

## PAKISTAN'S NUCLEAR PROGRAMME AND ITS IMPACT ON INDIA

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### Abstract

*The nuclear programmes of both India and Pakistan have become a flashpoint of South Asia and the world because of their rivalry with each other since independence had led them to wars in 1948, 1965, and 1971. But since the testing of nuclear weapons from both states in 1998 there is constant threat that both the nations might engage with each other and which has happened in 1999 when both fought at the Kargil but due to the intervention from international community the conflict didn't changed in the nuclear war and again the situation became worse in 2001-2002 India-Pakistan border confrontation. The threat between both states is still there due to their tense relations although the relations were normalized since end of 2002 confrontation but after the Mumbai terror in November 2008 has again restrained the relations of both states. The nuclear doctrines of both States are showing their intentions. Pakistan's nuclear doctrine clearly shows that their nuclear weapons are India specific and they have no other purpose than just to defend the state from Indian aggression, whereas in contrast Indian nuclear doctrine shows somewhat an image of emerging global power by comparing it with other states like China and developing the triad of forces. The nuclear doctrines of both States have a huge impact on South Asia because it clearly indicates that it looks impossible to stop the nuclear race in South Asia because Pakistan is maintaining credible minimum nuclear deterrence against India and India against China whereas China against other powers. The future of South Asian security is not very bright due to the fact that Kashmir issue is still hanging which is the bone of contention between both states and there is a need to solve the issue as quickly as possible so that the peace of South Asia can be restored and the threat of nuclear war on South Asia would be eliminated.*

**Key Word:** *Nuclear, India-Pakistan, Security, Impact*

### Introduction:

“Southern Asia comprises the countries of Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. By other definitions and interpretations (*see below*), Afghanistan, Burma, Iran and Tibet are also sometimes Included in the region of South Asia. South Asia is home to well over one fifth of the world's population, making it both the most populous and most densely populated geographical region in the world (www.wikipedia.org).

Pakistan and India are the two major states of South Asia. India is the second most populated state of world and Pakistan is one of the largest Muslim populated state and the sole Muslim nuclear state. Both states share the borders with the world most populous states Peoples Republic of China. Due to the conflict between both states since the partition of Indian Subcontinent in 1947 under the British rule has led many controversies and started the volatile relations between both the states. As a result of these contentious relations among Pakistan and India South Asia became one of the volatile regions of the world as two of its dominant states i.e., Pakistan and India are locked on the most contentious issues of Kashmir and since the late 1990s it has become the nuclear flashpoint.

### **Brief History of Pakistani Nuclear Programme:**

Pakistan's Nuclear Energy Agency was founded in 1948. Pakistan showed little interest in the early stages in nuclear technology, but when in 1954 the US exhibition of "Atom for Peace" came to Pakistan and as a result the government of Pakistan became interested in acquiring the nuclear technology for peaceful purposes.

Pakistan initiated its civilian nuclear programme in 1956, and in 1965 Pakistan Atomic Energy Commission (PAEC) was founded. General Ayub Khan froze the nuclear programme during his reign and it remained frozen until Zulifqar Ali Bhutto came in power. In the year of 1965 Zulifqar Ali Bhutto has arranged a meeting between Pakistani president Ayub Khan and Pakistani nuclear scientist Munir Ahmad Khan at London. Munir Ahmad Khan tried to convince Ayub Khan to restore the nuclear programme but he refused on the grounds that Pakistan is a poor country which cannot afford to purchase expensive nuclear technology.

Z.A.Bhutto restored the nuclear programme which aimed to develop nuclear weapons for Pakistan. There were two major reasons that have forced Pakistan to develop nuclear weapons and those are:

- 1- Loss of East Pakistan in 1971 war with India
- 2- Indian Peaceful Nuclear explosion

Pakistan had a worse experience in the alliances such as SEATO and CENTO because Pakistan was unable to get help from its Western allies who were the members of SEATO and CENTO against the India in the wars of 1965 and 1971. These allies had completely ignored Pakistan in both the wars and even they had provided military and economic assistance to India after the Sino-Indian war of 1962 in which India was routed by China. India used this aid against Pakistan in the 1965 war, and during 1971 war it was due to the Indian intervention that East Pakistan was separated from Pakistan and became Bangladesh.

