South Asian Studies A Research Journal of South Asian Studies Vol. 29, No.1, January – July 2014, pp. 41-60

Nuclearization of South Asia 1998: Pakistan's Domestic Constraints

Mubeen Adnan

University of Punjab, Lahore.

Abstract

India and Pakistan are two countries that, having tussles since the day they emerged on the globe as independent countries in 1947. The dispute between the two countries has a number of constraints in terms of historical, political and strategic terms. However, the most important amongst them is Kashmir, over which a number of wars have been fought. In May 1998, the relations between India and Pakistan took a new turn when India conducted its nuclear tests on 11 and 13 May 1998, followed by Pakistan conducting its own series of nuclear tests on 28 and 30 May 1998. Thus began a complicated nuclear race between the two that concerned the international community at large because any conflict between the two having a nuclear angle would have global ramifications. This research is focused on the domestic constraints of Pakistan related to the nuclear issue of 1998 and provides a better perspective, from a Pakistani viewpoint. The acquisition of nuclear weapons by India and Pakistan did not lead to instability in the region, both have adopted a policy of deterrence, the leadership of both sides is thinking rationally and stable relations in the form of deadlock are current. Both in India and Pakistan there exists a common belief that their nuclear programs are the guarantors of national security and national power. Due to these explosions, nuclear weapons have been put to political use by both countries. And both states are now targets for the nuclear missiles of all the other nuclear weapon states, as well as each other.

Key Words: Nuclear weapons, explosions, constraints, India, Pakistan.

Introduction

Nuclear weapons, importance is linked to political value. "Nuclear weapons are not instruments for fighting wars and their military value actually derives from the political effects of the existence of nuclear arsenals, including their ability to define and shape political stability between rival nations and blocs and signify power in relations between states" (Chellaney, 1991: p.312) For political reasons, nuclear weapons enable "mutual kill." (Broodie, 1946: p.23) Nuclear weapons development is also considered as the advancement of defense capabilities and a stronger military. Explosions show that nationalism is an important force behind the nuclearization of India and Pakistan. Pakistan emerged as a nuclear leader of the Muslim world and the whole nation is together on the

nuclear issue. According to Rodney Jones, nuclear weapons for Pakistan, "would strengthen the unity of the country and in that sense, its security." (Jones,1997: p.212). Nuclear weapons are considered an important component of power and India as a large state, wanted to have power projection capabilities for political purposes in the region and beyond. (Subrahmanyam, 1981: p.12). Nuclear weapons might give a sense of strength and power to the military and political leaders of Pakistan. On the Indian side scientific developments have been shaped by nationalism and the whole nation feels proud.

Nuclear explosions and missile programs on the Indian and Pakistani side are the result of nationalism in the form of technological advancement and there exists a national consensus on both sides to deter their enemy and a show of power. Nuclear developments of India and Pakistan have not resolved border tensions and the disputes over Kashmir. Another point of view is that nuclearization is basically a political problem, leaders use nuclear policy as an instrument of self-defense and a deterrent against her enemy. The Long standing India- Pakistan rivalry pushed them both to go for the nuclear option.

Nuclear Explosions by India and Pakistan 1998

South Asia became overtly nuclearized on 11th and 13th May 1998, when India exploded nuclear devices. India justified its nuclear explosions by claiming it did this in order to contain China, which was providing co-operation to Pakistan in developing nuclear and missile programmes and also to stop China's naval activity in the Indian Ocean. India surely did not need nuclear weapons against a decisively weakened Pakistan. As far as China is concerned, it has neither showed any aggressive posture within the region, nor at the global level. It has been following a non-alignment policy. Thus Indian nuclear capability has had a hegemonic nature. For Pakistan the un- successful western military alliances made it vulnerable before India and the acquisition of nuclear power gave it self-reliance and confidence.

A serious attempt is required in order to understand the dynamics of the nuclear politics as a constraint in South Asia. Pakistan emerges as the main villain to the Indian strategic community. The Indian nuclear programme was portrayed as civilian in nature before the May 1998 explosions but the Pakistani programme was militaristic from day one. (Nizamani, 2001: p.55) After the May 1998 nuclear tests, the Indian leadership showed an exemplary pragmatism in handling protracted insurgency in Kashmir. India considered itself a superior force in comparison to Pakistan. In the face of this threat, Pakistan took a political decision to conduct its own nuclear tests, ignoring all pressure from the world. The decision of the government has had popular domestic support which helped the leadership to face domestic constraints related to the nuclear explosions.

The political investment of the voices of the dominant security discourses in India and Pakistan in the nuclear issue makes it immensely difficult for any government to abandon the nuclear option. Zafar Iqbal Cheema, Pakistani defense expert, explains that "the chances of denuclearization of South Asia are slim because of the level of nuclear weapons capabilities both countries have acquired" (Cheema, 1996: p.103). In 1998 the nuclearization of South Asia marked by nuclear tests by India and Pakistan ended the ambiguity that both

have nuclear weapons. These tests dramatized the need to work on nuclear risk reduction techniques. The impact of nuclearization on conventional tussles/wars has been ambiguous. The interplay of nuclear and conventional threats is a new dimension of Pakistan-India relations.

The overt demonstration of nuclear weapons in the subcontinent increased international attention to the region and especially on the Kashmir issue. Pakistani and Indian officials argue that the nuclear deterrence had minimized the option of full-scale war in this region. However there exists the possibility of misperception and technological error can lead towards the dangers of accidental nuclear war. The significance of access to real time information for nuclear weapons has increased. Any lapse in this regard would have serious consequences for the people and infrastructure of both the states.

Indian Nuclear Policy

India introduced the nuclear arms race in the region for supporting her hegemonic desire. The Tata institute was established in 1945 and Dr. Homi Bhaba was nominated its Chairman.

"India's first Nuclear test occurred on 18 May 1974. Since then India has conducted another series of tests at the Pokhran test range in the state of Rajistan in 1998. India has an extensive civil and military nuclear program, which includes at least 10 nuclear reactors, uranium mining and milling sites, heavy water production facilities, a uranium enrichment plant, fuel fabrication facilities, and extensive nuclear research capabilities. In 2005, it was estimated that India had between 40 and 50 warheads." (Khan, 1998: pp.5-6)

Between 1974 and May 1998, the internal dynamics of Indian nuclear policy were influenced by different factors. The Weak Indian political leadership was reluctant to develop a policy that saw a connection between Indian independence and indigenous capabilities in the field of conventional and nuclear arsenals. Indians declared the Non Proliferation Treaty (NPT) discriminatory and divide the world into haves and have not's. On the other side is the Comprehensive Test Ban Treaty (CTBT) which created technical discrimination.

