

**THE END OF COLD WAR AND THE TRANSFORMATION OF INDIA'S
NUCLEAR POLICY (1991-2008)**

*Dissertation Submitted to Jawaharlal Nehru University in partial fulfillment of the
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MASTER OF PHILOSOPHY

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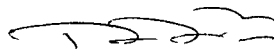
DECLARATION

I declare that the dissertation entitled “**THE END OF COLD WAR AND THE TRANSFORMATION OF INDIA’S NUCLEAR POLICY (1991-2008)**”, submitted by me in partial fulfillment of the requirements for the award of the degree of **Master of Philosophy** of Jawaharlal Nehru University is my own work and has not been previously submitted for any degree of this or any other university.


Abhay Kumar

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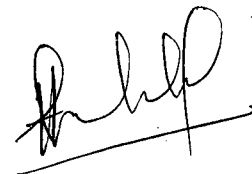
We recommend that this dissertation be placed before the examiners for evaluation.



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Happymon Jacob

Supervisor

Dedicated

To

My Family

For Its Consistent and Invariable Support

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LIST OF ABBREVIATIONS

AEC	Atomic Energy Commission
PTBT	Partial Test Ban Treaty
IAEA	International Atomic Energy Agency
PNE	Peaceful Nuclear Explosion
PSI	Proliferation Security Initiatives
NFU	No First Use
NDA	National Democratic Alliance
NPT	Non Proliferation Treaty
CTBT	Comprehensive Test Ban Treaty
NSSP	Next Step in Strategic Partnership
EIF	Entry into Force
FMCT	Fissile Material Cut off Treaty

Chapter One

Introduction

The purpose of this study is to understand, describe and analyse the transformation of India's nuclear policy since the end of the Cold War. The shift in the nuclear behaviour of India can be seen as a transformation from moral principles based on global nuclear disarmament and sovereign equality of all states, to a completely different approach of declaring itself a nuclear weapon state. The purpose of the study is to explain the shift of the India's nuclear policy from deliberate ambivalence to measured participation. The aim is to highlight the factors that were instrumental in bringing about the shift. For this purpose, this study attempts to analyse factors at the systemic and domestic levels.

Background

India embarked on an ambiguous nuclear policy since its independence in 1947. On the one hand, its leadership decried nuclear weapons but on the other hand it allowed its scientific community to set up the necessary nuclear infrastructure. India's ambiguous nuclear status came to an end in part, in 1974, when it went for peaceful nuclear explosion (PNE) and finally in 1998, when it carried out a full fledged nuclear explosion. The ambiguous nuclear posture was used by India as a bargaining chip in its relations with the rest of the world especially the two contesting blocs of the Cold War, the US and the Soviet Union.

The end of the Cold War also signalled the end of the bipolar international system which had implications for India's nuclear policy. In 1995, the United States of America (USA) advocated an indefinite extension of Nuclear Proliferation Treaty (NPT). This step was taken by the USA to stop global proliferation of nuclear weapons. India was facing moral and political pressure to sign it. Indian policy makers were well aware that once India signs the NPT, it won't be able to conduct nuclear tests. In 1995 India attempted to

conduct nuclear tests but it failed because American spy satellite detected the preparations for the test and warned India not to go ahead with it. With the coming of the BJP in power in 1998, India took precautions and successfully carried out the nuclear tests. India's decision to acquire the status of a nuclear weapon state in 1998 by conducting tests on 11 and 13 May marks the shift from nuclear ambiguity to owing up to having a full fledged nuclear weapons programme. India unveiled its first nuclear doctrine in 1999 which explains its long term policy approach.

The concept of minimum deterrence was invoked to secure the territorial integrity of India from any aggressive behaviour from its neighbours especially China and Pakistan. After Pokhran II, India declared a voluntarily moratorium on further nuclear testing and a No First Use (NFU) policy. Having declared itself a nuclear weapon power after years of vacillation, India made three basic transitions in its approach to the world from the normative to the pragmatic, from ideas of collective security to those of balance of power, and from the notion of disarmament to arms control. (Mohan: 1999)

The aim of the study is to describe the evolution of India's nuclear policy and analyse the various systemic constraints and domestic factors which led the country to the May 1998 tests. The study will trace continuity and changes in India's nuclear policy by exploring various strategic and the domestic factors. It will describe the variations in the nuclear policy of the then ruling government starting from Jawaharlal Nehru till the present one led by Dr. Manmohan Singh. India's nuclear policy which preached abolition of nuclear weapons in the Nehruvian era gradually transformed its approach and accepted the development of the nuclear weapons.

The study discusses the influence of the systemic and domestic factors in the transformation of India's nuclear policy. It analyses various strategic reasons responsible for the nuclear tests in 1998. The attempt is to explain why nuclear option was kept open by India despite the moral tinge in the beginning. Disintegration of the Soviet Union

transformed the International relations and tilted the axis in favour of the United States. The systemic constraints can be categorised as: India's aspiration for a status in the international system, hostile strategic environment, reluctance to accept of treaties such as NPT and CTBT.

The rise of China and continued strains in relations with Pakistan brought a troubling period for India. The nuclear non-proliferation treaty (NPT) was extended indefinitely and unconditionally in 1995, perpetuating the existence of nuclear weapons in the hands of five countries, who were busily modernising their nuclear arsenals. In 1996, after they had conducted over 2,000 tests, a Comprehensive Test Ban Treaty (CTBT) was opened for signature, following two and a half years of negotiations in which India participated actively. This treaty was neither comprehensive nor related to disarmament but rather devoted to ratifying the nuclear *status quo*. The strategic community in India argued that nuclear weapons capability could enhance India's position in the international system. It was deemed significant for India's claim as an emerging power in the current global order.

The domestic factors also contributed towards the shift in the nuclear policy. National security threat is a consistent concern for India but it was the BJP led National Democratic Alliance (NDA) government which finally decided to cross the nuclear threshold. The reasons could be the ideological view of the BJP, role of the scientific community, role of the decision makers, political survival of BJP and the domestic electoral compulsions.

Ideologically, the BJP is guided by the Rashtriya Swayamsevak Sangh (RSS) which expresses a revisionist world view where national security could be strengthened by acquiring nuclear capability. Electorally, the shift in nuclear policy is manifest in the election manifesto of the BJP. Its victory in the parliamentary election of 1998 encouraged the nuclear programme. The role of the scientific community which has

vested interests in a nuclear programme also contributed to choosing the nuclear option by the country.

As a hyper nationalist right wing political party of India BJP always eulogises power and to gain nuclear weapon is the best way to have power in today's global politics. India's nuclear weaponisation was regarded as a symbol of modernity and technological excellence. It generates prestige and status in the international system. Therefore systematic forces together with domestic factors promoted India to change its nuclear behaviour in accordance with the then prevailing situation.

The study also attempts to look at this transformation using the theories of International politics. India's nuclear explosion and the causes behind its explosion can be explained through realist and liberal schools of thought. Realists depict international relations as a struggle for power among strategic, self-interested states. They argue that the international society is best described as a condition of international anarchy, since there is no central authority to protect states from one another; states act as independent, sovereign political units that focus on their own survival (or expansion). India's nuclear explosion was to secure its interest in terms of security from its adversaries especially nuclear China and unpredictable Pakistan. The possession of nuclear bomb provided it deterrent capability against its rival neighbours.

In the liberal view, the state is not a unitary, rational actor in a state of war, but a coalition or conglomerate of coalitions and interests, representing individuals and groups. Liberals argue that state behaviour is driven primarily by preferences, which precede interests. As India of 1990s was different from India before it, so its preferences changed and it preferred nuclear tests in 1998.

Literature Review

The history of India's nuclear programme has been dealt in detail in a wide array of academic works. Almost all the existing literature on the topic traces the origin of India's nuclear policy using a historical approach. There seems to be a general consensus regarding the origin of India's nuclear programme. Most of the works agree on several historical factors that cumulatively brought about the change in the mindset regarding the acquisition of nuclear weapons. Ashok Kapur in his book, "Pokhran and Beyond: India's Nuclear Behaviour" (2001) explains the origins and trajectory of India's nuclear policy and diplomacy in the context of both its domestic politics and challenges to her interests in regional and international environments. He brings out the evolving and dynamic relationship among science, state, military, and society in India. In discussing this relationship, he points to militarisation of India's nuclear and space science, characterised by both reactive and proactivity. He goes on to argue that a proactive approach, rather than a reactive one, is required to maintain the nuclear deterrent and participate in the international strategic discourse among the world's major and minor powers.

Kalpna Chitranjan (1998) takes a dive into history to trace the origin of nuclear weapons. Through a factual account, she demonstrates how the world has been veering on the paths. She traces the long Indian struggle for nuclear disarmament that began from the time the country emerged as an independent state. It casts significant doubt on the wisdom of traditional Western approaches on the issue that has exclusively emphasised non-proliferation. The Indian case has exposed the fallacy of this approach and reinforced the need to pursue universal and non-discriminatory disarmament as the only effective solution to the problem of proliferation.

One factor seems dominant in the historical analysis of decision to go nuclear- the strategic environment of the country. The strategic environment which surrounded India in the post independence phase was such that it necessitated the acquisition of the nuclear weapons. Shyam Bhatia in his book "*India's Nuclear Bomb*", (1979) writes about Indira

Gandhi's initial decision to go ahead with a Peaceful Nuclear Explosion (PNE) in 1971. He writes that Indira Gandhi appears to have been influenced by concerns about India's deteriorating strategic position. However, by the time the test was carried out in 1974, India's international relations had improved considerably. The fact that India experienced serious domestic unrest between 1971 and 1974 could shed some light on the Prime Minister's decision to go ahead with the test anyway, in an attempt to improve domestic morale and divert attention from the internal economic and political problems that were plaguing the government.

The most outstanding understanding of the transformation of India's nuclear policy is provided by the Ashley Tellis. In, "*The Strategic Implication of a Nuclear India*", (2001) Tellis argues that the broader strategic implication of the Indian decision was to develop a nuclear deterrence. He focuses on three distinct but related sets of issues: First, how does the formal Indian decision to develop a nuclear deterrent change the strategic environment in Southern Asia? Second, how does it affect the prospects of war and peace in great South Asian region? And, third, how will it affect American regional non-proliferation objectives and, in particular, India's relationship with the United States? He concludes his article with a brief comment on the role nuclear issues ought to play in the evolving US relations with India. Most of the academics and policy makers suggested that India should go nuclear citing the nuclear capability of India's immediate neighbour- China. However, there were those who argued against this line of thinking, among them the most prominent being Dr Bhabani Sen Gupta. In his book "*Nuclear Weapons Policy Options for India*" (1983) Gupta does not believe in the concept of nuclear deterrence between India and Pakistan because according to him the resulting 'peace' would be bought at high cost international paranoia and unprecedented high level of military preparedness dictated by an oppressive psychosis of mutual hostility fear and suspicion. Pakistan's nuclear weapons programme is seen as being India centric. Rai is of the opinion that such a view is shaped by the perceptions of threat from hostility towards India (Rai 2009: 177). These threat perceptions emerge from the fact that India and Pakistan have fought three major wars in 1947, 1965 and 1971 and one

limited war in 1999. The nuclear activities of Pakistan beginning in 1978 and Pakistan's support to armed insurgency in the Indian state of Kashmir further fuelled the Indian apprehension. There is a wide array of literature dealing with Indo-Pak relations which is dealt in detail in the following chapters.

The debate on 'why states go nuclear' figures prominently in the literature explaining the shift in India's nuclear policy. Bhumitra Chakama, in his article "*Toward Pokhran II: Explaining India's Nuclearisation Process*", (2005) highlights India's acquisition of nuclear weapons in the light of the general debate why states 'go nuclear' and build nuclear arsenals. In general, analysts proffer four arguments about proliferation of nuclear weapons. They are: security concern, prestige, technological imperatives and domestic politics. The first posits that security concerns directly related to a state's physical security and survival might drive a state to acquire nuclear weapons. The second argument holds that nuclear weapons act as a symbol of prestige for nation, which tempts a state to build a nuclear arsenal. Thirdly, a state's decision to acquire nuclear weapons is an inevitable outcome of technological momentum created by nuclear research and development programmes. Fourth argument hold that intra-bureaucratic politics as well as politicians drive to score domestic political points may lead a state towards the nuclear path. Gaurav Kampani (1998) argues about the shift from moral perception of reluctance towards nuclear weaponisation to acceptance towards nuclearisation. Earlier it was existential deterrence, unorganised nuclear authority to articulate no first use doctrine. Kenneth Waltz, in his article, "*Nuclear Myths and Political Realities*," (1990) uses rational deterrence theory to explain the slow spread of nuclear weapons and their impact on the international system. According to this theory, once more than one state has acquired a second-strike nuclear capability, war between the nuclear armed states is unlikely to occur, due to the fact that mutual destruction is virtually assured. This theory specifies that the possession of nuclear weapons by two states diminishes the chances of war between them as the costs of war and its consequences are immeasurable.

Amitabh Mattoo in “*India's Nuclear Deterrent, Pokhran II and beyond*” (1999) throws a great deal of light on India’s nuclear behaviour in the post Pokhran II phase. As India's political class struggles to come to return with Pokhran II, the volume of essays edited by Amitabh Mattoo provides an excellent guide to many of the complex issues involved in India's nuclear direction.

The systemic factors seem to be vehemently dominating the debate on India’s nuclearisation. Among the systemic factors, besides the security concerns the urge to become a power that matters in the international system motivated Indian nuclear policy towards transformation. Nuclear weapons are seen by states in the anarchic international system as guaranteeing the recognition on the international arena. Scott Sagan (1997), outlines ‘three models in search of the bomb, which includes the element of prestige in addition to security concerns of the states and domestic pressures. Sagan argues, the perception that nuclear weapons enhance prestige of the states in the international system has proved greatly effective in the increasing efforts at nuclearisation by several states.

One important factor that greatly influenced the decision was the discriminatory character of the disarmament treaties. In preface to *The CTBT and the Rise of Nuclear Nationalism in India* Linkage between Nuclear Arms Race, arms Control & Disarmament (1996) T.T Poulouse argues that two perceptions about CTBT in India were instrumental in highlighting the discriminatory nature of these treaties. One it was perceived to be against India’s security. The others argued that India should sign CTBT since it was limited in its character. The global nuclear regime is deemed to be the first critical factor that determined the direction, extent and patterns of change in India’s nuclear posture. Ashley Tellis (2001) argues that the contemporary nuclear regime will influence the future direction of India’s nuclear posture in at least one straight forward manner: It makes denuclearisation impossible (Tellis, 2002: 22). Nuclear Non Proliferation Treaty (NPT) was opposed by India for having been worked out by the then two superpowers instead of the 18-Nation Disarmament Commission (Rai 2009: 209). Initially, India had favoured

the conclusion of non discriminatory treaty, but later became a strong opponent of the NPT, realising that the nuclear powers wished to maintain their monopoly and that the treaty was primarily aimed at curtailing the nuclear aspirations of the non nuclear weapons states. Almost all the existing literature on the topic points out this impasse that characterised the mindset of the Indian policy makers (ibid: 214).

The quest to enhance prestige was thus intricately linked to the power of the states in terms of military hardware and expenditure. In his book, "*Crossing the Rubicon, the Shaping of India's New Foreign Policy*", (2003) C. Rajamohan argues for the changing philosophical premises of India's engagement with the external world, the discarding of the old consensus and the emergence of a new one in which socialism has yielded to liberal capitalism, one-party rule has been replaced by a coalition government at the centre, and lately there have been 'attempts to redefine the notion of secularism'. He describes India's decision to become a nuclear power in 1998 as a decision to redefine its 'approach to the question of power' and an effort to temper the idealism in its foreign policy with a strong dose of realism.' He extensively elucidates India's redefinition of power and its efforts to temper the idealism in foreign affairs with a power surge of realism in relation to the United States, Russia, China, and Pakistan.

TV Paul in his article '*The Systemic Bases of India's Challenge to the Global Nuclear Order*' (1998) argues that India's nuclear behaviour is located in longer global and regional nature of systematic approach. A systematic approach would explain security behaviour of state in terms of its position in international system and how the position is objected by interaction between it and major power reaction. According to author systematic constraints posed India to change its policy and adjust it towards the changing international scenario. The aspiration of becoming a great power in international system inclined India to possess nuclear and marks a foothold in global power hierarchy. India was forced to nuclearisation as current system deny any legitimate place in international order and have no intervention of illegality India in the system.

Moreover nuclear weapon would serve as key to using power and would provide major technological breakthrough in conventional capability.

Besides the systemic influence on the transformation of the nuclear policy, the effect of domestic factors also figures prominently in the existing literature. Robert O. Keohane, in his article "*Neo-Realism and Its Critics*" (1986) quotes the admission of Kenneth Waltz by saying structures condition behaviours and outcomes, yet explanations of behaviours and outcomes are indeterminate because both unit-level and structural causes are in play. Glenn Chafetz (1993) provides a more wide-ranging application of neo-liberal institutionalist theory. He argues that the world is divided into "core" states and "periphery" states. According to Chafetz, the fact that domestic political systems of the core states are dominated by liberal democracies leads them to develop shared norms and values, which is likely to result in international cooperation rather than arms racing. This is because the members of the core no longer regard each other as military threats, but rather as partners in a "pluralistic security community." The incentive for these states to acquire nuclear weapons is dramatically reduced, as they are more secure and able to achieve their national security interests through international cooperation rather than self-help. However, the states on the periphery have had little experience of liberal democracy and, as a result, have not developed these shared values. Such states are more likely to regard each other as military threats, and so respond by seeking to develop nuclear weapons.

Runa Das (2008) presents an analytical hybrid of realism and critical social constructivism as its theoretical framework, and representations of insecurities as an interpretation of politics, to explain India's nuclearisation policies. Arguing that a linkage of political leaders' ideologies, articulation of statist identities, and insecurities defines a state's security practices, he compares how the ideological perceptions of the postcolonial Indian state's leaders have articulated divergent notions of nationalisms, nationalist identities, and insecurities and corresponding nuclear-policy choices. In charting this

comparison, he explains how the political, economic, and developmental insecurities perceived by the Indian state under the Congress Party have become communal/cultural under the Bharatiya Janata Party, thereby facilitating the BJP's justification of India's nuclear-weapon tests. The BJP locates its ideological preferences from the concept of *Hindutava*. The central motive of this *Hindutava* ideology is the idea of a strong India. To become strong, they believe that India must be united culturally and politically (Bidwai and Vanaik 1999: 95). Atal Bihari Vajpayee, his party the BJP and its mother organisation the *Rashtriya Swayamsevak Sangh (RSS)* were staunch believers of nuclear weapons (Chengappa 2000: 35). The BJP laid a lot of importance on a culturally unified state. The leader of BJP, Atal Bihari Vajpayee himself was inspired with ideology of power and prestige and most important way to gain was through the strengthening of the military strength. This military strength would protect territorial integrity according to the BJP which could only be acquired with the inducement of the nuclear weapons. As the Prime minister Vajpayee concedes, "India has never considered military might as the ultimate measure of national strength," but adds, "it's a necessary component of national strength" that will earn the respect of the world (Chaulia 2002: 221).

Mehta (1998) argues that the reason to test nuclear device was to bolster regime stability. According to him the party heading a coalition government that time, might have been tempered card to bolster its own survival (Mehta 1998: 403-406). Thus, domestic factors greatly influenced the transformation of nuclear policy.

The following questions were sought to be answered in this study:

- What has been the shift in India's nuclear policy since the end of Cold War?
- What explains the shift in India's nuclear policy which started with the end of the Cold War?
- What have been the various domestic and systemic factors that influenced the transformation of India's nuclear Policy?

The research work at the outset was premised on the following hypothesis:

- India's nuclear policy has changed from deliberate ambivalence to measured participation.
- The change in India's nuclear policy can be attributed to its preference for greater participation in the international system.
- The sources of transformation of India's nuclear policy can be located at the both the systemic and domestic level.

