Chapter VI

Nuclear Pakistan: Issues and Challenges in the New Century

The international community experiences a great fear of insecurity from Pakistan’s nuclear posture. Multiple causes are found for this dilemma caused by threats to international security. Nuclear black marketing, nexus with rogue states and the overwhelming role of terrorists pose very grave threat to nuclear non-proliferation regime and international security system. The nuclear threat from Pakistan is largely due to its domestic failures. The socio-economic and political strangulation of the state raises many threats associated with its nuclear posture. The Pakistani nuclear threat is multi-faceted with the possibilities for nuclear accidents, nuclear war, nuclear terrorism and nuclear proliferation. So there are several kinds of threats emanating from several sources. The following chart indicates the various threats and their sources culminating to global nuclear security dilemma.

![Diagram showing various threats and their sources related to nuclear security]

Table-6.1 Global Nuclear Threat from Pakistan
Nuclear Proliferation

Due to nuclear black marketing and nexus with the rogue states Pakistan must be regarded as a nuclear proliferator. The first step of the proliferation activity begins with its decision to develop nuclear weapons. In fact the nuclear weapon development by Pakistan has led to horizontal nuclear proliferation. However by upgrading and enlarging its nuclear weapon capability Pakistan has involved in the vertical proliferation of nuclear weapons. The initial horizontal proliferation was motivated by Indian nuclear ambition, religious influences and national prestige. It was indeed self proliferation. This self proliferation was proven beyond doubt. However, as it obtained the nuclear capability it started the ‘cross horizontal proliferation’. Various reports suggest that it has exported nuclear technology and devices to rogue states. Pakistan justifies its vertical proliferation on the grounds of security requirements as the complexity of its security relies upon balancing power status with India. Therefore, the security dilemma felt under the Indian military capability forced it to enhance its nuclear potential. But, the political instability and insecurity within the state points to the biggest threat embedded with these self and vertical proliferations. To some extent, the silent blessing of the big powers, their indifference and disharmony on the issue of nuclear proliferation have helped Pakistan to carry out the proliferation. In the first two phases, the European and American states helped this nuclear development by Pakistan. In the later phases, it was the Chinese and North Korean assistance that helped the Pakistani nuclear programme. Moreover, international issues like the Soviet invasion in Afghanistan changed the international circumstances in favour of Pakistan. In the last phase, it was the Chinese assistance that helped Pakistan, particularly to strengthen its nuclear weapon capability (Zingal; 2000: 47).

More than strong commitment by Pakistan to attain nuclear weapon capability, it was the failures within the international nuclear non-proliferation system that helped its nuclear capability. The PTBT (1965), NPT (1968), or the CTBT (1996), could not prevent Pakistan from attaining the nuclear weapon capability. It is widely known that the International Atomic Energy Agency (IAEA) inspects all nuclear facilities and every storage facility in the States which are parties to the NPT, the treaty on the Non-Proliferation of Nuclear Weapons (Wirz & Egger; 2005: 500). But
it has two big drawbacks. First, the state must be a party to the treaty, which is not mandatory for all states. There are nuclear weapon states as well as non-nuclear weapon states which are not party to the NPT. There are no strong compelling forces to drive the states to sign NPT. What actually exists is the diplomatic move with sanctions and de-sanctions that is seldom found to be successful when the ardently nuclear ambitious states are concerned. Secondly, states shall not open up all of their nuclear facilities to the IAEA inspections. Also, they carry out clandestine nuclear programmes with ambiguous nuclear policies.

In fact the defects within these treaties along with the negligence of the members to implement the treaty effectively created a favourable condition for Pakistani nuclear weapon development. Moreover, the peaceful nuclear development was a curtain for covering the nuclear weapon proliferation. The negligence of proliferation issues by the Nixon administration is better example for this inefficiency of international mechanism. This passive policy of the US especially with NPT created a great vacuum in the non-proliferation regime. It was the Indian stand that Pakistan followed while refusing to sign CTBT. It was as part of the reactive policy of Pakistan, responding India with the same manner (Arnett; 1998: 14). Similarly the IAEA is limited in the sense it does not have power to investigate beyond a narrowly defined parameter (Khan; 2009:30). Nations with nuclear development programme do not reveal all their nuclear sites to the IAEA. They hide their nuclear weapon programme sites from the inspection of the IAEA.

Concerns about nuclear weapons and proliferation over the past decade have been driven by the actual or suspected nuclear weapons development programmes of North Korea, Iran, and Libya, and the activities of rouge scientists such as A.Q Khan (Burke; 2010: 510). The risk gets intensified as more and more states are joining the rouge group as well as the rogue states are committed to vertical proliferation. In 2009, North Korea decided to restart its reactor at Yangbyon and conduct further bomb and missile tests. Also, there were reports of North Korean nuclear cooperation with the secretive regime in Myanmar (Burke; 2010: 521). One of the major issues associated with the A Q Khan net-work is that radical political forces might obtain nuclear weapons as the result of a sudden destabilization of the domestic political situation occurs in the country (Kokoshin; 2006: 60). If the self proliferation of
Pakistan was to meet their security requirements, the cross-proliferation was primarily due to the failures of their command control system. However, we can also find some security and economic reasons behind this proliferation. Dr. A Q. Khan, who empowered Pakistan with the nuclear weapon, enjoyed extensive freedom and power as a national hero\(^2\). This uncontrolled freedom enabled him to carry out secret and illegal trade of nuclear technology. At the same time, as the father of Pakistani nuclear bomb, he had considerable influence on the government on matters pertaining to nuclear programme. Recognizing his great contribution in the development of nuclear capability, Dr. Abdul Quader Khan was conferred the award of Hilal-i-Imtiaz in March 1989 by the President of Pakistan (Jones; 2002: 394). He is considered as a national hero with a wide range of influence in both the civil and military administration of Pakistan.

Burke argues that use of nuclear threat for asymmetric deterrence against conventional attack has driven proliferation outside the nuclear weapon states (Burke; 2010: 521). The role of the Pakistani government in this proliferation activity should be considered now. Though, the Pakistani official’s claim is that the Khan nuclear marketing was without their knowledge, there was the deed received the silent blessing of the Army and Government. The official Pakistani line – that the exports to Iran, North Korea and Libya were the work of one errant man and his duped associates - cannot be taken at face value, but neither is there the validity to the claim that Khan was alone. Indeed a careful analysis shows that most of Khan's illegal activities were carried out on his own initiative (IISS; 2007: 93). However, there are clear evidences of Pakistani government’s involvement in the nuclear proliferation. It was utter corruption and dishonesty of successive Pakistani governments that helped the Khan network to grow and flourish. Initially the governments denied any involvement by its scientists in the illicit procurement. Further, they resisted both internal investigations as well as external investigations on this illicit nuclear deal. To restore their credibility, the Pakistani leaders routinely denied the involvement of Khan in the nuclear black market whenever the issue was raised (Albright & Hinderstein; 2005: 118). This silent consent of the Pakistani governments, though due to inefficiency of the government, points to the state’s involvement in the Khan network.
Pakistan’s nexus with the rogue and failing states like, Libya, North Korea, Iran, and Malaysia has been a challenging security issue, placing the international community under deep security dilemma. Being aspirants of nuclear weapons, the nexus with Pakistan would help them to acquire nuclear weapon capability. The global concern is this would in fact lead to a high level nuclear proliferation, reaching the dreadful weapon in wrong hands and making the international security highly volatile. And this dilemma of proliferation quadruples as these states discard the international norms and treaties on nuclear non-proliferation. For example, "Libya had been caught red-handed on flouting international rules against the trafficking of nuclear technology and materials" (Coleman; 2006: 118). The clandestine weapon programme by Pakistan would provide inspiration and enthusiasm to these states to develop nuclear weapons. Libya and North Korea have diverted their civilian atomic energy programmes to nuclear weapon programme (Coleman; 2006: 119). The secret deals Pakistan made with these states helped A.Q. Khan to carry out his illegal trade with these nations. In the mid-1990s, Khan’s offer to give nuclear technology and materials was discovered by International Atomic Energy Agency (IAEA) weapons inspectors (Albright & Hinderstein; 2005: 113).

It is reported that Iran is pursuing advanced P-2 type centrifuges based on designs and samples provided by A.Q Khan (IISS; 2007: 93). To A.Q. Khan, these black marketing and illegal deals were not new. It was the stolen technology and information he used to carry out the clandestine nuclear weapon programme. There were considerable concerns raised by Pakistani intelligence officials on the overwhelming freedom enjoyed by A.Q Khan. However, the Pakistan government had to forgo any action on him due to the significance of nuclear weapons in their national security and prestige, and the role played by AQ Khan in this venture. Former military ruler Musharaf revealed it in his memoir in 2006 that the government ignored any action against him in the largest interest of the sensitive and important work, in which he was engaged (IISS; 2007: 94). Initial investigation revealed that Dr. Khan and some other scientists were involved in transferring nuclear technology from Pakistan to other states, including DPRK, Libya and Iran. On 5th February 2004, under intense pressure, Dr. A.Q. Khan confessed to the illegal trade, spoke to President General Musharaf, requested clemency and sought forgiveness. The
Pakistani cabinet pardoned him (Rajain; 2006: 305). Khan began his nuclear activity as a patriotic effort to serve his nation, now it has created an unprecedented global black market for nuclear technologies. However, not sheer patriotism that forced Khan to plunge into the nuclear programme. Evidently, he was driven by economic and prestige factor. The illegal network and nuclear black market he established was to serve his economic interest and prestige.

