷ Hence, the Indian Government became bound to revive the nuclear explosive programme. In 1979

Gandhi assumed power, she was faced with far different world than the one that she had left in 1977. Because the global landscape had significantly changed, India explored alternatives to strengthen its security. In doing so India was willing to abandon its long-time ally, the Soviet Union. India saw a declining Soviet Union and the opportunities available in the U.S in the realm of technology (computer, electronics, and telecommunication) that were not available in the U.S.S.R. and were willing to explore other economic opportunities available.²⁸ In 1983, India turned from testing nuclear weapons to developing an Integrated Guided Missile Program (IGMP). India faced dramatic, complicated strategic problems from 1980-84. U.S. aid to Pakistan in the Afghan war and Pakistan's advancing nuclear weapon program created the kind of external environment that would call for increasing the nuclear arsenal. Despite pressures from the nuclear establishment and rising military voices urging the acquisition of nuclear weapons, Gandhi refused to authorize another nuclear explosive test or other measures to weaponise India's nuclear capability.

Phase IV: From 1995-1998. Operation Shakti

By the mid-1990s, India was standing at the cross-road of a declaratory and non-declaratory nuclear deterrent posture, while still pursuing a policy of nuclear ambiguity. However it had certainly reached a point from where it could assemble nuclear weapons within a short period of time. The Indian public security discourse at this stage was that India maintained an adequate nuclear preparation as a precaution to confront an uncertain strategic environment.²⁹ In 1995, many commentators in India labeled the indefinite extension of NPT³⁰ as "nuclear apartheid." The NPT extension however encouraged Indian hawks to advance nuclear weapon development before prospective test ban and fissile material production ban treaties were passed. This meant that if India's strategic security interests and the desires of its nuclear scientists required testing of nuclear weapons; India would have to move quickly before facing enormous external pressure.

Rao Government planned for a nuclear test in December 1995³¹ but before this plan reached its logical conclusion, American intelligence sources detected Indian preparations and Washington put enormous pressure on New Delhi to abandon the test. Prime Minister Narasimha Rao, who nevertheless felt that it would be better to wait until economy would face the inevitable sanctions and the missile programme, was more advanced. Allegedly, Bharatiya Janata Party (BJP) also considered nuclear testing when it came to power for two weeks in March 1996. These 'near test' incidents highlighted India's strategic dilemma—domestic force, international

²⁶Devin T. Hagerty. "The Indo-U.S. Strategic Convergence," *US-Indian Strategic Cooperation: Into the 21st Century*. (New York: Routledge, 2006), p. 17.

²⁹Akhtar Majeed, 'India Must Opt for the Bomb,' *The Times of India*, 2 September 1994; Amar Zutshi, 'Nuclear Strategy: India's Policy of Deterrence,' *The Statesman*, 25 November 1994.

³⁰In 1995 the international conference was held of states which were party to the NPT, which India could not participate as a non-party to the treaty. Indians sought to rally support for a move to press the five "haves" to commit themselves to concrete steps towards nuclear disarmament. To the dismay of many, this was rebuffed by the five states, and they generated a consensus of the 179 parties to extend the treaty indefinitely in May 1995. This left India more isolated than before. Cited in Chakam Bhumitra, *Towards Pokhran II: Explaining India's Nuclearisation Process*. *Modern Asian Studies*, 39.2005 pp. 189-226

³¹Raj Chengappa, 'Testing Times,' *India Today*, 31 December 1995, pp. 49- 50. Vipin Gupta and Frank Pabian, 'Investigating the Allegations of Indian Nuclear Test Preparations in the Rajasthan Desert,' *Science and Global Security*, No. 6 (1997), pp. 101-88.

²⁶ Desai in Lok Sabha, June 13, 1977, quoted in Perkovich, 2000, p.202.

²⁷Swadesh Rana, 'The Islamic Bomb,' *India Today*, 1-15 June 1979, pp. 88-9.

pressure and evolving nuclear regime were forcing India to choose whether to retain nuclear ambiguity -credible deterrent without testing or to conduct a series of test to streamline a minimum deterrence, unveil it in a rapidly changing global and regional strategic environment.