Organisation of the research work

The second chapter of the study traces the evolution of the India's nuclear policy. This chapter examines the various phases of Indian nuclear policy which it pursued since independence in 1947, till the present time. It examines the nuclear policy of different government in India and how they perceived the nuclear development programme. The first phase began with the creation of India's Atomic Energy Commission in 1948 to Sino- India war in 1962. Pt. Nehru recognised that nuclear energy was vital to the project of state sponsored industrialisation. It is to provide the electricity necessary to power the large industries that were meant to place India on a sure economic footing, which in itself had security implications (Khilnani 1999: 72). The second phase began from 1962 to 1974 when China exploded its first nuclear device in 1964 and India followed by conducting Peaceful Nuclear Explosive (PNE) in 1974. It was the period during which the nuclear establishments gradually acquired the material, know how and necessary technology. After facing a humiliating defeat by China in 1962 war there was a political roar and in India for acquiring nuclear bomb for protection of its sovereign interest and security against China (Mirchandani 1978: 56).It strengthened the case of Hindu nationalists in opposition to Nehruvian compromising and peaceful co-existence model. The third Phase began from 1974 to 1998 which depicts the nuclear restraints for twenty four years and the path to testing is taken, leading to the tests in 1998. As seen in for over two decades after the 1974 nuclear explosion, India followed the policy of nuclear ambiguity - neither confirming nor denying its pursuit of a military nuclear programme.

At times, the programme had slowed down but the development and perfection of nuclear weapons and missile delivery related technologies were never halted. This period is marked by little progress in accelerating nuclear programme even though there was an increase in public and military support for nuclear programme (Perkovich 2000:191). Finally, the fourth phase explains the scenario beyond Pokhran II. It describes the consequences of 1998 tests till the events leading to the formulation of Indo-US Nuclear Deal. After the nuclear test of 1998, a marked shift was seen taking place in India's nuclear policy. In order to portray itself as a responsible nuclear state committed to nuclear non-proliferation and nuclear disarmament, the Indian government made amendments in its nuclear policy and came out with nuclear doctrine.

The third chapter focuses on the various domestic factors that have influenced the transformation of the country's nuclear policy. Threat to national security is a consistent concern on India but it is the BJP led National Democratic Alliance (NDA) government which finally decided to cross the nuclear threshold. The reasons could be the ideology of the BJP, role of scientific community, role of the decision makers, political survival of the BJP or the domestic electoral compulsion, the institutional beliefs of India's strategic establishment and the coalition imperative of India's nuclear and military research (Kampani 1998). The BJP led NDA coalition was facing problem of making all twenty four partners cobble together for a long time period. The BJP as a major coalition partner and important party wanted to go on poll with some concrete issue and the test was appropriate thing to go for to gain political mileage in forthcoming election. To certain extent the test helped the BJP led NDA to get back into power in 1999 general elections. It also consolidated the power of the BJP over its coalition partners.

Ideologically, BJP is guided by the Rashtriya Swayamsevak Sangh (RSS) which expresses a revisionist world view; where national security could be achieved by acquiring nuclear capability. Electorally, the shift in nuclear policy is manifest in the election manifesto by BJP party. The victory in the parliamentary election of 1998 encouraged the nuclear programme.

Another important domestic factor which contributed towards greatly towards the acquisition of nuclear weapons by India was the role of its scientific elite. India's nuclear establishment had strong vested interest in the nuclear programme as it had collapsed from 1950 to 1970. After the 1974 peaceful nuclear explosion, it was expected that India would gain prestige, but with the loss of international collaboration, but it did not turn out to be effective.

India's strategic nuclear weaponisation is regarded as symbol of modernity and technological excellence. It has generated prestige and status for India in the international system. Therefore systematic forces in consideration with domestic factors influenced India to reconstruct its nuclear behaviour in accordance with the current situation.

The fourth chapter explains the impact of systemic constraints in the Indian nuclear policy. India's aspiration for great power status in the international system, hostile strategic environment, reluctance in accepting of international treaties such as NPT and CTBT and the changes in the international system brought about by the end of the Cold War provoked India to change its earlier stance on nuclear weapons.

The second part of this chapter provides a brief outline of the theories in International politics, which deal with the questions of proliferation of nuclear weapons. Realists argue that international relations as a struggle for power among strategic, self-interested states. They discount any claims to system-wide international order other than that is based ultimately on power or force. They argue that the international system is best described as a condition of international anarchy, since there is no central authority to protect states from one another. So states act as independent, sovereign political units who focus on their own survival.

Subsequent parts provide a brief analysis of the various systemic factors responsible for the nuclear tests in 1998. The concluding chapter sums up the findings of study.

Chapter Two

India's Nuclear Policy: A Historical Overview

Introduction

India's decision to acquire the status of a nuclear weapon state in 1998 by conducting nuclear tests on 11 and 13 May gave a decisive turn to the Indian nuclear policy in particular and global nuclear history in general. India started nuclear research with the sole purpose for its technological and industrial growth. Initially its nuclear policy revolved around two principles; first to promote research and development for nuclear energy for peaceful purposes and second to attain self sufficiency in its nuclear programme. Simultaneously it also perceives that national security considerations demand the availability of all options. On the one hand India talks about global nuclear disarmament but on the other hand maintains *de facto* weapons capability and keeps the nuclear options open. After conducting a peaceful nuclear explosion in May 1974, India exercised restraint for twenty four years before conducting nuclear tests in May 1998 and proclaiming itself to be a nuclear weapon state. Therefore it is necessary to understand the situations or circumstances which led India to open up its nuclear policy which was in complete departure from the previous years. The various dynamic factors behind the evolution of India's nuclear policy can be considered as the following: perceived systemic threat, the influence of domestic politics and its strategic culture.

In brief, this chapter will examine the evolution of India's nuclear policy in four distinct phases. The first phase began with the inception of India's Atomic Energy Commission in 1948 till the Sino-India war in 1962. In this period Jawaharlal Nehru maintained a mix of idealism and realism. On the one hand he propagated global peace and disarmament while on the other hand encouraged Homi Bhabha to develop nuclear technology. The second phase began in 1962 in which China exploded its first nuclear device in 1964 leading to India's first nuclear test in 1974. In this period Prime Minister Lal Bahadur Shastri for the first time initiated the Subterranean Peaceful Nuclear

Explosion Project in 1965. Later Indira Gandhi conducted the nuclear test in 1974. The third phase explains the scenario after 1974 nuclear tests to May 1998 nuclear tests. It explains the nuclear restraints for twenty four years and the factors leading to the nuclear tests in 1998. In this phase India witnessed another war with Pakistan in 1971. The close alliance between China and Pakistan and the United States isolating India paved the path for the 1998 nuclear tests. The fourth phase explains the scenario beyond Pokhran II. It describes the consequences of 1998 tests till the events leading to the formulation of Indo-US nuclear deal. In this phase India unveiled its newly created nuclear doctrine which describes its nuclear policy approach in the future period.

1947-62: Nehruvian idealism and India's Nuclear Policy

The origin of India's nuclear program can be traced back to India's independence from the British Empire in 1947. Soon after India gained its freedom; it stepped to the front lines of universal disarmament. Mahatma Gandhi who led a remarkable moral campaign against the British imperialists saw the development of atom bomb as "deadening the finest feeling that has sustained mankind for ages" (cited in Mirchandani 1968: 2). In the same article, Gandhi said "the moral to be legitimately drawn from the supreme tragedy of the bomb is that it will not be destroyed by counter bombs even as violence cannot be by counter violence. Mankind has to get out of violence only through non-violence". In another piece in the journal *Harijan*, Gandhi said, "I regard the employment of the atom bomb for the wholesale destruction of men, women and children as the most diabolical use of science" (cited in Dixit 1996: 54).

Gandhian moral philosophy of non-violence inspired India's first Prime Minister Jawaharlal Nehru to such a great extent that he articulated his foreign policy with great favour. Addressing the United Nations General Assembly in Paris on 3 November, 1948, Nehru evoked the Gandhian theme to underscore India's opposition to the development of nuclear weapons. He told the assembly, "I am not afraid of the bigness of great powers and their armies their fleets and their atom bombs. This is the lesson which my Master

Gandhi taught me. We stood as an unarmed people against a great country and a powerful empire” (Nehru 1996: 162). Nehru accepted the destructiveness of nuclear weapons and visualised a world wherein power is exercised peacefully by moral persuasion. On the other hand Nehru was greatly influenced by western technology and sought to master nuclear energy for peaceful purposes.

Nehru recognised that nuclear energy is vital to the project of state sponsored industrialisation. It is to provide the electricity necessary to power the large industries that were meant to place India on a sure economic footing, which in itself had security implications (Khilnani 1999: 72). Therefore in 1948 Nehru introduced before the constituent assembly an Atomic Energy Act to create an Atomic Energy Commission (AEC) and the legal framework for its operations. The AEC was created to train scientists and engineers to work in the relevant fields of physics, chemistry and metallurgy and to manage the surveying and locating of atomic mineral deposits. The Indian AEC was established on August 10, 1948, pursuant to the Atomic Energy Act. The same year Nehru selected Dr. Homi Bhabha to take charge of AEC functioning. Nehru never ignored the prospects of nuclear technological capability.

Previously in 1945, Bhabha had been able to persuade the House of Tata’s to establish the Tata Institute for fundamental Research in Bombay to promote nuclear physics in India. Bhabha as the first head of department of Atomic Energy created on August 3, 1954, worked with full commitment to preserve the organizational autonomy of India’s nuclear energy programme.

He truly believed in the potential for nuclear energy to open up enormous development activities and his reasoning rested on two assumptions: first it increased electricity consumption would automatically enable increased industrial activity; and second, that India’s hydroelectricity and conventional fuels would be inadequate to meet all of India’s energy needs. He further argued that nuclear energy was affordable and an

attractive option given the ability to produce electricity in remote areas far away from the raw materials required for its generation, unlike coal-generated electricity (Malik 2010: 37).

Therefore both Nehru and Bhabha believed that economic development depended on the supply of power, and given India's relatively poor conventional energy resources, nuclear energy offered a seemingly logical way to address the shortfall (Jain 1974: 4).

In the early 1950 President Eisenhower delivered his famous speech "Atoms for Peace program" before the UN General Assembly. Highlighting the dangers of nuclear war and arms racing, he urged the world community instead to harvest the power of atomic fusion for peaceful uses. He proposed an Atomic Energy Agency that would act as a bank to receive deposits of fissionable materials taken from American and Soviet weapon power stockpiles (Perkovich 2000: 25). Nehru reacted to this statement as it was an attempt to restrict nuclear procurement. He acknowledged that there was a need to control and eventually eliminate nuclear materials but went on to state that UN was incapable of controlling nations from producing nuclear power. It was viewed as another way for the nuclear equipped countries to maintain dominance over those countries that required the production of atomic energy for the welfare of its people (Nehru 1961: 194).

In 1954 Nehru further proposed a "Stand Still Agreement" among the nuclear weapon states. He urged the nuclear weapons power, pending progress towards elimination of weapon of mass destruction, to discontinue production and stockpiling of nuclear weapon, to inform world public opinion about the destructiveness power of these weapons, and to raise their voices against the production of these weapons. This period could be characterised as one of intense idealism (Nehru 1961: 187).

By mid to late 1950's there was slight shift in the Indian government's position regarding non-proliferation regimes. Indian government supported the establishment of

International Atomic Energy Agency in 1957 and signed the Partial Test Ban Treaty (PTBT). According to India, perception the International Atomic Energy Agency could contribute to nuclear disarmament and sought to promote peaceful uses of nuclear technology without discrimination. Nehru's speech also reflects his peaceful intention. For example he told the Lok Sabha in 1957, "We have declared quite clearly that we are not interested in and we will not make bomb even if we have the capacity to do so destructive and that in no event will we use atomic energy for destructive purposes. I am quite sure that when I say this I represent every member of this House. I hope that will be the policy of all future governments" (cited in Mirchandani 1968: 6). From time to time Nehru reciprocated his idealist perspective but on the other hand he provided a free hand to Bhabha to acquire nuclear power.

Bhabha outlined the plan to tap the power of the atomic energy. According to his blueprint, India would first develop natural uranium fuelled reactors (with Canadian assistance). When these burned to generate power, they also produce plutonium as a by-product. The second stage involved building reactors that would use the plutonium generated in the first stage and burn that with thorium which India had in abundance. The plutonium-thorium mix, when burned in these reactors would produce uranium (U-233) as a by-product. The third and final stage involved the burning of the U-233 and thorium to produce more U-233 than was consumed. If all went as per the plan the three-stage process would ensure unlimited quantities of U-233 and thorium to generate electricity (Malik 2010: 38).

Thereafter India's ambitious nuclear plan collided with US led international efforts to establish tight safeguards on the acquisition and use of nuclear fuels and facilities. Bhabha with ultimate determination and insistence played a pivotal role in asserting minimum safeguards on India. It is due to his efficiency that the final statute required that agency safeguards would apply only to fissile materials and the relevant nuclear reactors in order to ensure that they would not be diverted to military use. State

could separate and maintain possession of plutonium as they wish under safeguards where they apply. Thus India could accept the ultimate IAEA statute and receive international assistance without sacrificing its option to produce nuclear weapons (Perkovich 2000: 28).

The dual peaceful- military theme of the Indian nuclear program and the contribution of foreign capital technology to it continued from 1960-62. In August 1960 Nehru announced in the Lok Sabha that India would build its first power generating nuclear station at Tarapur and would move ahead to construct previously proposed plutonium separation plant at Trombay (ibid: 37). The nuclear power and research was kept under secrecy and scrutiny under central government. So while nuclear research well underway India's nuclear policy took a major shift due to the Sino- India war in 1962. In 1962 China attacked the North Eastern Indian frontier, convincingly defeated India's ill-equipped and ill-prepared military forces occupied 14,000 square miles of Indian Territory and after achieving its territorial objectives, declared a unilateral ceasefire. It made Indian political leadership realise the need to pay more serious attention to national defense (Ganguly 1999:151).

Overall India's foreign relations in the 1948-62 period showed that although Bhabha was consciously developing nuclear weapon capabilities prior to the emergence of a Chinese nuclear threat, international security consideration played little role in shaping India's nuclear policy. Rather the main motivation for India's initial plan to acquire the means to produce nuclear explosives had more to do with Bhabha's and Nehru's belief that nuclear technology offered India short cut to modernity and major power status.

1962-74: Pathway to Pokhran I

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The 1962 Sino Indian Border war brought defeats at the hands of the Chinese. After facing a humiliating defeat by China there was a political clash between Hindu nationalist Bharatiya Jan Sangh and the Congress Party. The former demanded the production of nuclear weapons by India as part of India's long-term defense efforts against China. It strengthened the case of Hindu nationalism in opposition to Nehruvian model. They argued that high profile moral diplomacy had not prevented China from crushing Indian military forces on the ground and had weakened India's international prestige. Indian political leaders realised the need to pay more serious attention to national defence (Mirchandani 1968: 21-22). The other serious event which occurred after two years was the nuclear test conducted by China on 16 October, 1964. Before that India only thought of developing nuclear capability which could be converted into a nuclear weapon option, if it becomes necessary. After China tested segments of India's political and scientific establishment evinced a greater interest in acquiring nuclear weapons. There were three benefits seen to accrue from the possession of nuclear weapons. There was a stronger defence against China, an improved national morale and a restored Indian leadership of the South Asian region (Bhatia 1979: 110-111).

After the demise of Nehru, Lal Bahadur Shastri assumed power and found himself grappling with defence and security. The first nuclear debate in the Indian Parliament intensified upon change in nuclear policy and adherence to nuclear weapons programme. Despite considerable pressure, Shastri had firm resistance to pursue policy lines which were not inconsistent with the philosophy of peace and non-violence preached by Gandhi and Nehru (Bhatia 1979: 120). He further invigorated that the Indian government would stick to its moralistic policy of developing and applying nuclear energy only for peaceful purposes. Shastri's no policy change stance was criticised by various political parties including of All India Congress Committee, the Indian media and majority of Indian polity. They reacted sharply, and demanded the manufacture of nuclear weapons by India. "Therefore due to extreme pressure Shastri changed his stance from "no bomb to no bomb at present position" (Mirchandani 1968: 35). He argued that he would not



jeopardize national security. "He inaugurated the policy of ambiguity by declaring that India had the capability to make nuclear weapons, but that the government was not keen to exercise this option" (Dixit 1996: 59). Moreover this change paved the way to undertake Subterranean Nuclear Explosions Project which Shastri authorised in November 1965. There was no immediate possibility of manufacturing nuclear weapons from the project but to develop nuclear energy for peaceful purposes (Bhatia 1979: 106). The shift in the nuclear policy is well perceived where Shastri expressed willingness for the development of nuclear weapons in the future.

Later Shastri explored the possibility of an external nuclear security guarantee from the nuclear power states. "Shastri's vague statement that it was for the nuclear powers to discuss some kind of guarantee which was needed not only by India but by all the non-nuclear countries, set the tone for New Delhi's incoherent search for nuclear protection" (Noorani 1967: 49). However his effort was weak and indecisive over the issue of seeking an external security guarantee because fears from domestic opposition and suspicion of any such support from nuclear states. Nuclear weapon states were at best vaguely committed to provide any security guarantee to non-nuclear states. They consoled verbally that if non-nuclear weapon states seek some support they are ready to grant it. Whereas India indeed needed a more explicit and concrete assurance nuclear guarantee which nuclear weapons states were not ready to ensure. Whatever were the reasons that showed reluctance of the major powers to give such a guarantee, India's search for binding nuclear deterrence commitments from nuclear weapon states ultimately proved futile (Ganguly 1999:155). Therefore India had to pursue different path as predicated by the looming nuclear security dilemmas emanated from China's possession of nuclear weapons.

During this period the United States and Soviet Union sought to propose a multilateral treaty to stop the further spread of nuclear weapons. The draft specified a mutual responsibility on part of nuclear and non-nuclear weapon states and indicated that

the attempts to promote non-proliferation would be merely a first step towards the ultimate goal of universal nuclear disarmament (Perkovich 2000: 105). "India to defend on its own part proposed that non-nuclear weapon states should be able to carry out peaceful nuclear explosion. But the United States rejected on the ground that there is no difference between peaceful and non-peaceful nuclear explosions" (Kapur 1978: 172).

Further India's nuclear posture was further fluctuated by the India-Pakistan War in 1965. China not only supported Pakistan but also maintained an offensive posture towards India. China sent a diplomatic note to India threatening grave consequences if India proceeded with military actions against Pakistan (Barnds 1970: 206). However the war ended and both sides reached an agreement. Both states pledged "not to have recourse to force and to settle their disputes through peaceful means in Tashkent Declaration" (Perkovich 2000: 119). It was suggested that India's survival both as a nation and as a democracy in the face of collusion between China and Pakistan, casts a clear and imperative duty on the government to take an immediate decision to develop own nuclear weapons (Mirchandani 1968: 39).

Indira Gandhi succeeded Prime Minister Shastri who died in the Soviet city of Tashkent immediately after formalising the ceasefire agreement that formally brought the 1965 India-Pakistan war to an end. Initially she showed abhorrence to nuclear explosive project after assuming power and reversed SNEP. But later she modified her stance due to several factors. "The first serious strategic development was the Chinese test of thermonuclear weapon on 9 May 1966 setting of its first hydrogen bomb" (Mirchandani 1968: 44). This enhanced China's capability to hit deep targets inside India. Due to these serious implications Indira Gandhi's government began to consider seriously the exercise of the nuclear option by embarking upon a nuclear weapon programme. As US state Department study in 1966 concluded: "It is probable that without a dramatic alternative in a few years India will decide to become a nuclear power" (Perkovich 2000: 117). But Indira Gandhi still chose not to begin a definite nuclear weapon programme considering

India's economic, conditions. She instead geared up research and development of India's nuclear explosive technology (ibid: 118).