1974 PNE (Peaceful Nuclear Explosion) of India further aggravated the security of Pakistan and it became a vulnerable state. The then prime minister Zulifqar Ali Bhutto had started the nuclear programme so that the nation realized the importance of self-security and they could not rely on someone else for their own security, and since

Pakistan cannot match the traditional weapons viz-a-viz India so it had sought the nuclear technology as a tool to create a balance between both countries.

Pakistan acquired nuclear plants from Western countries (plants like Chashma and KANUPP) for the production of electricity. "The Islamic Republic of Pakistan began focusing on nuclear development in January 1972 under the leadership of Prime Minister Zulfikar Ali Bhutto."(www.wikipedia.org)

The situation changed dramatically when in 1974 India exploded its first nuclear weapon code named "Smiling Buddha". Since then Pakistan under the leadership of Zulfikar Ali Bhutto (then prime minister of Pakistan) started to get the nuclear technology so that they can defend Pakistan in the wake of Indian aggression. But internationally the situation for the Pakistan was not suitable as US during the 1970s opposed Pakistani efforts to acquire nuclear technology, and US have become successful in blocking the Pakistani efforts in Nuclear Suppliers Group (NSG) to acquire technology. At that Pakistan changed its policy and looked towards East for help and they found an ally which became the all-weather friend and that was Peoples Republic of China.

The major boost came to Pakistan's nuclear programme in 1975 when Dr. A.Q. Khan who is the main architect of Pakistan's nuclear programme had brought designs of uranium centrifuges and other nuclear devices. As a result in 1976 A.Q. Khan founded the Engineering Research Laboratories at Kahuta, which are now known as Dr. A.Q. Khan Research Laboratories (KRL).

Pakistan developed its nuclear weapons in 1980s but they didn't test the nuclear weapons due to lot of political reasons and has created the nuclear bluff against India. The pressure from the West was not strongest against Pakistan's nuclear programme due to the Western particularly US involvement in Afghanistan.

Chinese role has been instrumental in the development of Pakistani nuclear programme as their cooperation started in 1971, but the decade of 1980s and 1990s has been phenomenal as they cooperated in different fields of nuclear technology and Chinese cooperation helped them in acquiring the nuclear weapons as well as missile technology. It is believed that China has provided the Lop Nor facility to conduct the nuclear test in 1989. Chinese assistance even stretched in the development of nuclear reactors as in 1991 they signed an agreement to build the 300Mega Watt nuclear reactor at Chashma.

It was due to these efforts that Pakistan was able to develop the nuclear weapons in 1990s, but both India and Pakistan tested their nuclear weapons in May 1998. Pakistan's nuclear programme is one of the fastest developing programmes in the world and it has both the types of nuclear weapons i.e., Uranium and Plutonium with the facilities available to Pakistan. "Even though Pakistan is still developing its nuclear arsenal, there is some modernization taking place. Pakistan is moving from an arsenal of weapons based wholly on HEU to greater reliance on lighter and more compact plutonium-based weapons. The shift to plutonium based weapons is being made possible by a rapid expansion in plutonium production capacity, with two production reactors under construction to add to the two reactors that are currently operating."(www.princeton.edu) Pakistan's nuclear weapons have been fastly increasing as the following table which is

based on assumptions made by the world nuclear watchdogs shows that there is great increase in the number of nuclear weapons.