On May 11, 1998, India tested three devices at the Pokhran underground testing site, followed by two more tests on May 13, 1998. One of the detonations was claimed to be thermonuclear.³²R. Chidambaram, then Chairman, Atomic Energy Commission stated: "The bombs tested at Pokhran were purely for defensive purposes."³³This time there was absolutely no reference to any peaceful nature of the nuclear tests. The rationale behind the test can be ascertained from the letter by Prime Minister Vajpayee to the President of U.S Bill Clinton following India's nuclear test, in which Vajpayee wrote about the complexities involved in the deteriorating security environment, especially the nuclear environment faced by India and the compulsions of circumstances confronting India to make overt its nuclear capabilities.³⁴ However on 25th May 1998 Prime Minister argued that the test had given India "Shakti" physical and political power, ability and self-confidence.³⁵ Yet the high grounds of nuclear moralism was held, India declared its desire to create a 'minimum credible deterrence' it also offered a 'no-first-use guarantee'. India committed herself to exercising a moratorium on nuclear test and hinted at adhering to test ban treaty.³⁶

The outcry from outside India was almost universal.³⁷Foreign Minister of Pakistan Gohar Ayub Khan hinted that Islamabad would consider conducting a nuclear test of its own,³⁸ and the same month five nuclear tests came from Pakistan, there was fear that the region might become the flash point (accidental or deliberate) for a nuclear exchange.

A number of motives help explain why India suddenly decided to break the pattern in 1998. Certainly, the existence of nuclear threats, overt and covert, from China and Pakistan and international pressure to sign the Comprehensive Test Ban Treaty in the mid-1990s were factors. Domestic politics, in the form of a strategically minded Hindu nationalist leadership hoping to harden India's "soft" image, was another. But it was also clear from the jubilant response of the Indian urban public to the first nuclear tests in May 1998 that the bomb had

enormous domestic value as a symbol of global prestige. Overnight it placed India on the same level as a select club of nuclear-armed states.

Conclusion

In analysing India's nuclear policy it is important to keep historical perspective in mind because the nuclear tests carried out in May 1998 were not a mere episode driven by current and largely domestic political compulsions (though this may have influenced the precise timing), but rather the logical and perhaps an even inexorable culmination of a decades-long evolution in strategic thinking, influenced by an increasingly complex and hostile security environment. The timing may also have been influenced by geopolitical developments. The end of the Cold War and the rise of China brought a sense of strategic opportunity to India. The collapse of the Soviet Union meant that the U.S. was no longer inimical to Indian interests as it had been during the Cold War years, with India being seen as an ally to Soviet. China's emergence as a potential adversary to the U.S. made a more rapidly growing, India an attractive countervailing power, apart from the opportunities it offered to U.S. business and industry, however 9/11 incident brought India more closer to US as an allies to fight Global war on terror, this reinforced the positive shift in American perceptions about India. Therefore, while fully conscious of the adverse fallout from its decision to undertake a series of nuclear tests and to establish itself as a declared nuclear weapon state, Indian leaders may also have calculated that such fallout would be temporary and India's growing strategic relevance would eventually overcome such impediments. Less than a decade after the 1998 tests, the exceptional nuclear deal between India and the United States signalled that India had drawn resourcefully on its history to complete the journey from nuclear rogue to nuclear partner.

The restraint exercised by India for 24 years, after having demonstrated its capability in 1974, is in itself a unique example, up until 1998, India was building a record of restrained nuclear behaviour and a pro-peace image that would one day prove crucial in facilitating a positive reading of its nuclear past. Although India's curious mix of demonstrations of strength and declarations of restraint in 1998 puzzled and frustrated onlookers, the swiftly painted portrait of a principled, responsible nuclear power was ultimately persuasive beyond India's borders. It has not violated any international agreements either in 1974 or in 1998, and has remained firmly outside of the NPT, arguing that "nuclear weapons are an integral part of its national security and will remain so pending the global elimination of all nuclear weapons." New Delhi has not signed the CTBT, and continues to produce fissile material for its nuclear weapons program. Although it has reiterated its commitment to no-first-use of nuclear weapons, India's nuclear posture of credible minimum deterrence is still evolving, and the country is developing a strategic triad of nuclear delivery system.

BIBLIOGRAPHY

1. Abraham, Itty (1998): *The Making of the Indian Nuclear Bomb*. (Hyderabad: Orient Longman).

³²The nuclear tests carried out at 3:45 pm on May 11th were claimed by the Indian government to be a simultaneous detonation of three different devices - a fission device with a yield of about 12 kilotons (KT), a thermonuclear device with a yield of about 43 KT, and a sub-kiloton device. The two tests carried out at 12:21 pm on May 13th were also detonated simultaneously with reported yields in the range of 0.2 to 0.6 KT. However, there is some controversy about these claims. Based on seismic data, U.S. government sources and independent experts estimated the yield of the so-called thermonuclear test in the range of 12-25 kilotons, as opposed to the 43-60 kiloton yield claimed by India. By late 1998 analysts at Lawrence Livermore National Laboratory had concluded that the India had attempted to detonate a thermonuclear device, but that the second stage of the two-stage bomb failed to ignite as planned. <http://www.fas.org/nuke/guide/india/nuke/>

³³P.M. Kamath, No. 47, p. 60.

