

CHALLENGES TO NUCLEAR DETERRENCE IN SOUTH ASIA: INSIGHTS AND RESOLUTIONS POST-PULWAMA ATTACK

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ABSTRACT

Nuclear deterrence has been a cornerstone for strategic stability in South Asia especially between Pakistan and India, but there are some political and strategic factors which grave challenges to nuclear deterrence in South Asia and the incident of Pulwama further intensified the situation. The study aims to identify and analyse various challenges posed to nuclear deterrence in South Asia especially after the crisis of Pulwama attack. Discussing challenges, the study finds that Indian hegemony ambitions and imbalanced power in the region, interventions of global powers, existence of non-state actors, lack of crisis management and absence of formal mechanism for dialogue and reconciliation are the biggest challenges posed to nuclear deterrence in the region. The study further aims to highlight and recommend steps to address challenges to nuclear deterrence. Firstly, a robust, reliable and urgent crisis management mechanism and effective communication channels should be established between both countries. Secondly, both states should initiate confidence building measures (CBM), and thirdly, both nations need to clarify and harmonise their nuclear doctrines, most importantly, there should be a mechanism to monitor and control arms race and maintain balance of power.

Keywords: *South Asian Security Environment, Challenges to Nuclear Deterrence, Nuclear Escalation, Security Dilemma.*

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INTRODUCTION

The two nuclear powers of South Asia, Pakistan and India, with a bitter historical and violent relationship, have thrown the security situation of South Asia into chaos. The security environment of South Asia is in a state of flux due to the tense relations between of India and Pakistan.

On February 14, 2019, The Pulwama attack, which was watershed moment in the history of South Asia, not only reverberated through the socio-political landscape but also cast a profound shadow on the delicate balance of nuclear deterrence in the region when a suicide bombing took place in the Pulwama district of Jammu and Kashmir, India. A convoy of Central Reserve Police Force (CRPF) personnel was targeted by a vehicle borne improvised explosive device (VBIED), which resulted into tragic loss of 40 CRPF personnel and making it one of the deadliest terrorist incidents in the region. Jaish-e-Mohammed (JeM), a Pakistan based militant group claimed the responsibility of the attack. The Pulwama attack fuelled escalation in the already tensed relations between Pakistan and India. It triggered national and international condemnation and led to a series of retaliatory measures taken by the Indian government. The incident not only had immediate security implications but also brought to the forefront the intricate dynamics of nuclear deterrence in the South Asian context.

The concept of nuclear deterrence is based on the principles of avoiding conflict through the threat of retaliation, it has been a cornerstone of the security policies among the nuclear armed nations (Mearsheimer, 1983). In the context of South Asia, the possession of nuclear arsenals by both India and Pakistan has contributed to a complex strategic calculus (Ganguly & Kapur, 2010).

This study aims to answer the question that what are the challenges to nuclear deterrence in the South Asian context, and their resolution in aftermath of the Pulwama attack. To answer the question, we have conducted thematic analysis of publicly available data sources such

as books, journal articles, news and reports.

This study acknowledges certain limitations, the study focuses only on challenges to nuclear deterrence in south Asia thus overlooking other broader regional power dynamics such as economic ties, international diplomacy and other factors which may impact as deterrence. This study does not encompass a detailed examination of nuclear missiles, carriers, other capabilities or tactical military operations and intelligence specifics rather the focus is on the broader regional implications within the domain of nuclear deterrence.

LITERATURE REVIEW

In *'India and Pakistan: A Case of Asymmetric Nuclear Deterrence'*, Christoph Bluth (2010) argues that in term of nuclear asymmetry, India enjoys superiority over Pakistan with a larger and more advanced nuclear weapons stock while Pakistan has developed a range of tactical and short-range missiles to offset India's nuclear capabilities. He adds that both India's larger nuclear arsenal and Pakistan's tactical weapons to use against each other has created a complex deterrence environment as both fear each other when it comes to full-scale nuclear escalation.

In *'Conceptualizing Nuclear Deterrence: Pakistan's Posture'*, Rasul Bakhsh Rais (2020) explains that Pakistan's policy of nuclear weapons reflects Pakistan's perceived threats from India and thus the country maintains its nuclear readiness to offset India's nuclear superiority. He concludes that Pakistan's anxieties and fears about India are rooted in the power imbalance and India's intentions of regional hegemony in the region therefore Pakistan has developed nuclear weapons to offset India's conventional threats.

In *'Deterrence Stability, Security Doctrines, and Escalation Control in South Asia'*, Khurshid Khan (2013) argues that nuclear weapons cannot maintain deterrence when there is persist conflict and increasing hostilities between Pakistan and India. He adds that India's massive investment in its defense sector and nuclear weapons

development cannot be matched by Pakistan which is economically weaker than India. India's continuous use of economic, psychological, diplomatic, political, intelligence and military tools to offset Pakistan will add more to Pakistan's frustration which may lead to brinkmanship and never-ending enmity between the two nations.