<b>Pakistan's Nuclear Arsenal</b>									
<b>Year</b>	<b>1998</b>	<b>2000</b>	<b>2002</b>	<b>2004</b>	<b>2006</b>	<b>2007</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Estimated Number of Weapons	2	14	26	38	50	60	80	90	100

### **Delivery Vehicles of Nuclear Weapons:**

There are two types of delivery vehicles of Pakistan's nuclear weapons one is the fighter jets and another one is the missiles. "Western nuclear experts have feared that Pakistan is building small, "tactical" nuclear weapons for quick deployment on the battlefield. In fact, not only is Pakistan building these devices, it is also now moving them over roads."(cryptogon.com) Following chart shows the delivery vehicles of Pakistan:

### **Pakistan's nuclear weapon delivery systems, 2011**

<b>Delivery System</b>	<b>Range</b>	<b>Deployment</b>
<b>Aircraft</b>		
Aircraft F-16A/B	1,600	1998
Mirage V	2,100	1998
<b>Ballistic missiles</b>		
Abdali (Hatf-2)	180	(2012)
Ghaznavi (Hatf-3)	400	2004
Shaheen-1 (Hatf-4)	>450	2003
Ghauri (Hatf-5)	1200	2003
Shaheen-2 (Hatf-6)	2000	(2011)
Nasr (Hatf-9)	60	(2014)
<b>Cruise missiles</b>		
Babur (Hatf-7)	600	(2011)
Ra'ad (Hatf-8)	350	(2013)

Source: (Hans Kristensen and Robert S. Norris, 2011)

Newly built JF-17 Thunder fighter jet which was made operational in 2010 when 2 squadrons of JF-17 were added to Pakistan Air Force (PAF), with a range of 2037km adds a new delivery vehicle to the Pakistan's nuclear arsenal.

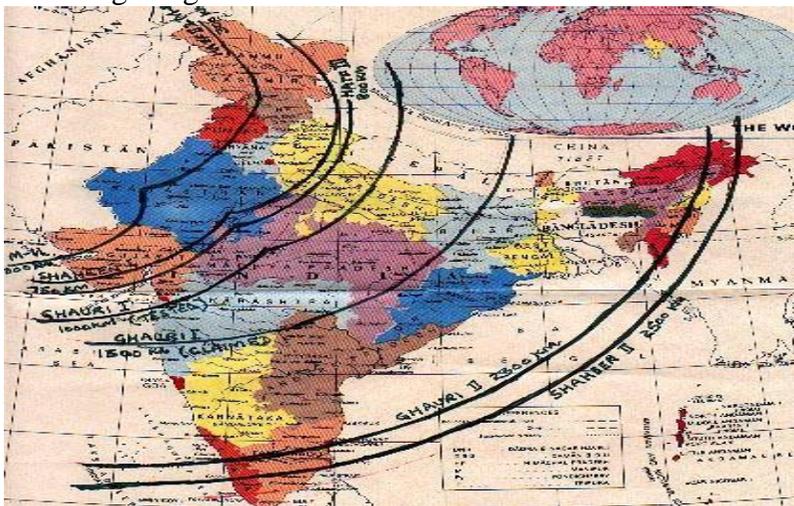
1. **Aircraft**\_Pakistan can deliver its nuclear weapons in US F-16 fighter jets, French Mirage fighters, and newly developed JF-17 Thunder. (PAF), which can deliver the nuclear weapons in a war but since the development of surface to air or air to air missiles by India it looks difficult for PAF to penetrate the Indian air defenses and deliver nuclear weapons to the targeted areas. So in this age the missile technology has become one of the important elements in delivering the nuclear weapons and maintaining the nuclear deterrence against India.

**2. Missile programme:** “Pakistan’s missile programme is termed as dramatic because in a short span commencing in 1991 this country has demonstrated the development of a long range potent missile arsenal with nuclear warhead capabilities.”

(www.southasiaanalysis.org) During 1990s Pakistan faced the US restrictions over its nuclear programme in the shape of Pressler amendment; as a result US stopped the deliveries of new F-16 jets to Pakistan which at that time were only means available to Pakistan to deliver nuclear weapons. As a result Pakistan looked outside for new type of delivery vehicles such as development of its own missile and in this regard China became the close ally and supporter of Pakistan’s missile and nuclear developer.