³⁴It locates the test rationale in the so called threat from China and Pakistan, heightened by alleged Sino-Pakistan strategic level nuclear and missile collaboration.

³⁵ Prime Minister Vajpayee. India Today , May 25, 1998

³⁶ India Today, May 22, 1998

³⁷ The Indian tests drew immediate condemnation from the Clinton Administration, United States was "deeply disappointed" and was reviewing trade and financial sanctions against India under American non-proliferation laws; from other Western nations, including Britain, which voiced its "dismay" and Germany, which called the tests "a slap in the face" for 149 countries that have signed the treaty, and from Kofi Annan, the United Nations Secretary General, who issued a statement expressing his "deep regret." John F. Burns, "India Sets 3 Nuclear Blasts, Defying a Worldwide Ban; Tests Bring A Sharp Outcry," New York Times, May 12, 1998.

³⁸ Ibid

2. Ahmed, Samina and Cortright David, Ed (1998): *Pakistan and The Bomb*, Norte Dame: University of Norte Dam Press.
3. Ashley, Tellis (2001): *India's Emerging Nuclear Posture: Between Recessed Deterrent and Ready Arsenal*. (New Delhi: Oxford University Press.)
4. Bharat Karnad, (1994) ed., *Future Imperilled: India's Security in the 1990s and Beyond*. New Delhi: Viking.
5. Chari, P R. (1995). *Indo-Pak Nuclear Standoff: The Role of the United States*. New Delhi: Manohar.
6. Chakma, Bhumitra (2005). *Towards Pokhran II: Explaining India's Nuclearization Process*. Modern Asian Studies. Cambridge University Press.
7. Cohen, Stephen (2001). *India: Emerging Power*. Washington, D.C.: Brookings.
8. Datt, Savita (1992): "Nuclear Weapon Free Zone in South Asia: A Perception", *Strategic Analysis* Vol. XXIV No12.
9. Hart, David (1983): *Nuclear Power in India: A Comparative Analysis*. London: Allen and Unwin
10. Kamath, P M (1999): "Indian Nuclear Strategy: A Perspective for 2020", *Strategic Analysis*, Vol. XXII No. 12.
11. Kanwal, Gurmeet (2000): "Does India Need Tactical Nuclear Weapon?" *Strategic Analysis* Vol. XXIV. No.2
12. Naidu, G.V.C (2001): "India and the Asia Pacific Balance of Power", *Strategic Analysis* Vol. XXV. No.4.
13. Nair, Vijay. K. (2002): "No More Ambiguity: India's Nuclear Policy", *Foreign Service Journal*, Washington D.C: American Foreign Service Association.
14. Perera, Jehan (2011): "The India- China Nuclear relationship" *Strategic Analysis* Vol.35.No 2.
15. Perkovich, George (1999). *India's Nuclear Bomb*. (New Delhi: Oxford University Press.)
16. Pathak, K.K. (1980): *Nuclear Policy of India: A Third World Perspective*, (New Delhi: Gitanjali Parkashan.)
17. PM's reply to the Discussion in Rajya Sabha on Nuclear Test. October 1998, Vol. 18 No.10 (Courtesy: Minister of External Affairs (Disarmament and International Security affairs division), July 1998.
18. Raj, Chengappa (2000): *Weapons of Peace: The Secret Story of India's Quest to be a Nuclear Power*, New Delhi: HarperCollins Publishers India.
19. Rajagopalan, Rajesh (2005). "India: Largest Democracy and Smallest Debate?," *Contemporary Security Policy*, vol. 26, no. 3 (December)
20. Shyam, Bhatia (1979): *India's Nuclear Bomb*, Ghaziabad: Vikas Publishing House Pvt.Ltd.
21. Sisodia, S.S.(1985): *Foreign Policy of India: Indira Gandhi Era*, New Delhi: Inter-India Publication
22. Sunayana, N. Singh. (2013): "Myth and reality of Nehru's Nuclear Policy". *International Journal of Innovative Research and Studies*, Vol.2. No. 5
23. Tellis, Ashley (2005): *India as a New Global Power*. Washington DC: Carnegie Endowment for International Peace.
24. Thomas, Raju (1986): *Indian Security Policy*. Princeton: Princeton University
25. Thomas, Raju (1993): *South Asian Security in the 1990s*. Adelphi Paper (278) Implications of a Nuclear India. Orbis 46 (1):13-45.
26. Zhang, Ming (1999): *China's Changing Nuclear Posture: Reactions to the South Asian Nuclear Tests*, Washington, DC: Carnegie Endowment for International Peace.
