IPRI Journal XI, no. 1 (Winter 2011): 1-20

PAKISTAN'S NUCLEARISATION – IMPERATIVES OF NATIONAL SECURITY AND SURVIVAL OF A SMALLER STATE

Naeem Salik*

Abstract

Unable to find a satisfactory solution to its security dilemma in the face of a much larger and hostile neighbour, Pakistan sought security through external sources of support. As a result it became a part of the Western alliance system by joining the SEATO and CENTO in the mid 1950s and also signed a bilateral defence agreement with the US in 1959. However, during its war with India in September 1965, the US and Western allies imposed an arms embargo on both India and Pakistan, an act that hit Pakistan harder because of its greater dependence on that source of supply. Then, in the 1971 war, Pakistan's hope that the Americans and the Chinese would intervene on its side was dashed. As a result of the loss of its eastern wing, Pakistan became acutely aware of the fact that in the future it will have to stand on its own feet to defend itself. Pakistani leaders realized that given the disparity in size and resources it would be impossible for Pakistan to defend itself conventionally against India and it needed an equalizer in the shape of nuclear capability to safeguard its territorial integrity. They were also aware that India had already mastered most elements of the nuclear fuel cycle. If there were any doubts as to the viability/desirability of this option, these were swept away by the first Indian nuclear test in May 1974. Pakistan was, therefore, left with no option but to pursue its own military nuclear programme.

Preamble

The decision by any state to go nuclear is not always easy to explain given the complexity of motivations and drivers behind such decisions. Similarly, Pakistan's imperatives for going nuclear are not simple to rationalize. An attempt will however be made to explain these to the extent possible through an examination and analysis of available literature and Pakistan's real or perceived threat perceptions. Of particular relevance for the purpose is Professor Scott Sagan's excellent exposition, "Why do States Build Nuclear Weapons? Three Models in Search of a Bomb" and an analysis based on the historical evolution of Pakistani security perceptions and its strategic culture by a prominent Pakistani security analyst, Feroz Hassan Khan, in his "Nuclear Proliferation Motivations–Lessons from Pakistan". The third source, of course, would be an analytical study of Pakistan's evolving attitudes towards nuclear weapons and understanding of the role and significance of nuclear weapons in resolving its security dilemmas. Additionally, the growing

* Advisor, Faculty of Contemporary Studies, National Defence University (NDU), Islamabad.

conventional imbalance, India's ever expanding nuclear prowess, failure of carefully crafted alliance relationships to underwrite Pakistan's security, and the preferences and persona of its leadership in influencing the direction of its nuclear endeavours, would also help in highlighting its compulsions for eventually deciding to take the nuclear path.

Nuclear technology is highly complex, sophisticated and cost prohibitive, involving not only cutting edge technologies and specialised machine tools but rare materials as well. These technologies and materials are not only expensive but are hard to procure. One has to carefully tread one's way through a labyrinth of technology control arrangements that have evolved, particularly after India's first nuclear test in May 1974. Over the years most of the advanced industrialised countries have also tightened and strengthened their export control laws and enforcement mechanisms. United Nations Security Council Resolution 1540 (2004) has made it obligatory for all member states to bring their national export control laws and implementation and enforcement mechanisms in line with the international standards. In addition to financial costs, efforts by any country to go nuclear under the prevailing international environment would entail serious politico-diplomatic and economic costs in the form of sanctions and international isolation. This is not to imply that procurement of nuclear materials, technology and know-how was easy at any given point of time in the past decades. It is, therefore, logical to assume that no state has taken or will ever take the decision to nuclearise without taking due cognisance of its serious repercussions. Unfortunately, though, the non-proliferation efforts usually lay too much emphasis on the supply side of proliferation to the virtual exclusion of the demand side. The tendency on the part of many analysts to rely on stereotypes to explain the causes of proliferation, results in overlooking the profundity of motives behind such decisions, and leads to shaping inappropriate and ineffectual policies.[1]

Pakistan's nuclear programme has always been at the centre of one controversy or another. Pakistan initiated its nuclear weapons programme in the early 1970s when the NPT was already in force; and when it started its efforts in earnest in the aftermath of the 1974 Indian test, technology control arrangements such as the London Suppliers Group, the precursor of the Nuclear Suppliers Group, and a series of other technology denial agreements were already evolving. Pakistan, therefore, not only had to negotiate a series of obstacles, but its nuclear programme was also unfairly labelled as the "Islamic Bomb" which created sensitivity and political opposition amongst the pro-Israel lobbies in the United States. In such a hostile environment, Pakistan has had to pay a heavy price for attaining nuclear capability in terms of

[1] Feroz Hassan Khan, "Nuclear Proliferation Motivations – Lessons from Pakistan," *Non-Proliferation Review* 13, no.3 (November, 2006): 502.

opportunity costs and political retributions in the form of layers of US sanctions. But Pakistan was willing to pay the cost since its very existence and survival was at stake. Pakistan's determination is epitomised in the famous statement made by Zulfikar Ali Bhutto in 1965 that, "If India makes an atomic bomb, then we will also do so, even if we have to eat grass or go hungry." [2]

Pakistan is erroneously regarded as a small state even by its own people. But such characterisation is probably unjustified. Precisely for this reason the expression "smaller state" has been deliberately used here for Pakistan instead of a "small state" to highlight the fact that Pakistan is a country with a population of 170 to 180 million and an area of 0.8 million square kilometres, with the fifth largest armed forces in the world. A state with such physical attributes could be a major player in any region of the world. Pakistan also enjoys an important geo-strategic location at the crossroads of South, West and Central Asia and overlooks the entrance to the strategic Persian/Arabian Gulf. However, this very geo-strategic location, and especially the geographic configuration and orientation of the country, bring with it some serious disadvantages as well. Why then Pakistan is generally perceived as a small state has been very aptly explained by Thomas Perry Thornton:

> When Pakistan became independent in 1947 it was the fifth most populous nation, but three of the four above it – China, India and the Soviet Union – were its nearby neighbours. Pakistanis came to think of themselves as a small country that had to shape its foreign and security policies accordingly. To make matters worse, Pakistan came into existence split in two and lacking strategic depth; its borders were ill-defined and indefensible, dividing ethnic groups. Thus from its very inception, Pakistan was an 'insecurity state' that perceived itself not only as small and disadvantaged but as on the defensive against a real and present threat, with its survival at stake.[3]

Pakistan's decision to pursue a nuclear weapons capability is deeply rooted in its historical experience as a young nation. Faced with a much larger adversary and located in a difficult neighbourhood, Pakistan has been perpetually struggling for its survival. A brief overview of Pakistan's history is pertinent here to be able to understand the context of Pakistan's nuclearisation before we proceed to explain it in terms of the more immediate causes based on its security perceptions and other geo-strategic compulsions.

---

[22] Abdul Sattar, *Pakistan's Foreign Policy 1947-2005 – A Concise History* (Karachi, Oxford University Press, 2007), 144.

[3] Thomas Perry Thornton, "Pakistan : Fifty Years of Insecurity" in *India and Pakistan – The First Fifty Years*, ed. Selig S. Harrison, Paul H. Kreisberg and Dennis Kux (The Woodrow Wilson Center for International Scholars, 1999), 171.

A Brief Historical Background

Pakistan appeared on the world map as a newly independent state on 14th of August 1947 as a result of the British decision to grant independence to the new dominions of India and Pakistan by partitioning the South Asian subcontinent. Though the decision to allow the establishment of a Muslim state in the North Western and North Eastern parts of India had resulted from a long politico-legal and constitutional process, it was not accepted by the Indian leadership with good grace, while there was some opposition amongst segments of Muslim community as well, especially amongst the religious parties, some prominent Hindu leaders supported the partition.[4] Unfortunately, the partition which caused the largest mass migrations in history involving scores of millions was accompanied by widespread communal violence resulting in large scale loss of life and property. This bitter memory of partition has left deep and indelible marks on the psyche of the two nations and has continued to bedevil the relations of the two states and impeding development of good neighbourly relations between them. It took over five decades for an Indian leader to formally accept the reality of Pakistan when Prime Minister Vajpayee visited the site in Lahore in February 1999, where the historic resolution, which codified the aspirations of the Muslims of the subcontinent for a separate homeland, was passed in March 1940.[5] The gesture was reciprocated by President Musharraf when he paid his tributes at the Mausoleum of India's supreme leader Mahatma Gandhi during his visit to New Delhi in 2001.[6]

Pakistan was born with serious structural problems. Its two wings were separated by a thousand miles of hostile territory and the government machinery was virtually non-existent. The only solace was the presence of some experienced hands from the Indian Civil service but they were faced with the challenge of building up the administrative machinery virtually from a scratch in the face of severe resource constraints. The only other national institution with long established traditions of professionalism, institutional coherence, discipline and organisation was the military which Pakistan inherited from the erstwhile British Indian Armed Forces. Unfortunately, the Indian government held back the bulk of weapons, munitions and equipment that was due to be transferred to Pakistani armed forces. Additionally, the burden of rehabilitation of millions of refugees made the situation look very

[4] Hafeez Malik, *Dilemmas of National Security and Cooperation* (London, Macmillan, 1993), 10-15.

[5] Indian Prime Minister Vajpayee visited the Minar-e-Pakistan (the Pakistan Monument) at Lahore during his historic bus journey to Lahore in February, 1999. See Owen Bennet Jones, *Pakistan: Eye of the Storm* (London, Yale University Press & New Haven, 2002), xiv.

[6] "First Pak Head of State to Visit Rajghat," The *Tribune* (Chandigarh), July 15, 2001.

bleak with apparently insurmountable difficulties. Pakistan's founder Muhammad Ali Jinnah's untimely death in September 1948, just over a year after independence, came as a severe blow to a fledgling nation's morale and confidence. His closest lieutenant and the first Prime Minister of Pakistan also did not survive long enough to oversee the consolidation process when he was assassinated in Rawalpindi in October 1951. These setbacks and plethora of economic, political and administrative problems encouraged Indian leaders in their belief that this unique experiment in nation building was bound to fail sooner than later and Pakistan would one day fall back into the lap of mother India.

The unsatisfactory handling of the fate of the princely states by the last British Viceroy and his team created new sources of friction amongst the two newly independent states. Two such states came into prominence namely Hyderabad Deccan and Jammu and Kashmir. Whereas Hyderabad was a Hindu majority state with a Muslim ruler, Jammu and Kashmir was a predominantly Muslim majority state (about 80 per cent Muslims) with a Hindu ruler. India annexed Hyderabad with military force in September 1948. India supported the Maharaja of Kashmir's efforts to suppress an internal rebellion that tribesmen from Pakistan's North West Frontier Province had joined. It airlifted its forces to the state capital Srinagar and accepted the Maharaja's controversial instrument of accession to India.