Towards the end of 1990s, the Khan network attained the capability to provide the technical know-how and materials needed to make nuclear weapon. It evolved into a hyper market that could provide “one-stop shopping” both for the technology needed to produce weapons-grade uranium and nuclear weapons designs (Albright & Hinderstein; 2005: 112). Now the two important issues are raised on Khan's black marketing - 1) the transfer of nuclear technology to rogues states and (2) the transfer nuclear technology to terrorists. Both these issues pose severe challenges to international non-proliferation regime. The structure of the nuclear establishment in Pakistan and the key role played by military as well as the long standing ties between Pakistan and all the three countries raise doubts whether Khan acted without knowledge of government. A greater consideration must be given to the motivation behind these proliferation activities. It is because the track was with the rouge and Islamic states. Further the motivation factor will also unfold the possibilities of transfer of nuclear weapon and materials to terrorists in the future. The Pakistan - North Korea relation on the missile and nuclear areas has been long time relation in which a greater level of give and take policy is followed. While Pakistan provided North Korea with nuclear technologies, it received sophisticated missile technology from North Korea. It was an international trade following the spirit of barter system. Pakistan needed reliable missile technology to deliver the nuclear weapon, particularly targeting India, which North Korea possessed, whereas North Korea wanted the nuclear technology to restart its nuclear weapon programme that Pakistan had (Rajain; 2006: 304). Unlike Libya and Iran the Korean potential in receiving the nuclear assistance from Pakistan was its missile technology which Pakistan required. In a signed statement given to the Pakistan government, A.Q. Khan admitted that he supplied old and discarded centrifuge and enrichment machines together with sets of drawings, sketches, technical data and depleted hexafluoride (UF6) gas to North
Korea (Chakma; 2009: 116). It was because of the enormous authority bestowed with A.Q Khan by the Pak government to attain the nuclear capability that he could develop this black market³. Nuclear proliferation, vertical as well as horizontal, increases the security threat. The safety of the nuclear arsenals becomes a formidable challenge both in the vertical and horizontal proliferation cases.

Kenneth Waltz viewed that the spread of nuclear weapon would be better. He argued that just as nuclear weapons had played a decisive role in preventing war between the super powers, it would do the same in future (Wheeler; 2009: 428). However the severity of the nuclear risk is not just its use in the war, rather it is the use by the terrorists even by the rogue states during peace times. There is a high chance for these dreadful weapons falling into wrong hands, rouge states and the potential for terrorist use of them (Burke; 2010: 507). There exists a high link between the proliferation of the nuclear weapons and its accessibility by the terrorists. International community has been very vigilant about nuclear proliferation after the September 11 attack. In April 2004, the UN Security Council passed Resolution 1540, which requires all states to criminalize proliferation to non-state actors and to establish, review, and maintain appropriate and effective export control systems (Albright & Hinderstein; 2005: 121). But it depends on the character of the state. If a state shows several features a failing state, it is very difficult to provide adequate protection for preventing proliferation. Moreover, rogue states shall not adhere to the UN resolution as some other motives are riding them.

Another concern on the nuclear proliferation is proliferation to the Islamic world. This argument bases on two grounds- the religious and the economic factors³. There are evidences that B.A Bhutto had approached Libya and Saudi Arabia for getting funds to finance the nuclear project. This financing will be followed by sharing the fruits of the project (Jones; 2002: 218). Pakistan would show its gratitude for the economic assistance it received by providing the nuclear technology. The Islamic sentiments also will drive Pakistan to share the nuclear technology with the Islamic nations. Pakistan found Iran as an economically potential Islamic nation to help in its nuclear programme and maintained a strong relation with it.
There are several reports about the illegal nexus among these nations in the nuclear market. The most stunning one was that the Khan network sold the design of workable nuclear bomb and nuclear weapons instructions to Libya (Chakma; 2009: 110). In 2003, IAEA traced centrifuges and highly enriched uranium in Iran's nuclear facilities. It was also disclosed that Pakistan was the main source of its crucial technology behind this uranium enrichment (Teresa; 2009: 142). In 2000, A.Q. Khan offered to train the man power of the UAE to develop nuclear bomb while the minister of information from the UAE visited Pakistan (Jones; 2002: 219). "Iran's uranium enrichment drive has been aided almost solely by the Khan network, which has brought Iran close to building nuclear weapons. Without the assistance from the Khan network, Tehran, perhaps, could not have made the progress that it has made" (Chakma; 2009: 111). It has been reported that now Iran has the potential to develop and test a nuclear bomb. The Pakistani model of clandestine development of the nuclear weapon is adopted by Iran, Libya, and North Korea. The circumstances are much better for these nations than Pakistan. Libya and Iran are economically wealthier than Pakistan. Further, they do not have to steal the nuclear technology as in the case of Pakistan because it is available in the black market created by Khan Network. Pakistan has provided these states with the strategy of clandestine development as well as nuclear technology and information.

The Khan network also points to the inefficient and incompetent command and control system of Pakistan. The command and control structure was such it could not make effective control on the activities of the nuclear scientists. The nuclear scientists were recruited into the nuclear programme without considering their conduct. Though Pakistan claims that the personnel recruitment to the nuclear industry is highly screened, the reality is quite different. If such a screening was there A.Q. Khan could not have been admitted to nuclear programme of Pakistan. This reveals that the rouge scientist had a place in the nuclear programme. There are also reports on the nexus between the nuclear scientists and the terrorist groups. While the Pakistani command and control system gave greater significance to the safety of the nuclear weapon and its effective use against the energy, it was less concerned with safety of the technology and activities of the scientists. The socio-political condition of Pakistan also helped the scientist to enjoy enormous freedom and illegal activities.
The bureaucratic military dominated society was corrupted. The political instability created a very weak government and a fragile legal system. It is this failure of the state that has led to the Khan Network and nuclear proliferations, leading to severe global security dilemma.

Now the fear is about the reach of this illegal network. “Given the Islamic dimensions of Pakistan’s policies and rules of the Shia dominated Iran, proliferation from Pak to its western Islamic neighbours and to radical organisations like the Al Qaeda cannot be ruled out” (Sing; 2007: 149). Stephen Cimbala contents it is more than a decade that the A.Q. Khan network with the involvement of Pakistani and other government officials, middlemen and scientists trafficked in nuclear technology and know-how. The Khan network, described as a wall-mart of nuclear proliferation has apparently touched North Korea, Libya, and Iran, among others (Cimbala; 2010: 115). Many analysts consider A.Q. Khan as the best known and the most decorated Pakistani smuggler (Teresa; 2009: 253).

To Pakistan, Khan net-work was illegal and state-work was legal. But both of these were creating formidable challenges to the non-proliferation regime. Under the cover of peaceful nuclear programmes, Pakistan transferred the nuclear weapon technology and information to the rogue states. Pakistani Prime Minister Benazir Bhutto initiated the deal with North Korea for no-dong missile technology in 1993. It was reported that there was an agreement between Pakistan’s general Mirza Aslam and Iran on nuclear corporation in 1991 (IISS; 2007: 68). The Saudi Arabian defence minister could not have visited the K R L in 1999, without the knowledge of the Pakistan government. The Pakistani negligence of NPT, CTBT and international non-proliferation regime created a space to carry out the proliferation activity. The Pakistani action in the proliferation network was ridden by its earlier commitments with the Islamic nations, economic gains and enhancing defence strength. The NPT was opened on July 1, 1968 with the goals to prevent the further spread of nuclear weapons, foster peaceful nuclear cooperation and safeguards and to encourage negotiation to end the nuclear arms race (Ahmar; 2001: 133). The NPT further makes the commitment by the signatories to FMCT. Both the vertical and horizontal proliferation by Pakistan would have been controlled to a greater extent if Pakistan has signed these treaties. Further, states adhering to the NPT are required to make
available their facilities and infrastructures for scheduled or challenge inspections by the IAEA (Cimbala; 2010: 114).

The Pakistani connection with the rogue states has really alarmed the nuclear non-proliferation regime. Moreover, the acquisition of nuclear weapon has created special attraction for corrupt, despotic, ruling circles who determines to remain in power (Arnold and Brown; 2010: 305). Therefore, the fear is, in future more and more rogue states would approach Pakistan for acquiring nuclear weapon. As observed by many scholars, the conventional military weakness of these states would drive them to nuclear weapon option. Pakistan would be an ample source for them. It is really alarming that the spread of nuclear energy has been taking place at a high speed, especially in the third world countries "Nuclear power is expanding faster in the Third World than in developed countries. Currently many countries (Argentina, Brazil, Mexico, South Africa, South Korea, and Taiwan) are operating nuclear power reactors. Though it is civilian nuclear programme, the weapon programme is easy for them as the black market created by Pakistan would make the technology and information available to them. The proliferation concern should go beyond the spread of nuclear weapons. It should consider the spread of nuclear weapon delivery systems. As Pakistan has already acquired this technology from North Korea and has created close ties with the rogue states, the fear of spread of the delivery system and its technology from Pakistan is high. Further, it is the technology they brought from North Korea and China, and similarly with the case of nuclear weapon, they would be ready to sell it for economic gains under such a scenario, the international security will be severely staked. The rouge nexus that Pakistan has would in upset the international non-proliferation regime and place many nations under security dilemma.

It is a fact that international community has accepted the nuclear status of Pakistan at least as ‘de-facto’. Therefore, the non-proliferation attempt must be to avert the nuclear risk such as avoid further proliferation, nuclear accidents, nuclear war and nuclear terrorism. This may be the reason for the shift in the policy of the big powers in dealing with Pakistan. The Brown Amendment by the US reveals its new policy towards Pakistan (Arnett; 1998: 64). The failure to control nuclear proliferation by Pakistan, by the state or scientists, could spread nuclear fever throughout Asia.
Non proliferation commitment by Pakistan can be made possible with greater incentives to Pakistan. Jasjit Singh contents that it is inevitable that the U.S, with its global aims to promote nuclear non-proliferation, would seek closer co-operation with Pakistan in future, even offering incentives to fit for that purpose (Behera & Joseph; 20004: 81). The high level secrecy that Pakistan is maintaining of their nuclear policy options also enhances the proliferation challenge. There is no clear information in the open media even about the draft of Pakistan's nuclear doctrine (Rajagopal; 2003: 79). The ambiguous strategy and policy that Pakistan contained during the course of its nuclear weapon programme, is still continued. Indeed a very open and credible nuclear doctrine by Pakistan is really inevitable to check the proliferation. Both the vertical and horizontal proliferation by Pakistan jeopardizes the international security. As long as Pakistan remains politically unstable and non-state actors have an overwhelming role in the state, the vertical proliferation makes the security at stake. Joseph Cirincione argues that access of the developing countries to the black market of A.Q Khan can be solved or stopped by technological denial strategy (Cirincione; 2007: 75).