In 1986 Pakistan and China signed an agreement on the nuclear cooperation as a result of this cooperation China became a major factor in the development of Pakistan’s nuclear weapons and its missile technology. “Pakistan’s strategic nexus with China enabled an easy and assured access for build-up of Pakistan’s missile arsenal as it was for Pakistan’s nuclear weaponisation with Chinese help.”(Ibid)

Pakistan’s missiles can target the Indian cities at large as they have already developed one the long range ballistic missiles such as ghauri and Shaheen and it can be seen in the following image:



Source: <http://www.southasiaanalysis.org/%5Cpapers2%5Cpaper148.html>

Pakistan is also trying to develop the Multiple Independent Re-entry Vehicles (MIRVs) which will enable Pakistan to fit several warheads on single ballistic missile and can target the multiple enemy targets. Pakistan has not only successfully tested the ballistic missiles but also the state of the art cruise missiles, which has given an extra advantage in future as India is vying to acquire the Anti-Ballistic Missile (ABM) system, and if they would be successful the cruise missiles would be helpful to maintain the second strike capability in a nuclear war.

The following table lists capabilities and characteristics:

Missile	Year of Testing/ Acquisition	Range in km	Warhead Weight in Kg	Propulsion Stages Propellant		Origin	Deployment Status
HATF-I	1989	80	500	Single	Solid	Indigenous	O
HATF-IA	1992	100	500	Single	Solid	Indigenous	O
HATF-II	1989	300	500	Two	Solid	PRC (M11)	D
HATF-III	1997	600-800	500	Two	Solid	PRC	D
GHAURI-I	1998	1500	500-750	Single	Liquid	DPRK/PRC	T
GHAURI-II	1999	1500-2300	700	Two	Liquid	DPRK/PRC	T
SHAHEEN-I	1999	750	1000	Two	Solid	PRC (M 9)	T
SHAHEEN-II	2000	2500	1000	Two	Solid	PRC	T
M-11	1991-1998	300	500-800	Two	Solid	PRC	S

D =Development O = Operational S= Storage T- Tested

Source: [www.southasiaanalysis.org](http://www.southasiaanalysis.org)

Pakistan's missile development continued and they have made progress in the cruise missile technology also in 2005 when first time they tested Hatf VII (Babur) with a range of 500 km but later in 2007 they tested the cruise missile with enhanced range of up to 700km. Again in 2011 "Pakistan successfully test-fired the "indigenously-developed," stealth-capable, cruise missile Hatf-VII (Babur), the military's public relations wing said on Friday. Capable of carrying both nuclear and conventional warheads, Hatf-VII is a "low-flying, terrain-hugging missile with high maneuverability, pin-point accuracy and radar avoidance features," said a press release from the Inter-Services Public Relations (ISPR)... The only surface-to-surface subsonic cruise missile in Pakistan's missile arsenal, Hatf-VII compares with India's Nirbhay and the American Tomahawk missile, albeit 300 km shy of their range. For navigation, the missile incorporates the Terrain Contour Matching (TERCOM) and Digital Scene Matching and Area Co-relation (DSMAC) technologies, the press release added."(tribune.com.pk)

These developments in the missile technology show that Pakistan is trying to meet the demands of advanced delivery vehicles as in future they might be able to counter the threats posed by India. As India is trying to develop the ABMs and surface to air missiles Akash (Sky).

### Indian Nuclear Doctrine:

India has a coherent nuclear doctrine which has main basic characteristics and those are

- 1- **Credible Minimum Nuclear Deterrence:** Its credible minimum nuclear deterrence is based on the perception of its enemies like India perceives China as a challenger rather than Pakistan so they are vying for the nuclear race viz-a-vis China which will start a nuclear race.
- 2- **No First Use:** India has no first use nuclear policy until the other state attacks Indian territory and its forces with unconventional weapons or weapons of mass destruction.