The rivalry between India and Pakistan has been so deeply internalised in popular perceptions over the last six decades that it has come to be regarded as the obvious outcome of their creation. However, some prominent Pakistani analysts have argued that this was in fact an unexpected outcome in stark contrast to the vision of Pakistan's founding fathers who had seen in the creation of a separate homeland in their majority areas a solution to the communal mistrust, friction and hostility that had developed during the period of half a century preceding the independence.[7] According to Dr Hassan Askari Rizvi, "Pakistan's founders thought that the new state would protect, not threaten India."[8] He goes on to cite from Dr Muhammad Iqbal – the poet-philosopher who had propounded the idea of a separate Muslim homeland during the course of his address to the annual convention of the All India Muslim League at Allahabad in 1930 – as saying that, Pakistan should not worry India, for "the North-West Indian Muslims will prove the best defenders of India against a foreign invasion, be that invasion one of the ideas [an obvious reference to the Communist threat from the Soviet Union] or of

[7] Feroz Hassan Khan, "Pakistan's Security Perspectives," *Force Magazine* (New Delhi, April 2005).

[8] Hassan Askari Rizvi, "Pakistan's Strategic Culture," "South Asia in 2020: Future Strategic Balances and Alliances," Michael R. Chambers, ed., (Carlisle, Penn: US Army War College, November, 2002), 309 as quoted in Feroz Hassan Khan, "Pakistan's Security Perspectives."

the bayonets."[9] Similar sentiments were expressed by Muhammad Ali Jinnah in the early 1940s, when he stated, "We join together as good friends and neighbours and say to the world, 'Hands off India." [10]

However, instead of becoming good neighbours somewhat like the United States and Canada, complementing each other's socio-economic development, Pakistan and India became staunch rivals and antagonists. Stephen Cohen, a noted South Asia expert, has thus observed that:

> …India and Pakistan immediately clashed over three issues. The boundaries created through the partition were viewed as neither fair nor just. The division of civil and military assets was inequitable. Most importantly, the accession of the princely states was improper. The most glaring injustice was created by the accession into India of the state of Jammu and Kashmir – a Muslim majority state under a Hindu ruler or maharaja.[11]

Origins of Pakistan's Nuclear Development

Pakistan was a relatively late entrant in the nuclear arena. It was not until a touring nuclear exhibition came to Pakistan in 1954 under the auspices of President Eisenhower's "Atoms for Peace" initiative that some interest in this new technology was generated. Pakistan Atomic Energy Commission (PAEC) decided to enter into an agreement with the United States for the provision of a 5 MW Research Reactor in 1957. It was hoped that the reactor would be functional by 1960, however, due to bureaucratic inertia, lack of funding and disinterested leadership it only went critical in 1965.[12] By that time India had established complete fuel cycle facilities including fuel fabrication and heavy water production plants, a plutonium production reactor built with Canadian and American assistance, a chemical reprocessing plant – the first of its kind in Asia[13] and a conversion plant needed to convert separated plutonium into metallic form. Only a few of the Indian nuclear facilities such as the Tarapur Power Plant were under IAEA safeguards, the rest were un-safeguarded leaving India free to do with whatever it wanted to do with the materials produced by these plants.

The focus of Pakistan's nuclear research and development in the first decade and a half was on peaceful applications of nuclear energy specifically in

---

[9] Ibid.

[10] Ibid.

[11] Stephen P. Cohen, *The Idea of Pakistan* (Washington, D.C., Brookings Institution Press, 2004), 46-47.

[12] P.B. Sinha and R.R. Subramanium, *Nuclear Pakistan- Atomic Threat to South Asia* (New Delhi, Vision Books, 1980), 30.

[13] US Department of State, "Inauguration of Indian Plutonium Separation Plant," *Airgram* No, A-253, April 29, 1964 from American Consulate, Bombay to the Department of State.

the fields of medical, agriculture and power generation. The first nuclear power plant, a 137 MW CANDU type reactor constructed at Karachi with Canadian assistance and under IAEA safeguards was inaugurated in 1972.[14] During the 1960s a large number of young scientists and engineers were sent abroad for specialised and advanced training. Some of those chose to stay back while many others returned to Pakistan. Many of these, helped train the coming generations of nuclear scientists and engineers at the Pakistan Institute of Nuclear Science and Technology (PINSTECH) which was co-located with the research reactor at Nilore near Islamabad. Uranium exploration, mining and processing skills and related infrastructural facilities were also being developed. When Mr Z.A. Bhutto joined President Ayub Khan's cabinet as Minister for Fuel, Power and Natural Resources, he found the nascent nuclear programme as part of his portfolio.[15] He tried to energise the programme but could not achieve much in the face of the powerful duo of Finance Minister and the Chairman of the Planning Commission. Neither did he find any support from President Ayub or the military top brass. The lack of interest amongst the military leadership was due to the fact that by the early 1960s the well trained Pakistani Armed Forces equipped with American military hardware were confident of their ability to deter, even defeat Indian military which had been badly mauled and humiliated in their border war with the Chinese in late 1962. Bhutto, then Foreign Minister, took serious note of the inauguration of India's first reprocessing plant in early 1964 and urged President Ayub Khan to allow the procurement of a similar plant which the French were willing to sell at that time, but was overruled by the financial bureaucracy.[16]

How and Why Pakistan Went Nuclear?

The Early Nuclear Discourse

Nuclear issues had never caught the imagination of the Pakistani public or its political elites. Neither the military leadership evince any interest in nuclear technology nor did the political leadership grasp the significance of the fast growing Indian nuclear programme for Pakistan's security, with the sole exception of Zulfikar Ali Bhutto. The Foreign Policy establishment with stalwarts like Agha Shahi was also well aware of the intricacies of the nuclear issues and showed good foresight in keeping Pakistan's options open once

[14] Sinha and Subramanium, *Nuclear Pakistan- Atomic Threat to South Asia* (New Delhi: Vision Books, 1980), 33.

[15] Ibid., 31-32.

[16] Jozef Goldblat and Peter Lomas, "The Threshold Countries and the Future of the Non-proliferation Regime," in John Simpson ed., *Nuclear Non-proliferation: An Agenda for the 1960s* (Cambridge: Cambridge University Press, 1987), 309.