In the meanwhile the framework of NPT was under its full development. The non-proliferation framework had a profound impact on India's disarmament and security plan. The country's earlier emphasis was on the pursuit of global nuclear disarmament based on fundamental moral premises. The new nuclear agenda was based on the sense of withdrawal from an active role in international arms negotiations (Ganguly1999: 157). Indian government faced a daunting position from where if India illustrated a reluctant stance towards the treaty it would have serious implications on vital nuclear programme. India then required large amount of economic aid from the United States and military supplies from the Soviet Union. But still India took a strong position against the discriminations by the "haves" against the "haves not" regarding nuclear weapons (Poulose 1978: 119). It reserved the right of acquiring peaceful nuclear explosions which was completely denied by the great powers. India repeatedly voiced its concern about China's nuclear weapons and indicated that if its "China's problem was not addressed it would stay out of the treaty. Finally the treaty was declared inequitable and colonial form of nuclear apartheid as the NPT accentuated its insecurity by making China a legal nuclear state" (Chakma 2005: 208). On July 18, 1968 the Soviet Union and the United States, U.K. signed the treaty. The nuclear non proliferation treaty came into force on March 5, 1970. The government of India refused to accede to the terms of the treaty because it failed to address India's aspirations (Gupta: 1968). India retained the right to conduct a peaceful nuclear explosion which was hence compatible with its nuclear policy.

In 1970 when China launched its first low range rocket carrying a satellite into orbit, India perceived that this signified a Chinese determination to build a ballistic missile capability that could hit larger parts of India (Gupta 1983: 2). It projected a

growing threat perception about China's nuclear and missile capabilities among the Indian.

Chairman of the Atomic Energy Commission after Bhabha, announced a ten year development of atomic energy and space research in India. Bhabha announced two important decisions that implied far reaching effect on nuclear policy. The first initiative was that India would not produce nuclear weapons but it would retain the option of conducting underground nuclear explosion for peaceful purposes (Bhatia 1979: 142).

The second initiative was the adoption of a ten year nuclear and space programme by the Indian government known as the Sarabhai Profile. It emphasised three objectives for space research: to develop and deploy satellites for communications, particularly television broadcasting; to develop and utilise meteorological satellite to predict weather, particularly monsoon; and to apply remote sensing technology to detect crop and forest disease, measure snow coverage in the Himalayas to anticipate drought and flood conditions and so forth (Perkovich 2000: 154-155).

The Sarabhai Profile therefore manifested an Indian determination to strengthen the nuclear option by embarking on a vigorous programme of Technology Development. "Thus at the start of 1970 India had both the capability and the political motivation to conduct a nuclear test and Gandhi informed the Parliament on 1970 that her government was studying the economic and technical issues surrounding peaceful nuclear explosives" (Gupta 1983: 5).

This was the first serious peaceful indication from the Indian government as it was considering conducting a nuclear explosion. "It picked momentum as Sarabhai told at the Fourth International Conference on the Peaceful Users of Atomic Energy in

September 1971 in Geneva that Indian scientists were developing nuclear explosive engineering techniques on top priority basis” (Perkovich 2000: 159).

The Year 1971 was a decisive one as India and Pakistan fought a third war in 1971 within twenty-four years of their independence. The war initially started as a civil war within Bangladesh and eventually ended with intervention by India. This resulted in the breakup of Pakistan and the emergence of Bangladesh as an independent country. This war assigned significant strategic and nuclear implications for India. The United States policy showed inclination towards Pakistan “US sent the nuclear capable aircraft carrier- *USS- Enterprise* and nine supporting warships to the Bay of Bengal” (Jasjit Singh 2000: 196). It showed strategic partnership between the US and Pakistan. Even more alarming was the prospect that a US, Pakistan and China tripartite alliance would develop in the near future. Such a potential brought India closer to the Soviet Union and the two countries signed a Treaty of peace, friendship and cooperation on August 1971 (Chengappa 2000: 151).

In May 1972, during a debate on the Ministry of defense annual budget, most of India’s political parties demanded that India should develop nuclear weapons or at least embark on a programme that would ensure production of nuclear weapons within a very short time. “In reply, Defence Minister, Jagjivan Ram informed the Parliament that the Atomic Energy Commission is studying the technology for conducting underground explosion for peaceful purposes link” (Bhatia 1979: 143).

Thereafter with the final approval of Prime Minister Indira Gandhi nuclear test was conducted on 18 May, 1974. Some members of the cabinet ministers were informed a few hour or few days before the test. It was a style of executive decision making that persisted right up to Pokhran I test (ibid 1979: 143).

There were a variety of reasons to justify a nuclear test. They included security concerns emanating from the Chinese nuclear programme, an unsatisfactory nuclear non-proliferation treaty and benefits associated with the development of nuclear explosive technology. The decision evolved gradually over the year based a careful assessment of threat perception emanated from Chinese nuclear activities and the intensifying regional nuclear security dilemma. Therefore strategic imperative was the main guiding principle for 1974 nuclear test.

Following the test India was quick to indicate that the blast had no military implications and perceived peaceful motivation. But however it was clear that it was a significant step towards strengthening India's nuclear options, which eventually paved the way for India's building of nuclear arsenals. Indeed the blast manifested a consistency and continuity in India's nuclear policy and assertiveness of India's growing nuclear programme. Thus by conducting a Peaceful Nuclear Explosion (PNE), it would allow the government to demonstrate its weapon option without necessarily committing it to a full-scale weapon programme. This period showed the shift in nuclear policy from its moralistic notion to a more or less realist notion.

1974-98: Post Pokhran I

As seen for over two decades after the 1974 nuclear explosion, India followed the policy of nuclear ambiguity - neither confirming nor denying its pursuit of a military nuclear programme. At times, the programme had slowed down but the development and perfection of nuclear weapons and missile delivery related technologies were never halted. This period is marked by slow progress in accelerating nuclear programme even though there was an increase in public and military support for nuclear programme.

At the international level Indira Gandhi had to face severe criticism as doubts were raised about India's claims of the peaceful character of the explosion. The nuclear

test led to an immediate suspension of Canadian nuclear assistance in nuclear reactors. It also led to near suspension of enriched uranium exports from the US (Chellany 1993: 74-75). However, India's nuclear policy remained the same after the test period as it was before testing, like denunciation of nuclear arms race, opposition to the NPT but a refusal to foreclose the nuclear options in future.

After the test, the Indian political system went through a series of upheavals and instability. Pressing concerns of price rise, railways strikes and Jayprakash movement started by Jayprakash Narayan worsened the situation. Jayprakash Narayan called for a manifold "social, economic, political, cultural and educational changes leading ultimately to a revolution" (Perkovich 2000: 191). This proved as an impediment to rule for Indira Gandhi to remain in control. She therefore imposed emergency on 26 June, 1975. At the end of emergency in 1977, Indira Gandhi called for fresh elections in which she was defeated decisively. The election outcome resulted in the beginning of Janata Party rule from 1977-1980, which was the first non-Congress central government.

Prime Minister Morarji Desai after assuming office announced that he would reassess India's previous nuclear policy and promised that India would not conduct any further nuclear explosion including peaceful nuclear explosion. He emphasised "that the Janata Party government would distance itself from Indira Gandhi's past nuclear policies" (Subrahmanyam 1998: 33). Finally with such a posture, Desai hoped that his policy would help win back nuclear energy assistance from the United States. However before the evolution of Janata Party's nuclear policy any further, the government collapsed in July 1977 due to internal bickering. Summing-up his attitude Mr. K. Subramanyam remarked that "the one thing that Morarji Desai hated more than the nuclear weapons was India being dictated to by the nuclear weapons powers"(ibid: 33). After the fall of Desai, interim Prime Minister Charan Singh was quick to indicate that he intended to keep nuclear options open. Indeed Charan Singh was the first to express

concern officially from New Delhi about Pakistan's nuclear weapon programme (Mohan 1979: 38-39).

On 25 December 1979, Soviet forces entered Afghanistan. This war had important implications for South Asia. Ominously enough, it placed Pakistan in a more advantageous position than India in ensuing US-Soviet Cold War equation. There emerged a relationship which includes American support for Afghan rebels operating from Pakistan. There was the use of Pakistani naval facilities by the US warships and probable exchange of information regarding the Soviet presence in Afghanistan (Gupta 1983: 33). In addition to this "U.S. sold Pakistan several squadrons of F-16 fighter jets. India as expected vehemently lobbied against the sale of F-16 to Pakistan but with little success" (Kux 1992: 383).

Meanwhile Indira Gandhi reassumed power in January 1980. Under the Afghan shadow Pakistan had been making rapid progress towards acquiring the capability to produce nuclear weapons. In particular, its progress in the production of fissile materials in Kahuta Uranium Enrichment Plant was alarming from an Indian perspective (Chakma 2005: 221). India feared that the United States or China or both would now be induced to dramatically step up arming Pakistan. Indeed, countering the Soviet influence in Central and South Asia may have been an under appreciated reason for China's subsequent assistance to Pakistan's nuclear and missile programs. To head off the possibility of China- American axis India would have to maintain as much goodwill as possible with Washington, while not allowing antagonism with China (Perkovich 2000: 222). Accordingly Mrs. Gandhi maintained an amicable understanding with the US for alternative fuel supplies for Tarapur which was finally achieved after her very successful state visit to Washington in July 1982 (Malik 2010: 78).

Subsequently in July 1983, India launched the Integrated Guided Missile Development Programme (IGMDP) and placed it under the Defence Research and

Development Organisation for its implementation. It included an anti tank missile *NAG*, two surface to surface missiles *Aakash* and *Trishul*, one medium range surface to surface missile *Prithvi* and an intermediate range ballistic missile *Agni* (Perkovich 2000: 244-246). It clearly signalled that India was determined to develop a viable nuclear deterrent capability. K. Subrahmanyam maintained that the IGMDP made it clear that “India was aiming at developing its nuclear option further” (Subrahmanyam 1998: 39).

The shift to a dedicated missile programme in 1983 resulted from assessment of technological capability, the evaluation of a long term need for advanced indigenous tactical and strategic weapon platform. So to proceed with these programmes in July 1983 India finally commissioned the Madras I nuclear plant in Tamil Nadu. This plant could produce plutonium for explosive purpose as well the breeder programme. However in dedicating the plant, Indira Gandhi declared that “India had no intention of embarking a nuclear weapon programme and wanted to concentrate on providing an honorable life to masses” (Perkovich 2000: 249).

After the demise of Indira Gandhi in 1984 her son Rajiv Gandhi was appointed as the Prime Minister of India. During his tenure in office, India pursued contradictory policies on the nuclear programme. On one hand he proposed a comprehensive plan for the gradual elimination of nuclear weapons popularly referred to as the Rajiv Gandhi Action Plan. This plan which he presented in an address to the UN Assembly, called for the elimination of nuclear arsenals by the year 2010. It spelled out targets that were to be achieved by all nuclear weapon states and imposed restrictions on all nuclear threshold powers (Ganguly 1999:164). The Rajiv Gandhi Action Plan was ignored by the five permanent members of the UN Security Council (US, China, UK, France and USSR). It was a bitter disappointment for Rajiv Gandhi (Subrahmanyam 1998: 44). Despite a renewed attempt at multilateral diplomacy the scientific military establishment received a considerable boost under Rajiv Gandhi (Ganguly 1999: 165). “Indian scientists reportedly began to work with the Rajiv Gandhi’s approval on thermo nuclear weapons in

late 1984 or early 1985” (Allright and Zamora 1989: 25). According to Subrahmanyam it was under Rajiv Gandhi that India made the decision to acquire the missiles and other technology to form an effective nuclear deterrent (Subrahmanyam 1998: 44).

Rajiv Gandhi’s interest in India’s military modernisation may have also contributed to South Asia’s first nuclear crisis in 1987 in the wake of major military exercise code named “Brass-tacks” (Ganguly 1999: 165). “The crisis originated in ambitious Indian plan for the largest military exercise in the sub continent about which India did not inform Pakistan resulting in a defensive reaction from Islamabad” (Malik 2010: 90).

The basic idea was of holding the largest, most ambitious military exercises in the sub-continent’s history to develop and demonstrate India’s capacity to conduct mobile armoured warfare with air support integrated by new communication, command and control system. Pakistan responded effectively by deploying its Army closer to Indo-Pak border closer to Amritsar. As crisis surfaced both sides decided to hold discussions and agreed that military movements had been purely precautionary and defensive (Perkovich 1999: 278-280).

In February 1988 Soviet Union announced its willingness to withdraw forces from Afghanistan. The Soviet withdrawal would reduce Pakistan’s rationale for building military capability. The end of the Afghan war and the revival of democracy by the election of Benazir Bhutto government in Pakistan yielded some hope that Indo-Pak relations would improve soon.

They were false hopes because in three years India was again on the verge of a crisis with Pakistan – a crisis with a nuclear overtone. This was a limited war which was fought in Kargil region of Jammu and Kashmir. “This crisis unlike the 1987 Brasstacks

was different in a sense it led to the outbreak of a secessionist ethno-religious insurgency in the disputed state of Jammu and Kashmir” (Ganguly 1999:166). Violence mounted into a nascent insurgency demanding independence from India. These insurgents were allegedly operating out of camps in Pakistan. The Indian government responded with repressive measures and accused Pakistan of training and supporting the militants. The dramatic rise in the incidence of violence within the Kashmir Valley instigated Indian decision makers to consider deep strikes into Pakistan territory for destroying insurgent training camps. There were chronic conventional arms firing across the line of control in Kashmir as India moved more troops into the region, which was deployed to prevent cross border infiltration from Pakistan. Hence the conflict was due to insurgency with the deliberate support from Pakistan (Sidhu 2004: 9).

As the crisis peaked in May 1990 on the basis of reports from US intelligence agencies, President Bush sent Robert Gates the deputy National Security Adviser, to India and Pakistan. In New Delhi Gates counselled restraint. In Islamabad he warned Pakistani decision makers that in every war game scenario which the Pentagon had developed, Pakistan emerged as the loser. Consequently he argued that it is not in the Pakistan’s interest to provoke India (Ganguly 1999: 166). The US government was not able to certify that Pakistan did not possess nuclear weapons. This resulted in a substantial cut by US economic and military assistance that had been flowing to Pakistan since the beginning of civil war in Afghanistan. It too imposed sanctions on Islamabad (Malik 2010: 160).

The 1990 Kashmir crisis heralded a new era in South Asian Nuclear competition. It brought about a rudimentary regional nuclear deterrence system. As Davin Hagerty says “A strong case can be made that India and Pakistan were deterred from war in 1990 by the existence of mutual nuclear weapon capabilities and the chance that, no matter what India and Pakistan decision makers said or did any military clash could escalate to the nuclear level” (Hagerty 1996 :107-08). “Despite the cessation of aid the Pakistani

nuclear program proceeded with pace and the Chinese continued to support Pakistan's efforts to acquire nuclear weapons" (Holmes 1993: 6).

The abrupt end of the Cold War and its consequences heralded an uncertain strategic environment for India. It meant the loss of a traditional strategic ally and reliable arms supplier, the Soviet Union. India also lost Moscow's Veto wielding support on the question of Kashmir at the United Nations. Moreover and critically from India's point of view Soviet Union could no longer be counted on to provide counterweight to China.

The strategic posture of China and Pakistan in the post-Cold War era aggravated India's strategic anxiety. China conducted a series of nuclear tests and deployed warheads in Tibet targeting India (Rao 1978: 79). This development, along with China's assistance to Pakistan in developing nuclear weapons and ballistic missile systems contributed to intensify the existing South Asian security dilemma at least from Indian point of view (Chander 1998: 20). In such circumstances, India had to develop an independent self-reliant defence posture." The Indian anxiety was further reinforced by a leaked intelligence report that China had supplied M-11 missiles to Pakistan" (Chellany 1993: 253). Therefore by the mid 1990's, India was standing at the cross-roads of declaratory and non-declaratory nuclear deterrent posture. Strategic imperatives at this stage dictated that India carried out nuclear tests in order to maintain a credible nuclear deterrent posture.

However, as India was still struggling to maintain a stable position after the Cold War, the extension of Non Proliferation Treaty in 1995 constituted a severe blow to its intentions. More than 170 countries participated in the 1995 NPT Review Conference. "The US one of the principal proponents of NPT regime who sought an unconditional and indefinite extension of the treaty" (Ganguly 1999: 167). As a result, India understood that it perpetuated the discriminatory aspects and provided legitimacy to the nuclear arsenals of the nuclear weapon states. India was alarmed of being internationally facing

extreme pressures from the major nuclear power states to sign the treaty or at least to agree to international inspection of its nuclear facilities. However, India remained firm on its stance that its own security imperative demanded to stay out of the treaty until other nuclear power states, primarily China, limit their nuclear weapons.

Meanwhile, the US introduced a legislation called the Brown Amendment which was designed to allow the provision of economic and military assistance to Pakistan without any attached conditions. The extension of NPT and the passage of the Brown amendment which led to the renewal of US military assistance to Pakistan inevitably provoked Indian security concerns (Malik 2010: 177).

On the other hand the CTBT moved towards its conclusion in 1995, India found that any window of diplomatic opportunity to press its own strategic concern was rapidly closing. Once the CTBT was concluded, it would be politically very costly to conduct nuclear tests. Therefore, Indian government decided to conduct further nuclear tests in December 1995, but before this plan reached its logical conclusion, American intelligence sources detected Indian preparations and Washington applied enormous pressure on New Delhi to abandon the tests (Perkovich 2000: 368). By the early fall in 1995, Narasimha Rao and the Congress party were politically endangered and BJP emerged as a challenge to Congress. BJP leaders saw great opportunity to replace the Congress as the only national party.

India finally refused to sign the CTBT treaty when it was readied for signature in 1996. Several key factors determined India's opposition to the treaty. India perceived that the CTBT as it had evoked as an offspring of the NPT primarily aimed at preventing countries like India from building nuclear weapons because all other non-nuclear states were already barred from conducting nuclear explosion under NPT. "Therefore India too insisted that they would accede to the treaty only if the nuclear weapon states agreed to a time bound plan for universal nuclear disarmament" (Chakma 2002: 242).The second

objection sparked off because of the pressure on India through the “entry into force” clause which required India along with forty three countries to accede to the treaty before it comes into force (Malik 2010: 175). The argument against the entry into force was questioned on the ground of fairness. The final objective was with the treaty’s allowances of computer simulation of nuclear tests and hydro nuclear tests. In the Indian view, the failure to close these two technological loopholes undermined the larger goal; of taking step towards the elimination of nuclear weapons (Ganguly 2000: 54)

In 1997 more evidence surfaced on the proliferation between China and Pakistan and about United States permissiveness on this issue. China continued to pass missile technology and components to Pakistan. Despite this, Clinton administration was still willing to certify that China was not proliferating or - even worse for India - that the US was either unable or unwilling to restrain China (Jaswant Singh 1998: 46).

During all this international turmoil and constraints BJP with a coalition of fourteen parties came to power in 1998. The BJP manifesto clearly declared it would reevaluate the country’s nuclear policy and exercise the option to induct nuclear weapons (Perkovich 2000: 373).

In the meanwhile Pakistan tested Ghauri missile on 6 April, 1998 which was built with either Chinese or North Korean technology and had a range of 1,500 kilometres and can carry a payload of 750 kg. Its range would enable Pakistan to target twenty six cities in India. Ghauri test provided the BJP led government a useful rationale for carrying out nuclear tests. Between 9 May 1998 and 10 May 1998, Prime Minister Atal Bihari Vajpayee informed key ministers and the highest ranking bureaucrats as well as the three services chiefs of his decision to proceed with the nuclear tests. On 11 May 1998 India conducted its first nuclear tests in the Pokhran desert in Rajasthan. Later, on 13 May, two more tests showed the Indian determination to execute their weapon development testing

plan before the international community. The test at least symbolised India in the club of nuclear weapon states (Ganguly 2000: 56).

1998 -2008: End of Ambiguity and Nuclear Assertion

On 11 and 13 May 1998 India tested a total of five nuclear devices in the desert sands of Pokhran. It was in contrast to the nuclear test in 1974 which was just declared as a Peaceful Nuclear Explosion (PNE). The tests were for the purpose of declaring India as a nuclear weapon state.

The main theme of change in the Indian nuclear policy after Pokhran II rested in the shift from past policy of disarmament to arms control. The former was in favor of total elimination of weapons while the latter mainly focused on reducing nuclear threats. In this global era with deteriorating security imperative and lack of assured global nuclear disarmament policy, India understood that it is just a normative idea to stick to the notion of non weaponisation (Mohan 2003: 15).