The threat of nuclear terrorism

Terrorism, known in different forms and names, has been creating a formidable challenge to the global security for the last few decades. The methods they opt and their interest in occupying nuclear weapon expose that they won’t even hesitate to use nuclear weapon. Now-a-days non-state actors employ a wide range of tactics to achieve their goals. Along with use of conventional weapons, they carry out hijackings, suicide bombings, and even the acquisition of weapons of mass destruction (Jenkins; 2006: 35). There are many events where the terrorists tried to use missiles to their target. Terrorist attacked the ‘Flight 582' with two soviet made SA-7 missiles on November 28, 2002. The chartered C-130 Hercules transport planes were shot down over central Angola on December 26, 1998. Again, in March 1999, Flight RH 827 was shot down by ZIPRA, a terrorist wing (Harmon; 2008; 109). More alarmingly, they were used against the civilian flights. The terrorists groups are really fascinated by the dreadful weapons like the CBRN (Chemical, Biological, Radiological and Nuclear) weapons. "In 1998, Chechens did something more dangerous; they built a radioactive bomb, which security forces discovered and
The deployment of bubaline toxin and anthrax by the terrorists shows that they even opt for the most ugly and dreadful weapons to accomplish their target. Therefore, the terrorist groups are really after the nuclear weapon capability.

Though nuclear terrorism virtually has not taken place, the possibility of nuclear terrorism can't be discarded. It is under this context that the United Nation Organization adopted an international treaty against nuclear terrorism in April 2005 (Mehta; 2007; 920). There is abundant evidence that a wide range of terrorist outfits have actively sought WMD materials, and it is very likely that some have obtained them (O’ Day; 2004; 3). An important objective of the global anti-terrorism campaign is to keep nuclear weapons and nuclear explosive material out of the hands of anti-state actors such as terrorist organizations, rogue regimes, and violent sub-national groups (Malik; 2003:178). Also, some scholars opined that terrorists shall not require heavy nuclear bombs to keep the threat alert. Even gun type nuclear weapon could serve their interests.

Analyzing the arguments of nuclear pessimists and optimists on the spread of nuclear weapon, Siracusa contents that the nuclear weapon proliferation is a global menace, especially due to the horrific strategies used by the terrorists. The issue driving nuclear-armed states and even terrorists group are not just political. The possessiveness of the religious fundamentalism, which does not seem amenable either to diplomacy of humanitarian restraint, is major challenge. Indeed, the 9/11/ incident have forced some experts to suggest that there are at least some terrorist who do want to inflict mass causalities. In this context, nuclear terrorism not only represents an effort to intimidate and coerce, but also poses critical threat to states and people around the world (Siracusa; 2008; 111).

The perceived threat of nuclear terrorism has been expressed on the grounds of link between terrorist and weak states, massive damage the terrorist groups choose now, and the 11th September 2001 attack. There are clear evidences of successful attempts made by the terrorists groups to occupy modern weapons and their use. Though the technological barriers and the availability of nuclear materials have been blocking their acquisition of the nuclear capability, many analysts find that it won't
last more. There are ample evidences of earnest ambitions expressed by the terrorists groups to acquire nuclear weapon. "In December 1998, Osama Bin Laden declared it's a matter of religious duty that he acquires a nuclear weapon" (Harmon; 2008: 111). Harmon further states that Al Qaeda's proven interest in nuclear arsenal demonstrates one of the oldest and most reliable patterns in terrorism. Former Prime Minister of India Dr. Manmohan Singh also expressed the Indian fear of nuclear Terrorism. He stated that India fully shares global concerns on nuclear terrorism and clandestine proliferation, which continue to pose serious threats to international security (Ministry of External Affairs; 2012: 267). Hence it is very clear that the terrorist organizations are interested in nuclear weapon and they are after it. Its affordability by them could be questioned. However, relating the factors like overwhelming role of terrorist in politically unstable Pakistan, the nuclear black market created by Pakistan (Khan Net Work), the link between terrorist and rouge scientist and the poor control and coordination system of nuclear programme of Pakistan, the barriers that the terrorist face in the acquisition of nuclear capability would be overcome, unless the situation is changed. The concern of nuclear terrorism mainly springs out on three grounds: - conventional attack on the nuclear sites by the terrorists, use of radioactive materials and the use of nuclear bombs. Again the question of nuclear deterrence against terrorists is raised by many scholars. Though nation states can be deterred from using nuclear weapons by fear of retaliation, terrorists have no fixed assets to protect and it is difficult to deter them (Cirincione; 2008: 89). This indeed reveals more explicitly the danger that emanates if the terrorists possess nuclear weapon. It is also a fact that terrorists can't be deterred by means of threat rather should be wiped off from the globe.

There are many reports showing the interest of the terrorist groups, their attempts to acquire nuclear weapons and their link with Pakistan. "Reportedly Al Qaeda has tried to obtain weapons grade material (enriched uranium and plutonium) and assistance in assembling both nuclear weapons and radiological bombs (Cimbla; 2010; 115). The national report on terrorist attacks on the U.S 2004 reveals that the Al Qaeda had tried to acquire nuclear weapons for at least 10 years and continues to pursue its strategic goal of obtaining a nuclear capability (Arnold & Brown; 2010; 305). David Cortright & Lopez while discussing the new terrorism content that
terrorists now follow mass causality or "catastrophic" terrorism (Cortright & Lopes; 2008; 203). The former National security Adviser and Secretary of state of the U.S.A. Dr. Condoleezza Rice stated Al Qaeda was both client of and patron to the Taliban, which in turn was supported by Pakistan (Devare; 2006; 57). Michael Tkacik has pointed out that since 1990 in particular, Pakistan has facilitated terrorism against India in Kashmir. Also the Pakistani army finds a key source of domestic legitimacy in its support or Kashmir insurgents (Tkacik; 2010: 181).

The September 11 terrorist attack on WTC and Pentagon gave strong support to the argument that the terrorist groups could make conventional strikes on the nuclear sites. “The International Atomic Energy Agency now considers the nuclear facilities to be attractive terrorist targets, in the post September 11, 2001” (Caldicott; 2002: 10). The International Convention on nuclear terrorism 2005 expressed that the terrorists target would include nuclear power plants and nuclear reactors (Mehta; 2001: 921). This would cause catastrophic effect to the global security. In a similar fashion, they can hijack a flight and hit a nuclear reactor or weapon storage facility. Rather than using guns and missiles against the nuclear sites, WTC-model attacks will be preferred by the terrorist groups as it involves less risk comparatively. The greater hindrance to such attacks would be the high level security provided to the nuclear facilities. However the attack on Pentagon, the US Arms center draws attention the failure of the security and safety measures provided, especially by weak and failing state like Pakistan. Even a hijacked passenger flight flying close to nuclear facilities could be used to hit the nuclear facility. As suicide terrorism is flourishing day by day, September 11 model flight attacks on the nuclear site or terrorist driving vehicle loaded with nuclear materials against state infrastructures may be opted by the terrorists. The frequent suicide bombing taking place in Pakistan shows that it could provide a good number of suicide terrorists to take up the task of hitting the nuclear site.7

Andrew O' Neil argues that the use of larger nuclear devise by terrorist as improbable. But there is a probability of use of smaller nuclear devices such as a suitcase bombs, the effect of which would be the same as the bomb used in the Second World War (O’ Day; 2004; xix). There are arguments that the terrorist can't use the nuclear weapons or materials against their targets due to technological incapability and security safeguards. However, the threat seems to exist still. A
counter attack on the terrorists possessing nuclear weapons or materials could escalate a nuclear detonation. Joseph Cirincione explains two major obstacles in the way of nuclear weapon development which are associated with technology. They are the production of highly enriched uranium or plutonium and putting all the necessary pieces together (Cirincione; 2008; 74). Along with these two technological barriers the international safeguarding system also prevents the terrorist from making a nuclear bomb. Similarly the development and deployment of the nuclear bomb is very expensive. But this could be overcome by the terrorist as they might use highly enriched uranium (HEU) that is used in civilian research reactors, test reactors and submarine propulsion reactors (Wirz & Egger; 2005:498). Further, most nonproliferation measures directed at states, such as sanctions and export controls, may not be effective against non-state actors (Jenkins: 2006: 35).

Centrifuge facilities are available in some of the poor states. This could be utilized by the non-state actors to obtain highly enriched uranium. The Khan network has shown that some states, such as Malaysia, that are not generally considered actual or potential suppliers of nuclear items have advanced industrial infrastructures that can be exploited to produce direct-use nuclear items such as centrifuge components (Albright & Hinderstein; 2005: 122). The threat gets multiplied as more states of the above type possess such facilities. Economic and technological barriers can be overcome by the terrorist groups if there were no coherent international and domestic safety regulation on the nuclear devices. Especially after the 11th September 2001 attack, it is due to the vigilance from the state actors, the nuclear terrorism has not virtually happened. The massive striking power of nuclear weapon in causing causalities nuclear weapons really attracts the terrorists. Technical advances in fabricating process for the miniaturization of nuclear weapon have made such an event increasingly probable (O'Day; 2004:3 &135).

The question why Pakistan could be the centre of nuclear terrorism is to be considered here. Political instability, poor command control system, Pakistan link with the terrorist and the state sponsored terrorism by Pakistan especially against India are certain conditions that suggests that the threat of nuclear terrorism primarily originates from Pakistan. “The successive Pakistani governments-civilian as well as military--created, nourished, maintained, and encouraged the Lashkar-e-Toiba, Jaish-e-
Mohammed, Harkat-ul- Mujahedeen, Markazdawa, Dawat-ul-Irshad, Taliban, al-Qaeda's International Islamic Front, and a dozen other terrorist outfits on its soil to wage proxy wars in Afghanistan and Kashmir” (Malik; 2003: 180 ). A number of terrorist organizations are working in Pakistan with the silent blessing of the government and the army. Both the civilian and military administrations have not taken effective measures to end terrorist activities in the state. The overwhelming role of these organizations in the state enables them to be highly influential to and preferred by the military and state institutions. Pro-Islamic factions who have unceasing nexus with the Islamic militant are there in almost all institutions of the state. Every action against these organizations should be opted so cautiously to avoid protest from military and other institutions. In fact joining the US in the anti-terrorism campaign was a herculean task for Pakistan. Some feared that domestic opposition in Pakistan to its role as a ‘front-line’ state in the US campaign against ‘international terrorism’ would fuel a deadly coalition between Muslim extremist groups and pro-Islamic factions in the army, giving them access to nuclear weapons (Shaikh; 2002). It is under this context that Operations against al-Qaeda in Pakistan clearly have been less than successful, and General Musharaf ability to control Jihadi groups is severely limited (Malik; 2003:178).