- 3- India will develop triad of forces i.e., land, air and water forces which can carry their nuclear weapons.

### **Pakistan's Nuclear Doctrine:**

Pakistan has actually no written nuclear doctrine, but from time to time statements from the leadership the doctrine of Pakistan can be assumed.

Pakistan's nuclear doctrine has two parameters:

- 1- **It is India specific:** Pakistan's nuclear programme is totally India centric and it focuses on India as Pakistan feels the threat from the Indian aggression from time to time as they have witnessed the challenge from India in 1999 Kargil war and 2001-2002 military standoff between both states when Pakistan was threatened by India they warned Indian government that nuclear weapons would come into action if Indian forces crosses the border. Pakistan uses this strategy because they cannot match the conventional forces with India as they have the modern forces with large quantities.

- 2- **Credible Minimum Nuclear Deterrence:** Their nuclear policy is also credible minimum nuclear deterrence as they wanted to balance the Indian nuclear weapons. Pakistan would not be in a position to match the quantity of nuclear weapons with India but they have emphasized that quality of weapons should be improved so that they can match the number superiority. Pakistan has rather opted for few weapons which target the counter value targets. "It is estimated that Pakistan possesses 35 to 95 nuclear warheads which can target the Indian cities in case of war. Pakistan has targeted the main Indian cities because Pakistan clearly think that it is not possible to destroy the Indian retaliatory capabilities so they would create a deterrence that India would not attack Pakistan by targeting their big cities. "Pakistan's motive, as stated by its former President Muhammad Zia-ul- Haq in 1985, for pursuing a nuclear weapons development program is to counter the threat posed by its principal rival, India." (www.wikipedia.org)

### **3. Option of First Use of Nuclear Weapons:**

Pakistan's nuclear doctrine is basically a defensive doctrine. It does not exclude the first use option, because they are the last resort of Pakistan. Pakistan's first use of nuclear weapons has deterred the Indian aggression towards Pakistan. As a result Pakistan has made the option open to use nuclear weapons first against India due to its imbalance in the conventional forces.

"Pakistan thus deters Indian conventional action through ... the threat of authorized nuclear first use in a conventional conflict at some unspecified, but relatively early, threshold".(belfercenter.ksg.harvard.edu)

### **Indo-US Nuclear Deal and its effect on Pakistan's Nuclear Programme:**

With the changing circumstances in global scenario the emergence of China as a global power is threatening the US dominance in global affairs. US have established a strategic alliance with India so that in future it may contain the influence of rising China and guard the US interests in the region. For that purpose they have made several agreements with India and Indo-US nuclear deal is one of them which aim to boost the Indian nuclear enhancement of their nuclear arsenal.

In March 2006 India and US finalized an agreement on civilian nuclear technology. US agreed on the nuclear deal due to the clean role of India in nuclear proliferation and its increasing energy demands. India was given a prestigious waiver in nuclear technology which is an exemption in Nuclear Suppliers Group (NSG) (NPT), on September 5<sup>th</sup>, 2008 in a meeting in Vienna, which is an exemption for a non-signatory of NPT and CTBT. As a result US president signed the agreement on 8<sup>th</sup> October 2008. But on the other hand Pakistan was declined to get same exemptions by US and NSG member states.

As a result of the Indo-US nuclear deal Pakistan went to China for assistance and in 2008 both states reached on an agreement which aims that China will build two nuclear power reactors in Pakistan. Indo-US nuclear deal has following impacts on the region:

- 1- It has started the nuclear race between Pakistan and India
- 2- US support to India will create more problems in the region as China has already come for Pakistan's help and is also possibility that more foreign elements would exercise their influence in the region.
- 3- There is the realization that Pakistan is feeling US as antagonist state and it feels that the nuclear weapons will create stability against powerful states. "But the US-India nuclear deal may actually be a fig leaf. Pakistan's rush for more bombs has as much to do with its changing relationship with the United States as with Indian military modernization. This racing reflects a paradigm shift within Pakistan's military establishment, where feelings against the US have steadily hardened over many years. Post-bin Laden, the change is starkly visible. In the military's mind, the Americans are now a threat, equal to or larger than India."(tribune.com.pk)