Whereas earlier the Indian policy emphasised global nuclear disarmament and rejected the non-proliferation regime as discriminatory, India has now signalled willingness to put its nuclear disarmament agenda on the back burner and join the global non-proliferation regime in exchange for tacit recognition of its *de facto* nuclear status (Kampani 1998: 12). The exclusive emphasis on total disarmament had become a mantra and prevented India from becoming part of any nuclear arms control regime. Post Pokhran II as specified sought participation in nuclear arms control agreements that at least sought partial solutions to the nuclear proliferation problems.

“At the end of 1999 domestic debate ensued over the question of signing the CTBT. One line of argument was that India’s fundamental objections to the CTBT remain valid. These include the discriminatory character, the unsatisfactory definition of

the scope of the treaty and the absence of a linkage with the total elimination of nuclear weapons” (Rai 2009: 235). On the other hand supporters of India’s accession to CTBT made a case that after May 1998 tests India is a nuclear weapon state and that its central security concerns have been addressed by these tests. R. Chidambaram, Chairman of the Atomic Energy Commission (AEC), asserted that there was no need to conduct any more test, as he believed that India could now build a variety of nuclear weapons, and maintain safety and cope with new developments by sustaining an advanced research programme in nuclear weapons (Rai 2009: 236).

The new nuclear policy abandoned India’s earlier position in favour of using atomic energy only for peaceful purposes and opened the door for the nuclear weapons options. It was officially declared that India would use nuclear power for energy production as well as for it’s national security.

Previously India emphasised that the right of technology transfers should not be curbed in the name of non-proliferation but now it desired to tighten national laws on export of sensitive technologies and materials. While India continues to insist it needs to have better access to advanced technologies, it has been willing to underscore the importance of preventing sophisticated arms from falling into the hands of the so called states of concern. Here again there is subtle change of attitude. In another important shift India also endorsed the objectives of the Non-Proliferation Treaty. In a formal statement before the Indian Parliament on May 2000, the Foreign minister Jaswant Singh expounded the new Indian approach to the treaty. Singh explained, ‘Though not parties to the NPT India’s policies have been consistent with the key provisions of NPT that apply to nuclear weapon states’ (Mohan 2003: 18-19).

The essence was that India should seek some kind of accommodation with the unequal global nuclear order, while seeking to develop a new strategic relationship with the US, even going beyond the requirements of a nuclear bargain. In particular, India should agree to play by the rules of the global nuclear order if it were granted entry into its framework with at least *defacto* recognition of its nuclear power status. In addition, India, while pursuing its own path of nuclear weaponisation, would water down considerably its criticism of the leading nuclear weapons powers and its rhetoric in global nuclear disarmament.

At the International level the US President stated that he was deeply disturbed by the tests and added that this action by India not only threatened the stability of the region but also directly challenged the firm international consensus to stop the proliferation of Weapons of Mass Destruction (Rai 2009: 4). The US vehemently rejected India's claim of security threat from Pakistan and China as unpersuasive. US declared that India and Pakistan would not be allowed to join nuclear clubs or accepted as nuclear weapon states. The most important elements were the slapping of sanctions against India. Therefore in order to persuade great powers, India finally agreed as a participant to negotiate in the global regimes like NPT, CTBT etc. (Kapur 2001: 232-233).

In the months after Pokhran II, the Government of India constituted the National Security Advisory Board with a task to formalise the principles of nuclear doctrine. The Board was a conglomeration of defense analysts, academics former civil and military officials and journalists. It was chaired by K. Subrahmanyam .The Board issued the Draft Indian Nuclear Doctrine on August 17, 1999 (Bajpai 2000: 268-269). This was the first ever clear statement on India's nuclear posture. It spelt out the objectives of Indian nuclear policy and refers to nuclear forces, credibility, command and control and research and development. With the draft of the nuclear doctrine having been made public, it is now possible to deliberate on the long-term strategies that India would have to adopt in its approach to nuclear policy. The details of the nuclear doctrine are as follows:

The objectives of the doctrine are that India shall pursue a doctrine of 'credible minimum nuclear deterrence'. In this policy of 'retaliation only', the survivability of India's arsenal is critical. This is a dynamic concept related to the strategic environment, technological imperatives and the needs of national security. The actual size components, deployment and employment of nuclear forces will be decided in the light of these factors. India's peacetime posture aims at convincing any potential aggressor that any nuclear attack on India and its forces shall result in punitive retaliation with nuclear weapons to inflict damage unacceptable to the aggressor. The fundamental purpose of

Indian nuclear weapons is to deter the use and threat of use of nuclear weapons by any state or entity against India and its forces. India will not be the first to initiate a nuclear strike, but will respond with punitive retaliation should deterrence fail. India will not resort to the use or threat of use of nuclear weapons against states which do not possess nuclear weapons, or are not aligned with nuclear weapon powers (National Security Advisory Board: 1999).

The India deterrence doctrine remains the following;

- (a) Sufficient, survivable and operationally prepared nuclear forces,
- (b) A robust command and control system,
- (c) Effective intelligence and early warning capabilities, and
- (d) Comprehensive planning and training for operations in line with the strategy, and
- (e) The will to employ nuclear forces and weapons.

The doctrine envisages assured capability to shift from peacetime deployment to fully employable forces in the shortest possible time and the ability to retaliate effectively even in a case of significant degradation by hostile strikes. It endures credibility and survivability as the central principles to India's nuclear deterrent:

The next provision in the doctrine emphasised command and control in which nuclear weapons shall be tightly controlled and released for use at the highest political level. The authority to release nuclear weapons for use resides in the person of the Prime Minister of India, or the designated successor.

The doctrine assured security and safety of manufacture, transportation and storage of nuclear weapons are fully guarded against possible theft, loss, sabotage, damage or unauthorised access or use. It also ensured that India would take significant

efforts in research and development to keep up with technological advances in this field (ibid: 1999)

Finally India declared that global, verifiable and non-discriminatory nuclear disarmament is its national security objective. India shall continue its efforts to achieve the goal of a nuclear weapon-free world at an early date. Since no-first use of nuclear weapons is India's basic commitment, every effort shall be made to persuade other states possessing nuclear weapons to join an international treaty banning first use (ibid :1999)

In 1999 India and Pakistan again confronted in what is known as Kargil crisis. “Due to the level of hostility between India and Pakistan, and the rudimentary nature of the nuclear arsenals, it was feared that the region might become the flash point for a nuclear exchange. This concern was highlighted by Kargil intrusions. Both India and Pakistan managed crisis and prevented a dangerous increase in tension” (Sidhu 2004: 10).

“Nuclear weapons had not established a nuclear peace on the sub-continent, on the contrary, as Prakash Karat argued after drawing parallel, with cold War history, it provided the opportunity for low intensity conflict” (Karat: 1999). This time US showed greater sensitivity to India's position that disputes in the sub-continent needed to be resolved bilaterally. Pakistan must also first stop exporting terrorist violence in India before a dialogue could take place. On the diplomatic front, Clinton initiated a ceasefire between the two armed forces in July 2000 and got it formalised at the end of 2001. The diplomatic efforts were on its way when terror struck on World Trade Centre in United States on September 11, 2001.

Post 9/11 there was a major shift in focus from non-proliferation regimes to fighting international terrorism. The Bush administration moved away from elimination of India's nuclear weapons programme and instead it focused on ways to explore high

technology cooperation's with India while strengthening the broader objectives of global non-proliferation regimes. In 2002 National Security Adviser Brajesh Mishra obtained a political commitment from the Bush administration to expand cooperation in a trinity of areas with India such as civil nuclear energy, commercial space application and high technology trade (Mohan 2005 :114).

In 2003 President Bush unveiled a new agenda that aimed at restructuring the global nuclear order. The first point of the action plan expands on Proliferation Security Initiative (PSI). Firstly, the PSI calls for pre-emptive military action by selected states to disrupt the international traffic in sensitive nuclear technologies and materials in nationally controlled areas (land, air and sea). Secondly, it strengthened the laws regarding export control of sensitive technologies by United Security Council. Thirdly, it further banned the sale of uranium and plutonium reprocessing enrichment technologies to countries that do not at present have full scale capabilities in these areas. Lastly To ban nuclear commerce which do not adhere to the protocol of International Atomic Energy Agency (IAEA) (Rai 2009: 33-34).

India in response to this plan declared that it is ready to cooperate with new non proliferation initiatives provided India is fully consulted and its interests are well taken on board. It emphasised that old nuclear proliferation regimes are ineffective and the current international context has changed so much that it is time for multilateral consultative machinery to tackle the emerging terrorist groups, suicide attacks and proliferation of Weapons of Mass destruction (Rai, 2009:36).

India responded to these changing international scenarios and reformalised the country's nuclear doctrine in 2003. India is the largest victim of terrorism and clandestine nuclear trade. Now no first use (NFU) policy stands qualified as India will not adhere to NFU against non-nuclear states if they attack India or it forces anywhere in the world with biological or chemical weapons.

Over a period of more than three years the NDA dispensation provided highly visible support to the Bush administration on a number of critical occasions. The Bush administration duly acknowledge this in its progressive upgrading of the Indo-US relationship from a “Strategic Partnership” to the “Next Step in Strategic Partnership” (NSSP) while lifting part of the high-technology restriction imposed in the immediate aftermath of the weapons tests (Jayaraman 2006: 5216-5217).

In January 2004, the two countries formally announced the NSSP under which each would take reciprocal steps to facilitate technology transfers. In the first phase of the NSSP, which concluded in September 2004, India agreed to accept a U.S. export-control attache at the American embassy in New Delhi to monitor the end-use of U.S. technology transferred to India. The United States, in return, removed the Indian Space Research Organization (ISRO) from its Entity List (a list of organisation to whom technology transfer was restricted), and subsequently eased licensing requirements for exporting low-level, dual-use items to ISRO subordinates. Furthermore, the US permitted exports of items related to the non nuclear “balance-of-plant” portion of safeguarded Indian nuclear facilities but still continued to hinder more substantial nuclear cooperation with India. This “balance of plant” portion of nuclear facilities included the portion outside of nuclear reactors such as turbines and generators (Mistry 2006: 681-682).

NSSP further led to development of the Indo US Civil nuclear deal. In July 2005, President George Bush announced a major new foreign policy initiative with a commitment to attaining "full civil nuclear energy cooperation and trade with India. This transformed the relationship between India and US which went beyond the NSSP. The nuclear agreement with India stemmed from the Bush administration's desire to transform US -India relations and develop a strong strategic partnership with India.

The deal is seen as a watershed in U.S India relations and introduced a new dimension to international non-proliferation efforts.

In the July 2005 agreement, the United States accommodated India in two important ways. First, without giving India formal status as a nuclear weapons state, Washington nonetheless acknowledged that India should acquire the same benefits and advantages in nuclear energy transfer as other such states. Second, and more substantively, the Bush administration agreed to assist India in obtaining civilian nuclear technology and to help facilitate technology transfers and cooperation (Mistry 2006: 683).

India commits to signing an additional protocol which allows more intrusive IAEA inspection of its civilian facilities. India agrees to continue its moratorium on nuclear weapon testing. India commits to strengthening the security of the nuclear arsenals. India agrees to prevent the spread of enrichment and reprocessing technologies to state that don't possess them and to support international non-proliferation efforts. An Approval by the Nuclear Supplier Group lifting the ban on India has also cleared the way for other countries to make nuclear fuel and technology sales to India (Bajoria: 2009).

By adhering to these terms India would be eligible to buy U.S. dual use nuclear technology, including material and equipment that could be used to enrich uranium or reprocess plutonium potentially creating the material for nuclear bombs. India becomes one of the only six countries allowed to participate the nuclear commerce and is also allowed to keep an independent nuclear arsenals and the most significant of all the United States accepted India as a key ally which will help in maintaining the global balance of power.

There is no doubt that it enhanced the role of India as a global nuclear power but the left parties due to several political reasons severely criticised it. According to them, firstly the agreement does not lift so called dual use restrictions relating to enrichment

and reprocessing. Secondly the agreement does not ensure full cooperation across particularly uranium enrichment and reprocessing of spent fuel. Thirdly the assurances provided by the United States for the uninterrupted supply of uranium fuel are hardly as firm. While the right to reprocess spent nuclear fuel of imported origin has been granted in principles there were still substantial possibilities for delays and holds up the United States in the actual implementation of reprocessing (Jayaraman 2008 :163-164). Whatever were the criticisms of civil nuclear cooperation India and United States eventually signed sealed, and delivered the deal on 10 October, 2008.

Conclusion

The historical evolution of India's nuclear development was guided by a combination of various factors. In the first phase that is post-independence (1947-62), the main motive was to use nuclear energy for industrial growth and economic prosperity. In the second phase (1964-74) India responded to regional strategic constraints like Chinese nuclear threat by adopting a nuclear option strategy which eventually culminated with first nuclear test in 1974. From 1974-1998 in the third phase of its nuclear development, India persistently upgraded its nuclear option capabilities against a gradually intensifying tripartite nuclear security dilemma involving (China, India and Pakistan) in the South Asian Region. India pursued a policy of nuclear ambiguity-neither conforming nor denying the pursuance of a nuclear weapon programme during this period eventually led down the road to Pokhran II. Therefore Pokhran II was a culmination of the policy process which occurred in a vulnerable strategic environment that emerged after the end of Cold War. So in this content it was not surprising that India opted for declaratory nuclear deterrence posture when it came to the point of making a choice. Post Pokhran II nuclear policy clearly specified Indian perception that its nuclear weapon programme is an essential core of its foreign policy and fully declared it as a nuclear weapon state in the 21st century.

Chapter Three

Domestic Sources of the Indian Nuclear Policy

India's decision to conduct nuclear tests on May 1998 and formally declare it a nuclear weapon state marks an important historical transition in the India foreign policy. The gap of twenty four years that lies between the nuclear explosion in 1974 and the nuclear tests in 1998 witnessed perhaps the greatest transition in the country's nuclear policy. There is no doubt that strategic imperatives played a major role in the transition of India's nuclear policy but the role of domestic actors cannot be underestimated. Domestic actors too channelise themselves to contribute as an important component in the accomplishment of a viable nuclear policy. This chapter discusses how domestic constraints influenced India to become a nuclear weapon state. This chapter will also evaluate how various theories approach and understand the role of state preferences and decision makers.

Introduction

Disintegration of the Soviet Union and the consequent end of the Cold War helped to bring about a new phase in the Indian nuclear policy. This phase heralds an era of transformation in the Indian nuclear policy. One of the key determinants of the change was the end of bipolarity which triggered rapid foreign policy rethinking in India. The end of the Cold War was either a cause or a blessing for India, depending on how one looks at the new situation. The changing pattern of the international politics was considered a cause when the United States made non-proliferation a key point in its foreign policy agenda. This became most obvious during 1995-1996 when considerable US pressure was mounted on India to be part of the non-proliferation treaty (NPT) and the Comprehensive Test Ban Treaty (CTBT) (Nizamani 2001: 59). It can also be seen as a blessing because the breakdown of the Soviet Union instigated India to pursue an independent nuclear policy. Under these circumstances, India's policy of non alignment itself was being questioned since it had little meaning when there was nothing left to be

non-aligned about. India's national security did emerge from the interplay of number of factors such as domestic and international or state and non state actors.

Therefore the changes in India's external environment resonate at the domestic level too. According to David Singer, "the systematic level is only one among several that could produce such an outcome, and it cannot be relied upon exclusively. Therefore combining the insights from different levels would be more useful to gain an understanding of policies than concentrating on one determinant alone" (Singer 1961: 91). Geography, external environment, nature of political system and the role of non-governmental agencies constitute the external determinants. History, culture and policy-makers ideological perception which are also elements of India's strategic culture constitute the internal determinants (Das 2008: 43).

Domestic level determinants and elite perceptions were more or less important in charting a different course of action. In that sense, the macro-level external factors set the scene while the micro-level factors provided the incentives for policy alteration. Till 1998 many successive Indian governments had maintained a position of creating ambiguity about their nuclear policy while forcefully articulating their global disarmament doctrine (Shridharan 2006: 80). The Bharatiya Janata Party (BJP) led a coalition to power in 1998 and almost immediately carried out a series of nuclear tests and there by ending the ambiguity. Simultaneously, it enunciated a skeletal doctrine of 'credible minimum deterrence' that included an affirmation of no first use. On the face of it, this was a dramatic policy shift: nuclear deterrence was now officially adopted as a pillar of national security (Basrur 2001: 188).

The reasons that led the BJP coalition government in 1998 to decisively break from previous nuclear policy approach stemmed from several considerations. Political survivability, a strong Hindu ideology and to aspire India as nuclear power in the global

system were core factors in the nuclear tests. The shift in the policy is explained by C. Raja Mohan as follows:

For good or bad, and whether the world liked it or not, India decided to cross the nuclear Rubicon. Fifty years after independence, India now wanted to become a normal nation—placing considerations of *realpolitik* and national security above its until recently dominant focus on liberal internationalism, morality and normative approaches to international politics (Mohan 2003: 7).

BJP's Ideological influence on the Indian Nuclear Policy

The BJP locates its ideological preferences from the concept of *Hindutava*. The central motive of this *Hindutava* ideology is the idea of a strong India. To become strong, India must be united culturally and politically (Bidwai and Vanaik 1999: 95). The BJP see *Hindutava* as a unifying force that will create a national identity and social cohesion for India. The BJP has two goals: (1) making Hindu revivalism the basis of nationhood and (2) constructing a masculine national security state as the symbol of national myth and achievement. They intended to build a grand, powerful, and masculine national security state that will emerge as the symbol of national mythology and the converging point of high science, national identity, and achievement (Kampani 1998: 18).

This ideology reflects in the foreign policy of the BJP. They wanted to enhance the status and prestige of India and perceived India emergence as a great power in the international system. The *Hindu* idea was to dispense with the moralistic belief peace, secularism and global disarmament preached by Nehru. The BJP ideology was major breakthrough from its predecessors as its vision was to replace it with the hard core realistic notion where India foreign policy is based on the perception of national interest and power.

Atal Bihari Vajpayee, his party the BJP and its mother organisation the *Rashtriya Swayamsevak Sangh (RSS)* were true believers of nuclear weapons (Chengappa 2000: 35). They had no doubt that India had to have the bombs. Nuclear weapons are the vital

component which could enhance India's status in the international system. "BJP denote nuclear weapons as an article of faith, part of their vision of a resurgent militant India" (cited in Malik 2010: 219).

There also lies the fact that the BJP precursor Jan Sangh wanted nuclear development programme after the Chinese test in 1964 (Mirchandani 1968: 27). In 1974, after the peaceful nuclear explosions Vajpayee was in full praise for Indira Gandhi in the Parliament but demanded that Indira Gandhi must had pursued a full nuclear development programme (Chengappa 2000: 38).

In 1985 election BJP called for exercising the nuclear option in its election manifesto. In 1996, BJP under the leadership of Vajpayee came to power for thirteen days and it is known that BJP actually authorised nuclear test at that time. Unfortunately, Vajpayee had to call off the decision to test when it became evident that his government was unlikely to survive (Ayoob 2000: 134-135).

Two years later in 1998, the BJP achieved a strong electoral victory and finally succeeded in forming together a coalition government. Its election manifesto clearly suggested that to ensure the security, territorial integrity and unity of India, BJP will take all necessary steps and exercise all available options. It will re-evaluate the nuclear policy and exercise the option to induct nuclear options (Ollapally 2006: 933).

Strategic Culture of the BJP

Strategic culture may be defined as "the socially constructed and transmitted assumptions, habits of mind, traditions, and preferred methods of operation-that is, behaviour-that are more or less specific to a particular geographically-based security community" (Gray 1999: 28). The national security of a state, when seen through the strategic predispositions, or behaviours, of its leaders, may influence them to define their

country's security discourse in terms of what they see as their country's strategic culture (ibid: 28).

As strategic culture can influence the national security consideration through ideational factors like culture, norms, ideas and values, it is clearly reflected in India's foreign policy. India's national identity and normative aspiration have significantly shaped nuclear policy choices. Two vital norms coexist uneasily within this national identity: one, India should achieve major power status in the international system and two, India should demonstrate moral superiority over the world's dominant states, which have been perceived as exploitative, over militarised and insensitive to the needs and aspirations of the world's majority of the poor (Perkovich 2000: 448).