Amr Aboul Atta from Egypt stated while adopting pre international convention for the suppression for the acts of nuclear terrorism that ‘from the legal perspective, terrorism was not limited to non-states; State could also commit terrorist acts’ (Mehta; 2007: 937). This further intensifies the threat of nuclear terrorism from Pakistan as state that has the history of sponsoring terrorism. Pakistan with history of sponsoring terrorism might also promote nuclear terrorism if the situation is conducive for them. Terrorist forces are very powerful in Pakistan, it even killed the former Prime Minister Benazir Bhutto. To the terrorist Ms. Bhutto was considered the flag because of the new anti-jihadist imperialist policy, she could not be tolerated (Akthar; 2010; 106). The former U.S secretary of defense Donald Rumsfeld held that "the most serious threat to global security is the potential nexus between terrorist of mass destruction" (Ipe & Miller; 2007: 123).

It is also alarming that international Islamic militant organizations have shown their concern towards Pakistani nuclear arsenal as it was a weapon of their divine
strength. (Cirincione; 2008:89). They regarded the Pakistani nuclear bomb as Islamic Bomb. "Chechen leader Zelim Khan, who visited Pakistan February 2000, became very popular with the national press when he recommended that Pakistan should not decide about the CTBT on its own. He was of the opinion that Pakistan bomb was an Islamic bomb and there for the property of the entire Muslim Umma (global Muslim polity)" (Ahmed; 2002; 85). Bin Laden apparently sought to capitalize on Pakistan's nuclear program when, in 2001, he, Ayman al Zawahiri, and two al Qaeda operatives met with Pakistani scientists Sultan Bashiruddin Mahmood and Abdul Majeed to discuss various aspects of weapons of mass destruction (WMD) development, but particularly nuclear (Allison; 2004: 24). It is deadly dangerous that deeply religious terrorist organizations like al Qaeda are more likely than political terrorist groups to seek nonconventional weapons (Jenkins: 2006: 37). The political terrorist groups have certain particular targets and when they obtain it they cease to be sources of nuclear threat.

Miller and Ipe points out that the most possible chance to acquire nuclear capability is by obtaining fissile materials and assembling a nuclear bomb. They also point out that rouge states could help in this process (Ipe & Miller; 2007: 129). From this point of view Pakistan would be possible centre of nuclear terrorism. Scholars have also placed Pakistan as one of the vulnerable locations for terrorist attack. Pakistan has a volatile control of weapons, instability, and radical fundamentalism that make them attractive targets for terrorist hunting the bombs. Once the fissile material is attained the remaining technological barrier can be overcome more easily (Cirnicione; 2008: 74). The danger of nuclear terrorism, though not new, is the most serious threat. Some Islamist terrorist are known to be actively seeking intact nuclear warheads or the fissile materials necessary to construct a crude nuclear device if terrorist could buy or steal 25 kilograms of highly enriched uranium. A well organized group could probably obtain the necessary technical expertise to develop a small bomb, similar to the Hiroshima bomb (Ibid; 2008: 90). Michael Tkacik finds that there is also evidence that Pakistan's nuclear weapons establishment has some sympathies for Islamists and some scientist have had connections with radical Islamists. This may threaten Pakistan's stability and therefore put its nuclear weapons at risk (Tkacik; 2010: 200). Therefore the Islamist groups and the military link would provide a viable condition for the terrorist to obtain nuclear
devices and technology. The two ways link i.e., the scientist and Islamist terrorists; and the military and the terrorists are malignant to the nuclear safety and security. This could culminate in nuclear terrorism. The Pakistani situation becomes more volatile as the nuclear scientists of the state maintain a close link with the militant groups. Pakistani scientists are influenced by Taliban and Al Qaeda militant organizations (Chellaney; 2001: 108). “There have been shadowy contacts between Al Qaeda and nuclear experts from Pakistan; including a meeting with Osama Bin Laden who has called for the procurement of weapons of mass destruction a religious duty” (Arnold & Brown; 2010: 305). As terrorist groups prefer to acquire an intact nuclear warhead and there exist structural weakness along with a volatile mixture of instability, religious extremism, and nuclear weapon in the Pakistani state, it is plausible to imagine that Pakistan will be a natural target of the terrorists in their hunt for the nuclear bomb (Chakma; 2009:124). It is the fear of terrorism particularly nuclear terrorism that has brought in committed involvement of the U.S in Pakistan. Moreover, there will certainly be policy shifts once the terrorist activities are put down. Bhumitra Chakma points out that it is uncertain what attitude Washington will have towards Pakistan's nuclear status when the current wave global terrorism is over (Chakma; 2009; 133). Former President Musharraf in his address to the nations in September 19, 2001, stated his concern for the safety of the country's nuclear asset as major reason for his decision to side with the U.S.A in its crusade against terrorism (Sing; 2006; 37).

Stealing nuclear weapons as well as technology is the most expressed danger associated with nuclear terrorism. But it is not quit easy to steal nuclear weapons unless there are certain favourable conditions. A theft would involve many risks and great efforts in terms of personnel, finances and organization. Without the support of insiders and local knowledge, such a theft is inconceivable (Wirz & Egger; 2005: 502). However, Pakistan would be the most suitable state for theft as above facilities are available within it. Islamic fundamentalists within the military and nuclear scientists would provide support to non-state actors to steal nuclear materials.

Sponsoring of terrorist activities by Pakistan has been viewed by many scholars as the possible source of nuclear terrorism. G. Parthasarthy, former Indian diplomat, contented that there is now conclusive evidence that both Taliban and
Pakistan groups like Harket-ul-Mujahideen and Lashkar-e-Toiba were waging jihad against India in Jammu and Kashmir with armed support from Pakistan's Inter Service Intelligence (ISI) (Devare; 2006; 57). Even the possibility of the state sponsored nuclear terrorism by Pakistan cannot be neglected, because Pakistan has a history of state sponsored terrorism. Amr Aboul Atta of Egypt expressed the role of states in terrorist activities in the international convention for the suppression of acts of nuclear terrorism of 2005. In his view, terrorism is not limited to non states, states could also commit terrorist acts (Mehta; 2007; 937). Joseph Foxell expresses the threat of nuclear terrorism probable as rogue states have acquired the nuclear capability (O'Day; 2004; 136). Since these states do not support the international safety regulations against illegal fabricating of nuclear devices and technologies, they create a favourable condition for the terrorists to attain the nuclear devices and technologies. Also most of these states have resorted to clandestine development of the nuclear weapons. Pakistan suffers from the above defecting features and the threat emanates from it. Chakma contents that due to complexities in making nuclear weapons; terrorist groups will prefer to acquire a constructed nuclear warhead (Chakma; 2009; 121). If it is so happens, Pakistan would be the most preferred shop for the terrorists. The illegal market established by Pakistan under the Khan net-work would provide nuclear bomb if not checked effectively by the international community. Under these circumstances many have argued that greater efforts would be made to control Pakistan's nuclear technology in order to prevent its falling into the hands of terrorist organizations (Challney; 2001: 108 and Farzana; 2002).

Siracusa finds that the decision of Libya to renounce and dismantle its nuclear programme after the Khan network was caught up is a clear evidence of the link between Libya's nuclear programme and Khan Network. He says that the urgent attention required to the problem was the case of the international trafficking of atomic technology and materials set up by Pakistani atomic scientist Dr. A.Q. Khan. All the more it was a one stop shopping network for nuclear weapons. By all accounts, Khans operation was a highly sophisticated supply and production network spreading from Pakistan to Libya, North Kenya, Iran, Malaysia and elsewhere. Khan network had played a crucial role in Libya’s nuclear ambitions. Within months of the
network being shut down in 2004, Libya had re-announced its nuclear programme (Siracusa; 2008: 122)

There has been very coherent and vigilant effort by the states after the terrorist attack in 2001 and this effectively disrupted the terrorist networks. Almost everyone accepts that nuclear devices with its massive casualties have attracted the interest of the terrorist (Cortright & Lopez; 2008: 240). It is not about the capability of the terrorists to acquire such weapon but about the favourable condition that empower them with nuclear warheads that the scholars differ in their opinion. However Pakistani conditions are considered by many scholars as conducive for the terrorists. Also the Islamists have highly influential role in Pakistani socio political affairs. The influence can also be noticed in the nuclear programme. The Islamists claim that they are the protectors of Pakistan's nuclear deterrent capability (Singh; 2006: 25). This involvement of the Islamists especially extremists has been viewed as threat to combating nuclear terrorism.

Smuggling of nuclear materials confirms the scholarly opinion that there exists ample opportunity for the terrorists to possess nuclear materials. Till September 2005, there had been 220 cases of nuclear smuggling confirmed by the IAEA since 1993. Eighteen of these cases involve highly enriched uranium (Siracusa; 2008: 121). Though one could argue that these smugglings were carried out by the rogue states for their nuclear development, it points to nuclear black market where the terrorist could get a chance to nuclear capability. This market is indeed the creation of A.Q. Khan net-work, silently supported by the Pakistani government. The threat of stealing of nuclear weapon or material may happen during wartimes (Rajagopalan; 2010: 225). Deployment of the nuclear arsenals and delegated control of the nuclear weapon would provide a better chance for the anti-state actors to steal them. As Ellingsten suggests the terrorists are patiently waiting for an opportunity to equip them with the nuclear arsenal (Ellingsen; 2011: 353).

Obviously, Nuclear weapon remains attractive to insecure and ambitious states (Siracusa; 2008: 108). Though the number of terrorist incidents is declining, the number of casualties per incident is increasing (Cortright & Lopez 2008: 243). So there are perhaps certain shifts in the terrorist methods. The threat of nuclear
terrorism, by all means, cannot be neglected. Though there are many attempts to keep the terrorist activities under control, especially after September 11, the reports of the casualties caused 67 years of history of Pakistan it would be irrational to think that the fundamentalist ideology will cease to operate in Pakistan. Whether it is a fabricated idea, nuclear terrorism has been in fact, haunting international security. Despite this, scholars like Garima Sing believe that the chance of nuclear terrorism is highly unlikely.  