The Chinese factor was also important for developing Indian nuclear policy. The India-China border war of 1962 and China's nuclear tests of 1964 and China's friendly relations with Pakistan and Chinese military assistance to Pakistan silently put pressure on India. "Dismissing Pakistan's India centric security concern, India rationalized its nuclear- centric security concerns" (Haider, 2002: p.83). India justified its nuclear explosions by explaining it did this in order to contain China, which is providing co-operation to Pakistan in developing nuclear and missile programmes and also to stop China's naval activity in the Indian Ocean.

In March 1998 the BJP government came into power. Under this government no dialogue process between India and Pakistan was started and the Indian government was not ready to show any compromise on Kashmir and the BJP government has had an ambition to conduct nuclear tests.

Nuclear Doctrine

India has drafted a nuclear doctrine which was announced on 17 August 1999 by its National Security Advisory Board created by the BJP government. The Doctrine announces its joining of the nuclear club of five states and the main features were stock-piling of nuclear weapons, intercontinental reach of weapons and to play a role in this world as an emerging geo-economic power.

"India has a declared nuclear no first use policy and is in the process of developing a nuclear doctrine based on "credible minimum deterrence." In August 1999, the Indian government released a draft of the doctrine which asserts that nuclear weapons are solely for deterrence and that India will pursue a policy of "retaliation only". The document also maintains that India "will not be the first to initiate a nuclear first strike, but will respond with punitive retaliation should deterrence fail" and that decisions to authorize the use of nuclear weapons would be made by the Prime Minister or his 'designated successor(s)." (http://www.indianembassy.org/policy/CTBT/nuclear_d octrine_aug_17_1999.html)

There were five principles laid down in this doctrine, these are sufficiency, survivability and co-operational preparedness of nuclear forces, a development of a nuclear triad of land, air and sea. To have the capability to absorb and then retaliate enemy's nuclear strike with a force which would create unacceptable damage to enemy. Second strike capability should be acquired for deterring China. The doctrine also emphasizes the need for credible nuclear deterrence. Comprehensive training and planning for the employment and deployment was the important feature of this doctrine. It maintains strict control over the export of sensitive technologies and materials. It would continue further nuclear testing. India was adopting the no first use policy in 2001-2002 during the border stand off. India's strategic nuclear command was formally established in 2003, with an Air Force officer, Air Marshal Asthana, as the Commander-in-Chief. The joint service SNC is the custodian of all of India's nuclear weapons, missiles and assets. The Indian Cabinet Committee on Security reviewed the operationalization of India's nuclear doctrine of 4 January 2003 and drafted a new version of the nuclear doctrine, in which it omits the development of a triad of strategic nuclear forces (land-based, air based) which was beyond India's capacity. The no first use policy was modified as the word "anywhere" has been added e.g.; nuclear weapons will only be used in retaliation against a nuclear attack on Indian territory or on Indian forces anywhere. This showed the aggressive posture of India.

Article six of the doctrine renders the no-first use declaration in valid by saying that in a major attack against India or Indian forces any where, by using biological or chemical weapons, India will not hesitate to answer the attack by using nuclear weapons.

The Indian nuclear tests were carried out for getting recognition of India as a major power in South Asia and to catch up to China, in terms of status and deterrence. India also wanted to show its technological and strategic superiority over Pakistan. The political analysts believed that these tests were done in order to boost the BJP government's internal weak position. These tests were used to divert the attention from their domestic problems. But India was not totally successful in getting advantages from its nuclear explosions of 1998, and it did not secure great respect among international community. It gave the chance to Pakistan to match India as a declared nuclear power. Nuclear power was used to revive bilateral diplomacy between India and Pakistan. For India, the role of the military increased in nuclear policy making and as a result the defense budget also increased. India also lost its standing as an advocate of nuclear disarmament.

Pakistan's Nuclear Programme

Nuclear weapons are an integral part of the strategic discourse of Pakistan. Z.A Bhutto was considered the pioneer of the nuclear issue in Pakistan. He was convinced that the major threat to Pakistan's security comes from India.

The Indian factor has been the rallying point of the dominant security discourse in Pakistan and Pakistan deemed it a national duty to respond to Indian's nuclear explosions. The decision to go to nuclear "earned Prime Minister Nawaz Sharif a place of honor in Pakistan's history."(Arif, *Dawn*, 25 November1998). Pakistan acquired nuclear weapons for political as well as for military purposes. The motives behind this are to deter its enemy's conventional superiority as well as acquiring international fame.

Nuclear Policy

The disaster of 1971 war was the one driving force for formulating the nuclear weapon programme when the Pakistani conventional forces did not match the Indian superiority for defending its territory.

Pakistan has many reasons to adopt a cautious attitude in relation to its nuclear activities, it is almost certain that it would resist any formulation that singles it out and ignores or disregards the activities of other countries in the region. The Indian nuclear development threatened Pakistan as all the leaders made it an issue of concern. Pakistan assumed that the main target of Indian nuclear weapon is Pakistan. It can be used against Pakistan. In order to deter India, Pakistan's nuclear programme development is essential in this regard.

Prime Minister Bhutto wanted a nuclear weapon for balancing India's conventional superiority, to counter its nuclear threat as well as to revive Pakistan's reputation. The leadership thought that nuclear weapons were necessary in order to deter India. Prime Minister Z.A Bhutto stated that "if India builds the bomb, we will eat grass or leaves, even

go hungry, but we will get one of our own, we have no alternatives." (Aslam, 1989: p.10). It is said that Prime Minister Bhutto encouraged nuclear development in order to strengthen his own image with the Pakistani public and to have a shield against Indian nuclear progress. Pakistan worked for a credible nuclear deterrence against India. In 1985, President Muhammad Zia- ul- Haq clearly announced that Pakistan's nuclear development was to counter the Indian threat.Prime Minister Bhutto, saw a nuclear bomb as a way of balancing India's conventional superiority and an answer to its nuclear threat. He was deeply interested in making Pakistan Nuclear. In front of India, Pakistan was an isolated and threatened state and the nuclear bomb was considered very important.

Pakistan policy makers initially adopted a wait and see attitude to have time to access the world community's response to the Indian tests. At the same time, Pakistan was working for retaliation tests. But foreign pressure for not conducting a nuclear test was increasing day by day. At a domestic level, public opinion, political parties and defense establishment put pressure on the government to go for nuclear explosions. 70% of Pakistanis wanted their government to explode a nuclear device. Prime Minister Nawaz Sharif in his interview to the Times said that "I don't think I will last in office more than 2 or 3 days if I don't make a test." (Daily Times, May 26, 1998)

After exploding nuclear tests Prime Minister Nawaz Sharif said that "we have settled the score with India by detonating five nuclear devices of our own."(Hussain, 1998: p. 23) He announced that Pakistan did this for its security concerns. It is required for the peace and stability in South Asia. Having exploded its nuclear devices Pakistan is now in a position to bargain with India when it comes to the negotiating table in order to settle their differences through talks. By virtue of Pakistan's nuclear capability, it has gained confidence and is ready to expedite efforts for the solution of the Kashmir problem. India constantly accused Pakistan of supporting insurgency in Kashmir.