Simultaneously, the BJP inherited the ideological notion of a culturally united state. The BJP was obsessed with a strategic culture of national power and status which could only be enhanced by the acquisition of nuclear weapon states. Jaswant Singh (Ministry of External Affairs for India under the BJP) defines India's strategic culture and says one has to "examine the very nature of India's nationhood; the very characteristics of its society; and the evolution of its strategic thought over the ages" (Singh 1998: 2). Strategic culture is a by-product of the political culture of a nation and its people; an extension of the functioning of a viable state and more particularly its understanding of the ways in which the power of a state can be used (ibid: 2).

The BJP laid a lot of importance on a culturally unified state. BJP leader Atal Bihari Vajpayee himself was inspired with ideology of power and prestige and most important way to gain was through the strengthening of the military strength. This military strength would protect territorial integrity according to the BJP which could only be acquired with the inducement of the nuclear weapons. As the Prime minister Vajpayee concedes, "India has never considered military might as the ultimate measure of national

strength,” but adds, “it’s a necessary component of national strength” that will earn the respect of the world (cited in Chaulia 2002: 221).

Nehru pursued the humanistic belief of peace and disarmament and discarded nuclear weapons but he never ignored the power of nuclear weapons and used it for peaceful purposes. Indira Gandhi too exploded the device but it was only a peaceful nuclear explosion. None of the ruling power in the India till 1998 openly declared their nuclear weapon capability. It was only the Bharitya Janta Party who surpassed the moralistic notion of idealism and favoured the great power norm to the inclusion of the nuclear power.

It is proved by as tests themselves 'were named "Operation Shakti" (Shakti means "strength" in Hindi). In his first interview after the tests, Vajpayee told *India Today*, "The greatest meaning of these tests is that they had given India Shakti, they have given India strength and they have given India self confidence (cited in Chengappa 2000: 36).

According to the Foreign Minister, Jaswant Singh, “all the weakness, vulnerability, lack and effeminacy of the past are behind India after Pokhran, with a “transformation from the moralistic to the realistic and India’s self-centred pursuit of strength” (cited in Chaulia 2002: 221). In reply to Raja Ramanna, a leading nuclear scientist, who asked him why he wanted to test at that juncture, Vajpayee simply said, “I want to see India as a strong country and not a soft one With the BJP nuclear weapons are seen as vital for national power and status” (Chengappa 2000: 52).

Within this strategic culture, there was nothing terribly problematic about the importance of nuclear weapons. It was obvious to its proponents and adherent’s that nuclear weapons must be an element of national power, and status. The all round vision

of BJP government was to glorify India's interests and power which create a strong image of India's position in the world.

Even though the immediate international reaction to its tests was extremely negative, subsequent actions by the United States and the others showed that India figured more keenly in their strategic calculations. Closely related to this power-enhancement argument is the notion that the tests were an Indian identity assertion exercise after it had suffered a dent when the country was forced to adopt economic liberalisation measures under intense pressure from international institutions (Varadarajan 2004: 319-342).

India demonstrated that it could do what only the five recognized major powers had done. The Indian achievement was even greater as it came against such odds and obstacles. In the words of Raja Ramanna, "India is the only developing country to have achieved such stupendous success in the field of atomic energy despite innumerable pressures and all sorts of discouragement from various nations." The Indian press and public have continued to glorify the achievements of the nuclear and ballistic missile establishments (cited in Perkovich 2000: 157).

Nuclear weapons are an instantaneous source of power and status in the BJP world view. Everyone can agree that in the long run, economic and technological power counts for a lot in terms of national capabilities and standing. Nuclear weapons are spectacular announcement of power that is difficult to ignore. "In the BJP strategic thinking it was not necessary for a state to wait for technological and economic power before developing military power. Rather the reverse is true in the view that national power comes primarily from military strength" (Bajpai 2009: 38).

Thereafter the decision to go nuclear is the status enhancing aspect. The acquisition of nuclear capability, the argument goes, was perceived as an assertion of India's place in the world.

Political Culture of the BJP

The BJP over the years has convinced itself and has sought to convince that in comparison with other parties in India it carries through policies that it believes to be right for the country. Till its formation from 1984 to coming into power in 1998 it had continuously pursued nuclear weapons as the source of power. It had historically been in favour of nuclear tests as the election manifesto of the BJP clearly depicts. Therefore when it formed the coalition government in 1998 it had to fulfil its promise it had made during the election campaign. The tests particularly suited the BJP because the politics of promise keeping needs something that evokes themes of sacrifice and cost-to India and to the party.

At the level of political culture, the BJP preoccupied infused with the idea that it is an organisation that delivers on its promise no matter what the cost to the party in terms of immediate political returns. The nuclear tests would be the promise that had been fulfilled (Bajpai 2009: 38). After the tests, one of the aides of t Vajpayee explained, "He wanted to come in with a bang at that time. It was also to say that he had kept his word on something he had been advocating India should do for the past thirty years" (ibid: 38).

After the tests, Vajpayee himself noted to his aides: "I had faith in the country's inherent strength to withstand any difficulties that may arise out of the test. The fundamentals of the economy were strong and in such cases I believe our people are ready to make any sacrifice for security of the country" (cited in Chengappa 2000: 50).

The political and strategic culture of the BJP could now serve as an influential tool for the nuclear test. The importance of the cultural factor becomes clearer when Narasimha Rao of the Congress party, Vajpayee's predecessor as prime minister chose not to test.

That Rao did not test and that Vajpayee did so, it might be argued, occurred because of different orientation towards risk taking, that is Rao was a risk-averse leader, whereas Vajpayee was risk accepting. The decision to test or not to test therefore depends on the risk preferences of the two leaders. A risk-averse leader might just as well have chosen to test and reap the almost certain political dividends of domestic approbation. Rao's decision to hold back the tests is thus more likely related to the nature of the Congress Party's strategic and political thinking than his risk-averse personality (Bajpai 2009: 38).

Hence it was the different perspective of the strategic and the political culture of the BJP from the Indian previous government which finally led to the nuclear tests in 1998. The BJP vision of India was clearly different from its predecessors which transformed the nuclear policy from ambiguity to acceptance of development of the nuclear weapons.

Role of the Decision Makers

Internal political developments played a significant role in determining the step change in India's nuclear policy. With the BJP at the helm, a change in nuclear policy was to be expected given that a pro-bomb stance had been one of the party's long-held objectives of all India's political parties. The BJP had been the most vociferous advocate of the bomb and had been critical of past Indian governments for lacking a suitably robust national security strategy. Therefore, when power changed, policy alterations were inevitable.

It is argued that the BJP was not the first government to consider nuclear testing. Indira Gandhi's government conducted a nuclear test in 1974, and the P. V. Narasimha Rao government evidently planned to conduct nuclear tests at the end of 1995 (Joeck 2002: 10). The nuclear test of 1974 was declared as a peaceful nuclear explosion and in 1995 the Congress government led by Narasimha Rao was intently pressurised by the government to cancel the test. The fear of economic sanctions convinced the Rao government to give leverage to economic security. But once the BJP came to power, this

balance apparently looked different. Although economic reform was an important element in the party's policy, the threat of sanctions arguably played into the hands of the strong nationalist faction within the party, the Rashtriya Swayamsevak Sangh (RSS), but favoured a more independent, even autocratic, economic policy (ibid: 12).

In any case, the value of creating a visible nuclear deterrent evidently outweighed the value of any economic growth that might have come at the expense of the BJP's strategic vision. Clearly the BJP's ideas differed from those of the Congress Party. Interestingly the following two governments H.D. Deve Gowda and Inder Kumar Gujral also chose not to test. It was only the BJP who finally took the decision to test. So change in nuclear policy also rests upon the priorities and preferences of the ruling government.

Given that three separate governments chose not to test, and only one did, the political party in power appears to have been a critical variable. Foreign Minister Jaswant Singh made the BJP aspirations clear:

It is axiomatic that unless India gives some definition to its vital national interests, it will fail to even conceptualize its strategic frontiers. Thereafter, a violation of any of those interests will, unfortunately, go entirely unchecked. In consequence, India's difficulties will be enhanced, future correctives will be made more difficult, and the country's national security will be adversely affected. This has been the root of India's past mistakes; this critical deficiency lies at the heart of its present immobility, both of thought and of action (Singh 1999: 278).

Nuclear Tests and BJP's Survivability

If the political and strategic culture of the BJP made it almost certain that the party, at some point in power, would authorise nuclear testing and the building of an overt nuclear weapons program, this still does not explain why Vajpayee tested when he did. It is inevitable to raise an issue why Vajpayee finally took the decision to conduct the nuclear tests. In fact, Vajpayee's personal political survival and desire to promote himself as a strong leader play an important factor in the decision to do the nuclear tests. Vajpayee decided to test in 1996 but due to instability of the coalition government cancel the test.

In 1998 again Vajpayee formed the government in alliance with seventeen other political parties known as National Democratic Alliance (NDA) (Chengappa 2000: 29). Therefore it could be believed that if he did not order the series of tests quickly, the opportunity might never reappear as his government can fall any time because of over fighting among the coalition partners.

Before we proceed any further, it is important to note that decision to test in 1998 was taken by Vajpayee and his closed adviser, Brajesh Mishra. Vajpayee personally was committed to making India a nuclear power, and he went ahead with the tests without a detailed policy review within the government. He made a decision on his own, having consulted senior scientists and a few senior BJP leaders (Bajpai 2009: 40). As on March 20, 1998, the day after Vajpayee was sworn in as prime minister; he met India's nuclear scientists again and asked for a briefing on India's nuclear program. He did not immediately clear the tests but indicated his strong interest in testing. On April 9, three days after the test of Pakistan's Ghauri missile, he indicated that the scientists should go ahead and fix a date with Mishra for the nuclear test (ibid: 41). The reason to test nuclear device was to bolster regime stability. It has been argued that a party heading a coalition government might have been tempered card to bolster its own survival (Mehta 1998: 403-406).

Vajpayee reason was clearly that of political survival as they faced in the aftermath of the fractured electoral verdict. For survival, Vajpayee had to manage his allies and the opposition, and he had to ward off extremists within his own party he had to refurbish his political image. Vajpayee viewed that nuclear tests would cement the party as the popular favourite and enhance its electoral standing. In 1998, the BJP was the largest single party in terms of the number of seats in Parliament, but it was nowhere near a majority. Electoral concerns and the need to maintain alliances with coalition partners had forced the BJP to moderate it with aggressive religious stances. Vajpayee also wanted to rule out that he is an ineffective and a weak prime minister. He wanted to

reframe his image as decisive, visionary and determined. As Bharat Karnad says “There is little doubt that Prime Minister Atal Bihari Vajpayee’s decision to resume nuclear testing at one level, sprang from his personal desire to disprove he was a weak leader” (Karnad 2002: 399).

Therefore it could be concluded that Vajpayee could count on the fact that testing was popular. Virtually all public opinion surveys on nuclear weapons suggested that testing and weaponisation brought about a huge wave of popularity. Opinion polls taken after the tests revealed that the decision to test had overwhelming popular support. A staggering 91 percent of the adult literate population had heard about the test and 90 percent of those polled felt personally proud of this achievement (cited in Sidhu 2004: 12).

Vajpayee was assured that a series of nuclear tests would have an impact internationally and therefore nationally. The tests, therefore, had a short-term and a longer-term meaning for Vajpayee. Their immediate impact would be to make it more difficult for his various allies to counter attack its allies and could easily cement it ties under the veil of nuclear tests. In the longer term, even if the alliance began to fray and the opposition parties gained strength, the conduct of the tests under a BJP government added to Vajpayee’s political credibility. The nuclear test is well acclaimed as a milestone in India’s foreign policy.

Role of the Scientific Community

The BJP’s ideological and electoral compulsions forced it to draw on prevailing institutional beliefs within India’s security establishment. This establishment, comprising sections of the civilian bureaucracy, think tanks, media, and armed forces, views nuclear weapons as an essential element of great power status.

Although India's nuclear capabilities are still primitive by the standards of the nuclear weapon states in earlier days, these capabilities have been created by fairly large and powerful bureaucratic structure centring on three principal complexes. These complexes-the atomic energy establishment, the defence research and development organisations, and the space research program have been termed "strategic enclaves" by Itty Abraham (Abraham: 1992).

The scientific enclave is likely to push for two distinct politics that will have a significant impact on India's nuclear posture. First, to continue research and development in weapon design. This effort will focus on developing a small number of distinctly different types of nuclear weapons (Tellis 2001: 91). Secondly, the enclave will press for continuation of different kinds of nuclear tests. Since the "peaceful nuclear explosion" carried out in 1974, the nuclear design establishment has been at the forefront of internal debates arguing for a resumption of hot testing (ibid: 92).

It has been suggested that the tests represented the culmination of a scientific and technological momentum. The Indian nuclear establishment had pursued two goals from the days of Dr. Homi Jehangir Bhaba. It helped to develop the capabilities to harness nuclear power to address the country's energy needs and scientific development, and it laid the foundations of a nuclear weapons program.

The strategic enclave of scientists and technologists has driven India's quest for nuclear capability. The AEC and the DRDO needed to prove their computer simulated weapon-related techniques developed since 1974, in order to get the confidence that India can build functional nuclear weapons. After the Non proliferation treaty extension in 1995 and adoption of the CTBT in 1996, the strategic community began to argue that India needed to conduct tests and validate its more sophisticated nuclear weapons designs before the political window of opportunity closed forever (Kampani 1998: 20).

According to Peter Lavoy, “a state is likely to go nuclear when national elite who want the state to develop nuclear weapons emphasize the country’s insecurity or its dissatisfactory international status to popularize the myth that the nuclear bomb would provide military security and power in international politics” (cited in Weixing 1998: 23)

India’s strategic elite regards nuclear weapons, ballistic missiles, and other high-tech weaponry as symbols of modernity and technological excellence that place India on par with the most advanced states in the world. This reflects India’s quest for modernisation, an effort that has led India’s state and political managers to try to reproduce Western paradigms of development and national security (Nandy 1989: 9-11).

Thus, India’s strategic community had an influential impact on the nuclear policy of the country which is seen in the 1974 and in 1998 tests.

Theoretical Analysis

After analysing the various domestic factors and its implications on Indian nuclear policy it is necessary to test it with several theories.

According to the domestic model by Scott Sagan, nuclear proliferation focuses on the domestic actors who encourage or discourage governments from pursuing the bomb. Whether or not the acquisition of nuclear weapons serves the national interests of a state, it is likely to serve the parochial bureaucratic or political interests of at least some individual actors within the state. Three kinds of actors commonly appear in historical case-studies of proliferation: the state's nuclear energy establishment (which includes officials in state-run laboratories as well as civilian reactor facilities); important units within the professional military (often within the air force, though sometimes in navy bureaucracies interested in nuclear propulsion); and politicians in states in which individual parties or the mass public strongly favor nuclear weapons acquisition. When such actors form coalitions that are strong enough to control the government's decision-making process-either through their direct political power or indirectly through their control of information-nuclear weapons programs are likely to thrive (Sagan 1996-1997: 63-64).

The domestic politics model provides insight on why India’s tests came at this particular time. It is the BJP’s rise to power that provided the political compulsion for the

tests. The Indian nuclear establishment, Atomic Energy Commission has lobbied hard for nuclear testing and weapon development. The BJP, a Hindu fundamentalist party, has made the development of an Indian nuclear deterrent as one of the most important election manifestos since its establishment in 1980. In 1984 the BJP only got two seats in the 543-member Lower House of Parliament. But in the 1998 election it became the single largest party in the Lower House with 180 seats and heads a coalition government. The 18-party coalition government led by the BJP is politically heterogeneous, and the BJP needs to retain political support by abandoning some of its plans. Operation Shakti (code name for the tests) was the best solution that as it could silence the critics both within and outside the coalition. For the BJP, nuclear weapon was an important source of power and serves the national strength.

Mitchell Reiss argues that “a decision on whether or not to develop nuclear weapons, if it is to be explained, must be placed within the larger framework of a country’s domestic and foreign policies” (Reiss 1988: 173).

Another exponent Etel Solingen argues that democratic states pursuing liberal economic policies may decide that it is not in their interests to develop an overt arsenal, due to their dependence on the global economy and the international community. As a result, they decide to keep their options open. It acknowledges that states have multiple goals and that these goals link foreign and domestic policies inextricably (Solingen 1994: 15).

Liberal Perspective of Domestic Politics

Liberal IR theory elaborates the insight of state-society relations. “The relationships of states to the domestic and transnational social context in which they are embedded have a fundamental impact on state behavior in world politics. Societal ideas, interests, and institutions influence state behavior by shaping state preferences, that is, the fundamental social purposes underlying the strategic calculations of governments. For liberals, the configuration of state preferences matters most in world politics” (Moravcsik 1997: 516).

The basic assumptions on which the liberal theory is based are the role of societal actors, representation and state preferences in the international system.

The Role of the Societal Actors

“The fundamental actors in international politics are individuals and private groups, who are on the average rational and risk-averse and who organize exchange and collective action to promote differentiated interests under constraints imposed by material scarcity, conflicting values, and variations in societal influence Liberal theory rests on a “bottom-up” view of politics in which the demands of individuals and societal groups are treated as analytically prior to politics” (ibid: 517).

Here we could analyse the role of the scientific elites and political parties who shaped the nuclear policy. Scientific elites have undoubtedly contributed to shaping the nuclear policy. Scientific and military establishment could be fitted into the prism of societal actors who promote their interests. India’ nuclear establishment has a strong vested interest in a nuclear weapons program because the consensus that the civil nuclear program had slowed down after the 1974 peaceful nuclear explosion and the nuclear test would bring a boost for military and scientific research.

Representation and State Preferences

In the liberal conception of domestic politics, the state is not an actor but a representative institution which is constantly changing due to the coalitions of social actors belt through which the preferences of individuals and groups are translated into state policy. “Representative institutions and practices constitute the critical ‘transmission directed as a transmission belt where individual group identities and interest are turned into foreign policy” (ibid: 518).

Vajpayee government and its ideological Hindu nationalism played a vital role in 1998 nuclear interest. The goal of *Sangh Parivar* clearly reflects the agenda on nuclear policy. The goal was to replace it with a hard boiled vision from a transition from

moralistic to realistic in which India aggressively pursues its national interest. Nuclear weapons are very attractive in this world view.

The liberal theory rejects not just the realist assumption that state preferences must be treated as if naturally conflicting, but equally the institutionalist assumption that they should be treated as if they were partially convergent, compromising a collective action problem. To the contrary, liberals causally privilege variation in the configuration of state preferences, while treating configurations of capabilities and information as if they were either fixed constraints or endogenous to state preferences (Keohane 1984:10).

Liberal theory gives importance to state preference. For example, during the NDA government the state preferences were to accept India as a nuclear weapon state. Its preferences were to enhance its identity prestige which could be glorified only by nuclear weapons. Vajpayee preferred a strong military power which was different from its predecessors. Narasimha Rao government was also in a same position in 1995 when he decided to test but cancelled because of the US pressure. That Rao did not test and that Vajpayee did so, it might be argued, occurred because of different orientation towards risk taking, that is Rao was a risk-averse leader, where as Vajpayee was risk accepting. The decision to test or not to test therefore rests on the risk preferences of the two leaders.

Neo classical Realist's explanation of the Domestic Politics

Neo-classical realists explicitly incorporate both external and internal variables, updating and systematizing certain insights drawn from classical realist thought. Its adherents argue that the scope and ambition of a country's foreign policy is driven first and foremost by its place in the international system and specifically by its relative material power capabilities. This is why they are realist. They argue further, however, that the impact of such power capabilities on foreign policy is indirect and complex, because systemic pressures must be translated through intervening variables at the unit level. This is why they are neoclassical (Rose 1998: 146).

To understand the way states interpret and respond to their external environment, they say, one must analyse, how systemic pressures are translated through unit-level intervening variables such as decision-makers' perceptions and domestic state structure.

In the neoclassical realist world leaders can be constrained by both international and domestic politics. Therefore according to them the first intervening variable they introduce is decision-makers' perceptions, through which systemic pressures must be filtered (ibid: 152).

Neoclassical realists, argue that the international distribution of power can drive countries' behaviour only by influencing the decisions of officials, political parties which they point out, and would-be analysts of foreign policy. They explore in detail how each country's policymakers actually understand their situation.