India decided to stay out of the NPT. There was no public debate over whether or not Pakistan should join the NPT and Pakistan's decision to stay out of the NPT was largely a bureaucratic decision. It is hard to find any serious nuclear discourse in Pakistan in either the media or academia during the 1960s and early 1970s except the statements made by Agha Shahi in the Eighteen -Nation Disarmament Committee (ENDC) – the precursor to the present day Conference on Disarmament (CD) and United Nations General Assembly sessions. Mr Bhutto who had clearly discerned the linkage between India's nuclear ambitions and Pakistan's threat perceptions and had given expression to his feelings through the "eating grass" statement in 1965, dilated upon nuclear issues in much greater detail in his book "The Myth of Independence" published in 1969. However, his statements are usually quoted out of context of the overall vision he had laid out for Pakistan's future security.

Although Bhutto realised that nothing can counter the strategic threat posed by the adversary's nuclear weapons than owning nuclear weapons of your own, this was not the only option in his mind to counter the Indian military threat to Pakistan. He argued that, "All wars of our age have become total wars;….and it will have to be assumed that a war waged against Pakistan is capable of becoming a total war. It would be dangerous to plan for less, and our plans should, therefore, include the nuclear deterrent."[17] He was critical of the NPT and cautioned his country not to be deceived by an unjust treaty which had legitimised the possession of nuclear weapons only for five countries. He was also closely following nuclear technological developments in India and was convinced that India would not let the major powers monopolise nuclear weapons. Bhutto predicted that sooner or later India would detonate its own nuclear weapon and if Pakistan restrained its nuclear development it would become vulnerable to nuclear blackmail by India.[18] Referring to the fact that India had received substantial technical assistance from foreign countries and was continuing to do so, he wanted Pakistan to embark on a similar effort. However, he was pragmatic enough to recognise the challenges such a programme would pose and the long gestation period before it would yield some results. He, therefore, viewed it as a long term objective and something that would not be of any practical value should there be a military confrontation with India in the short term.[19]

Given his socialist political philosophy and his fascination with Mao's People's War concept he also proposed a kind of "Nation in Arms" concept wherein he was advocating training and arming the civilian population of the

[17] Zulfikar Ali Bhutto, *The Myth of Independence* (Karachi, Oxford University Press 1969), 153.
[18] Ibid.
[19] Ibid.

country so that even in case Indians were able to overcome regular Pakistani military they would face resistance at every step. This is evident from the following excerpt from his book:-

> …A non-industrialised country, without even the basis of a heavy industry, cannot depend entirely on the traditional defence system of a small, though highly efficient, armed force equipped with conventional weapons…..The economic strains created by the expansion of a standing force would be great, and it would be unwise to think in terms of competing with India in size of forces and quantity of equipment.[20]

Seeking inspiration from the Vietnamese people's struggle against the military might of the United States, he argued that the lesson Pakistan could learn from that war was that an armed and determined populace can successfully resist any foreign invader even if that invader was a global power. He proposed a "national militia" led by professionally trained military officers to augment the standing army in the event of any war. He also advocated the introduction of compulsory military training in the universities besides training the rural population in the handling of small arms.[21]

He went on to add that, "Diffused warfare is extremely costly for the aggressor and offers no hope of a speedy victory. The knowledge that an attack upon Pakistan would lead to total warfare against a fully armed nation can be the only real deterrent"…… [22]

Parallel to the people's war concept he also invoked the religious injunctions about war as enunciated in the Quran quoting some verses which enjoin upon the Muslims that, "Fighting in the defence of Truth and Right is not to be undertaken light-heartedly, nor to be evaded as a duty…. Not all can be chosen to fight for God. It requires constancy, firmness and faith. Given these, large armies can be routed by those who battle for God." [23] Such references were obviously aimed at raising the morale of the people and to build their will and determination to fight a numerically superior enemy, trying to impress upon them that given the righteousness of their cause they were bound to be victorious as predicted by the Quran. He was in no doubt that if Pakistan gave in to the external pressures it would lose its sovereignty and independence.[24] In other words it would tantamount to a sort of "Finlandisation" of Pakistan. It is, therefore, unfair to definitively conclude from the arguments in the book that Bhutto had already irrevocably made up his mind to pursue a nuclear weapons option as and when he will assume

[20] Ibid., 152.
[21] Ibid., 154.
[22] Ibid.
[23] Ibid., 156.
[24] Ibid., 157.

power in Pakistan, given the fact that his earlier advocacy had not made any headway due to an unresponsive President and active opposition of the finance minister.

The Trauma of 1971 War

Bhutto took over power in Islamabad in the wake of the traumatic events of 1971 war, wherein, Pakistan had lost its Eastern wing through active Indian military intervention, which had further widened the military imbalance with India. Faced with the challenge of rebuilding a distraught and demoralised nation and hamstrung by resource constraints, he could not afford to experiment with fanciful, risky and alien concepts such as the people's war. He must also have realised that in a politically fragile country, like Pakistan, imparting military training and arming the populace could become a danger to the state authority and also encourage fissiparous tendencies. Pakistani leadership had seen the futility of dependence on allies who couldn't prevent the dismemberment of the country and had realised that in any future crisis Pakistan would have to fend for itself. Bhutto's search for a credible security mechanism to guard against any future Indian aggression and his desire to close the widening gap between the conventional military capabilities of the two countries, naturally led him to the nuclear weapons option. Pakistan's precarious security situation called for drastic measures and irrespective of Bhutto's past rhetoric, nuclear weapons' option was the only logical solution available at the time. Consequently, Bhutto convened a meeting of nuclear scientists in Multan. This was supposed to be a highly classified meeting where a very sensitive national security decision was to be taken. However, instead of holding it behind closed doors to ensure secrecy, the meeting was held under a tarpaulin roof in the lawn of the house of a ruling party politician, much in keeping with Mr Bhutto's dramatic populist style of politics.[25]