The most important similarity between the Indian and Pakistani nuclear hawks is their reliance on "political realism as a result of these intellectuals, preoccupation with the problem- solving goals of theorizing. This trait, in turn, makes existing accounts of nuclear politics prone to presenting their subjective analyses as objectively true depictions of strategic reality" (Nizamani, 2001 : p.138) The Pakistani Political party Jamait- i- Islami and Bharatiya Janta party in India were the supporters of the nuclear option and played important roles in influencing the nuclear discourse.

In the case of Pakistan's security issue, India is always portrayed as the key threat. It is in this context that Prime Minister Z. A Bhutto included the nuclear option to his policy as a deterrent against India. Over the nature and direction of nuclear discourse and some others, there is a near monopoly by a selected number of people that are politicians and it comprises a small number of scholars, military and civil servants both in India and Pakistan. It is evident that how the political parties abide by the rules. The researchers explained that a selected number of individuals have linked the nuclear issue with some other internal and external issues. The animosity between the two countries has increased; both countries will increase their nuclear capability in the future. CBM's have had not produced the desired results of resolving the different issues between them. Domestic politics and stereotyped leadership of both states have had an influence on foreign policy. Pakistani officials believe that nuclear weapons have ruled out the possibility of a conventional war between them but the kargil episode showed something different to it. A year later after India and Pakistan became nuclear powers, kargil conflict erupted between them. "By traditional deterrence theory, nuclear weapons are primarily political weapons." (Nizamani, 2001: pp.147-148) The Nuclear programmes of both countries are the extensions of the political aims rather than having pure military objectives. Both states have a viewpoint that they do not want to become the target of one another and indulging them into unnecessary crises. India and Pakistan do try to influence each other. The so called nuclear arms race is underway between India and Pakistan.

Stephen P. Cohen explains that

"India and Pakistan, driven by racial and religious hatred, are locked into a deadly arms race that could (at worst) lead to regional and or global nuclear war, or (at best produce a nuclear accident, nuclear theft, or the transfer of fissile material and sensitive technology to other near nuclears....The perception is widespread that regional governments are often unstable and can not be trusted with nuclear weapons. On the other hand there is a minority view that nuclear weapons themselves generate their own logic that of deterrence.... India and Pakistan will replicate and evolve on a small scale the peaceful deadlock."(Cohen, 1991: pp.10-11)

Nizamani in his book the Roots of Rhetoric discussed nuclearization of India and Pakistan as a result of "love-hate relationship between nuclear hawks." (Nizamani, 2001: p.148). There is no guarantee between the two that nuclear war will not break out. Nuclear Proliferation has stopped conflicts to a level that no new or worse crisis has erupted. But "India can not make peace, Pakistan can not make war." (Cohen, 1991 : p.15).

Disequilibrium/Imbalances between India and Pakistan

South Asia is the poorest and most militarized region in the world. India and Pakistan are responsible for the arms race. India is ranked at 94th (2009) in terms of per capita income and emerged as fourth largest economy globally. (http://www.articles.economicstimes.indiatimes.com...,economicsurvay) . On the other side, Pakistan's ranking is very low in terms of per capita income and in terms of its economy.

As compared to Pakistan, India has a four times larger territory, is seven times more populous, is two times more powerful in conventional force, it has four times more extensive and advanced technological proficiency and has strategic depth from a defense perspective. On the other side Pakistan's location on the Arabian Sea, geographic linkage with China, Iran, Afghanistan and proximity to Central Asia and Russia stands as strong evidence of its natural strategic importance. Due to its geographical position, Pakistan has the potential to play a significant role within the region. It has sizeable armed forces.

Table 1.1 Defense Expenditure as % of GDP						
Year	India	Pakistan				
1998	2.8	5.2				
1999	3.1	5				
2000	3.1	4				
2001	3	4				
2002	2.9	4.2				
2003	2.8	4.2				
2004	2.8	4.1				
2005	2.7	4				
2006	2.5	3.8				
2007	2.3	3.6				
2008	2.5	3.4				
2009	2.6	3.2				
2010	2.4	3.2				
Source: data. world banl	k.org/indicators/MS.MI	L.XPND.GD.ZS				

This table shows that in the comparison of India and Pakistan, Pakistan is spending more on its defense as percentage of its GDP. (Reddy, South Asian Journal Jan-March, 2004, Issue III)

Pakistan being a small country in comparison to India and spending greater money on defense ultimately put pressure on economy, education and welfare programmes. The political elite justify it by saying that they have to do this in order to deter India. This table shows huge difference of spending's on health, education and defense.

Table	Table 1.2 DEFENCE VS EDUCATION AND HEALTH (% of GDP)								
Country	Country Public & Private Public & Private Defence Spending								
	Spending on Health	Spending on							
		Education							
India	4.2(2009)	3.09(2006)	2.6(2009)						
Pakistan	Pakistan 2.6(2009) 2.7(2009) 3.2(2009)								
Sourc	e: World Development I	ndicators Database (W	orld Bank, 2009)						

Insecurity by Nuclear Weapons

Nuclear weapons lead to many types of insecurity. The great danger comes from the possibility of a nuclear explosion, by mistake or by choice. "If a small nuclear weapon with the same yield 15 kiloton's as the one that was dropped on Hiroshima more than 50 years ago was exploded over Mumbai or Karachi, the number of immediate deaths could be as high as half a million." (Ramana, Report, 1999: p.10). The deaths due to radiation effects and cancers would be more than the above estimate. Pakistan and India must come to terms with Robert Jay Lifton's statement: "the central existential fact of the nuclear age is vulnerability" (Lifton & Falk, 1982: p.55). Nuclear weapons also pose non nuclear/ conventional threats. It is seen that violence and militarism in Kashmir intensified almost around the period when Pakistan started claiming and announcing its nuclear capability in the late 1980's or early 1990's. The terrorist's acts in the Kashmir valley after the nuclear

explosions have not changed the situation in Kashmir. The risk has been increased that a small battle could be escalated into a nuclear war crisis.(Ravana, 2003: p.166) As for Pakistan and India, an economically stable state with strong institutions and without nuclear bombs would be more secure than an economically shattered state with few nuclear arsenals but having a population without basic necessities. The Soviet Union is an example of a state that collapsed due to bad economy but still having nuclear weapons.

Nuclear weapons have increased militarized behaviour of India as well as Pakistan. Nuclearization has made both states less stable as the Indian- Pakistani disputes have increased. Both state's relationships became more conflictual. There were two major militarized confrontations in the wake of the 1998 nuclear tests, the Kargil conflict and Indian Pakistani militarized stand off that nearly led to war in 2002. Crises have followed crises. Despite the defeat in the Kargil war, Pakistan political and military leaders stressed that Pakistan's nuclear weapons had deterred India from crossing the Line of Control or the international border. Military has had this strong belief who otherwise acknowledged that nuclear weapons are of no other than military utility.