It is irrational to discard the idea of nuclear terrorism as a myth and to avoid the safety measures. Terrorists would have attained nuclear capability if coherent safety and security measures were not ensured to nuclear weapons and materials. In a larger perception, it is not sheer the use of nuclear weapon by the terrorist that leads to nuclear terrorism, but even the threat that they can inflict by simply processing nuclear materials and arsenals could intimidate security. Still a conventional attack on the nuclear reactors, reprocessing plants by the terrorists can also lead to catastrophic nuclear terrorism.

It is clear that nuclear bombs have not yet been acquired by the terrorists so far. However such a scene possibly could not be overturned. Therefore nuclear terrorism or the fear of nuclear terrorism still creates a security predicament. The current crisis in Pakistan if read with its past nuclear black market and sponsored terrorism, multiplies the security threat from the nuclear terrorism. There is insolvent in Pakistan and part of combating terrorism has vitally reduced the risk. However unless terrorism is completely wiped off or the nuclear devices are ensured with high security, Pakistan would remain a severe threat to global security.

Two ways to deal with nuclear terrorism are to combat terrorism to ensure high security and safety to nuclear devices and technologies. But the question can terrorism be completely combated remains unanswered. Jasjit Singh argues that counter terrorism in this context may reduce the immediate activities of terrorist organizations, but may yet prove to be inadequate in eradicating the most deeply entrenched beliefs that support the "Jihad kalashnikov ideology" (Behera & Joseph; 2004: 86). Coherent security and safeguards are required to provide to the nuclear weapons and materials to prevent nuclear terrorism. The Ad Hoc committee of the
U.N on International terrorism (1996) recommended the Assembly to adopt an International convention for the suppression of acts of nuclear terrorism (Mehta; 2007: 924). States, particularly possessing nuclear materials and devices should be cautious enough to avert every possible chance of nuclear terrorism.

**Nuclear War**

Sixty nine years have passed after the first and last nuclear bomb was exploded. The world shifted from ‘uni-nuclear’ world to ‘multi-nuclear world’. Over twenty wars were fought after the Second World War. Nevertheless nuclear weapon was used not even in a single case. Many scholars have also viewed that the Cuban crisis did not escalate into a war due to the presence of nuclear weapon. Waltz argument 'many may be better' seems to the relevant here. However, Waltz has put it right that it depends on the state that possesses the nuclear capability in averting the nuclear danger. He says "the likelihood of avoiding destruction as more states become members of the nuclear club is often coupled with the question which those states will be" (Susan & Waltz; 2003:10). From this perception the threat of nuclear war from Pakistan cannot be completely put aside. The reasons that could primarily be attributed to a nuclear war from Pakistan's nuclear capability are geographical proximity with conventionally powerful India, frequent military dictatorship and command control failures.

It has been contented by many that the long standing antagonism between India and Pakistan would give way to a nuclear war. Everyone expected a nuclear detonation in the first large scale military confrontation between the two nuclear weapon states in the Kargil crisis of 1999. The prolonged enmity between the two nations is well expressed by Zulfiqar Bhutto as "war on India for a thousand years" (Blink; 1998; 31). Religious extremism in both countries would destabilize the peaceful condition prevailing in the region. A former chief of the Indian Army suggests the Indian method of response against the terrorist insurgents. He says if a nuclear war can bring an end to the thousand years of invasions of India by the armies of Pakistan, India should fight a nuclear war and destroy Pakistan once and for all (Malik; 2003:189).
As Rajesh Rajagopalan argues, the risk of nuclear war is closely related to the nuclear deterrence doctrine the nuclear states adopt. Pakistan has refused to reciprocate India's No first-use nuclear policy, and its apparent willingness to consider the actual use of nuclear weapons to compensate for the inferiority of its conventional military forces are generally seen both as a challenge to military strategy and as an important factor raising the possibility of a nuclear escalation in the region (Rajagopal; 2005: 36). It is also important that it was not the nuclear capability of India that worried Pakistan and forced it to nuclear development rather the conventional supremacy of India. Even under minor conflicts provoked by Pakistan, India would not attempt to a high level war due to the nuclear capability of Pakistan. Therefore, for Pakistan the nuclear weapon would deter the conventional strength of India. This view is more comprehensive as former Indian Prime Minister Vajpayee reportedly mentioned to an Indian Army Chief that India could not fight a war with Pakistan because Pakistan had an Atom bomb that they might use against India (Singh; 2010: 229). So the possibility of low level conflict is high and that of high level conflict is low.

The problem of proximity with respect to Indo Pak nuclear case revolves on failure of early warning capability, very limited reaction time, decapitating strike and counter force strike. Due to very short span of time both these nations get, early warning would not be possible or accurate. The failure in the early warning system with very limited reaction time would cause irrational decision on the nuclear force. The very limited reaction time will make it, inevitable to take a hasty decision. Due to the geographical closeness, the countries may target the political decision making centre or the nuclear weapon cites. Even conventional force is adequate to do the same. Fear that communication might be disrupted or collapse in a conventional war provides an incentive to pre-delegate the control of nuclear weapon in an extreme situation of war (Algappa; 2009: 234). Zafar Jaspal points out that the geographical closeness will compress decision making by the national leaders and battle field commanders, reducing stability at crisis" (Javaid; 2006:102). This is due to the very limited time they would get while the crisis alive.

However Rajesh Rajagopal points out that additional command authority has been established in India and Pakistan presumably also has it. Further initial pre-emptive strike would be overcome by developing the nuclear forces at different sites (Rajagopal;
Alagappa argues that the assertive command and control system followed by both India and Pakistan reduces the risk of hasty and unauthorized use of the nuclear weapon (Alagappa; 2009: 209). Analyzing the threat of irrational leadership, Javaid points out that the national command authority of Pakistan's arrangement thwarts the possibility of any irrational decision by an individual (Javaid; 2006: 115).

**Economic Implications of the nuclear Programme**

Economic forces play a very vital role in influencing international relations. Economic statecraft (also referred to as economic inducement, economic engagement, economic diplomacy, positive economic sanctions, and economic appeasement) is an indispensable tool for facilitating international cooperation (Momani; 2004: 42). As there involves no military application it must be regarded as a constructive means to influence other states behaviour. Being an economically backward nation, Pakistan bares severe economic ramifications for its nuclear programme. More than the direct economic cost of the nuclear programme, it was the external influence on the economy that actually caused the economic turmoil. The severity of this economic crisis multiplied as Pakistan economy largely depended on the foreign aid. The nuclear test forced the developed nations to cut down their economic assistance to Pakistan. This period witnessed an economic downturn, in which the growth rate fell below that of India, and both fiscal deficits and foreign debts rose to unsustainable levels (Jetly; 2009: 240).

By the middle of 2001, the foreign exchange reserves of Pakistan had sunk to around $200 million (Hussian; 2004). Pakistan had to bare economic blockades from the developed nations during the course of the nuclear programme. The nuclear deal between France and Pakistan had made the U.S to invoke Symington amendment which cut off all aid to Pakistan (Paranjpe; 1987: 79). This caused additional burden to its economy. However these economic constraints and cutting off foreign aid could only result in the temporary halting of the nuclear programme. Considering the economic conditions of Pakistan, scholars have very strongly criticized its nuclear weapon programme. In their perception nuclear weapons are costly and a poor economy like Pakistan will have to pay heavily for it. Billions of dollars are required to produce and maintain a nuclear arsenal (Cirincione; 2008: 81). For example the report by William J. Weida about the cost of the American nuclear weapon programme reveals that the US had spent a minimum of $5.5
trillion on its nuclear programme from 1940 to 1996 (Schwartz; 2008). Nuclear weapons states develop and deploy the nuclear weapons in addition to the conventional weapons. They don't abandon their conventional weapons even though they possess nuclear weapon. Nuclear weapons are very expensive, and are always deployed in addition to conventional forces, not as substitutes for these forces (Cirincione; 2008: 77). Pakistani demand for an Islamic bomb indeed helped them to gain economic benefit from the Islamic nations. The reasons given include the economic need of Pakistan and, the Arab need to deter Israel. There has also been a significant increase in the flow of Arab world funds to Pakistan during this period (Paranjpe; 1987: 76).

Pakistan could have gained more economic benefits, if it hadn't conducted the test. The economic burden Pakistan bore due to the nuclear test was the immediate stoppage of pre economic assistance from abroad. On the one side Pakistan would continue to get the then existing assistance and on the other side it would have got more assistance. Infact the U.S and other developed countries had offered considerable financial assistance as to stop it from conducting the test. This assistance could have been used by Pakistan for its socio-economic advancement. Despite this, Pakistan neglected the well being of its people for nuclear weapons capability (Cirincione; 2008; 77). While diverting their economic potentials for the defence, particularly for nuclear weapon program, Pakistan showed less concern to their social sector. The weak and fragile condition of the social sector had brought about a number of social problems which were posing severe threat that has even cross-broader effects. Militancy and illegal trade from Pakistan has become a global menace, particularly to South Asia. Deepening poverty heightens the tension between different ethnic and religious groups. Violent ethnic and religious strife further deters investments (Faruqui; 2003: 19).

It was reported that Pakistan received financial assistance from some Islamic states like Iran and Libya during the course of their nuclear programme. However it was not adequate to prevent the economic crisis in Pakistan. Indeed the alienation of the Pakistani economy by the big powers, inflicted grave damage to its economy. It may be noted that the actual cost of the nuclear weapon program was planned one and therefore it doesn't pose severe burden to the economy. With more than three quarters of the federal budget going to defense debt servicing not much remains for spending on social
programmes to promote economic development (Faruqui; 2003: 146). However over-
spending on the defense sector causes considerable deficit on the social and other sectors.