India's nuclear policy could be well fit into this as it has greatly influenced by the strategic constraints. But still it is the domestic policy makers who finally carved out the nuclear policy and domestic actors played a crucial role of intervening variable strategy. US-China-Pakistan axis and the non proliferation treaty forced India to adopt a viable nuclear policy. But still it was only the NDA government which finally declared India as a nuclear weapon state. Therefore, it is the role of policymaker which is indicated as an intervening variable through which final nuclear policy was designed. The roles of political parties as a policy makers are well suited in the sphere of intervening variable.

The second intervening variable emphasised by neoclassical realist Fareed Zakaria is the concept of state power. "He affirms the logic that capabilities shape intentions but finds it necessary to introduce state strength as an intervening variable between national capabilities and officials' behaviour: Foreign policy is made not by the nation as a whole but by its government. Consequently, what matters is state power, not national power" (Zakaria 1999: 9).

This variable can be explained by analysing the behaviour of the BJP government. The Rao government too tried to conduct the nuclear test but it was only the BJP

government which finally destined it. Vajpayee demonstrated the vigour or capability to capitalise the national power into state power. BJP was the only government which shaped India's nuclear policy by adopting the nuclear doctrine and declared India as the nuclear weapon state. Therefore, national power was transformed into state power by the BJP government.

We could conclude it by asserting that both liberal and neoclassical theories on their point are able to explain their theories by emphasising upon domestic actors. Liberal theory gives privilege to state preference and decision makers while neoclassical only accept it as an important but intervening variable between international and foreign policy. Both of these theories induce the importance of domestic actors in contradiction to the neo-realist perception.

Conclusion

Lastly we could conclude that the main purpose of this chapter is to provide evidence in support of the claim that India foreign policy under the NDA government underwent a reorientation. Domestic politics certainly played a major role in the decision to test. This proves the argument that decision makers regard change as the best way to ensure their survival in an anarchic world. It was significant that notwithstanding the constraints like a weak coalition government, bureaucratic pressures and strong '*Hindutava* ideology comprises a significant role in transformation of nuclear policy. The BJP's nationalist security agenda shows that it, like the Congress Party, has pledged to defend the unity and integrity of India under all circumstances.

However, unlike the Congress, whose concept of national integration was territorial and political, the BJP's concept is influenced by religion and culture. While affirming its ideal of national integrity, the party mentions that its notion of national security tends to glorify the ancient Hindu traditions of Hindustan.

Chapter Four

The Systemic Sources of India's Nuclear Policy

The focus of this chapter is to discuss the influence of the systemic factors on the transformation of India's nuclear policy. For this purpose the introductory part of the chapter focuses on the ambiguous nature of the India's nuclear policy, since independence, though briefly. It analyses various reasons responsible for the nuclear tests and tries to explain why nuclear option was always retained by India. The second part of the chapter provides a brief outline of the theories in International Relations which deal with the question of proliferation of the nuclear weapons. Thereafter, the ensuing section provides a brief analysis of various systemic factors responsible for the outbreak of nuclear explosion in 1998. The conclusion part of the chapter sums up the observations.

Introduction

After a gap of almost 24 years, India shocked the world by exploding nuclear explosive device in early May 1998. It was the time when the international community had solemnly expressed a desire, through the Comprehensive Test Ban Treaty (CTBT), to refrain from the field testing of nuclear explosives. On May 11, 1998, India abruptly announced that New Delhi had conducted three nuclear tests, one of which involved the detonation of a thermonuclear device. The global community before responding to this development, saw India announcing two days later that it had conducted two more detonations that purportedly "completed the planned series of underground tests" (Tellis 2000: 1). These developments, among many others, moved one of India's leading strategic commentators to reflect on the momentous events of May 1998 in the following terms,

The world knew for quite some time that both India and Pakistan have been in possession of atomic weapons, although they were not formally recognized as nuclear weapon powers. The great powers have hoped that the anomalous nuclear standing of India and Pakistan in the international nuclear system could be fudged. They have striven hard to keep the Indian and Pakistani nuclear capabilities under wraps forever. But the hot summer of 1998 has finally vapourised [sic] the veil of nuclear ambiguity in the Indian subcontinent. As a consequence, the security situation in the subcontinent and the global nuclear order are unlikely to be the same ever again (Mohan: 1998).

In the same time frame, another prominent Indian analyst concluded that the nuclear tests had allowed India to become “a willing and active player in the international nuclear arms control regime,” but with a difference: “the difference now is that India seeks to play that game as a nuclear weapons power. This is the end of ambiguity and hypocrisy” (Gupta: 1998).

The history of the Indian nuclear program began with the country’s independence in 1947. The attitudes of India’s leadership towards nuclear weaponry evolved gradually over the years. Strong opposition to nuclear weapons was most visible during the 1950s, when India, having recently emerged from the colonial era, sought to put forth a brand of politics that emphasised economic development and, the harnessing of atomic energy for peaceful purposes (Ganguly 1983: 30).

India’s approach toward nuclear power during this period was the use of nuclear energy as a cost effective solution to its vast developmental problems. This opposition to nuclear weapons and to nuclear weaponry per se as instruments of high politics, changed during the 1960s when India became aware of the Chinese threat and of China’s nuclear power, following its defeat in the Sino-Indian border war of 1962. Indian strategic circles thought of the possibility of extending civilian nuclear technology to defense applications (Tellis 2001:10-11).

This attempt to exploit the civilian nuclear energy and research infrastructure for strategic purposes reached its peak in 1974, when India carried out its first atomic test and dubbed it as a “peaceful nuclear explosion”, while simultaneously reiterating its opposition to nuclear weaponry (Jaipal 1977: 44-51).

The ambiguity that arose from India’s demonstrated ability to make nuclear weapons, continued throughout the 1980s and well into the 1990s. Finally the end of the Cold War transformed international politics and tilted the axis in favour of United States. The rise

of China and continued strains with Pakistan made the 1980s and 1990s a greatly troubling period for India. The nuclear non-proliferation treaty (NPT) was extended indefinitely and unconditionally in 1995, perpetuating the existence of nuclear weapons in the hands of five countries busily modernizing their nuclear arsenals. In 1996, after they had conducted over 2,000 tests, a Comprehensive Test Ban Treaty (CTBT) was opened for signature, following two and a half years of negotiations in which India participated actively. This treaty was neither comprehensive nor related to disarmament but rather devoted to ratifying the nuclear *status quo*. India's options had narrowed critically (Singh 1998: 41).

India's strategic environment grew both more complex and dangerous after 1990, the medium range political calculations seemed to have made it easier to go nuclear, and there was a general movement away from opposition to nuclear weapon *per se* and growth of militant nuclearisation. Nuclearisation now seemed capable of solving a wide range of national, cultural and strategic problems. These created an environment in which the decision to go nuclear was domestically permissible and perhaps politically essential for those on the Indian right (Cohen 2001: 177). Indian nuclear policy for much of the Cold War period and thereafter focused on attaining two sets of objectives. The first set of objectives consisted of promoting the global abolition of nuclear weaponry and, secondly towards sustaining India's capability to produce fissile materials for nuclear weapons (Tellis 2001: 13).

Theoretical Analysis

The concept of nuclear proliferation has not been adequately defined by the contemporary approaches, making a rigorous approach more difficult. Furthermore an elaborate definition of the word 'nuclear puzzle' has not been given. Different theories have explained their own perception about nuclear proliferation.

Classical realism is perhaps oldest of theories to be applied to the proliferation puzzle. Classical realist explanations of international politics are based on the assumption

that states are unitary actors that seek to maximize their power. Political realism believes that politics, like society in general, is governed by objective laws that have their roots in human nature. It's main emphasis is on how statesman think and act in interest defined in terms of power. In order to improve society it is first necessary to understand the laws by which society lives. The main signpost that helps political realism to find its way through the landscape of international politics is the concept of interest defined in terms of power. It sets politics as an autonomous sphere of action and understanding apart from other spheres, such as economics understood in terms of interest defined as wealth, ethics, aesthetics, or religion (Morgenthau 1978: 4-15).

It explains how nuclear weapon plays a peculiar tool to acquire power in the adverse circumstances in post cold war years. Classical realist tends to explain some extent that during the 1990's era India main interest was to maximize its power. Therefore development of nuclear weapon was regarded as an apparent solution for it.

Kenneth Waltz uses rational deterrence theory to explain the slow spread of nuclear weapons and their impact on the international system. According to this theory, once more than one state has acquired a second-strike nuclear capability, war between the nuclear armed states is unlikely to occur, due to the fact that mutual destruction is virtually assured (Waltz 1990: 734). This creates an incentive for many states to acquire nuclear capabilities to guard against war and to ensure their survival. It follows from this argument that nuclear weapons will inevitably spread, and that the more they spread the better it will be for international stability. Waltz's is of the opinion, however, that when faced with explaining the complex dynamics of nuclear proliferation, rational deterrence theory alone is not suited to the task (Waltz 1990: 737).

Zachary S. Davis developed broader approaches to explain nuclear weapons proliferation, which remain in the classical realist mould, but provide a more convincing explanation of proliferation dynamics. He claims that "Classical realism provides a complete explanation for the causes of nuclear proliferation and international responses

to it non-proliferation. Davis argues that states are driven to acquire nuclear weapons only if they feel that they will contribute in some way to their national security. In many cases, states will decide that their security will actually be threatened by the presence of nuclear weapons, and this is their incentive to cooperate with other states in the non-proliferation regime (Davis and Betts 1993: 79).

The theory of neorealism has also been used to explain the dynamics of nuclear proliferation and has provided some controversial explanations of the phenomenon. It is based on the same assumptions as classical realism, but adds an extra dimension to it: based on the idea that the structure of the international system (whether unipolar, bipolar, or multipolar) influences international politics and can explain international outcomes. Waltz originally developed the theory to explain why the world enjoyed such a long period of peace between the great powers during the Cold War, concluding that the bipolar structure of the international system caused this peace. However, he made it clear at the time that the theory was developed to explain how states are constrained by the structure of the international system and not to explain the more complex problems of how states would react to these constraints (Waltz 1979: 72-73).

The international system constrains the states within the system to behave in a particular way so as to ensure their own security and in turn, of the other states within the system. It dubs international system as being anarchic which asks for cooperation among the states for mutual survival. He admits that both unit level and external factors would need to be taken into account to explain behaviour of this kind, and that neo realism as not developed for this task (Keohane 1986: 343). Structural realist explains India's nuclear tests purely on strategic constraints. The deteriorating security environment and discriminatory nuclear non proliferation treaties were structural constraints which pushed India towards nuclear tests.

Benjamin Frankel believes that neorealism is an "explicit and accessible theory of nuclear weapons proliferation" (Frankel 1993: 37). He argues that the shift from

bipolarity to multi polarity since the end of the Cold War is the most important incentive for intensified proliferation as states attempt to ensure their survival after the removal or loosening of superpower “overlay.”(ibid: 38).

Barry Buzan, Charles Jones, and Richard Little have attempted to rectify some of the problems of traditional neorealism by bringing the state back in (Buzan, Jones, and Little 1993: 9). They began their work in response to Waltz’s brand of neo-realism, which could not explain the dramatic system change that occurred with the disintegration of the Soviet Union. This version of what they term “structural realism” argues that ultimately, unit level characteristics must be brought back into neo-realist theory to explain the shift from the bipolar structure of the international system during the Cold War to the multi polar structure of the post-Cold War world. As a result they have developed a more complex form of neorealist theory that allows for functional differentiation among states, accepts that states do not necessarily imitate each other in their battle for survival, and shows the system to be more dynamic and more difficult to predict than traditional neorealists had claimed (Buzan 1993: 11-13).

Thus it may be argued that if policymakers accept the arguments of the realist school, it leads to nuclear proliferation being regarded purely as a security issue determined by external pressures. Thus logically the policy recommendations will tend to focus on external constraints such as arms control, security assurances, and security environment in the immediate neighbourhood of country, global nuclear regimes and search for a greater role in the world politics. After explaining various theories of nuclear non proliferation it will be discussed how these theories fit into the case of India’s acquisition of nuclear weapons.

Strategic Factors of Pokhran II

From the above discussion it follows that three factors may be identified to explain the shift in the India’s nuclear policy in the post Cold War era. Among them, the systemic influences had a great bearing on the policy together with the changes in the immediate

security environment which India had to face in that era. Further, India's desire to achieve responsibility as a global power strengthened its resolve to bring about a deliberate shift in the ways it's looked at the nuclear weapons both in the normative as well as realistic sense. All of them need a separate discussion out here for a better and clear understanding. First will be the explanation of the concept of system approach by Robert Jervis and sub-systematic by William R. Thomson. Secondly the three systemic factors will be elaborated in detail.

Robert Jervis identified three characteristics of a systemic approach. First, outcomes may not be due to the attributes of actors, because a system can produce consequences that are not necessarily what the actors intended. Second, units are interconnected, that is, changes in some parts of the system produce changes in other parts. And third, relations between any two actors are conditioned in part by the relations between each of them and other actors in the international system (Jervis 1997: 212-244).

The term "sub-systemic" is used for interactions limited to a specific regional system. A systemic approach would explain the security behaviour of a state in terms of its position in the international system and how this position is affected by the interactions between it and the major power actors. A sub-systemic analysis would focus on interactions and power relationships among the most prominent actors within a region (Thompson 1973: 89-117).

Therefore a systemic approach is based on the assumption that states placed differently in the international system will have different security concerns and interests. Great powers tend to have global interests, while the security concerns and interests of most middle powers and small powers are concentrated in a given region. Aspiring great powers also perceive their security as being tied to the larger balance-of-power processes occurring in the international system, involving other established powers. India perceived the then prevailing world order as being discriminatory and negating India its legitimate

position within the International system which stemmed from the continued opposition of several countries most of them the great powers, against induction of India in the United Nations Security Council as a permanent member. This pressure on India only strengthened the resolve of New Delhi to shed off its earlier normative considerations regarding the use of the nuclear physics and to embark upon a new thinking on the issue of nuclear energy.

China-Pakistan-United States Triangle

The regional security apprehension deterred India to renounce its military option to strive for its survival and security. The nuclear activities of China and Pakistan, the United States and its allies have solidified their position on the non proliferation regime. Therefore it is evident for India to act on its self help which could only be fulfilled by acquisition of nuclear weapons. The circumstances which led to US Pakistan China axis clearly determined the path for nuclear proliferation.

Ehsan Aharari argues that India wanted to become a nuclear power for three reasons. First, because China had detonated its own nuclear device in 1964 only two years after it had humiliated India's armed forces in a limited border war. Second, because Pakistan's closeted nuclear program constantly drove India's own fear of getting caught off-guard (Ahrari 2004: 210).

The end of the Cold War saw India's close ally and a friend for several decades the former Soviet Union disintegration and thus losing its power and influence in the international system. With the collapse of the Soviet Union India had no one to fall back on in case of a nuclear attack on it. The post Cold War developments gave rise to new world order where the United States as the sole super power dominated the world. Moreover, because non-alignment was a response to Cold War rivalry, it lost much of its meaning as a policy posture when the Cold War ended. India's regional rival, China, has become accepted as a major power despite initial opposition by the West. India thus feels more isolated than ever (Paul 1998: 2).

China and India have been rivals in South Asia and world affairs. Territorial issues namely boundary dispute in the Himalayas and Chinese possession of a part of Kashmir along with China's refusal to acknowledge Indian sovereignty in Sikkim and Arunachal Pradesh intensified the rivalry (Kapur 2001: 181-182).

This rivalry ended in a military conflict in the 1962 India China war. Following India's humiliating defeat in the war, India became embroiled a wide-ranging debate on the need to develop nuclear weapons. This was exacerbated the public declaration by the Chinese in 1964 of their intention develop atomic weapons. Homi Bhabha, the founder India's atomic energy program, stated that it would be difficult to follow policy of restraint with introduction of nuclear weapons in the neighbourhood. Soon after the Chinese, thermonuclear test in 1967, a scientific effort began to study the design of nuclear explosives (Ollapally 2001: 929).

The China factor impacted India's strategic psyche from two other directions. Beginning in the early 1980s, China developed its diplomatic, economic, and military links with Myanmar. Secondly, Chinese naval personnel were active in developing radar and low frequency communication facilities in the Bay of Bengal, which were close to Indian naval facilities. In short, this period revealed China's increasing encirclement of India by diplomatic and military means, and by the build-up of a China-US-Pakistan coalition-with support from the international community (Kapur 2001: 89).

After discussing China the next sub systemic constraints which posed threat to India was Pakistan. The origins of the India-Pakistan conflict have been traced to many sources: the cupidity of British in their failed management of the partition; the deeply rooted antagonisms between the Subcontinent's major religious communities, Hindu and Muslims; the struggle for control over Kashmir; Kashmir's importance to the national identities of both states; and the greed or personal short-sightedness of leaders on both sides of the border (Cohen 2001: 198).

If there is anything constant in the relations between the two, it has been that they have never been constant. Several ups and downs have marked the relations between the two over six decades. These two have fought four wars in 1947, 1965, and 1971 and recently in 1999. Bilateral disputes created a deep trust deficit in the relations between the two ever since they came in to existence. India does in fact face a nuclear threat of some magnitude from Pakistan. India's civilian leadership has clearly accepted and affirmed the emergence of Pakistan's evolving nuclear capabilities even if many uncertainties remain about what that implies in terms of the balance of power vis-a vis India. Pakistan's nuclear potential, as exemplified both by its weaponry and by the plethora of delivery systems it is developing or has already acquired is certainly problematic in that for the first time in India's post independence history (Tellis 2001: 45).

If Pakistan perceives its nuclear capabilities as providing, among other things, the requisite strategic cover with which to immunize it against any military counteraction in the context of some ongoing unconventional conflict with India, New Delhi will face strong pressure to shift its overall nuclear posture to cope with the challenges of nuclear coercion. Overall end of the cold war clearly carved out the strong position of United States.

Geography is the great determinant of potentially good or bad relations between a great power and a would-be great power. The farther away a great power is the more diluted its interests in any particular region, and the more diffused its stake, the less likely it is that there will be a clash of interest, or that such clash will be resolved by the use of force. With India and the United States on virtually the opposite sides of the earth and keeping in the mind the global nature of American interests, the only serious differences between them can emerge, as they did during the Cold War, on the basis of conflicting ideology and or geopolitical alliance (Karnad 2002: 541).

Pakistan is important to the US both for its connection with Afghanistan and Central Asia, and for its long-standing relationship with Saudi Arabia. The latter link in very well with the paramount importance the US attaches to strategic control of Middle East. Here, it is informal US-dominated nexus pertaining to its influence and control over three states that is of vital significance-Saudi Arabia, Egypt and Israel. Moreover, Pakistan, unlike India, is more pliable and reliable strategic ally for future and it has proved to so in the past (Bidwai and Vanaik 1999: 229).

Thus US has no reason whatsoever to interpret the India-US relationship in the way that India's own strategic community understands or interprets it, or to draw the same corollaries concerning the necessary 'rearrangement' or 'adjust' attendant upon consolidating such a strategic link between the two countries. For this reason alone, tensions have continued to persist throughout the nineties in the post Cold War era despite the new opportunities and inclinations that have arisen for forgoing a closer Indo-US relationship (ibid : 230). Thus individually India foreign policies in respect to these countries were not smooth. So Post Cold War when India was isolated in the world the alliances among three countries provoked India to seek for its own self help.

The Sino-Pakistani connection, which has steadily strengthened since the early 1980s, is seen this context as placing Islamabad at an additional advantage. According to authoritative sources in the West, China has been involved in significant degree of nuclear cooperation with Pakistan (Tellis 2001: 46)

China has also helped Pakistan acquire reasonably efficient missile delivery systems-weapons that Islamabad had always desired because of the high degree of assured penetrability they represented in the face of India's relatively superior air defense network. Indeed, Chinese assistance is suspected even in the development of Pakistan's first indigenous missiles, the Hatf-1 and Hatf-2, both of which derived from the sounding rocket technologies imported from France by Pakistan's Space and Upper Atmosphere

Research Organisation in 1992 or thereabouts, when Beijing sold 34 M-11 ballistic missile to Islamabad (Tellis 2001: 47).