Domestic Constraints vis a vis Nuclear Explosions 1998

The relations with India have created domestic constraints for Pakistan for example security, lack of trust, geography, politics and indeed post independence history of bad relations. Pakistan had weighed all these constraints before exercising its choice. There is a fundamental link between constraints and nuclear weapons in South Asia. The Pakistani response to the 1998 nuclear crisis emanating from Indian nuclear tests resulted in multifaceted repercussions. Domestic constraints conditioned the foreign policy of Pakistan towards India.

Politically Pakistan faced domestic pressure and Prime Minister Nawaz Sharif found himself under the scrutiny of the political parties. Economic constraints had seriously undermined Pakistan's ability to meet its international debt obligations and continue its international trade activities. The situation took a serious turn when the foreign exchange accounts of all Pakistanis with local banks were frozen, to deal with the economic constraints. Pakistan having a weak economy still has to spend large amounts on defense. Following are the constraints which Pakistan had faced regarding the nuclear explosions in 1998.

Tuske 115 Domestic Constraints in 1996 Autekar Explosions								
Domestic	limitation on	Limitation on	Limitation on					
Constraints in	Foreign Policy	Foreign Policy	Capacity to act					
1998 Nuclear	Choices	Decisions						
Explosions								
History	India could attack.	To stop India from	Whether to					
Geography	Economic sanctions.	attack on Pakistan or to	go for					
Security	World power	over- rule its	nuclear or not to					
Economy	pressure. To absorb	superiority.	go for nuclear.					
Political	sanctions. To absorb	Relations might						
	world pressure.	suffer.						

Table 1.3 Domestic Constraints in 1998 Nuclear Explosions

Generated by the Researcher

a. Historical Factor

The Indian National Congress never accepted the two nation theory. India adopted the policy of secularism. The history of bad relations between India and Pakistan shows that military power is used to achieve political objectives. The troubled relationship has been, based on confrontation and crisis ever since the Independence of India and Pakistan. The animosity between them is rooted in their history and the tradition of mutual distrust and suspicion which is inherited by both. (Ahmed, 2009: p.55).The core problem between them is Kashmir, which has continued the relations of mutual distrust and tension.

A historical analysis of Pakistan-India relations provides the evidence that relationships are based on traditional issues, stereotyped mentality, non variable images and wrong perceptions given by political leaders.(Kumar, 2004: p.33) The conflict between India and Pakistan originated as a clash between Indian nationalism and Muslim nationalism before the partition of the sub-continent. Quaid-e- Azam Muhammad Ali Jinnah insisted on a separate country for the Muslims namely Pakistan. On the other hand India became the secular Hindu- majority and the world's largest democratic state. Kashmir has been the main flash point ever since partition and most Pakistani and Indian conflicts have ended in stalemate. The two neighbours are divided into two by a line of control and Pakistan-India relations are rooted in the geographic, political, cultural and economic links as well as various military conflicts and territorial disputes between them.

For over 700 years, Muslims ruled the subcontinent and eventually succeeded in establishing Pakistan as their separate homeland. Unfortunately, the Indians did not accept the partition of their great India; they took it as their defeat. In the Hindu national consciousness, as inspired by many great Hindu writers of the last century, the subcontinent is conceived as a unity, one and indivisible from the Khyber Hills to the far south, with the North-West, which is Pakistan, its heart and soul."(Bhutto, 1960: p.13). This thinking has a powerful influence over the Indian mind. The Indian leaders took Pakistan as a price for the transference of power from British to Indian hands. They had to concede to this division when it became clear to them that partition was inevitable.

b. Security

The post cold war time period has heightened Pakistan's concerns regarding its security deficit. During the cold war, Pakistan entered into partnerships with major powers for achieving its foreign policy aims and afforded incentives for adopting a moderate course, but also served as constraints on worst-case threats from India. Security perceptions of Pakistan are directly linked with the real and perceived threats confronting it from time to time. After independence Pakistan was feeling insecure against India and in turn it joined herself with the West and especially with America. The Indian factor virtually had a binding effect on Pakistan's security perceptions at that time. Pakistan joined SEATO (South East Asia Treaty Organization) in 1954 and CENTO (Central Treaty Organization) in 1955 for enhancing its security. (Rehman, 1999: pp.10-12). The Pakistani leadership says that Indian actions always threatened its neighbouring countries and it's for exercising hegemony in

South Asia. There also exists a lack of trust between India and Pakistan which further support the security concerns of Pakistan.

Pakistan faces security compulsions because of the Indian behaviour, which enjoys numerical superiority in conventional weapon a variety of missiles and a large weapon oriented nuclear programme. The threat that Pakistan perceives from India is not a product of its imagination but it's a reality. After the Indian as well as Pakistani nuclear tests, the security environment had changed. Pakistan had acquired nuclear capability not by desire but only for security or deterrent reasons against the hegemonic India. Pakistani leadership started consultations over the nuclear tests of India. (Rizvi, Indian News, 16 May, 1998).A Press statement was released after the meeting of the Defense Committee of the Cabinet (DCC), which was headed by Prime Minister Nawaz Sharif, It Stated that "Pakistan's warning to the international community, particularly to the major powers, to stop India from crossing the threshold had gone unheeded. Government is determined to reject any unilateral, selective and discriminatory pressure from any quarter on matters pertaining to national security."(The Nation, 22 May, 1998). Different Indian leaders in their speeches regarding the nuclear environment threatened Pakistan and demanded to roll back its anti-India policies. The hostile statements raised the temperature and intense clashes between India and Pakistan on the Line of Control (LOC) started. Pakistan's chief of army staff (COAS), General Jahangir Karamat, visited forward positions in Kashmir on May 23 and May 25, 1998, respectively. The Army Chief ensured that "any Indian military activity along the line of Control would trigger a response from Pakistan and that no sacrifice was great to ensure a balance critically" (Burk, 1975: p.44). These developments had a great impact on the decision makers and the Inter- Services Intelligence (ISI) Chief, Lt. General Naseem Rana on May 27, 1998, briefed the Prime Minister, the COAS on the overall security situation. The briefing highlighted intelligence reports of a possible Indian attack on Pakistan's nuclear installations. One report was regarding the sighting of an unidentified F-16 aircraft at the periphery of Pakistan's airspace on May, 1998. India had no F-16 aircraft and it was assumed that it was Israeli aircraft. The second report showed an unusual movement of aircraft in India just across the border, hinting that India might launch a preventive air strike against Pakistan's nuclear installations. (Chander, 2003: p.7). This information further increased tension in relations. Mr Shamshad Ahmad Khan, who was Pakistan's Foreign Secretary at the time of nuclear explosions of 1998, said that, we had credible information of an imminent (Indian) attack on our nuclear and sensitive installations. We immediately warned India that such an attack would be a breach of the 1988 bilateral agreement on no strike against each other's nuclear and sensitive installations. We warned them of a swift and massive retaliation. We also alerted the international community and major powers of the consequences of any such Indo-Israeli misadventure against Pakistan. The destabilizing effect of Indian Prithvi missile on the security of Pakistan can be judged that with its short flight time, Pakistan's reaction time to this is less than three minutes; this missile is quick to fire.