The senior scientists including the future Nobel Laureate Dr. Abdus Salam and the incumbent Chairman of PAEC, Dr. Ishrat Usmani, were not supportive of the nuclear weapons option and wanted to maintain the peaceful orientation of the programme. However, the younger scientists were far more enthusiastic and very vocal in their support of the weapons programme. They dominated the proceedings and Bhutto got what he wanted. He announced to the gathering his decision to replace Dr Usmani with Munir Ahmad Khan as the Chairman of PAEC,[26] a position he was to retain for the next 18 years. Munir Ahmad Khan had worked for over a decade in the IAEA as head of its nuclear power programme and was convinced of the need for Pakistan to

[25] The account of this meeting is based on an interview with the late Khalid Hassan, an eminent Pakistani Journalist, who at the time was Bhutto's Press Secretary.

[26] Sinha, "Nuclear Pakistan- Atomic Threat to South Asia," 35.

develop a nuclear weapons option. His views had brought him closer to Mr. Bhutto when the latter was in political wilderness in Europe. Once the political decision had been taken, Munir Ahmad Khan set about preparing a road map for mastering the complete nuclear fuel cycle without which the nuclear dream could not be translated into reality. The next logical step was to set up a procurement network and start acquiring essential pieces of equipment and technology from Europe.

The First Indian Nuclear Test in May 1974 and the Pakistani Response

The pace of development of the essential nuclear facilities and infrastructure however, remained sluggish, until in May 1974[27] the Indians shocked both the Pakistanis as well as the Western industrialised countries. Their resultant responses were, however, at cross purposes with each other. Whereas the Pakistanis were trying to speed up their procurement efforts, the Western suppliers were erecting a series of barriers in their way in the form of technology control and denial regimes.

After the Indian test, Bhutto convened a meeting of the Defence Committee of the Cabinet (DCC) on 15th of June 1974 and decided to initiate a nuclear weapons programme[28], this time around in a more formal setting. Since the Indian test had further vitiated Pakistan's security environment, the acquisition of a nuclear weapons capability had now become unavoidable. It was decided to redouble the efforts to procure the necessary technology and equipment. As Feroz Hassan Khan has aptly remarked, India's maiden test in the Pokhran desert had turned "a policy option" for Pakistan into an "imperative".[29] Bhutto's first reaction to the Indian test was to send his Foreign Minister Aziz Ahmed to Washington, Paris, London and Beijing to seek a collective or bilateral nuclear umbrella. At the declaratory level, Bhutto reacted very strongly to the Indian test both in his address to Pakistani parliament as well as in his exchange of letters with the Indian Prime Minister, Mrs. Indira Gandhi. While addressing the National Assembly on 7th June 1974, Mr. Bhutto stated that, "a more grave and serious event…has not taken place in the history of Pakistan. The explosion has introduced a qualitative change in the situation (between the two countries)." [30] In his letter written on 6th June 1974 in response to Mrs Gandhi's letter of 22nd May 1974, Bhutto recalled the history of hostility between India and Pakistan since their independence which had resulted in major conflicts which took place in 1948,

[27] Charles K. Ebinger, *Pakistan Energy Planning in a Strategic Vortex* (Bloomington: Indiana University Press, 1981), 84.
[28] Feroz Hassan Khan, "Nuclear Proliferation Motivations," 503.
[29] Ibid., 501.
[30] *India Quarterly* xxx, no.4 (October-December 1974): 262.

1965 and again in 1971 and had left behind a legacy of unresolved disputes principally over the issue of Jammu and Kashmir. He argued that, "Pakistan has reason for unique anxiety because no two among the five nuclear weapon states have been involved in the kind of confrontation and unresolved disputes which have bedevilled India – Pakistan relations."[31] It is interesting to note that Bhutto's formulation in the above statement appears to be taking for granted India and Pakistan as nuclear weapon states.

Bhutto brushed aside the assurances given by the Indian Prime Minister that there would be no political or military implications of the test by commenting that the real issue was not of intentions but capabilities, adding that he did not see any technical difference between testing of a "peaceful nuclear device" and that of a nuclear weapon.[32] He was also sceptical of the value of verbal assurances given by Mrs Gandhi explaining that these could not be of any value unless they were converted into binding international agreements, pointing out that in the past India had not lived up even to solemn international commitments – in relation to holding of a plebiscite in the state of Jammu and Kashmir.[33]

In an interview with Pakistani journalists on the occasion of the third anniversary of his government, Bhutto apparently made a strong plea for a Pakistani nuclear weapons programme though staying just short of making an unequivocal pronouncement of a decision to go down that path, saying that, "The US military embargo has not contributed to stability in South Asia. If conventional arms are not supplied to Pakistan under treaty obligations and the disparity reaches a stage where it threatens the stability of South Asia, Pakistan will be duty bound to take all measures to protect its integrity. Pakistan has no intention at this point of developing nuclear weapons, but the country may be forced into a military – nuclear programme….we are still examining the pros and cons of it."[34]

The Indian security analysts knowing the deficiencies in Pakistan's nuclear infrastructure remained sceptical and viewed Bhutto's statements as empty rhetoric. As *India Quarterly*, an International Affairs Journal, wrote in its issue of October-December 1974 that, "This threat to go nuclear should not be taken too seriously, because Pakistan has neither access to un-safeguarded plutonium, nor does it have a plutonium separation plant. He may be striking this posture to impress domestic public opinion and perhaps also to underline to the international community how strongly he feels on the subject."[35] Thomas Thornton, however, seems to be convinced of Bhutto's determination