With active support from China, Pakistan was emboldened to almost openly support the uprising in Kashmir. Further, the collusion of China with Pakistan and the active support to Pakistan's nuclear ambitions by China called for a rethink on the India's nuclear policy. In regard to both China and Pakistan, India's attachment to nuclear weapons therefore remains strong in the new political environment. Nevertheless, the security benefits that India gains from them seem increasingly open to question (Mirchandani 1968: 39).

In 1997 more evidence surfaced on the proliferation between China and Pakistan and about US permissiveness on this issue. During Chinese President Jiang Zemin's recent visit to Washington, the US insisted on a separate agreement with Zemin on Chinese proliferation to Iran and Pakistan which China signed instead of professing their innocence. Both the US unease and the Chinese signature attest Chinese proliferation as a threat to security. After all these assurances, continued to pass missile technology and components to Pakistan. Despite this, the Clinton administration was still willing to certify that China was not proliferating or even worse for India - that the US was either unable or unwilling to restrain China. As the range of options for India narrowed, so, too, did the difficulties of taking corrective action (Singh 1998: 46).

US on the other side too supplied aid package which included F-16 fighting aircraft. It was viewed that F-16 would fundamentally change the conventional balance of power (Kux 1992: 383). In addition Indian was worried of the fact US- Pakistan alliance and China-Pak alliance would eventually lead to Washington Beijing and Islamabad axis. It would dramatically change India's strategic environment.

In short, this period revealed China's increasing encirclement of India by diplomatic and military means, and by the build up of a China-US- Pakistan coalition

with support from the international community. As before the aim was to corner was India in sub -continental as well as in global affairs.

“Nuclear weapons may have psychological value for India as it contemplates China’s development in years ahead, but it is becoming harder to see how India could use them to influence Chinese behaviour in any substantial way. And in the context of relations with Pakistan, nuclear weapons have, if anything, blunted the advantage that India undoubtedly possesses in the field of conventional warfare” (Walker 1996 : 64).

Non-Proliferation Efforts and the Question of India

Since independence from Britain in 1947, India became a strong proponent of nuclear disarmament. In the word of the first Indian Prime Minister, Jawaharlal Nehru: “The objective of India is disarmament and we regard arms control as a means to achieve it. It is a step in that direction. It is important to seek agreement, on arms control measures especially when we have a situation in which disarmament has become a complex problem” (Jain 1974: 2-4). But he reiterated that “arms control is not disarmament and to make it an objective is to abandon the hope for disarmament” (Jain 1974: 5-6).

With China’s nuclear test in 1964, the Indian position on nuclear weapons changed dramatically. Although China was acquiring nuclear weapons to obtain major power status and to prevent nuclear coercion by the United States or the Soviet Union, the Chinese action nonetheless altered India’s immediate strategic environment profoundly. Following the nuclear tests by China the world leaders particularly the great powers started negotiations regarding a non-proliferation treaty.

The Nuclear Proliferation Treaty (NPT) of 1967 was the logical outcome of the efforts. The NPT was opened for signatures in 1968 and presently about 189 countries are signatories to the treaty except India, Pakistan and Israel. North-Korea signed the treaty, ratified it and later withdrew. India favoured the conclusion of a non-discriminatory treaty, but later became a strong opponent of the NPT, believing that the nuclear powers

wished to maintain their monopoly and that the treaty was primarily aimed at curtailing the nuclear aspirations of non-nuclear weapon states.

The NPT and associated arrangements in the non-proliferation regime were openly discriminatory. The Treaty validated the legality of five nuclear weapons states and it legitimized their right to bear nuclear arms; conversely, it de-legitimized the sovereign rights of others to use all military measures nuclear weapon for self-defense. The NPT was politically discriminatory because it created two different sets of obligations and rights. The non-nuclear weapon states have an obligation to disarm as well as never to seek nuclear arms except when supreme interests require a renunciation of NPT obligation with three months notice. On the other hand nuclear weapons states have their rights; but their obligation to move towards nuclear disarmament was vague as it lacked a time frame, and contrary to the declared military doctrines and the national interests of the five nuclear powers (Kapur 2001: 187).

The NPT calls upon the signatory nuclear weapons states not to transfer induce or, assist the non nuclear weapon states to acquire nuclear weapons or nuclear devices. It recognizes only five nuclear weapons states that have tested a device before 1967 (Mirchandani 1968: 123).

Initially India was favourable to the conclusion of a non-discriminatory treaty, but later became a strong opponent of the NPT, realising that the nuclear powers wanted to curb the legitimate right of the non-nuclear weapon states, that is, the right to peaceful uses of nuclear energy. During the negotiations leading to the treaty, the Indian leaders vehemently opposed it. The major irritant was that the treaty created two classes of states: those that had tested a nuclear device before January 1967 and those that had not done so by that date. The treaty would not only legitimise the nuclear capabilities of the five states that had conducted such tests, including China, but would prevent India from developing a nuclear weapon capability, even if a major threat arose (Rai 2009: 214).

In the second half of the 1990s, two events that were related to then non proliferation regime further aggravated the Indian sense of grievance against the world nuclear order. The first was the indefinite extension of the NPT in May 1995, largely as a result of pressures exerted by the United States and its allies. Some non-aligned signatories of the treaty sought rolling extensions for 25-year periods, with further renewals sub subject to progress in nuclear disarmament, but they did not carry the day. This treaty outcome gave every indication to India that the nuclear weapon states were keen to maintain their monopoly rights for a long time. From the Indian point of view, “disarming the unarmed” had become the main value of the NPT, rather than genuine global nuclear disarmament. (Rauf and Johnson 1995: 28-41).

The indefinite expansion of NPT after 1995, largely as a result of the pressure from the United States, further aggravated the concerns of India. The Indian government thought that US would fail to cobble together a coalition that would unconditionally and indefinitely extend the treaty. Such expectations were belied as able and relentless American diplomacy ensured the achievement of the US goal (Dunn 1995: 3-9).

The indefinite extension of NPT in 1995 was premised on the belief that a genuine Comprehensive Test Ban Treaty (CTBT) by the end of 1996 would be the next logical step. As a consequence, goal nuclear disarmament was seen ideally by most countries as the final goal of extension and review conference.

In India’s case, there was no opposition to a test ban *per se*, but the nuclear establishment strongly opposed any treaty that threatened the nuclear option. Its members knew that the 1974 test was not a success, and fresh tests were required (Cohen 2001: 173).

Unsurprisingly, the debate within India over the CTBT was framed by the Indian pro-bomb lobby in such a way that opposing the CTBT was taken to be a blow for Indian autonomy and a blow against American hegemonism. The anti-CTBT position thus

encompassed right-wing and conservative militants, a traditional left-wing anti-American faction, and advocates of nonalignment (ibid: 174).

India, during the CTBT negotiations, was more concerned that the treaty that would emerge would effectively prevent proliferation and would ensure the process of disarmament. This approach epitomized in the language and the spirit committee-primarily concerned with the drafting of the treaty but final treaty that emerged did not do justice to this negotiating mandate as it lacked a definitive commitment to nuclear disarmament (Mattoo. 1999: 341).

As Bidwai wrote, “Whatever the weakness of the present CTBT, it is indisputably a normative measure favouring nuclear arms reduction and disarmament, and a commitment not to conduct nuclear test explosion. This commitment is the least that India can demand of the world, and above all, of itself” (Perkovich 2000: 381).

It has been argued that this posture of ‘strategic ambiguity’ helped India to harmonise its national security imperatives with its disarmament objective. First, because of its very opaqueness and uncertainty, it offered an existential deterrent against China. Second, it pre-empted Pakistan from overtly seeking countervailing nuclear capability. Third, it implicitly avoided any direct confrontation with global non-proliferation regime led by the nuclear powers. Lastly, this ambiguity helped India to continue with efforts towards nuclear disarmament (Mattoo 1996: 41-57).

By summer 1995, it became clear to Indian negotiators that the scope of the proposed treaty was basically a P-5 bargain, just as the NPT’s scope was basically a US-USSR bargain. It also became clear to them that the CTBT was being projected by all the P-5 countries, and especially by UK, as a non-proliferation measure and not as a disarmament one. The Indian concern was shared by many third world participants but they were not able to effectively challenge the authority of the P-5 powers (Kapur 2001: 206).

The defining moment in the Indian debate came on June 20, 1996 when the United Front government in India authorised Arundhati Ghose to publicly state in the Geneva negotiations over the CTBT, that as far as India is concerned, "security interests were a consideration and would be compromised by signing the treaty (cited in Cohen 2001: 174).

"We cannot accept that it is legitimate for some countries to possess nuclear weapons while denying this right to others. Under such circumstances it is natural that our national security considerations become a key factor in our decision making... Countries around us continue their programmes either openly or in a clandestine manner. In such an environment India cannot accept any restraint on its capability, if other countries remain unwilling to accept obligation to eliminate their nuclear weapons", the Indian representative Arundhati Ghose said. "The present CTBT is shaped more by technical preferences of nuclear weapon states rather than by imperatives of disarmament. This cannot be the CTBT India can be expected to accept" (Statement by Ghose cited in Singh 1998: 242).

Finally India rejected the Treaty on three grounds:

First, the nuclear weapon states failed to give a commitment to eliminate their nuclear weapons in a reasonable and negotiated finite span of time. India felt that in the absence of such a commitment, The Treaty would become an unequal treaty retaining the present discriminatory nuclear regime and sanctioning, in effect, the possession of nuclear weapons by some countries for their security, while ignoring the security concern of other States (Mattoo 1999: 339).

Second, the CTBT failed to effectively contribute to nuclear non-proliferation in all aspects. It banned only explosive testing. As the Treaty text does not ban qualitative development, it cannot be considered an integral first step of a nuclear disarmament process (ibid: 340).

Third, the Treaty includes the EIF (Entry into Force) clause: Article 14 of the CTBT concerns the requirements for EIF. The EIF clause requires that 44 states, including all P-5 nuclear powers, as well as Israel, India and Pakistan must sign and ratify the treaty before it comes into force. The United Kingdom, Russia, China, Egypt and Pakistan insisted on EIF. Russia would not agree to the CTBT unless the People Republic of China (PRC) did, and the PRC would not agree until India did, and so on. The United States initially did not insist on this particular formula for EIF, but it faced a dilemma, and it agreed eventually with the formula as it was finally adopted (Rai 2009: 234).

These three major criticisms indicate that the critics of the treaty see it as way to co-opt India into the non-proliferation regime. It is a control mechanism for those who are not members of the NPT. India's hardened its stances against the treaty during 1995-96 and the eventual refusal to agree to the consensus at the Disarmament Conference in Geneva in June 1996.

According to Ashok Kapur the main constraints in the CTBT were: Firstly according to India Article I was not comprehensive. It allowed weapons development and testing in laboratory condition. It created a technological discrimination in favour of the technologically advanced states. It permitted nuclear weapon states especially the USA to maintain their technological advantage in nuclear sphere. At the same time, this article capped other states that are lower on the technological curve by eliminating their right and opportunity to test and to manage the gap with the states higher on the technological curve. Secondly it was an offspring of NPT as it was projected by the permanent countries *e.g.* US, Russia, China, France and United Kingdom as a non-proliferation measure and not as disarmament measure. Thirdly there is no time bound scheduled for nuclear disarmament in the CTBT. Fourthly it affected Indian security because it choked the test route to the development of nuclear explosive technology and it narrowed the window of opportunity to the development of non-explosive technology under laboratory conditions. Lastly, the other objections concerned the harassment potential and EIF (Entry into Force) requirement that placed India on a collision course with USA and

China. In rejecting the CTBT in 1996, the Gujral government emphasised the importance of national security and the Indian nuclear option in the Indian decision on the CTBT (Kapur 2001: 239).

Thus there were three major contextual elements in the 1990's that shaped the CTBT and India's reaction to it; there loomed nuclear clouds over Sino-India and Indo-Pak relations, there was a subtle redistribution of powers and authority within Indian political system and, adherence of France and China to NPT indicated the emergence of strategic bargain that solidified the discriminatory regime (Rai 2009: 229).

It seemed that the Indian position on CTBT had come a full circle after it conducted tests in 1998. India declared a moratorium on further nuclear tests and simultaneously indicated it would convert this *defacto* commitment to *de jure* status. India's accession to the CTBT had been one of the main issues that were being negotiated in the Indo-US talks in 2000. The Indian prime minister, Atal Bihari Vajpayee too, in his address to the UN General Assembly in 1999 had indicated that India was prepared to bring the discussion on CTBT to successful conclusion (Rai 2009: 234).

Although the Indian government has expressed its willingness to sign the CTBT in the past, the political uncertainty in India and an intense opposition to this move had made it difficult for it to make its position clear on these vexed issues. The decision to sign the CTBT had generated an intense political controversy and it had emerged as one of the most debated issues in the Indian strategic circles. Till date no consensus seems to have emerged in India on the issue of CTBT. The preceding discussion makes it clear that there has been a gradual change in India's position with regard to CTBT over time, thereby representing a historic opportunity for international community to complete the global nuclear architecture. Despite some security implications from India signing the CTBT, it has tried hard to reconcile its security interests with the global arms control norms, highlighting the significance of nuclear arms control for international stability. The CTBT emerged as the key vehicle for redefining India's arms control position after

its nuclear tests and coming to terms with global nuclear order that India had long considered inequitable.

Accordingly India went nuclear to enhance its prestige and status. It was found that the NPT and the CTBT were measures to target India and to bring it under the purview of non proliferation regimes. Therefore, in order to maintain a stable and powerful position and disapprove the discriminatory non proliferation treaties India exploded nuclear devices on May 1998. The nuclear tests reflected the credibility of India as a strong and powerful state.

Richard K. Betts argues that the incentive for India to go nuclear had more to do with the prestige element. He argues that “India is the dominant power in the region and one of the principal ‘emerging middle powers’ in the world. On a prima facie basis, this suggests that prestige incentives for nuclear weapons would be higher for India than they would be for Brazil” (Betts 1979: 1053-1072).

The essence of the nuclear arms race is power-military, political, and economic, argues William Epstein. He is of the opinion that “the incentives and disincentives for countries to go nuclear comprise a combination of military, political, and economic concerns and motivations. These vary over time for different countries” (Epstein 1977: 16).

He further adds that it has become obvious to all countries that the acquisition of nuclear weapons and the technology for making them enhance a nation's prestige and status in the world, not just in military terms, but also in other ways. States possessing these arms are given greater weight in the entire range of foreign policy matters. They are brought into more top level international discussions of all kinds, and their views are treated with greater respect (ibid: 21).

In Search of a New Role

India's foreign policy during the early decades after independence was based on a global role centred on non-alignment and leadership in the developing world. It relied heavily on India's standing as the largest democracy in the world, and on articulate Indian leaders who appealed to justice and idealism. Its hallmarks included resistance to the then prevailing division of the world into East and West and a push for economic aid and redistribution. As the world and India's role in it evolve, India's military power and economic success are key building blocks for the role it aspires to have.

India seeks greater standing in global affairs and institutions as they are now organised, but it also would like to see a different global organisation emerge, one in which power is distributed more evenly, among a larger number of important powers, including itself. Almost all nations want to enhance their power and thus improve their positions in the world and increase their influence over the behaviour of other nations. At the very least, many wish to diminish their dependence on other states and to increase their freedom of action-outcomes which again may depend on their accumulation of power. The particular forms that this quest for power will take may vary from country to country. Some of them see nuclear weapons as promoting their security, enhancing their prestige, augmenting their influence, and improving their economic conditions. Whether, and to what extent, a given state will act on these views depends in part on its leaders' perceptions of the international environment and on their assessments of the best ways to achieve national objectives in that environment.

Scott Sagan argues that one ambition which guides states to acquire nuclear weapons is their perception that nuclear weapons enhance their prestige within the international system. Nuclear weapons acquisition, seeing nuclear decisions as serving important symbolic functions-both shaping and reflecting a state's identity According to this perspective, state behaviour is determined not by leaders' cold calculations about the national security interests or their parochial bureaucratic interests, but rather by deeper

norms and shared beliefs about what actions are legitimate and appropriate in international relations (Sagan 1997: 73).

The 1998 nuclear tests were one way of stating India's ambition to be taken seriously as a major power (Cohen 2000: 46). Since the Nehru era, Indians have seen the world as unjust and dangerous. Nehru pursued a wide-ranging foreign policy with two major aims. The first was to speed up decolonization in Asia and Africa, the second to reduce the threat of nuclear war.

The fact of the matter is that India was hardly a middle power during the Cold War years. As a result, because it remained vocal in its moralistic rhetoric in a number of world forums, such as the Nonaligned Movement, India, rightly or wrongly, was depicted as a moralistic loudmouth, with no economic or military power to back up its apparent dignity (Ahrari 2004: 2009).

India changed from implicit to explicit to nuclear weapon status with its nuclear tests in 1998. The sanctions India faced from most of the world's industrialised countries after the tests had a modest effect on India's economy. India has worked with four aspirants to permanent seats (Germany, Japan and Brazil) to craft an approach that can command substantial global support. Whether it succeeds or not in the current round of UN reforms, India will continue to work on this as a long term effort (Schaffer 2005: 14).

C. Raja Mohan describes India's decision to become a nuclear power in 1998 as a decision to redefine its 'approach to the question of power' and an effort to temper the idealism in its foreign policy with a strong dose of realism' (Mohan 2003: 15). In George Perkovich's words, which the authors quote approvingly, India exploded its own nuclear device 'for reasons of international prestige' (Perkovich 2000: 200).

Acquiring global status is however not just about a seat at the table. It requires a clear strategic direction, and military capabilities sufficient for projecting power beyond

own region. Measured against this, India's military modernization program is indicative of a rather prudent approach towards acquiring global power status.

Conclusion

The initial phase of India's strategic vision was shaped by the following factors. First, the Cold War influenced India's security discourse and subsequently its vision. External threats were seen as being the primary sources of insecurity. Military security became synonymous with national security; building a strong and powerful military apparatus was seen as essential to safeguard India's security interests. Nuclear weapons were seen as a symbol of power and providing a security guarantee. Second, as mentioned above, the security policies and strategic vision of India were determined more by its charismatic political leaders, rather than by institutions including the Parliament, cabinet and concerned ministries. It was only in 1999 that the National Security Council was born.

Hence India's strategic vision, from the beginning, has been shaped by the historical and geopolitical situation in which it has been placed and how it has perceived its own security. From independence until the 1990s, one can trace a pattern in which India had been responding to the regional and international geopolitical situation, based on its own security perceptions. Ever since, India achieved independence in 1947; it has always remained within the strategic calculations of the great powers owing to its vast size and resources, both human and natural. Past experience and future prospects were certainly a motivating force behind the decision. To a large extent, India's nuclear tests in 1998 acted as a catalyst in reorganizing its security perceptions and, in the process, its strategic vision as well. These factors had a great bearing on the transformation of the Indian nuclear policy.

Chapter Five

Conclusion

The purpose of the study has been to describe, analyse and explain the nature of shift in the India's nuclear policy in the post Cold War era. It attempted to understand the factors that led to the transformation in the country's nuclear policy. It investigated and analysed a wide array of factors which led to the nuclear tests in May 1998. The nuclear tests of 1998 clearly depicted the changes in the Indian nuclear policy.

The following general conclusions are highlighted below:

India's nuclear policy saw a shift from deliberate ambiguity to measured ambivalence.

A complex mix of systemic, domestic and technological factors as well as an urge to play a global role were instrumental in bringing about the transformation of the country's nuclear policy.