India wanted to impose a threat to end Pakistan's existence and this security threat would materialize by an outright conventional military invasion, due to frustration over the resistance in Kashmir or as an outcome of smaller encroachments. Indian policies are

always considered as a continuous source of threat for Pakistan. The table1.4 shows that Pakistan as a developing state spending more on its defence as a percentage of its GDP as compare to India, Russia and the developed states China and US.

Table 1.4 Defence Expenditure as % of GDP					
China	2				
India	2.4				
U.S.	4.8				
Russia	4				
Pakistan	3.2				
Turkey	2.4				
Israel	6.5				
S. Arabia 10.4					
Source: World Bank Indicators(World Bank data base 2010) data, world bank.org/indicators/MS.MIL.XPND.GD.ZS					

ata.	world	bank.org	/indicate	ors/MS.N	AIL.XP	ND.GD.Z

In Local Currency (b. rupees)							-		
Year	1988	1989	1990	1991	1992	1993	1994	1995	1996
Value	47.3	51	58.6	70.2	81.6	89.6	98.1	112	124
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
Value	132	140	147	154	170	188	207	232	263
Year	2006	2007	2008						
Value	287	309	336						

Table 1.5 Military expenditure of Pakistan
In I and Common on (h. some and)

As percentage	of gross	domestic	product.
---------------	----------	----------	----------

Year	1988	1989	1990	1991	1992	1993	1994	1995	1996
Value	6.2	6	5.8	5.8	6.1	5.7	5.3	5.3	5.1
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
Value	4.9	4.8	3.8	3.7	3.8	3.9	3.7	3.6	3.5
Year	2006	2007							
Value	3.3	3.1							

Source: - http://milexdata.sipri.org/result.php4

c. Geography

Pakistan's geo-political location made its relations with India more important. Pakistan's geographical linkage to India and its internal topography also explains its sense of vulnerability to a potential Indian conventional invasion. India's sheer size has always been a source of fear, and a feeling of insecurity exists in the minds of policy makers. Its southern flanks lie exposed to India on a diagonal axis of roughly 2,000 kilometers from the Arabian Sea in South-West Sindh to upper Punjab and Kashmir in the North East. The terrain along most of this border is flat and vulnerable to rapid armor movement. The large size of Indian territory is linked to more natural resources. Pakistan shares half of its land borders with India and its major cities are within easy reach of the Indian army. Pakistan

lacks strategic geographical depth, which is vital for a sustainable defense effort. Pakistan's urban centers with large populations are concentrated along the territorial river belt, which is more than 300 kilometers wide in the North and narrow at points to less than 100 kilometers as it moves south, such as where southern Punjab ends and Sindh begins. Similarly, Lahore, the provincial capital and the largest city of Punjab, is within the range of front lines of Indian heavy artillery near Amritsar. Perhaps, all of Pakistan is susceptible to air attack by the Indian supersonic aircraft. (Kux, see also Singer,1998: p.161-164).

For Pakistani military planners, the logical avenues of Indian military advance are obviously those which were exploited in the 1965 war. Indian military leadership focused on the same opportunities during the Brass tacks exercise of 1986-87. Thus in a war like situation, if Pakistan's ground forces fail, Pakistani Punjab could be easily overturn by Indian armor, opposite Sialkot and Lahore, opening the door to occupation of the heart of the country. Punjab is expected to be the main invasion corridor because of its proximity to Kashmir and its status as Pakistan's political heartland. With diversionary attacks towards Lahore in central Punjab, India could concentrate armed forces further south in Rajistan for its main invasion across the desert by striking at Pakistan's vital north-south road and rail communication link, where they narrow to a waist hardly 70 kilometers across, southwest of Rahim Yar Khan. This plan could cut off Punjab and the North West Frontier Province (NWFP), where most of Pakistan's air and ground military assets are based, from Karachi, which is Pakistan's main naval base and a major port, handling the supply of oil and other imports upcountry and exports. Such an invasion could be supplemented by Indian sponsored subversion through dissident groups to threaten the breakup of Pakistan from territorial perspective. India could also block Karachi port from the sea.

d. Economy

The political influence of a nation has been more or less correlative to its military strength which comes out from its economic strength. Economic power helps the state in becoming a military power because military power is directly related to its economic capabilities. The economy as a whole was threatened by a low growth rate, high balance of payment deficit, decline in investor confidence, and decline in foreign direct aid, growing unemployment and poverty. The country suffered from chronic fiscal deficits because of a highly developed black market economy. By mid 1998, Pakistan's foreign debt stood at US \$ 30 billion, foreign currency reserves were less than US \$ 1 billion, GDP growth rate had fallen 12%ⁱ 3 % and inflation had risen to to (http://www.globalsecurity.org/wmd/library/news/pakistab/1998/980529-gop-pak-nuclear-1..).These economic constraints had rendered the Nawaz Sharif Government weak. There are no reliable estimates of Pakistan's cost on nuclear weapons. Ram Monohar Reddy, an economist and journalist estimated \$ 10-12 billion. The table below shows the Investment costs of nuclear weaponization.

1- One reactor to produce plutonium	7,000 million rupees
2- One missile production facility	5,000"
3-Cost of a 150 bomb arsenal	6,000 "
4- Cost of Missiles	40,450 "
5- Cost of fitting nuclear weapon on air force squadron	600"
6-Cost of 3 nuclear submarines	120,000 "
7-Cost of C4 I	35,250 "
8-Cost of satellite	20,000 "
9- Cost of radar and protection of air base and launch sites	50,000 "
Total	280,000 "

Table 1.6 Investment Costs of Nuclear Weaponization

Source: C. Ram Manohar Reddy, The Hindu, 2 September 1998.

Nothing is known about how much Pakistan spends, or has spent on its nuclear weapons. Kahuta has never announced its estimated expenditures. The financial cost of Pakistan's nuclear weapon programme is kept secret and even estimating the cost is difficult. But the above mentioned table gives an estimation cost for nuclear weapons. This shows how tough it is for a weak economy to have nuclear weapons.

Table 1.7 Composition of Key Macroeconomic Magnitudes in the Pre, Post-Blasts/Sanctions Scenario 1998-99

	Pre-Blast Scenario	Post-Blast	Difference
		Sanctions	
		Scenario	
GDP Growth Rate	6%	3%	-3%
Rate of Inflation	6%	5%	-1%
Budget Deficit?	6%	6%	0
Current Account Deficit? As % of GDP	31/2%	6%	21/2%

Sourse: 'Impact of Economic Adjustment on Social Development in Pakistan' Retrieved On 12 April 2010 from Http://Www.Spdc.Org.Pk/Pubs/Rr/Rr28.Pdf

The numbers in the Table highlight the differences between the performance of macro indicators in the pre and post blast/sanctions situation in the first year. It is apparent from the performance of macro indicators that the acquisition of nuclear capability and the resulting sanctions inflicted substantial costs on the economy in the short run. All the indicators, except inflation and budget deficit in post-sanction era, are lower or worse than in the counter-factual pre-blast/sanctions position. Tight fiscal policy specifically expenditure curtailment artificially closed the budgetary gap. Predictions of lower inflation in the post-sanctions reflect onslaught of deep recessionary conditions in the economy.