### **Impact of Nuclear Programme on India:**

Pakistani nuclear programme has created a huge impact on the South Asian region as it has brought the nuclear dimension in conflict with India, which has endangered the whole region as it seems that whole region is paralyzed by the nuclear weapons of both India and Pakistan. Since it cannot be forgotten that both the states have already fought four wars including Kargil and have been on the brink of a nuclear war on three occasions i.e., Kargil and the 2001-2002 military standoff, and the terrorists attacks on Mumbai in 2008. "A nuclear conflict can have no victor. In South Asia, nuclear deterrence may, however, usher in an era of durable peace between Pakistan and India, providing the requisite incentives for resolving all outstanding issues, especially Jammu and Kashmir."(www.foreignaffairs.com)

The nuclear weapons have created the parity between both states and the war was averted on three occasions between both states.

- 1- During the Kargil crisis of 1999 when mujahiden have captured the Kargil heights and India have mobilized their forces and have threatened to launch an attack on mujahiden camps in Pakistan, but Pakistan have warned that any air strike in Pakistan could be taken as an attack on Pakistan and it will not watch it but will retaliate with force, and the nuclear weapons would be the last resort of Pakistan in any war if its security is jeopardized.
- 2- On second occasion they came closer to the war when India deployed its hundreds of thousands of troops on border and it was a military standoff which took place

in 2001-2002 after the Indian parliament was targeted by the terrorists and India blamed that Pakistan is involved in these attacks. On this occasion the nuclear parity has worked and India was unable to launch an attack on Pakistan due to the fear that Pakistan will take it as a full scale war and will not hesitate to use its nuclear weapons once the security of state would be jeopardized.

- 3- "However, the region was once again brought to the precipice in November 2008 when terrorists swept across the city of Mumbai undertaking a series of blasts which were subsequently blamed on Pakistan. Despite initial brinkmanship and armed forces being put on alert, restraint eventually prevailed, even if wearing thin. A hoax call made to Pakistani president by the Indian Foreign Minister threatening the former of dire consequences at the height of the crisis almost triggered a war, the closest according to many analysts the world got to a nuclear exchange after the Cuban Missile Crisis. An immediate call to US Secretary of State by the Pakistani President stabilized the situation" ([www.greaterkashmir.com](http://www.greaterkashmir.com)).

The nuclearization of Pakistan has brought parity in the region as before that India was the sole nuclear power in South Asia and it has already established its influence in smaller states of South Asia, and which has caused a great sense of security in south Asian region. With the balance of power in South Asia the smaller neighbors of India can look for the alliance with Pakistan and can decrease the influence of India in the region.

"Strategically, Pakistan has today not only offset India's overwhelming conventional military superiority by its nuclear weaponisation but also acquired a missile force which in terms of speed of acquisition outstrips India's pace of development of missiles."([www.southasiaanalysis.org](http://www.southasiaanalysis.org))

There is one of the major concerns that rise in India and the West is about the safety of Pakistan's nuclear programme as they doubt that Pakistan's nuclear weapons might go into the wrong hands which can create the nuclear proliferation. So on that issue Pakistan has done plenty of efforts to reduce the risks of accidental use of nuclear weapons and the proliferation of nuclear weapons.

"America has been concerned about the safety of Pakistan's nuclear weapons since 2004, and there have been media reports that America has plans to send special security forces to safeguard the nuclear arsenal in case of instability in Pakistan. But America has denied any such reports and Pakistani authorities ridiculed the idea of US troops coming to the country to help safeguard nuclear weapons. Pakistan argues it can protect its own nuclear weapons, and earlier this month, the Pakistani government stated that it will train 8,000 additional troops to protect its nuclear weapons."([communities.washingtontimes.com](http://communities.washingtontimes.com))

For the protection and the management of the nuclear weapons Pakistani authorities have created the National Command Authority for the management of nuclear weapons so that they might not be used accidentally or may not go to the wrong hands.