Since its independence in 1947, India followed a policy of ambiguity with regards to the acquisition of the nuclear weapons. India was in pursuit of the development of nuclear capability under the garb of producing nuclear power and conducting nuclear research, but never talked explicitly about developing itself as a nuclear weapons state. The first prime minister of independent India, Jawaharlal Nehru, laid the foundation of India's nuclear policy. Nehru, on one hand, strongly rejected nuclear weapons because of their capacity for great and indiscriminate destruction, but on the other hand he was reluctant to close the door to nuclear power entirely acknowledging that there is always a built-in advantage of defence use, if the need arises. This denotes the feeling of deliberate ambivalence. Nehru's nuclear policy perpetuated a mixed feeling of idealism and realism. Following the line of Nehru, Lal Bahadur Shastri too was in favour of the advanced research on an underground test and yet it did not approve the nuclear test. A decade later Indira Gandhi conducted the test in 1974 but termed it as a Peaceful Nuclear Explosion (PNE) but did not follow it with a nuclear weapon programme. Successive Prime

Ministers, Rajiv Gandhi and P.V. Narsimha Rao of the Congress, H.D. Deve Gowda and I.K. Gujral of the United Front coalition resisted nuclear weapons due to the concerns that this would invite sanctions. It was Atal Bihari Vajpayee's BJP led coalition government that took the fateful decision to test nuclear weapons in 1998.

All the central governments in India pursued an ambiguous nature of nuclear policy where they denounced the nuclear weapons programme on one hand but never turned down the utility of nuclear research and nuclear power. After twenty four years of restraint India finally ended its ambiguity by exploding five nuclear devices in May 1998. This incurred a clear shift from the earlier nuclear policy. Before the 1998 tests, India constantly showed reluctance towards nuclear weapons, but after the 1998 nuclear tests India was keen itself to be accepted as a nuclear weapon state and strived for greater participation in the global system.

The study further discussed the transformation in India's nuclear policy which began right after the end of Cold War in 1991. In the early 1990's the most significant event was the US victory of the Cold War and break up of the Soviet Union. The Soviet Union's collapse and the transformation in the global order forced India's policy makers to make drastic changes in the country's nuclear policy. It came as a shock to India as the Soviet Union could no longer provide support to India in international forums. India lost the most important and reliable ally who was a counterweight to the Chinese threat: the security which was guaranteed in the 1971 treaty of peace and friendship by USSR was no longer available as a shield from external threats.

The post Cold War years had a significant impact on the Indian nuclear policy as within just seven years after the end of the Cold War, India conducted nuclear tests in May 1998. There were several strategic constraints and domestic compulsions which emerged simultaneously with the end of the Cold War. India found itself in an isolated position in international politics and therefore envisaged that the possession of the nuclear weapons could ensure its participation in the global system.

The factors that drove India's decision to test its nuclear weapons in 1998 are multi-dimensional in nature. Systemic constraints, influence of domestic actors and the issue of prestige and status in the international system were the key factors for the 1998 nuclear tests. Post Cold War period tilted the balance of power in the favour of the United States. At the global level, the nuclear weapon states showed no signs of global peace and disarmament. The nuclear non-proliferation regimes became stronger as the United States and its western allies gained greater power to enforce non-proliferation efforts through coercive military sanctions. Indian policy makers chose to exercise the nuclear option before pressures were brought to bear on India to accede to the Non Proliferation Treaty and Comprehensive Test Ban Treaty (CTBT). The indefinite extension of the NPT in 1995 and discriminatory character of the CTBT made India reject them.

Without the support of the Soviet Union, India found itself isolated. The CTBT was perceived India as reinforcing the discriminatory character of the NPT by not setting a time bound schedule for global disarmament. Deteriorating security environment and discriminatory non-proliferation treaties forced India to take the path of self help strategy. The conventional military capabilities, the persistence of the border dispute and the Chinese nuclear weapons asserted systemic constraints on India. Thereafter China's collusion with Pakistan and deliberate supply of arms and armaments to Pakistan intensified the Indian security concerns.

Another security concern was redoubling of Pakistan's efforts to acquire nuclear capability. In the decade of 1990's the relationship with Pakistan deteriorated because of an armed insurgency in the state of Jammu and Kashmir. Kashmir has been a bone of contention between India and Pakistan. Since the beginning of the Kashmir insurgency in 1989, it has undoubtedly supported militants in Kashmir with logistics and arms supply. China- Pakistan alliance and the US assistance to Pakistan were considered as major threats to India security imperatives.

India understood that in order to maintain a stable position in international politics it had to embark on a self help strategy designed to guarantee its security and survival. After the breakup of the Soviet Union, India instantly perceived the need for a policy of self reliance. It was argued by many that the security of the country could only be enhanced by acquiring nuclear weapons.

The domestic compulsions which included among other things the change of government in the year 1998 directed a new approach to the Indian nuclear policy. The advent of the 'Hindu nationalists' government with a realist perspective in making foreign policy caused India's abandonment of four decades of nuclear ambiguity. BJP and its predecessor, the Jan Sangh preached a long term objective of acquiring nuclear weapons. The Jan Sangh first made the demand for nuclear weapons in the Parliament in 1962 immediately after the border war with China and later after the Chinese nuclear test in 1964. BJP's ideology propagated acquisition of nuclear weapons as a symbol of power, prestige and status. Its election manifesto clearly committed to exercise the option to induct nuclear weapons. Later, BJP was pushed by the belief that nuclear weapons would enhance India's prestige as a major power in world politics, and had firm faith that nuclear capability would help India achieve such a role. They also constituted a significant pressure group who sought to propagate nuclear weapons as an important source of power and status. Decision makers regard timely change as the best way to ensure that their states survive and become influential. The shift in the nuclear behaviour since the end of the Cold War according to the BJP was more or less from a moralistic notion to the realist understanding.

Lastly, it was argued that the acquisition of nuclear weapons enable India to meet the requisite goals for prestige and status in the international system. In accordance with India's size, economic resources and growth prospects it was felt that India must assert itself as an actor that matters in the global system. Nuclear weapons capability could make India a great power and could seek a position for India where it would assert itself as an important participant in international politics. The post Cold War security insurance

by the United Nations Security Council and the unwillingness of its permanent five members to induct India as a permanent member also resulted in an Indian perception that it needed to achieve hard power resources such as nuclear weapons in order to obtain respect from the members of the nuclear club.

Today, India has emerged as a responsible and powerful nuclear weapon state. It has demonstrated that in spite of being a nuclear weapon state its goals of disarmament and peace remain prior to its achieving such a status. India plans to use nuclear capability for its defence and security and not to create insecurity and instability in the international system or to threaten anyone as is enshrined in the no first use policy.

List of References

(* Indicates a primary Source)

Abraham, Itty (1992), "India's Strategic Enclave: Civilian Scientists and Military Technologies", *Armed Forces and Society*, 18(2): 231-252.

Ahrari, Ehsan (2004), "India's Great Leap Forward", *Security Dialogue*, 35: 207-215.

Albright, David and Toni Zamora (1989), "India, Pakistan's Nuclear Weapons: All the Pieces in Place", *Bulletin of Atomic scientists*, 45(5): 20-26.

Ayoob, Mohamed (2000), "India's Nuclear Decision: Implications for Indian-US Relations" in Raju G. C. Thomas and Amit Gupta *India's Nuclear Security*, New Delhi: Vistaar Publication.

Bajpai, Kanti (2000), "India's Nuclear Posture after Pokhran II" *International Studies*, 37 (4): 267-300.

_____ (2009), "BJP and Bomb", in Scott D. Sagan (eds.) *inside Nuclear South Asia*, California: Stanford University Press.

Bajoria, Jayshree (2009), "The U.S.-India Nuclear Deal", [Online: Web] Accessed 10 July 2010, URL: http://www.cfr.org/publication/9663/usindia_nuclear_deal.html.

Barnds, J. William (1970), *India-Pakistan and the Great Powers*, London: Pall Mall Publishers.

Basrur, M. Rajesh (2001), "Nuclear Weapons and Indian Strategic Culture", *Journal of Peace Research*, 38(2): 181-198

Betts, Richard (1979), "Incentives for Nuclear Weapons: India, Pakistan, Iran", *Asian Survey*, 19 (11):1053-1072.

Bhatia, Shyam (1979), *India's Nuclear Bomb*, Ghaziabad: Vikas Publishing House.

Bidwai, Praful and Achin, Vinaik (1999), *South Asia on a Short Fuse: Nuclear Politics and the Future of Global Disarmament*, New Delhi: Oxford University Press.

Buzan, B. Et al (1993), *The Logic of Anarchy: Neo-realism to Structural Realism*, New York: Columbia University Press.

Chafetz, Glenn (1993) "The End of the Cold War and the Future of Nuclear Proliferation: An Alternative to the Neo-realist Perspective", *Security Studies*, 2(3/4):125-158

- Chakma, Bhumitra (2002), India and the Comprehensive Nuclear Test Ban Treaty, *BlISS Journal*, 23 (3): 235-252.
- _____ (2005), "Toward Pokhran II: Explaining India's Nuclearisation Process", *Modern Asian Studies*, 39(1): 189-236.
- Chander, Nayan (1968), "The Race Is On", *Far Eastern Economic Review*, 161(24): 20-22.
- Chaulia, S. Shreeram (2002), "BJP, India's Foreign Policy and the "Realist Alternative" to the Nehruvian Tradition", *International Politics* 39(6): 215-234.
- Chengappa, Raj (2000), *Weapons of Peace: The Secret Story of India's Quest To Be A Nuclear Power*, India: HarperCollins Publishers.
- Chellany, Brahma (1993), *Nuclear Proliferation The Us Indian conflict*, New Delhi: Orient Long man.
- Cohen, P. Stephen (2000), "India Rising", *The Wilson Quarterly*, 24(3): 32-53.
- _____ (2001), *Emerging Power*, Oxford: Oxford University Press.
- Das, Runa (2008), "Explaining India's Nuclearization Engaging Realism and Social Constructivism", *Asian Perspective*, 32, (1): 33-70.
- Davis, Zachary S. (1993), "The Realist Nuclear Regime," *Security Studies*, 2(3/4):79-99.
- Dixit, Abha (1996), "India Nuclear Status Quo" in Cortright David and Amitabh Mattoo (eds.) *India and the Bomb Public Opinion and Nuclear Options*, Notre Dame: University of Notre Dame Press Indiana.
- Dunn, A. Lewis (1995), "High Noon for the NPT," *Arms Control Today*, 25(6): 3-9
- Epstein, William (1977), "Why States Go and Don't Go Nuclear", *Annals of the American Academy of Political and Social Science*, 430 (3): 16-28.
- Frankel, Benjamin (1993), "The Brooding Shadow: Systemic Incentives and Nuclear Weapons Proliferation," *Security Studies* 2 (3/4): 37-65.
- Ganguly, Sumit (1983), "Why India Joined the Nuclear Club," *Bulletin of the Atomic scientists*, 39(4): 30.
- _____ (1999), "India's Pathway to Pokhran II: The Prospects and Sources of New Delhi's Nuclear Weapons Program", *International Security*, 23 (3): 148-177.

Gray, Colin (1999), *Modern Strategy*, Oxford: Oxford University Press.

Gupta, Sen Bhabani (1983), *Nuclear Weapon Policy Option For India*, New Delhi: Sage Publications.

_____ (2000), "Explaining the Indian nuclear Tests of 1998" in Raju G.C. Thomas and Amit Gupta (eds.) , *India's Nuclear Security*, New Delhi: Vistaar Publication New Delhi.

Gupta, Sisir (1968), "India and Non-Proliferation Hand Choice Ahead", *Times of India*, Delhi, 29 January 1968.

Gupta, Shekhar (1998), "Road to Resurgence," *Indian Express*, Delhi 12 May, 1998.

Hagerty, T. David (1996), "Nuclear Deterrence in South Asia: 1990 Indo-Pakistani crisis"; *International security*, 20(3): 107-08.

Holmes, A. Steven (1993), "China Denies Violating Pact by selling arms to Pakistan", *New York Times*, July 26 1993.

Hu, Weixing (1998), "India going nuclear: A bomb against China?", *Journal of Chinese Political Science*, 4(2):19-40.

Jaipal, Rikhi (1997), The Indian Nuclear Explosion, *International Security*, 1(4): 44-51.

Jain, P. J. (1974), *India and Disarmament Vol.1 (The Nehru Era: An Analytical Study)*, New Delhi: Radiant Publisher.

_____ (1974), *Nuclear India, vol.1 and 2*, New Delhi: Radiant Publications.

Jayaram, T. (2006), "Journey from Pokhran-II to Hyde Act," *Economic and Political Weekly*, 5216-5218.

_____ (2008), "Indian Nuclear Policy at the Cross Road; The Indo US Nuclear Deal", *Contemporary Perspective*, 2(1): 159-174.

Jervis, Robert (1979), "Systems Theories and Diplomatic History," in Paul Gordon Lauren, (eds.), *Diplomacy*, New York: Free Press.

Joeck, H. Neil (1999), "Nuclear Developments in India and Pakistan" *Access Asia*, 2(2): 5-45

Kalpna Chitranjan (1998), "Five Decades of Nuclear Weapons" in Jasjit Singh (ed) *Nuclear India*, New Delhi: KW Publishers Pvt. Ltd.

Karnad, Bharat (2002), *Nuclear Weapon and Indian Security: The Realist Foundations of Strategy*, New Delhi: Macmillan India Ltd.

Karat, Prakash (1999), "Kargil and Beyond", *Frontline*, Delhi, 3 July 1999.

Kampani, Gaurav (1998) "From Existential Deterrence to Minimum Deterrence: Explaining India's decision to Test"; *Non Proliferation Review*/Fall.

Kapur, Ashok (1976), *India Nuclear Option Atomic Diplomacy and Decision Making*, New York: Prager publications.

_____ (1978), "India Nuclear Politics and policy: Janata Party's Evolving Stance" in T.T. Poulse, (eds.) *Perspective of India's Nuclear Policy*, New Delhi: Young Asia Publications.

_____ (2001), *Pokhran and Beyond: India's Nuclear Behaviour*, New Delhi: Oxford University Press.

Khilnani, Sunil (1999), *The Idea of India*, New Delhi: Penguin Publications.

Kux, Dennis (1992), *India and the United States Estranged Democracies*, Washington D.C: National Defence University Press.

Malik, Priyanjali (2010), *India's Nuclear Debate Exceptionalism and the Bomb*, New Delhi: Routledge Taylor and Francis Group.

Mattoo, Amitabh (1996), "India Nuclear Status Quo", *Survival* 38: 41-57.

_____ (1999), *Indian's Nuclear Deterrent Pokhran II and Beyond*, New Delhi: Har-Anand Publications Pvt.ltd.

Mehta, Bhanu Pratap (1998), "India: the nuclear politics of self-esteem", *Current History*, 97 (623): 403-406.

Mirchandani, G.G (1968), *India Nuclear Dilemma*, New Delhi: Popular Book Services.

_____ (1978), "India and Nuclear Weapons" in T.T. Poulse (eds.) *Perspective of India's Nuclear policy*, New Delhi: Young Asia Publication.

Mistry Dinshaw (2006), "Domestic Politics and the US- India Agreement", *Asian Survey*, 46 (5): 675-698.

Mohan, Ram (1979), "The South Asian Arms Race", *Far eastern Economic Review*, 38-39.

Mohan, Raja C. (1998), "Living in a Nuclear South Asia," *The Hindu*, Delhi, 28 May 1998.

_____ (1999), *Post Pokhran-II: The Way Ahead*, New Delhi: India Habitat Centre.

_____ (2003), *Crossing the Rubicon, the Shaping of India's New Foreign Policy*, New Delhi: Penguin Book

_____ (1995), "India's Nuclear Option," *The Hindu*, Delhi, 19 December 1995.

Nandy, Ashish (1989), "The Political Culture of the Indian State", *Daedalus*, 118(4): 1-26

Nehru, Jawaharlal (1962), *India's Foreign Policy: Select Speech, September 1946-April 1961*, New Delhi: Government of India, Ministry of Information and Broadcasting Publication Division.

Moravcsik, Andrew (1997), "Taking Preference Seriously: A Liberal Theory of International Politics" *International Organization*, 51(4): 513-53.

Morgenthau, J. Hans (1978), *Politics Among Nations: The Struggle for Power and Peace*, New York: Alfred A. Knopf.

*National Security Advisory Board (1999) "Draft Report of India Nuclear Doctrine" [Online: Web] Accessed 11 July 2010, URL:<http://www.fas.org/nuke/guide/india/doctrine/990817.indnucl.d.htm>.

Noorani, A.G. (1967), "India Quest for Nuclear Guarantee", *Asian Survey*, 490-502.

Ollapaly, M .Deepa (2001), "Mixed Motives in India's Search for nuclear Status", *Asian Survey*, 41(6): 925-942.

Paul, T.V. (1998), "The Systemic Bases of India's Challenge to the Global Nuclear Order", *The Nonproliferation Review*, 6(1): 1-11.

Perkovich, George (1999), *India's Nuclear Bomb: The Impact on Global Proliferation*, Los Angeles: University of California Press.

_____ (2000), *India's Nuclear Bomb*, Berkeley: University of California Press.

Poulose, T. T (1978), "India' Nuclear Policy" in T.T Poulose (eds.) *Perspective of India's Nuclear policy*, New Delhi: Young Asia Publications.

_____ (1996), *The CTBT and the Rise of Nuclear Nationalism in India: Linkage between Nuclear Arms Race, arms Control & Disarmament*, New Delhi: Lancers Book.

Rai, Ajai (2009), *India Nuclear Diplomacy After Pokhran II*, Delhi: Pearson Kindessley.

Rao, Rama R. (1978), "India's security perception and the Nuclear Issue" in T.T. Poulose, (ed.) *Perspective of India's Nuclear Policy*, New Delhi: Young Asia Publications.

Rauf, Tariq and Rebecca Johnson (1995), "After the NPT's Indefinite Extension: The Future of the Global Non-proliferation Regime," *The Non-proliferation Review*, 3(1):28-41

Reiss, Mitchell (1988), *Without the Bomb: The Politics of Nuclear Non-proliferation*, New York: Columbia University Press.

Rose, Gideon (1998), "Neoclassical Realism and Theories of Foreign Policy", *World Politics*, 51(1):144-172.

Sagan, Scott D. (1997), "Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb", *International Security*, 21(3) 54-86.

Schaffer, Teresita C. (2005), "Pramit Mitra, Deutsche Bank Research", December 16, 2005, India Special, [Online: web] Accessed 04 April 2010, [URL:www.dbresearch.com](http://www.dbresearch.com).

Singh, Jasjit (2000), "India's nuclear Policy", in Major Sulakshan Mohan (eds.) *India's Nuclear Leap Forward*, Delhi: Indian Publishers Distributors.

Sidhu, Singh Pal Waheguru (2004), "Evolution of Nuclear Doctrine", *Centre for Research Policy*, New Delhi: 4-34

Singh, Jasjit (1998), "Why Nuclear Weapons?" in Jasjit Singh (ed) *Nuclear India*, New Delhi: KW Publishers Pvt. Ltd.

Singh, Jaswant (1998), "Against Nuclear Apartheid", *Foreign Affairs*, 77 (5): 41-57

_____ (1999), *Defending India*, New Delhi: Macmillan India.

Singer, J. David (1961), "The Level-of-Analysis Problem in International Relations", *World Politics*, 14(1): 77-92.

Solingen, Etel (1994), *The Domestic Sources of Nuclear Postures: Influencing Fence-sitters in the Post-Cold War Era*, California: University of California.

- Sridharan, Kripa (2006), "Explaining the phenomenon of change in Indian foreign policy under the National Democratic Alliance Government", *Contemporary South Asia*, 15(1), 75–91.
- Subrahmanyam, K. (1998), "India's Nuclear Policy, A Personal Recollection", in Jasjit Singh (eds.) *Nuclear India*, New Delhi: K. W. Publishers.
- Tellis, J. Ashley (2001), *India's Emerging Nuclear Posture*, Oxford: Oxford University Press.
- Thompson, R. William (1973), "The Regional Sub-System: A Conceptual Explication and a Propositional Inventory," *International Studies Quarterly* 17: 89-117.
- Varadarajan, Latha (2004), "Identity and neo-liberal (in) security", *Review of International Studies*, 30(3): 319–342.
- Walker, William (1996), "India Nuclear Labyrinth", *The Non-proliferation Review*, 4 (1): 61-77.
- Waltz, N. Kenneth (1979), *Theory of International Politics*, New York: McGraw- Hills.
- _____ (1990), "Nuclear Myths and Political Realities," *American Political Science Review* 84.
- Zakaria, Fareed (1999), *From Wealth to Power: The Unusual Origins of America's World Role*, Princeton: Princeton University Press.