The decision to carry out tests was certainly a difficult preposition for the government of Pakistan. The decision entailed the prospect of comprehensive sanctions Imposed on Pakistan. It was felt that a nearly bankrupt Pakistani economy might not be able to withstand these sanctions. Gohar Ayub the foreign Minister said that "we are quite accustomed to sanctions and embargoes. Sanctions will be savior and Pakistan will choose its time for nuclear tests."(The News, 28 May, 1998.).Economic constraint had serious concerns for Pakistan but the political leadership, public and defense establishment were ready to bear the burden. The Finance Minister, Sartaj Aziz made a statement that "plan underway to face sanctions, economic package no substitute for security."(The News, 27 May 1998). Earlier in a meeting of the Defense Committee of the Cabinet on 15 May 1998, he was the only person who opposed the tests on financial grounds, due to the economic recession, low foreign exchange reserves of Pakistan and the effect of economic sanctions which would be imposed.

Enforcement of economic sanctions had created stress and the decision makers took the controversial decision to cease foreign currency accounts (FCA's) held by Pakistani banks. This decision had long term economic constraints for Pakistan. This decision played havoc with the business of the foreign companies working in Pakistan. As a result its economic rating decreases more . In 1998, as a response to the continuing tests, the United States and Japan imposed temporary economic sanctions on India.

Prime Minister Nawaz Sharif informed the cabinet that "Pakistan had no choice, in case of emergency Pakistan will utilize its economic resources within the state." (The News, 30 May 1998.). Fears that sanctions might sink Pakistan's shaky economy were not misplaced. At the time of the nuclear tests, Pakistan had a foreign debt of over US \$ 30 billion and foreign exchange reserves of only US \$ 600 million. Pakistan would require fresh financial help from International Monetary Fund (IMF) in-order to meet the debt service payments.

f. Political

Prime Minister Nawaz Sharif was facing difficulties on the domestic political front, around the time of nuclear explosions of Pakistan. In the February 1997 elections, Mr. Nawaz Sharif's party, Pakistan Muslim League (PML) won a tremendous victory over other parties. To obtain absolute power, Prime Minister Nawaz Sharif began to remove constitutional hurdles. The Prime Minister had disputes with Chief Justice of Pakistan, Mr. Justice Sajjad Ali Shah, with the President of Pakistan, Mr. Farooq Ahmad Khan and with the Chief of Army Staff General Jahangir Karamat led to the resignation or the replacement of all these three. The removal of all these three had made Mr. Nawaz Sharif the most powerful Prime Minister in the history of Pakistan. In spite of his power, the Prime Minister was unable to restore civil order in Pakistan. Internal strife increased, in Karachi, Mohajir Qaumi Movement (MQM), Shia Sunni sectarian violence especially in Punjab and elsewhere in the country. The government was involved with the Taliban government in Afghanistan, as Pakistan, UAE and Saudi Arabia had recognized Taliban. The Taliban openly supported a sectarian group in Pakistan. In NWFP, there was ever increasing Taliban influence.(The News, 30 May 1998.). Mr. Nawaz Sharif's ability to govern Pakistan properly was in doubt. He was also under international pressure not to respond to Indian nuclear tests. All the governments in Pakistan declared that they would match any Indian tests, failure to do so would undermine Mr. Nawaz Sharif' already damaged credibility. It shows that Mr. Nawaz Sharif had personal political stakes attached to nuclear testing. The Government was under immense pressure from the political circles as well as from the scientists' community to test the country's capabilities in response to the Indian tests.

The Pakistani government tried hard to explore all possible alternatives for responding to the Indian tests. This was a unique situation for Pakistan when the political force, military force and public were in favour of conducting nuclear tests. The head of the state, Rafiq Tarar, the head of the government, Mian Nawaz Sharif, the Military Chief, Jahangir Karamat, and the Cabinet Ministers for Finance, Sartaj Aziz, Foreign Minister Gohar Ayub and Interior Minister, Ch. Shujaat all were in favour of explosions.

Prime Minister Nawaz Sharif consulted various parties and factions and remained under enormous pressure to conduct the tests. Former Prime Minister Benazir Bhutto favoured an immediate nuclear test and stated that India should be disarmed by a preemptive attack. Ms. Bhutto also demanded a resignation by Mr. Nawaz Sharif. (Dawn, 18 May 1998).Elite support was also there for explosions, to prove this, nation- wide celebrations are enough to see the support of all domestic community.

Despite having all the above mentioned constraints, there were some domestic influences which favoured the nuclear explosion and compelled Pakistan to go for nuclear. Here only public opinion would be discussed because it was thought that it was a constraint to nuclear explosions but according to surveys and different interviews of scholars, it was the supporting element for nuclearization.

Public Opinion not a Constraint

States declare that there has been public support for having nuclear weapons. Public support for them is built by creating a sense of crisis and fear. They are told that there is an enemy and the bomb is the only shield that would protect them. Generally the Pakistani public knows little about the nuclear issue. Media, newspapers, magazines also showed that nuclear weapons are vital. (Mian, 2003: pp.78-79).Nuclear tests took place in the political environment of Pakistan. Having created public opinion in favour of nuclear weapons, leaders claimed that they had no other choice. The Pakistani Public also asked for the removal of poverty, health and electricity and education problems etc but leaders did not pay much attention towards that. A survey conducted by Gallup Pakistan an institute of Public opinion affiliated with Gallup International in May 1998 stated that seventy percent people are in favour of nuclear tests, thirty percent advise restraint, fifty one percent called for immediate detonation of nuclear bomb while thirty percent said it should wait till economic recovery.

(http://www.globalsecurity.org/wmd/library/news/pakistan/1998/980528-app.htm)

Multiple surveys and opinion polls show that there is a general public support for the existence and maintenance of Pakistan's nuclear weapons. The fact remains that Pakistan's literacy rate is too low for the general public to fully comprehend the pros and cons of possessing and maintaining nuclear weapons and deterrent capability. Even most politicians hardly understand what a nuclear weapon is and what it can and cannot do. The NGOs in Pakistan are mostly confined to the economic and political fields primarily concerned with poverty alleviation, democratic rights, the health sector and dealing with natural catastrophes. Anti-nuclear lobbies are also working in Pakistan which includes university professors, retired army generals, social workers and journalists. Prominent activists among them are Dr. Anayat Ullah, Zia Mian, A. H Nayyer and Dr. Pervaiz Hoodbouy. They have

produced a number of publications and organize processions in which they create awareness among the masses about the dangers posed by nuclear weapons. Despite these efforts, the fact remains that Pakistan's literacy rate is too low for the general public to fully understand the pros and cons of possessing and maintaining nuclear weapons and deterrent capability. Even most political leaders hardly understand what a nuclear weapon is and what it can and cannot do. The NGOs in Pakistan are mostly confined to the economic and political fields primarily concerned with poverty alleviation, democratic rights, the health sector and dealing with natural catastrophes. (Nizamani, June 14, 2003). There is a general public consensus in Pakistan on the existence and maintenance of its nuclear weapons capability that has been demonstrated through multiple surveys and opinion polls.