The most important factor of the Pakistani nuclear programme was the nuclear
parity it wanted to create with India. Therefore it had to pay severe economic cost for the
same. When Pakistan attempted to create nuclear parity with India, it most probably
neglected the other asymmetries, especially the economic. The Indian economy
developed to a stage where the sanctioning states would hurt themselves. Even the
Pakistani government was aware that the sanctions that might be only a pinch for India
could bite deeply into its own economy (Khan; 2008: 247). The Pakistani attempt was
always to over-project military side of the security and underplay the significance of the
economic and social development in the national security calculus. Further, the political
conditions of these two nations were different and its impact was differently felt on the
economy. The Brow-back-2 Amendment lifted the sanctions on India but the sanctions
against Pakistan remained due to the military coup (Javaid; 2006: 38). The asymmetry in
the political spheres also established poor economy in Pakistan unlike India.

The failed economic condition of Pakistan was viewed by the international
community as a grave threat to international peace and security. Various arguments
supported the possibility of this threat. The most important among them were - Pakistan
might sell their nuclear technology and information to rogue states like North Korea, Iran
etc; the chaotic situation might affect the neighboring Islamic states and anti-state actors
might enhance their role and create severe security crisis in the sub-region. Hence it was
necessary for the international players to prevent the collapse of Pakistani Economy. The
U.S, the World Bank and IMF approved economic packages of support to Pakistan. As
Pakistani economy was severely hurt, these supports were indispensable to solve the
crisis. However, the September 11, 2001 terrorist attack and the U.S war on terrorism
paved the way for greater financial and other assistance to Pakistan. In fact, due to severe
economic and political instability, Pakistan has become further dependent on the U.S for
settling its economic issues in the post cold war period as well as aftermath of its nuclear
tests (Javaid; 2006: 37). This could also be viewed as the long standing alliance between
the U.S and Pakistan.
The table below indicates the shift in the military spending of Pakistan hardly a decade before and after the nuclear test. Average share of the military expenditure from 1991 to 1998 was 4.71% whereas after 1998 till 2012 it was 3.27%. The military expense comparing to GDP has gone down. Definitely the military share in the national expenditure was decreasing the decade before the nuclear test. And the average rate of decrease before after the nuclear test is appropriately equal (from 1991 to 1998, the total decrease in the share % was 1.1 and average rate of fall during these years was 0.157. The total fall from 1998 to 2012 was 2.1. The average rate of fall during this period of 14 years was 0.15.) However, the delineating year during this period was 1998, the year in which Pakistan conducted the nuclear test. In 1998 the military spending was 4.85 of the GDP of Pakistan. While in 1999 the military spending fell to 3.8% of the GDP. This is the highest fall in the military expenditure of in relation to the GDP that Pakistan had in the last two decades. The rate of GDP share fell by 1% that is from 4.8% in 1998 to 3.8% in 1999. The arguments that follow this shift are associated with the nuclear programme. The shift could be analysed on two grounds. Immediately after the nuclear test most of the nations stopped their assistances to Pakistan.

There was strong discontent among the countries that provided aid against the massive spending on the defence sector instead of their demand for spending it on the socio-economic development. The economy of Pakistan also fell severely due to the cutting off foreign assistances. The GDP of that year fell meagerly. The GDP of 1998 was 72,265,372,749 Pakistani rupees and in 1999 it was 72,166,255,035 Pakistani rupees. It is evident from here that the nuclear test had a very crucial effect on the economic. There was in fact retardation in the GDP of Pakistan. This in turn indicates the poor performance of the economy immediately after the nuclear test. Therefore the protest from within and outside the nation against the huge spending on the military build-up and the economic breakdown forced Pakistan to reduce the military expenditure. From another point of view the fall in the military budget shows the nuclear test had left out positive results too. Pakistan felt more secure after it had shown its nuclear capability openly. The very possession of the nuclear weapon would prevent the external threat. Literally, Pakistan felt it could not be defeated by the enemy state as it possessed the nuclear weapon. It was also quite favouring the Pakistani state that the nuclear weapon could even counter conventional weapon strength. It was well proved in the Kargil war.
that immediately followed the nuclear test. The six nuclear bomb tests in a row also proved its second strike capability. Therefore now the nuclear weapon could limit the conventional arms strength to minimum level that is adequately required to fight low level wars. This perception also has encouraged Pakistan to reduce its military budget. Therefore, some, especially the Pakistan supporters of the nuclear weapon programme considers the weapon capability more advantageous.

Table-6.2
Military Expenditure and GDP Share of Pakistan

<table>
<thead>
<tr>
<th>Year</th>
<th>Military expenditure in Billion Rupees</th>
<th>% of GDP</th>
<th>Rate of fall</th>
<th>Total rate of fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>75.8</td>
<td>5.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>87.5</td>
<td>6.1</td>
<td>-0.3</td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>91.8</td>
<td>5.7</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>105</td>
<td>5.3</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>120</td>
<td>5.3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>127</td>
<td>5.1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>136</td>
<td>4.9</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>143</td>
<td>4.8</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>150</td>
<td>3.8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>157</td>
<td>3.7</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>182</td>
<td>3.8</td>
<td>-0.1</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>195</td>
<td>3.9</td>
<td>-0.1</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>220</td>
<td>3.7</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>224</td>
<td>3.6</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>281</td>
<td>3.4</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>292</td>
<td>3.3</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>327</td>
<td>3</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>376</td>
<td>2.8</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>448</td>
<td>2.8</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>517</td>
<td>2.6</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>614</td>
<td>2.7</td>
<td>-0.1</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>641</td>
<td>2.7</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

(Source: World Bank 2012 & SIPRI; 2012 Modified)
Some scholars also argue that the nuclear weapon capability has given Pakistan the leverage to economic bargain. The weapon – capability has strengthened its bargaining power with countries like the United States as far as getting economic and conventional military assistance is concerned (Nanda; 2001: 109). It may also be found that during the course of the nuclear development programme, Pakistan received wide range economic and other forms of assistances. One of the motives of these assistances was to prevent the nuclear weapon development by Pakistan. In the similar fashion it could be seen that after the nuclear test by India there was a considerable rise in the economic and military assistance offered to Pakistan. The rationale behind Pakistan's refusal of these assistance was the over projecting of military strength in their national security. Pakistan was aware of the economic crisis it would inflict upon. But it expected that these sanctions against it would be temporary. Though in the short term, the economic pressure remained to be a viable option, in the long run it seemed to be futile.

Comparing the situation to India, Pakistan miscalculated the economic implication of nuclear programme and the sanctions against it. The nuclear test by India in 1974 and also in 1998 created no severe economic crisis in India. The economic sanctions on India were short lived. But to Pakistan even minor sanctions against it would be highly detrimental to the economy as its economy overwhelmingly depended on the external assistance. When it attempted to create the nuclear parity, the economic disparity multiplied. Analysing the strategy of nuclear ambiguity Pakistan followed, it would be seen that there were some economic implications for such a strategy. It was not sheer the military action against it that Pakistan was forced to adhere to such a strategy but the fear of economic sanctions against it.

So long as the domestic instability is not stabilized, the security of Pakistan is under grave threat. Therefore, spending adequately on the social development is very essential. Allocating sufficient revenue on the social sector has a vice-verse influence. Unless the social sector is developed the economic development can't take place. Moreover, economic development is a symbol of the social development. Social development, particularly educational and health can bring forth economic growth. Analysing the domestic circumstances, it would be seen that there exists several economic and social factors that causes instability and insecurity in the state. What is
more alarming is that this instability and insecurity has cross-broader effects. In fact the Pakistan instability is a severe threat to the South Asian region, particularly to India. It should also be noticed that the instability and the insecurity Pakistan experiences, have driven away foreign investments in Pakistan, which is inevitable for such a poor country to boost its economy. Pakistan's investment ratio of 15 percent is low for a developing country (Frauqui; 2003: 147). The instability born of the economic and social causes can further create nuclear insecurity in the region.

Already crippled with ethnic crisis and violence, the Pakistan economy became bleaker with the foreign sanctions against it. Immediately after the nuclear test, the international perception regarded the South Asian region, dominated by India and Pakistan, as the epicenter of security crises. Many nations warned their citizens to quit South Asia, particularly India and Pakistan under the background of nuclear threat. This in turn raised a heavy blow to Pakistani economy. Foreign investment in Pakistan collapsed severely. The state tourism found retardation affecting the income source of the Pakistanis. There was also an adverse impact on the foreign trade and commerce of the nation. Either the U.S dominated western assistance or the aid from the Islamic world was essential for the Pakistani economy to sustain. The U.S economic assistance, though cut off sometimes, was very significant for the Pakistani economy. Though the U.S cut off the assistance in 1970's, it renewed it later in the context of the Iranian resolution and Soviet invasion in Afghanistan (Mumtaz; 2002). For the U.S, Pakistan was an important strategic ally in dealing with Islamic states, West Asia and Soviet Union.

While admitting that the economic assistance to Pakistan should be resumed so as to prevent a total economic collapse, Japan made it clear that any resumption of bilateral economic assistance could depend upon not only Pakistan conforming to the nuclear non-proliferation regimes but also calling off its clandestine missile transactions with North Korea (Nanda; 2001: 71). The new realities revealed themselves in 1990 when all U.S military and economic assistance, provided under the special relationship established in 1981, was cut off as the U.S president did not provide a certification that Pakistan's nuclear program was peaceful in nature (Mumtaz; 2002: 166). It has been well accepted that the economy of Pakistan heavily depended on the external support at the time of the nuclear test. In1998 Pakistan's
The U.S involvement in South Asia, particularly Pakistan increased with the policy of combating terrorism. Being a nuclear power as well as terrorist centre Pakistan was a major concern for the U.S. The viable option the U.S had to avoid the nuclear threats such as nuclear terrorism, nuclear accident and nuclear black marketing, was to provide economic incentives to Pakistan. Washington was well aware of the strategic significance of Pakistan. Even during the development of clandestine nuclear weapon program, the U.S did the same. Within weeks of the Soviet occupation of Afghanistan on 28 December 1979, President Carter had dispatched an offer of a $ 400 million economic and military aid package to Pakistan (Jaffrelot; 2002: 322). Though the U.S frequently shifted its policy regarding South Asia especially dealing with Pakistan, at the core of its policy remained Pakistan a front-line strategic ally. Therefore, the economic and other sanctions against Pakistan could not be continued for a long time. This in fact was the Pakistani rationale when it considered the economic constraints of nuclear weapon program. By the Pressler Amendment nuclear sanctions were lifted, thus permitting a 5 year, U.S $ 3 billion aid programmes. One half of it directly stated for the military. Roughly, an additional U.S $ 1 billion a year has gone for funding the army's efforts since 2001 in support of counter terrorism operations and over all security along the Afghan border. This brings the US aid to Pakistan from 2002 to 2007 to an impressive total of US $ 10-5 billion (Gregory; 2008: 36).