#### **National Command Authority:**

"The National Command Authority is charged with joint-space operations (such as military satellites), information operations (such as information warfare), missile defense, internal and external command and control, intelligence, surveillance, and reconnaissance (C4ISR), and strategic deterrence (Pakistan's nuclear deterrent program), and combating weapons of mass destruction. The National Command Authority oversees and looks after the operations of Army, Air Force, and Navy's strategic commands, along

with their functional basis. The unified military strategic command structure is intended to give the Prime minister and the Cabinet secretariat a unified resource for greater understanding of specific threats (military, nuclear, chemical, biological, radiological, conventional, and non-conventional, and intelligence) and the means to respond to those threats as quickly as possible to prevent the collateral damage. The civilian Prime minister is a Chairman of this Command, with all military assets, components of NCA, and strategic commands directly reporting to Chairman of their course of development and deployment.”(www.wikipedia.org)

National Command Authority (NCA) was created in 2000 after the approval of national Security Council. The basic purpose behind the formulation of NCA was to establish an administrative authority over the use of nuclear weapons. “The National Command Authority is responsible for policy formulation and will exercise employment and development control over all strategic nuclear forces and strategic organizations.” (May 1994: 23)

The command comprises on three main branches they are:

- 1- Employment Control Committee (ECC): It is headed by the prime minister, and the other members are minister of Foreign Affairs who is also the Deputy Chairman, and the ministers of Defence, Interior, Chairman of Joint Chiefs of Staff Committee (CJCSC), Services Chiefs, Director-General of Strategic Plans Division who is the Secretary of the committee and technical advisers and others, as required by the Chairman.
- 2- Development Control Committee (DCC): DCC is headed by prime minister and other members are the Chairman Joint Chiefs of Staff Committee ( who acts as deputy chairman of DCC), other members include the Chiefs of Armed Forces, the director general (SPD) , and a representative from strategic organization and scientific community (science adviser).
- 3- Strategic Plans Division (SPD): “The Strategic Plans Division is responsible for the management and administration of the country's tactical and strategic nuclear weapons stockpile. It was created the same year as the NCA was formed.”(Ibid) It is headed by the Director General (DG) and the DG should be the rank of Lt General in Pakistan’s Armed forces and currently its head is Lieutenant General (R) Khalid Ahmed Kidwai.  
“The nuclear weapons development and production infrastructure managed by SPD has three broad divisions: the A.Q. Khan Research Laboratory (Kahuta) produces enriched uranium; the Pakistan Atomic Energy Commission is responsible for uranium mining, fuel fabrication, reactor construction and operation, and spent fuel reprocessing to produce plutonium; and the National Development Complex is responsible for weapons and delivery system research and production.”(2007: 23) These all three organizations come under the control of National Engineering and Scientific Commission.

Initially the chairman was the president, but after election of 2008, the newly elected parliament passed a bill which has given the charge to Prime Minister who is also the head of government. Other members of the NCA are the ministers of Foreign Affairs, Defence, Finance, Interior, Chairman Joint Chief of Staff Committee, Chief of army Staff, Chief of Naval staff, Chief of the Air Staff. The decisions in the NCA are taken

through the consensus but in case consensus doesn't develop then voting takes place in the NCA. SPD is the sectariat of NCA.