The potential for public opinion to act as a constraint on Pakistan's nuclear explosions and nuclear policy would be possible if the public could see environmental dangers affiliated with nuclear weapons. Some Pakistani citizens have joined hands with their Indian counter-parts to promote peace between India and Pakistan and oppose the arms race. The association of Peoples in Asia called for "reduction in arms purchases and stoppage of nuclear arms race in this continent."(Ahmed and Cotright, 2001: p.103).The India-Pakistan People's Forum for peace and democracy has also urged talks to eliminate the danger of nuclear conflict. A very small segment of Pakistan's educated elite was against the nuclearization and public initiatives were limited. It is not possible for people to obtain information about nuclear weapons and government's support for nuclearization through television and print media dominates. As a result the prospects for educating and arousing public opinion are bleak. All the Presidents, Prime Ministers and military leaders of the country are manufacturing a national consensus in support of nuclear weapons and they consider it vital to Pakistan's national interest. India has been projected as an hostile enemy of Pakistan. If an open and informed debate on nuclear weapons would be started then the people of Pakistan would more freely assess the full implications of the nuclear programme and would begin to search for an alternative policy for sustaining peace rather than military confrontations.

Conclusion

It will be in the interests of Pakistan and India to work out some bilateral arrangements to wipeout the environment of mutual suspicion and work for nuclear transparency.Nuclear tests by both India and Pakistan brought world attention to the decades-old Kashmir conflict. Since May 1998 nuclear tests, the relations have deteriorated. A different Crisis emerged after the nuclear tests. The Kargil war, the military stand off and the threat of war in spring of 2002 and terrorist attacks, all have increased the chances of nuclear threat of war .The political and military leaders of both the states are ignoring this reality as Einstein remarked that "the bomb has changed everything except our way of thinking." (Hoodbhoy & Mian, 2003: p.279). In the minds of leaders and military generals, nuclear weapons are tools for achieving foreign policy aims. The public is uninformed and uneducated regarding the cruelty of these weapons. Kargil war of 1999 was the first crisis which emerged due to nuclear weapons. On 13 December 2001, Islamic militants attacked the Indian Parliament in Delhi and India started its preparations to move out the militants camps in Pakistan

administered Kashmir. So the military stand-off on borders of both the states further deteriorated the relations. Both states started giving nuclear threats to each other. Indian military spending has been increased since the 1998 nuclear tests and Pakistan also want to increase that but its economy is bad and cannot stand the constraint. The World Bank report in 2002 stated that.... "in the 1990s the progress ground to a halt. Poverty remained stuck at high levels, economic growth slowed, institutions functioned badly and a serious macroeconomic crisis erupted." (http://www.worldbank.org/pakistancas).

Mostly people of India and Pakistan lack basic information about nuclear danger. For both states the absence of an informed and organized public opinion is not there which would keep the leadership in check and constrain the making and the use of nuclear weapons. When all is said and done it must be the duty of both India and Pakistan to avoid a future armed conflict. The possession of nuclear weapons should be used to prevent war and bring peace to the region. Kashmir is generally referred to as a nuclear flashpoint. After the seventeen days crisis, the decision to carry out nuclear explosions was very important and it is known as the "principal Trice Decision" in the history of Pakistan, In which the President, the Prime Minister, Army Chief and the Defense Cabinet Committee was involved in this decision. It was regarded a courageous attempt by the political leadership, nuclear establishment and military to opt for nuclear explosions. The Leadership thought that they have brought Pakistan into the front line in the particular aspect of nuclear technology which is a mater of national pride. However, the nuclearization of South Asia has brought along its own set of compulsions and requirements.

There are dangerous elements in the India-Pakistan nuclear equation. In case of a nuclear confrontation, there is less than five minutes early warning time for India and Pakistan, especially for Pakistan. One cannot exclusively rule out the likelihood that any one of the crises between India and Pakistan would not escalate into a nuclear war. There are many potentially destabilizing elements in the mechanics of nuclear deterrence. The possibility of war can be averted in a short term through a range of arms control, security and confidence building measures by dissipating the intensity of the conflict pending the ultimate settlement of contentious issues such as the Kashmir dispute. Through negotiations and confidence building measures both can promote peaceful environment in South Asia.

Thus, the logic to Pakistan's response in May 1998 was provided by the Indian initiatives. Nuclear tests have made Pakistan sure of the type of weapons that it develops. This is a stabilizing factor between India and Pakistan. Moreover the stability of relations would depend on the efforts to find a permanent solution of the Kashmir issue. For some time period Kashmir had become an international agenda for its solution. Pakistan has based its nuclear strategy on the first use of nuclear weapons in order to balance Indian conventional superiority over Pakistan. Pakistan lacks strategic depth to retaliate with a second strike capability. Economic conditions of Pakistan also did not allow it to have large stockpile of nuclear weapons. Indian nuclear explosions were taken as a security threat to Pakistan and Pakistan was not ready to accept the terror in the region. Pakistan's response was a combination of a unique type when all political parties, interest groups, public opinion, civil society, military and scientists were in favour of explosions. Hence a decision to go for nuclear was made. Possession of nuclear weapons, provides military and political

strength, it puts pressure on both the adversaries India and Pakistan to solve their issues. A bilateral dialogue process began between India and Pakistan, focusing on various issues plaguing the relations between them. There were eight rounds of talks culminating into the Lahore Declaration. However in 1999, these efforts were again sabotaged when India and Pakistan the two nuclear powers were engaged in a Kargil crisis.In the long term, democratic accountability, civilian control of nuclear weapons, removal of all domestic constraints within Pakistan can only be enhanced by moving towards democracy and building strong political institutions. Military control in all spheres should be eliminated for true functioning of institutions.