The possibility of Pakistan making an alliance with the rogue states for making economic gain has been expressed by many scholars. There is greater concern that Pakistan might sell their nuclear technology and information to rogue states like Korea, Lydia, and Iran etc. The economic implication behind nuclear trade can be viewed from two angles. Any such attempt by Pakistan might bring in the involvement of the big powers. Perhaps this would help Pakistan to gain more economic assistance so that they might not carry out such a nuclear trade. There are
clear evidences of the Pakistan nuclear trade with Korea which has been well revealed by A.Q. Khan, the father Pakistani nuclear program. To some scholars this trade was also aimed at making economic gains. Therefore the U.S, European Union and the International associations are providing financial aid to Pakistan to break such a nexus. In the future also, the economic assistance would be continued for the same reason. The most significant reason behind the high concern of the big powers on such a nexus is the nuclear weapon capability of Pakistan. This is because the Pakistani relation with the rogue states would lead to severe security crises.

The world development report indicated that Pakistan's GNP in 1998 was $63.2 billion while India's was $421.3 billion. But Pakistan spent about $3.5 billion on the military while India spent $10.5 (Khan Rafi; 2004: 176). Though India had around seven times the GNP of Pakistan it spent only around three times that of Pakistan's military spending. Therefore this economic disparity is major aspect Pakistan should pay attention to while it attempts to make the military parity. In the fiscal year 1998-99, the domestic debt of Pakistan was around Rs.1200 billion. However, on March 31, 2006 the domestic debt rose up to Rs. 2, 267 billion (Mahmood; 2007; 43). The military regime in Pakistan could bring economic progress and stability to some extent. The GDP of Pakistan had climbed up to $393.4 billion. The real GDP growth rate in 2005 was 7.8% and Pakistan's per capita GDP was now PPP $ 2,400 (Mahmood; 2007; 39). This development was due to the economic assistance it received from the western powers especially from U.S after September, 11, and 2001 to join the anti-terrorist fight. Of course there are views that the economic policies of General Musharaf has also helped to gain these developments. The United Nations investment report 2006 stated that Pakistan saw a 95% growth in FDI inflow in 2005 to reach $ 2.183 billion (Mahmood; 2007; 41). While the domestic debt increased largely, consuming greater proportion of the GDP; the external debt did not rise up at such a rate. It was even brought down from $38 billion to $35 billion in 2003-04. This reveals the highly influential role of the economic assistance Pakistan received during their periods. Here the Pakistani rationale of going nuclear can be justified. Though it was put under severe economic trap due to the sanctions against its strategic significance provided an opportunity gain more and more external aids.
In the 1970s and 80s there was an impetus to combine popular values and the necessity of securing Arab financial aid by in working Arab Islamic symbols and rhetoric (Mumtaz; 2002: 163). The demand for an Islamic bomb Pakistan can also be viewed from this economic imperative. Since it was viewed an Islamic bomb by some of the Islamic states they were ready to provide economic assistance to Pakistan. In fact, in the early 1970s Saudi Arabia and Libya were major financial supporters of Pakistanis nuclear program.

The nuclear arms race not only incurred an additional military spending commitment but also prevented Pakistan from receiving the economic aid that was the basis of its economy. The suspension of the IMF package termination of landing by the World Bank and the Asian Development Bank, and the mounting debts created arguably the worst financial crisis in Pakistan's history (Khan; 2008; 147). The blockades to their economic aids severely affected its domestic development. Arms buildup simply cannot be financed without neglecting economic development at home. The economic developments negligence carries its own dynamics. These dynamics pose a negative influence on the internal security of a state (Javaid; 2006: 11). Yet another rationale of Islamabad to developed WMD is that the weapons well come to the country's rescue during the days of worst economic crisis. It is the fear of insecure nuclear weapons due to economic turmoil that forced the U.S, world bank and the IMF to come to rescue (Nanda; 2001; 110). In a way the nuclear weapon acted as a bargaining chip for the Pakistan to get financial assistance.

The economic sanctions against Pakistan could not be extended for long. It was certain to Pakistan from the earlier Indian nuclear test (1974) and the economic sanctions imposed against it. A shift in the international environment would force to lift up the sanctions. And in the case of Pakistan the September 11 incident and the international movements to combat terrorism not only lifted the sanctions imposed against it but also provided additional aids. The United States removed three different economic sanctions that had been imposed on Pakistan for testing and acquiring its nuclear arsenal: the Symington Amendment (imposed in 1978), the Pressler Amendment (1990), and the Glenn Amendment (1998) (Momani; 2004; 44).
Definitely there was no clear economic imperative such that the nuclear weapon capability would help to reduce the military expenditure, while the Pak government began the nuclear programme. However, being an integral part of it the civil nuclear programme provided energy security to the state. Also it is noteworthy here that nuclear technology to mine, and enrich nuclear materials like uranium and plutonium would help make economic gains in the nuclear market. In this nuclear age nuclear trade has become one of the most relevant and attracted areas in the international market, due to the higher reliability of the nuclear energy. The nuclear energy development (a greater part of which helps in weapon capability) could help Pakistan to resolve its energy crisis and to be one of the major sources to meet its growing energy demands in the future. The application of the nuclear energy other than generating electricity such as application in medical science would further add to the economic benefit of Pakistan.

**Nuclear South Asia: Unstable peace or stable peace?**

Analyzing the effect of nuclear deterrence many scholars have viewed it is an ugly stability or unstable peace that is prevailing in the sub continent. In fact the question is what is better? - A condition of unstable peace or stable conflict? For, many viewed the unstable peace would be a better condition. The unstable peace existing in South Asia is just like a coconut on the wall. It may give way to peace or conflict. Immediately after the Kargil war many analysts contented the ugly stability brought in by nuclear deterrence might continue for 5 to 10 years. In fact this limit has been crossed by the ugly stability existing today. In a more optimistic perception, two changes are desirable. In one way, it would lead to an extension of an unstable peace and another way a shift from unstable peace to more or less stable peace.

The overt nuclearization of India and Pakistan in 1998, posed a number of anomalies in the South Asian security calculus. Nuclear pessimists viewed it as a very dreadful situation in South Asia. They presumed a nuclear war in South Asia. In their perception the low level conflicts would eventually make the irrational use of nuclear weapon. The attempt of the Indian and Pakistani leaders to relate nuclear weapon with the Kashmir issue made the South Asian security vulnerable to a nuclear detonation. In addition to this, the overwhelming role of non-state and anti-state actors in the sub region has multiplied the nuclear threat. On the contrary the Kargil war
The Kashmir crisis and other conflicts in the last 17 years didn't escalate to a nuclear war. All the more, the low level conflicts also got reduced.

The question about whether incentive to the Kargil war was the nuclear capability still remains unanswered. Only the relation can be made to its cause factor is that the war occurred immediately after the nuclear tests. Some viewed it as part of the Pakistani strategy of surprise against the opponent. Analysing the objective of the war some scholars viewed that Pakistan perceived an international intervention into the Kashmir issue as both India and Pakistan were nuclear weapon states. This would go against the Indian stand of avoiding third party involvement in the Kashmir issue. Also, Pakistan found an advantage that nuclear weapon would resist Indian massive strike and limit the conflict in basic levels.

Analyzing the history of India & Pakistan rivalries, it can be seen that Pakistan begins the war and receives the defeat. After each defeat there was severe ramification in the domestic politics of Pakistan. Usually the political turmoil after the war replaced the political administration. So a conventional war with India under compelling circumstances would lead to the defeat of Pakistan and perhaps could invoke political and economic troubles. An existing regime would be forced to use the atom bomb to prevent its overthrow. Especially if it is a government of the Islamic fundamentalists, the nuclear war can't be rejected. Also many have conceived the idea that the Pakistani nuclear potential intents to overcome the conventional superiority of India. Pakistan's primary concern of the nuclear weapon strength remains maintaining parity with India and its nuclear posture aims at deterring India from its superior conventional military in a direct clash (Rajagopal; 2005: 37). A defeat in a conventional war would lose Pakistan's attempt to create the parity with India. The two options Pakistan has are either to use the nuclear weapon or to avoid even major conventional war with India. The first attempt of Pakistan would be to avoid conventional war. This view has been expressed by the Pakistani officials. 'At a conference in Bangkok, Pakistani brigadier who is associated with the nuclear planning Division said That India should concede that conventional war cannot be begun in South Asia (Menon; 2003: 312). Pakistani attempt will be to limit the conflicts in the low level. It was clear from the Kargil Crisis that Pakistan signalled nuclear threat to preclude a major war with India. During the Kargil crisis, When the
Indian forces demonstrated their retaliation on May 31st. Pakistan's foreign secretary Sham Shed Ahmed said that they would not hesitate to use any weapon in their essential to defend the territorial integrity (Ganguly; 2008: 56). Many analysts concluded it as nuclear threat. In fact the threat was meant to limit the war at the low levels, preventing India from crossing the line of control. On that context Pakistan's strategy was successful. The nuclear threat also suggests that in reality even Pakistan feared the use of nuclear weapon and it wanted to avoid the use of the nuclear weapon.

The danger of Pakistan's first use - last revolt policy is, who shall determine the 'redline'. Vladimir Novikov points out that Pakistan's military will operatively define the red-line and since it is a guarded state secrete it requires no public declarations (Rajagopal & Chari; 2003; 80). Muthayya Alagappa observes that in each successive crisis the probability of deterrence failure was reaching closer and closer (Alagappa; 2009: 235). If it is the case, there would be a complete failure of the nuclear deterrence and a nuclear war would take place in the future. This argument of Alagappa seems to be rational from the rhetorical posture of India and Pakistan in each crisis situation. The statements of former Prime Minister Benazir Bhutto and Gen. Mirza Aslam Beg during the 1990 crisis points out that Pakistan would continue its revisionist policy of challenging India. Therefore, peace and stability in the region would be at stake in the future. Avoiding a sub-conventional war under this condition would require great efforts. Also the domestic pressure for the use of atom bomb than getting defeated in a war with India can't be over tuned by the governments in future. Admiral S M Nanda and Rajeev Sharma view that under pressure from the pan Islamic groups any psychic general could trigger a nuclear war in the sub-continent (Datta & Sharma; 2002:180).