[31] Ibid.
[32] Ibid.
[33] *India Quarterly*, 263.
[34] Ibid., 265.
[35] Ibid., 266.

to respond to India's nuclear provocation saying that "once the Indians tested a nuclear device in 1974, Bhutto decided to give additional priority to Pakistan's nuclear weapons program, as a parallel way of dealing with the problem of Indian predominance through means independent of the goodwill of others."[36]

In August 1974, Pakistan made a proposal before the United Nations General Assembly for declaring South Asia as a Nuclear Weapons Free Zone (NWFZ). Though this proposal was approved by a large majority of votes it was opposed by India. It is clear that Bhutto was pursuing a three pronged strategy to deal with the situation. Firstly, while he was seeking nuclear guarantees from major powers, he had given a formal go ahead to his nuclear establishment to pursue a nuclear weapons programme. Secondly, he was maintaining an aggressive stance at the rhetorical level and was sending signals to both India and the international community that a nuclear weapons decision has become unavoidable for Pakistan. Thirdly, acutely aware of India's advances in nuclear technology and the long lead time needed for Pakistan to build its essential nuclear infrastructure, he made the NWFZ proposal at the UN to mobilise international pressure against India's nuclear programme in order to retard its further progress to gain for Pakistan some breathing space to do the catching up. From then onwards, Pakistan single- mindedly pursued the nuclear option irrespective of the costs and irrespective of changes of leadership and governments in the country. By the mid 1980s it had developed nuclear designs, tested their viability through "cold tests", prepared a nuclear test site in the Chaghai mountains in Balochistan and had commenced production of fissile material in the form of Highly Enriched Uranium.[37] But Pakistan refrained from testing to fulfil the commitment President Zia-ul-Haq had made to President Reagan that he would not embarrass him. By the late 1980s, in response to India's burgeoning ballistic missile programme, Pakistan had also started its own effort to produce missiles for its potential nuclear arsenal.

Possible Explanations for the Pakistani Decision to Go Nuclear

Pakistan's achievements in the nuclear field are nothing less than a modern day miracle. The country had a poor industrial base, limited economic and financial resources and under-developed and weak institutions when it embarked on its nuclear journey in the face of strong non-proliferation pressures. Pakistanis, unlike the Germans, generally display a distaste for order, discipline and organisation and the chaotic nature of Pakistani society is most clearly manifest in the state of traffic on public highways and inner city roads

[36] Thornton, "Pakistan : Fifty Years of Insecurity," 178.
[37] Abdul Sattar, "Pakistan's Foreign Policy 1947-2005 – A Concise History," 147-150.

alike. It, therefore, baffles many an observer as to how such a country succeeded in mastering a cutting edge technology requiring sophisticated skills in diverse fields of precision engineering and technology. However, more important than wondering as to how the Pakistanis were able to organise advanced industrial processes, would be the need to identify the motives behind Pakistan's pursuit of a military nuclear capability. An attempt would be made here to explain the rationale behind Pakistani nuclear decision in view of arguments offered by different scholars and to determine whether it fits neatly into a particular model or whether it would need a combination of two or more models to find a credible justification for it. Professor Thornton has for instance argued that, "…The nuclear programme is both a remarkable technological accomplishment and rational response to Pakistan's strategic situation. It gives Pakistan another type of "equaliser" in its relationship with India – more reliable than the political support it has sought elsewhere and it has considerably increased Pakistan's capability of passive deterrence against India…it is a Pakistani, not an Islamic bomb."[38] In essence, his argument revolves around the security imperative.

Scott Sagan has developed a framework based on his three models namely "the security model", "the domestic politics model" and "the norms model" to analyse the nuclear proliferation decisions by various countries.[39] Sagan believes that reliance on the security model alone is "dangerously inadequate" since nuclear weapons have the potential to serve other important purposes as well, stating that, "Nuclear Weapons are more than tools of national security; they are political objects of considerable importance in domestic debates and internal bureaucratic struggles and can also serve as international normative symbols of modernity and identity." [40] Under the rubric of the "Security Model" he explains that, "any state that seeks to maintain its national security must balance against any rival state that develops nuclear weapons by gaining access to a nuclear deterrent itself."[41] This variant of the security model appears to best fit Pakistan's case since it not only had to balance against India's development of nuclear weapons but, in fact, could have justifiably developed nuclear weapons capability as a means to neutralise the significant quantitative advantage India enjoyed in terms of conventional forces, even if India had not developed nuclear weapons. The other variant of the security model is seeking an alliance with a nuclear power. However, given the doubts about the credibility of extended deterrence, especially when the vital interests of the state providing extended deterrence are not involved, and

[38] Thornton, "Pakistan : Fifty Years of Insecurity," 182.
[39] Scott D. Sagan, "Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb," *International Security* 21, no.3 (Winter 1996-97): 54-86.
[40] Ibid., 55.
[41] Ibid., 57.

failure of Pakistani efforts to secure a nuclear umbrella from one or more nuclear powers in the immediate aftermath of the Indian test in 1974, renders this as irrelevant to the Pakistani situation.