References

- Ahmad, Shamshad. (2009). 'Foreign Policy of Pakistan and Policy Making Process', in Moonis Ahmar, (ed.), Foreign Policy Making Process, Karachi, University of Karachi, p.55
- Ahmed, Samina and Cortright, David. (2001). 'Going Nuclear the Weaponization Option', in, Samina Ahmed and David Cortright, (eds.), *Pakistan and the Bomb* Pakistan, Oxford University Press, p.103
- Arif, General K. M 'Signing the CTBT With Care', Dawn, November 25, 1998.
- Aslam, Mohammad. (1989). Dr.Qadir Khan and Pakistan's Nuclear Programme, Islamabad, Mr. Book, p.10.
- Bhutto, Z.A. (1960). Myth of Independence, Karachi, Oxford University Press, p.13
- Burke, S.M. (1975). Main Springs of Indian and Pakistani Foreign Policies, Karachi, Oxford University Press, p.44.
- Cheema, Zafar Iqbal. (1996). 'Pakistan's Nuclear Politics: Attitudes and Postures', in P. R Chari, et at., (ed.), Nuclear Non Proliferation in India and Pakistan: South Asian Perspectives, New Delhi, Manohar, A Publication of Regional Center for Strategic Studies, Colombo, p.103.
- Cheema, Zafar Iqbal. (2008). 'The Domestic Governance of Nuclear weapons: The Case of Pakistan', Geneva, Febraurary, 2008. Retrieved on 2 November 2010 from http://www.dcaf.ch/civnuc/cheema-domestic-governance-nuclear-weapons.pdf
- Chander, Parakash. (2003). India and Pakistan: Unending Conflict, New Delhi, A. P. H Publishing, p.7 Chellaney, Brahma.(1991). 'Regional Proliferation: Issues and Challenges' in Nuclear proliferation in South Asia, (ed.), Stephen Cohen, New Delhi, WestView Press, p.312
- Cohen, Stephen P. (ed.), (1991). 'Nuclear Neighbours', in *Nuclear Proliferation in South Asia*, New Delhi, West ViewPress, pp.10-11
- Daily Times, May 26, 1998
- Dawn, 18 May 1998
- Haider, Zagul. (2002). 'U.S Policy Towards Nuclear South Asia at the Dawn of 21st Century', *Regional Studies*, Vol. XX, No.2, Spring p.83
- http://www.indianembassy.org/policy/CTBT/nuclear_doctrine_aug_17_1999.html Retrieved on 3 March 2008, see also Abdul Rashid, *From Makkah to Nuclear Pakistan*, Lahore, Ferozsons (pvt.) Ltd, 2001, pp.400-401
- http://pakdef.info/forum/archive/ind.php?t-8346.htmlstatue of Indian nuclear. Retrieved on 14 June 2010
- http://www.fas.org/spp/starwars/congress/1989/890516-cr.htm, Retrieved on 18 June 2010
- http://www.globalsecurity.org/wmd/world/pakistan/khan.htm. Retrieved on 17 August 2010
- http://www.defencejournal.com/2000/june/chagai.htm, Retrieved on 12 July 2010
- http://www.dawn.com/wps/wcm/connect/dawn-content-library/dawn/news/world/11-pakistan-

enhances-second-strike-n-capability--us-report--il--12, Retrieved on 5 June 2010 http://www.pakdef.info/forum/archive/index.php/t-8346.html, Retrieved on 15 June 2010 http://in.reuters.com/article/topNews/idINIndia-44323120091129. Retrieved on 4 September 2010 http://www.globalsecurity.org/wmd/library/news/pakistan/1998/980528-app.htm Retrieved on 5 November 2010

Hussain, Zahid. 'The Bomb and After', News Line, June 1998, p.23

Hoodbhoy, Pervaiz. and Mian, Zia.(2003). 'The India-Pakistan Conflict: Towards the Failure of Nuclear Deterrence', Smitu Kothari and Zia Mian, (eds.), Out of the Nuclear Shadow, Karachi, Oxford University Press, p.279.

- Schelling, Thomas. (1996). Arms an Influence, New Haven, Yale University Press, see also Bernard Broodie, (ed.), (1946). The Absolute Weapon: Atomic Weapon and World Order, New York, Harcourt Brace, p.23
- Jones, Rodney. (1997). 'Pakistan's Nuclear Options' in Soviet American Relations with Pakistan, Iran and Afghanistan, London, MacMillan Press, p.212
- Khan, Munir Ahmad. (1998). 'Nuclearization South Asia and its Regional and Global Implications', *Regional Studies*, Vol. XVI, No.4, Autumn, pp.5-6.
- Kumar, Vijay. (2004). 'Indo-Pak Relations Geo Political and Strategic Dimensions', in Joseph Benjamin, (ed.), *Indo-Pak Relations*, New Delhi, Darya Ganj, p.33.
- Kux, Dennis.(2001). The United States and Pakistan 1947-2000, Disenchanted Allies, Karachi, Oxford University Press, pp.344-347. see also Clifford E. Singer, et al., 'Feasible Deals with Indian and Pakistan after the Nuclear Tests', Asian Survey, Vol.38, No.12, December, 1998, pp.161-164
- Lifton, Robert Jay. and Falk, Richard. (1982). Indefensible Weapons: The Political and Psychological Case against Nuclearizm, USA, Basic Books, p.55.
- Mian, Zia. (2003). 'Pakistan's Fateful Nuclear Option', Smitu Kothari, Zia Mian, (ed.), Out of the Nuclear Shadow, Karachi, Oxford University Press, pp.78-79.
- Nizamani, Haider K. (2001). The Roots of Rhetoric ,Politics of Nuclear Weapons in India and Pakistan, New Delhi, India Research Press, 2001, p.25.
- Nizamani, H.(2003). 'Whose Bomb is it Anyways? Public Opinion and Perceptions about Nuclear Weapons and Policy', in *The Post-Explosions Phase in Pakistan*, Social Science Research Council, June 14. Ramana, M. V. (2003). 'Do Nuclear Weapons Provide Security?', in Smitu Kothari, Zia Mian, (ed.), *Out of the Nuclear Shadow*, Oxford University Press, p.166.
- Ramana, M.V(1999). 'Bombing Bombay? Effects of Nuclear Weapons and Case Study of a Hypothetical Explosion', M.A International Physicians for the prevention of Nuclear War Report, Cambridge, 1999.
- Rehman, Shahid-Ur. (1999). Long Road to Chaghi, Islamabad, Printwise Publications, pp. 10-12
- Rizvi, Hasan Askari. 'Pakistan's Nuclear Testing', quoting embassy of India in Washington's Publication, *India News*, May 16- June 15, 1998.
- Subrahmanyam, K. (1981). Nuclear Myths and Reality, Delhi, ABC, 1981, p.12
- Subrahmanyam, K. (1972). Our National Security, New Delhi, Economic and Research Foundation, p. ix
- The Nation, 22 May 1998. see also The News, May 22 1998.
- The News, 28 May 1998, Lahore.
- The News, 27 May 1998, Lahore.
- The News, 30 May 1998, Lahore
- 'Pakistan Country Assistance Strategy', World Bank, July 2002, Retrieved on 4 May 2010 from http://www.worldbank.org/pakistancas

Biographical Note

Dr. Mubeen Adnan is Assistant Professor, Department of Political Science, University of the Punjab, Lahore-Pakistan.