The rhetorical posture of Pakistan repeatedly mentioning the nuclear option made many to think a nuclear detonation in South Asia is not far. Pakistan threatened India with nuclear attack in 2002 if India to launches a conventional invasion of Pakistan in the wake of the terrorist attack on the Indian Parliament (Singh; 2010: 228). At the same time India has also respectfully mentioned that India will not hesitate to attack Pakistan if its security is threatened. Perhaps India would carry out military operations against the terrorist groups within the Pakistani territory. These
rhetorical postures of both nations under very hostile conditions suggest that South Asia would be a plausible centre of nuclear war. The terrorist violence intensity in the Indian held Kashmir and counter movements by New Delhi strengthen the argument that the chronic Kashmir conflict could trigger a nuclear war in the sub continent (Javaid; 2006: 103). The operation ‘parakrama’ by India, though didn't effect into a military retaliation, shows that any such militancy would lead to major militancy action against Pakistan which could escalate into nuclear war in South Asia. The operation ‘Parakaram’ experience demonstrated, Pakistan's nuclear capability limits India's conventional military options in dealing with Pakistan's sub conventional threats (Alagappa; 2009: 210).

It has been reported that due to early attack on the nuclear sites Pakistan as adopted delegating command control system. It increases the danger that their commanders might use nuclear weapon without orders even if they are not under attack. A rouge commander might decide to take matters into his own hands; it also increases the possibility that nuclear weapon could be stolen or commandeered by terrorists (Rajagopal; 2005: 137). However, scholars like Alagappa argues that both Pakistan and India have not opted for delegated command control system. The misperception of each other’s movements also leads to catastrophic use of the nuclear arsenal. Pakistan's perception of Indian pre-emptive strikes against its nuclear facilities would invoke a nuclear war. Mohamed Alam argues that such a scenario would compel Pakistan to continuously reject India's no-first-use posture and promote reliance upon nuclear weapon at the outset of a conflict situation, rather than keeping the weapon as its last resort (Alam; 2007: 114).

Another context for a nuclear war emanates from Indian direct intervention in Pakistan targeting the terrorists. There are reports after each terrorist attack on India the Indian patience is running thin and thinner. There were also calls for direct intervention in Pakistan to weaken it irreparably (Singh; 2010: 229). During the 2001-2002 crises Prime Minister Vajpayee called for decisive fight against Pakistan. Also the armed forces were carefully configured along the India Pakistan border to undertake significant invasion of Pakistan (Ganguly; 2008: 63). There is also an argument of rational contention that if the terror emanating from Pakistan cannot be dismantled within a few years, it is arguably wiser and conceivable to brace oneself
for the death of millions through nuclear war than to risk the terror of misguided militants and their intolerant religion for hundreds of years to come" (Sing; 2010: 231). This would be a very terrible situation indeed. The U.S hunt on terrorists on the Pakistan soil in fact gives impetus to this view. Also it is better to wipe off the terrorists from the Pakistani soil as the threat of use of nuclear weapon by the terrorist remains. However, the security does not rest here on the military strength. The economic viability is also to be considered. As a fact the burden it would inflict on the economics of the country should be overcome.

Rajesh Rajagopal finds a unique nuclear danger in South Asia due to South Asian geography and priority of the two adversaries, the hostility between India and Pakistan, the nature of the command and control systems in both countries, and finally safety mechanism or the lack of them in India and Pakistan (Rajagopal; 2005: 130). More than anything else, India and Pakistan relations have been secured on a deep mistrust and fear, which neither side have been able to overcome (Javid; 2006: 8). So one could find many overlapping factors one over other leading to a very dangerous scene. But the short history of nuclear south Asia gives a different picture. As Sumit Ganguly contents, the outcomes of the 1999 and 2001-2002 crises shown nuclear deterrence is robust in South Asia. Both crises were contained at levels considerably short of full scale war (Ganguly; 2008: 65).

Analyzing the role of deterrence in the India Pak confrontation Amarjit Sing contents it is an unstable deterrence that is prevailing and this unstable deterrence will not stop nuclear war. Baruki Javaid analyses the India Pak confrontation and the trigger out the nuclear war on the following context. Domestic political pressure, boarder disputes, doctrinal failures, command control challenging issue in the existing nuclear risk between India and Pakistan (Javaid; 2006). The border disputes, particularly Kashmir conflict and the terrorist attacks have been a continued threat in the nuclear risk reduction between the two states. Raja Menon points out the possibility of an accidental war in South Asia due to the failure of Pakistani command control system. He says the pervasive influence of the army in all areas of the NCA does remain a source of worry, as the army might refuse to the advice from the civilian rulers and administrative officials may be ignored (Chari & Rajain; 2003: 113).
The bone of contention between India and Pakistan, the Kashmir has been posing severe challenges to nuclear stability the South Asia. As Pakistan leaders have linked the nuclear weapon with the liberation of Kashmir and India’s strong stand that Kashmir is an integral part of India and threat to its integrity will be severely punished points to the potential threat in nuclear South Asia. Benazir Bhutto the former Prime Minister of Pakistan stated that the primary intention of Pakistan’s nuclear capability was to deal with Kashmir issue (Kapur; 2008: 75). Also, the Kargil war immediately after the overt nuclear tests also suggests Pakistan wanted to link Kashmir Liberation with the nuclear capability. To some scholars, nuclear war has a rare chance to occur. It is the fear of MAD nobody desires an international nuclear war has. This does not exclude the possibility of an accident, nor that of proliferation by an eventual extremists regime, (The Janat-i-Islamic pleads officially for sharing nuclear technology with muslin brotherly countries) nor that of pocket edition of a nuclear weapon of sorts falling into the hands of terrorists (Racine; 2004: 200).

Note:

1) The proliferation of nuclear technology, devices and materials from Pakistan to other states namely North Korea, Iran etc. is referred as Cross- horizontal nuclear proliferation. However, the nuclear development by Pakistan is considered as self-horizontal proliferation. In both the cases there is horizontal proliferation taking place as the number of states possessing nuclear weapon rises up.

2) During the course of nuclear weapon development Khan was given enormous powers. The Khan Research Laboratory was an autonomous body. After the Nuclear tests, he served high posts in the defence decision making of Pakistan (IISS; 2007, Chakma; 2009 & Sing; 2006).

3) The Islamic factor has played a very significant role in the nuclearization of Pakistan (Ahmed; 2002). Therefore, the Islamic sentiments by the leaders might drive them to transfer the nuclear technology to other Islamic nations. Frequently, some of the leaders like Zia & Bhutto connected the nuclear programme with Islam (Chakma; 2009; Ahmed; 2002
4) Pakistan always responded to the global non-proliferation regime with hidden policy that attempted to trap India. Moreover, it never wanted to avoid its nuclear capability.

5) Now Pakistan is trying to develop the nuclear triad. The nexus Pakistan maintains with Korea and China would help Pakistan to develop the nuclear submarine.

6) The nuclear weapon dropped over Hiroshima was based on the gun type. A cylindrical plug of uranium with a diameter of approximately 10 cm and a length of approximately 16 cm was fired into a hollow cylinder of uranium. The joint weight of the two masses was 64 kg and they consisted of 80% of U235 on average (Wirz & Egger; 2005: 498).

7) Suicide terrorism is increasing at a high pace in Pakistan. Within a short period around six weeks in 2009 Pakistan suffered nearly 36 suicide bombing killing over 465 people and injuring many (Lanche; 2009: 1). The fatalities of terrorism particularly suicide terrorism occurring in Pakistan is explained in chapter two.

8) Political instability in Pakistan has been detailed in chapter two. The political atmosphere of a nation has greater role in the security matters of it. On the one side it affects the nuclear policy, doctrine and strategy and on the other its failure raises security and command-control challenges to the nuclear weapons and materials.

9) The poor command control system of the nuclear program of Pakistan has been clearly discussed in chapter four. The failures in the command-control system would lead to stealth of nuclear materials and transfer of nuclear technology to the terrorist. The infiltration of the terrorist into the nuclear programme would be disastrous.

10) Though there are roamers bout relation between terrorist like Taliban and Khan network, these reports doesn’t prove that these terrorist groups have nuclear weapons with them. Even if they are able to hold the nuclear device it requires special skills and required to deal with the electronic coder. It would be more difficult to overcome the technical constraints (Singh Garima; 2006: 34).
11. American U2 aircraft were shot down over the Soviet Union in 1960 and by (Cuban forces) over Cuba in 1962. At this point immediate deterrence comes into play. The high risk involved causes both sides to be cautious and to take measures to avoid escalating the conflict to war (Basrur; 2010: 306). The superpowers behaved such a way to avoid a war during the Cold War (Waltz; 2003). Direct military confrontation between the U.S and USSR was avoided due to nuclear weapons and the risk of mutually assured destruction (Behera & Joseph C; 2004:76).

13. A sudden shift in the regime took place after the wars in 1971 and 1998. General Yahya Khan surrendered power to Zulfiquar Ali Bhutto who was sworn-in on 20 December 1971 as President. On October 12, 1999, General Musharraf staged a bloodless coup d’état, ousting Nawaz Sharif, then Prime minister. One was the transfer of power from military to the civilian government and other from the civilian to the military. The first war with India in 1948 and second in 1965, though didn’t change the governments abruptly, it paved the way for political shifts in the future. Therefore, all the wars had made a profound impact on the political life of Pakistan.

14. During the crisis of 1990, the Pakistan Army chief Gen. Mirza Aslam Zeg stated that in the past they had been pursuing a defensive policy but now there was a big exchange. They were shifting to a policy of offensive defense. If there was a war, the Pakistan army plans to take the war into Indian soil, launching a sizeable offensive strike on Indian territory. Similarly, on May 13, 1990, Prime Minister Benazir Bhutto proclaimed a 'thousand year war' against India (Ganguly; 2008: 52).
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