Quoting George Schultz' statement that, "proliferation begets proliferation" Sagan has argued that every time a state builds a nuclear arsenal to match its main antagonist, it triggers a chain reaction wherein it creates a threat to another regional state which in turn also exercises its nuclear option.[42] This argument is difficult to prove through an empirical analysis of the available evidence. For instance, even if it is accepted that India's nuclear weapons programme was in response to the Chinese nuclear test in 1964, (there is no logical explanation as to why India responded to the Chinese threat after a decade, given the fact that India's programme was technologically far more advanced than the Chinese programme in 1964), and in turn it led to Pakistan's decision to follow suit. There is no evidence to suggest that any other regional state felt threatened in turn by the Pakistani nuclear capability and initiated its own nuclear programme out of fear of a Pakistani nuclear threat. Similarly, Iraq may have started its nuclear weapons programme in response to the Israeli nuclear programme and Iran began its nuclear effort as a reaction to the Iraqi effort. How does one explain Iran's continued pursuit of a nuclear capability long after the Iraqi threat had disappeared? The Iraqi action cannot be logically explained in view of the fact that Egypt did not act in a similar manner despite common borders with Israel and having gone to war against that country in 1948, 1956, 1967 and 1973. It is, therefore, difficult to unconditionally accept the statement that, "…each time one state develops nuclear weapons it will increase the strategic incentives for neighbouring states to follow suit."[43] The same criterion is also not applicable to the Libyan case or indeed to the situation on the Korean peninsula.

While one can agree with Sagan's explanation of the joint decision by Brazil and Argentina in 1990 to give up their respective nuclear weapons programmes due to absence of mutual security threats, since the two countries had not fought a war since 1828, it is difficult to apply the same logic to the Soviet decision to go nuclear in response to US nuclearisation in 1945, since these two countries had also never fought a war against each other.

The "Domestic Politics Model" does not seem to be relevant to the Pakistani decision, since the country's national nuclear programme is unique because of an almost complete national consensus as to its need for the country, despite a highly fractious political landscape. The programme has been pursued with the same vigour by leaders as diverse as Bhutto and Zia-ul-Haq to Benazir and Nawaz Sharif and irrespective of the military or democratic ruling dispensation in the country. This model, however, is more

[42] Ibid., 57-58.
[43] Ibid., 62.

appropriate for the Iranian situation where, in addition to the external security imperatives, it is also actively employed as a tool in the domestic political competition. It also played a major part in Indira Gandhi's decision to authorise the May 1974 test as a means of overcoming her growing domestic challenges. Sagan too has argued that the Indian case best fits the "Domestic Politics Model."[44] In Pakistan's case neither the senior scientific leadership was in favour of pursuing a nuclear weapons programme, nor did the scientific establishment enjoy much influence until recently, while the military generally remained disinterested and, there is nothing to suggest, that it carried out any professional evaluation of the nuclear option. On the other hand, the financial managers were never favourably disposed towards it.

As for the "Norms Model", again there is little evidence to suggest that the symbolic value of nuclear weapons was a factor leading to Pakistani nuclear weapons decision. Pakistan, unlike India, did not view nuclear weapons as status symbols or the means to propel itself as a major regional or global player. Nor has it staked a claim to a berth in the UNSC on the basis of its acquisition of a military nuclear capability. The display of life size models of Pakistani missiles and replicas of the Chaghai nuclear test site are more a function of the rivalry between the PAEC and Khan Research Laboratories (KRL) and their desire to attract public attention than any well thought out national policy to display nuclear muscles.

Professor Stephen Cohen has also corroborated the argument in favour of the "Security Model" as the raison d'etre for Pakistani nuclearisation arguing that:-

> "Like Israel, Pakistan was founded by a people who felt persecuted when living as a minority, and even though they possess their own states (which are based on religious identity), both remain under threat from powerful enemies. In both cases, an original partition demonstrated the hostility of neighbours, and subsequent wars showed that these neighbours remained hostile. Pakistan and Israel have also followed parallel strategic policies. Both sought an entangling alliance with various outside powers (at various times, Britain, France, China, and the United States), both ultimately concluded that outsiders could not be trusted in a moment of extreme crisis, and this led them to develop nuclear weapons."[45]

Feroz Khan and Peter Lavoy have taken a similar line saying that, "Pakistan's quest to acquire nuclear weapons arose from an urgent need to deter political coercion or outright military attack by its powerful rival India,

---

[44] Ibid., 65.

[45] Stephen P. Cohen, *India: Emerging Power* (Washington, D.C., Brookings Institution Press, 2001), 204.

especially when Pakistan could no longer count on an offsetting security relationship with the United States"[46]... They further argue that, "At the core of Pakistan's national identity and strategic culture is India's threat to Pakistan's survival. Since the early 1970s, Pakistan's leaders have consistently seen nuclear weapons as crucial to deterring the existential threat from India, which they believe is real."[47]

Sagan however, is convinced that "multi-causality rather than measurement error lies at the heart of nuclear proliferation problem".[48] However, he concedes that most credible theories are the ones which can provide a rationale for the bulk of the cases and that the largest number of nuclearisation decisions of the past such as those of the US, the USSR, China, Israel and Pakistan can be most convincingly explained by the security model. Same applies to the more recent cases such as Iraq, Libya and possibly North Korea and Iran. One may, however, disagree with him on the inclusion of the Libyan case as the one that can be explained by the security model which is a bit hard to imagine since Libya was never faced with any existential threat, neither did Qaddafi – an autocratic ruler, face any domestic political pressures and therefore, Libya's motivations can probably be best explained by the norms model.[49]

Former Pakistan Foreign Minister Abdul Sattar has argued that the disastrous outcome of the 1971 War with India forced Pakistan to carry out what he calls a "painful reappraisal of its policy of nuclear abstinence". He explains that as a consequence Pakistan became acutely aware of the inadequacy of its conventional military capability and was left with no doubt about India's nefarious designs and the decision to go nuclear was a logical outcome of this reappraisal of its security environment.[50] Feroz Khan seems to concur to this line of argument stating that, "Humiliated by India in 1971 war, Pakistan wanted to acquire a nuclear capability quietly. But India's 1974 nuclear test turned a policy option into an imperative….."[51] He has also stressed the significance of a state's motivation to nuclearise and has ascribed the American failure to prevent Pakistan from going nuclear to its failure to grasp the depth and intensity of Pakistan's security concerns vis-à-vis India.[52] Feroz has carried the same argument further saying that:-

---

[46] Feroz Hassan Khan & Peter Lavoy, "Pakistan: the Dilemma of Deterrence," in Muttiah Alagappa ed., *The Long Shadow: Nuclear Weapons and Security in 21st Century Asia* (Stanford University Press, 2008), 215.