"The weapons are under control of the military's Strategic Plans Division (SPD). During a period of political instability last year the division boosted security at nuclear facilities and launched a public relations offensive to counter what Pakistan regards as scaremongering over nuclear weapon security."(www.dawn.com)

Pakistan has also implemented the Nuclear Regulatory Act in 2004 which is aimed at protecting the nuclear weapons of Pakistan in safe hands. "Pakistan's Export Control Act 2004 was enacted in September 2004, after four years of extensive inter-ministerial processes starting 2000, in keeping with UNSCR Resolution 1540 which had been adopted in April 2004. This Act is in addition to other national laws, which are applicable to offences other than export controls. The list of such laws is part of NCA Ordinance 2007. The NCA Ordinance was promulgated to provide stronger legal cover instead of simply an administrative authority under which the NCA was functioning since 2000. The NCA Ordinance enhances the safety and security of Pakistan's nuclear programme by providing explicit provisions with regard to physical security, investigation and prosecution of any violation of the Ordinance and other national law included in its schedule."(www.issi.org.pk)

Pakistani nuclear weapons have at least eliminated the total war and as a result India is working on the new concepts of limited war as this can be an option in future. "The Chief of Army Staff unveiled the new Cold Start concept in April 2004. The goal of this limited war strategy is to launch a retaliatory conventional strike against Pakistan before the international community could intercede, one that would inflict significant harm on the Pakistan Army while denying Islamabad a justification to escalate the clash to the nuclear level."(2007) But still there are doubts that this doctrine may not be successful as it depends on the thinking of Pakistan and Pakistan's nuclear policy has clearly define that if the security of the state would be jeopardized it will not hesitate to use nuclear weapons.

### **Conclusion:**

The Nuclear programme of Pakistan has been in the safe hands and also it is the only for the security of the state otherwise there is no greater threat to other states from Pakistan's nuclear programme. India feels the heat because they have realized that Pakistan's nuclear programme is India specific, and both the states have not very smooth relations throughout their history, so the Indians felt that Pakistan's nuclear programme is an extra threat to their security and that purpose from time to time they have shown the concerns over the Pakistan's nuclear programme.

There are few concerns to the India and the West regarding the nuclear weapons of Pakistan and those are:

- 1- The Nuclear weapons are not in the safe hands and the terrorists might get them.
- 2- There are no proper safeguards of nuclear weapons and the Dr. Qadeer like networks can gain access to the nuclear weapons and can transfer the nuclear technology to rogue states or non-state actors.

- 3- The nuclear weapons might be used by some fundamentalist elements present in the Armed forces and the government against the India and the Western interests in the region.
- 4- There are lots of chances that accidentally nuclear weapons could be used in a war due to the miscalculation and Pakistan's nuclear doctrine shows that nuclear weapons are the last resort for the security of the state. Pakistan will not want to destroy its nuclear capability in a war and for that purpose they might use the nuclear weapons as their first option to put a heavy cost to the enemy in a war especially India.

These concerns has raised the voice in the West that Pakistan's nuclear weapons should be taken under the custody of some strong hands and they should be eliminated or if not possible then should come under the safeguards of the International Atomic Energy Agency (IAEA), but since Pakistan is not the signatory state of the NPT and CTBT so it is not possible for the IAEA to safeguard their nuclear facilities under the IAEA safeguards. Pakistan on the other hand has from time to time has ensured that their nuclear weapons are in safe hands and they have taken the measures to stop the proliferation of the nuclear weapons. These have guaranteed that their nuclear weapons would be in safe hands and have eliminated the Dr. Qadir Khan group and as a result DR. Qadir Khan is under the custody of the forces so that he cannot transfer the knowledge of knowhow of nuclear weapons.

Pakistan's nuclear programme is India specific and its development as well as its technological advancement viz a viz India gives it a superiority and its delivery vehicles such as the development of cruise missiles has given an extra comfort in the age of ABM technology where ballistic missiles could be not a greater threat as India can counter them with their developing ABM systems. Indo-US alliance could further strengthen

Pakistan's ambitions to rely more on nuclear weapons as they provides deterrence against the superior Indian forces in terms of numbers as well as conventional forces. Pakistan's nuclear programme is a guarantee card to the survivability against the Indian aggression and will further strengthen the Pakistani pledge to continue its nuclear programme for the sovereignty of the state.

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