[47] Ibid., 218.

[48] Sagan, "Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb," 85.

[49] Ibid.

[50] Sattar, "Pakistan's Foreign Policy 1947-2005 – A Concise History," 145.

[51] Feroz Khan, "Nuclear Proliferation Motivations," 501.

[52] Ibid.

> …Pakistan's case reveals that states that have experienced catastrophic defeats and face significant security concerns will gravitate towards nuclear weapons as their ultimate security guarantee. Insecure states that lack firm security commitments from allies and that fear for their survival are essentially "orphan" in a nuclear armed world. Michael Mandelbaum has placed Pakistan and Israel in such a category.[53]

Three points emerge from this statement namely, stigma of a humiliating defeat, lack of credible security guarantees by allies and existential threat, that have been used to explain the nuclearisation decisions by states. This may sound convincing as an argument but it only has a purely theoretical value since there are real practical challenges in the way of translating a "wish" into a "capability". There is no gainsaying that development of nuclear capability is an extremely demanding enterprise. There are five essential ingredients all of which are critical for attaining a nuclear weapons capability. First, the requirement of highly skilled manpower trained in many technology areas such as theoretical physics, mechanical engineering, electronics, geophysics, chemical engineering including explosives chemistry and metallurgy. Second, the availability of requisite materials and components including raw materials in the form of Uranium mines, specialised metals and alloys and scores of electronic and mechanical components. Third, manufacturing facilities to convert these materials and components into a workable device. Fourth, is the ability to design a deliverable nuclear device. Fifth, is the expertise needed in preparing nuclear test sites and availability of diagnostic equipment and a team of experts for conducting not only the nuclear explosive tests but cold tests as well, to validate the theoretical designs. If any one or more of these essentials are missing no country can achieve nuclear capability irrespective of the intensity of its motivation to go nuclear.

In Pakistan's case, time was also at premium and it had to procure necessary equipment from abroad before all loopholes in the export control regime were plugged, while at the same time, developing indigenous capabilities to design, manufacture and reverse engineering components which were not available in the international market. By the time Pakistan embarked on its nuclear weapons enterprise there was no dearth of skilled manpower. It was also endowed with adequate domestic uranium reserves. A research reactor was operating at Pakistan Institute of Nuclear Science & Technology (PINSTECH), the premier training institution in the country in the field of nuclear engineering. Pakistan started moving simultaneously on multiple routes. It began negotiating with France to procure a reprocessing plant while a team of scientists was put together to experiment with enrichment technology. Simultaneously, a weapon design team was set up in the mid 1970s

[53] Ibid., 502.

to start work on producing workable nuclear devices. When the reprocessing deal with France appeared to be falling through, it quietly decided to pursue the enrichment route based on the gas centrifuge technology. It was clear after the cancellation of the reprocessing deal that it would not be possible to import complete plants from abroad and therefore through a network of procurement agents, middlemen and front companies, components of key technologies were procured. Many other countries with similar motivations are not endowed with the advantages Pakistan had and therefore, their efforts did not make any headway. A typical example is that of Libya which had acquired an almost complete centrifuge enrichment plant. However, it could not even unpack and assemble the machines due to lack of skilled manpower and was also unable to domestically produce some minor yet critical missing components.

Elsewhere, Feroz has, like Sagan, argued that no single factor can satisfactorily rationalise Pakistan's decision to nuclearise and has identified six factors which in his opinion have driven Pakistan's Nuclear Weapons effort including ineffectiveness of conventional forces to prevent 1971 disaster, loss of faith in the efficacy of alliances, introduction of the nuclear factor in South Asia by India's 1974 nuclear test, Bhutto's longstanding nuclear ambitions and the nature of civil-military relations, a sense of betrayal by the US, and concerns about the growing strategic imbalance with India.

One can of course take issue with Khan's comment about Bhutto's predisposition for acquiring a nuclear capability because his ambition cannot be taken as an independent variant. His final decision was influenced by the outcome of the 1971 war and reinforced by the May 1974 nuclear test by India. One can argue that despite Bhutto's fascination with nuclear weapons, he might have acted differently had there been no war and dismemberment of Pakistan in 1971 and especially if India had not forced his hand by its test in 1974. The second issue is with regard to civil-military relations in Pakistan. Some analysts have argued that wary of military interventionism in Pakistan, Bhutto had found an opportunity to put down a discredited and demoralised military in the aftermath of the disastrous war in 1971, as is evident from his summary dismissal of a dozen or so generals. He might also have seen in nuclear weapons instruments of national security which would reduce the salience of conventional weapons and by extension the importance and influence of the military. With his finger on the nuclear button, he would be wielding all the power with the military having to play a secondary role. This factor is hard to prove empirically and its logic has not been proven by later events. As it turned out, it is the military which has become the custodian of the nuclear arsenal, though the civilian leadership has a major say in the nuclear decision making. In the final analysis, however, all the six factors listed by Feroz are derivatives of the national security imperative. One can, therefore, safely conclude that Pakistan's case is best explained by the

"Security Model" and its decision to go nuclear emerged from the national security imperatives of a "smaller nation" faced with a clear and present threat- both conventional as well as nuclear- to its national security and sovereignty by a larger and more powerful adversary.■