In '*Paradox of Deterrence: India-Pakistan Relations*', the author of the article Zafar Nawaz Jaspal (2009) argues that deterrence is a leading concept of nuclear strategy from the start of the nuclear age. Jaspal adds that South Asian nuclear deterrence may be anxious about arms race between India and Pakistan. Joseph Cirincione (2013) argues that the specialists roughly calculated Pakistan nuclear weapons which are around 90 to 110 and can produce more. There are several terrorist groups operating in Pakistan, which is alarming. He adds that this factor cannot only be the reason for nuclear confrontation between the south Asian rivals, but perhaps it can be an even more tense situation if the terrorists would obtain nuclear weapon or fissile material from Pakistan's stocks.

RESEARCH METHODOLOGY

Seeing the nature of the study and its questions and objectives, the research uses qualitative method with an exploratory and descriptive approach. The criteria for data collection were based on filtration of all literature on the basis of their relevance, quality of the work and their being latest materials.

This study is qualitative in nature allowing an in-depth exploration of the research topic and providing comprehensive understanding of the topic. Using qualitative approach, endeavour to comprehend, describe, interpret, and develop innovative ideas about a context (Creswell, 2009). The study was explanatory in nature to identify and analyse various challenges posed to nuclear deterrence in South Asia especially after the crisis of Pulwama attack and recommend steps to

address those challenges. The data analysis was carried out using thematic analysis of publicly accessible scholarly works in shape of research articles, books, news reports and other sources. The Braun and Clarke's (2006) model of thematic analysis was used for data analysis.

CHALLENGES TO NUCLEAR DETERRENCE IN SOUTH ASIA

There are various political and strategic factors which pose as grave challenges to nuclear deterrence in Pakistan and India. The biggest challenges posed to nuclear deterrence in the region is global partnerships such as that of USA, Russia and Israel with India has added more to Pakistan's concerns and fears. Besides this, the power imbalance and Indian intentions of regional hegemony in the region. Ambiguity in nuclear doctrines of both countries, lack of trust, lack of mechanism to manage crisis such as that of post-Pulwama crisis between Pakistan and India, absence of conflict-resolution mechanism and existence of non-state actors in both countries' borders are some of the other challenges posed to nuclear deterrence in the region.

Global Powers Partnership with India

One of the major challenges towards Nuclear Deterrence is the global powers partnership with India. The US-India partnership, which is increasing day by day since the rise of China. From day one, America has sought support from Pakistan when in need, despite the declaration of Pakistan as an ally, it has not treated Pakistan as a close ally. As a result, this discrimination towards Pakistan and close alignment and partnership with India has left impact on the security situation in the region and has had weakening effect on the existing strategic stability (Rana, 2018).

In order to counter China as a power in the region, the US has developed close ties with India. The partnership has proved to be

counterproductive for regional security. Indo-US defense agreements such as the nuclear energy cooperation agreement, modernization of the Indian military, and increasing India's military capabilities with US support have resulted in Pakistan's sense of insecurity in the region, and resultantly, Pakistan has been struggling to bolster its nuclear weapons in order to counter Indian hegemonic intentions (Krepon, 2013). The Indo-US nuclear energy cooperation agreement is alarming for Pakistan and the region in terms of strategic stability (Hyder, 2013). With the support of France, India is working to upgrade its Mirage fleet. India has an agreement with Russia to upgrade its air force and navy along with buying the latest Russian missile defense system. With Israel support, India has been establishing medium range surface-to-air missiles system. With the support of USA, India is spending US\$11 billion to include six new generation diesel electric submarines in its naval fleet (Zeenat, 2011). In such a delicate situation and volatile environment, Pakistan like other states becomes compelled to go to war to counterbalance the hegemonic intentions of its opponent (Jervis, 1989). These agreements and developments by India are seen aggressive by Pakistan, aiming to intimidate its neighbors and establish hegemony in the region, as Robert Jervis (2021) puts it those excessive military capabilities of one country poses danger for the other.

Global Efforts to Limit Pakistan's Nuclear Weapons

Since Pakistan have acquired nuclear in 1998, the Western powers, has expressed concerns over the development of Pakistan nuclear capabilities. The Non-Proliferation Treaty (NPT) was one of the very first initiatives which aim to prevent the nuclear weapons spread, but Pakistan like India, has regularly refused to sign the treaty. While, Pakistan justifies its nuclear as a deterrent which is necessary against growing conventional of India and its nuclear capabilities and Pakistan stating that its nuclear weapons are for sake of its national security and sovereignty.

Additionally, international community had also made efforts to prevent Pakistan from acquiring advanced nuclear technology which

could boost its nuclear weapons program. The Nuclear Suppliers Group (NSG) has been against Pakistan access to civilian nuclear trade, which could indirectly bolster its weapons capabilities. Despite Pakistan's efforts to join the NSG, the international community remains unwilling due to concerns over nuclear proliferation and Pakistan's refusal to sign the NPT. Moreover, Western powers have also used economic and political tools as, aid restrictions and sanctions to pressurize Islamabad to follow to NPT. Beside all this, Pakistan still has managed to maintain and develop its nuclear program.

The attack of Pulwama in 2019 intensified more the global concerns over nuclear arsenal of Pakistan, mainly because of the possibility for escalation between India and Pakistan. After the attack, international community efforts to limiting Pakistan's nuclear development became more intensive to ensure the crisis stability and to avoid nuclear confrontation. The US, repeatedly urged Pakistan to adopt actions which would reduce the risk of a nuclear escalation with India, the measures include, strengthening its command-and-control systems and adopting transparent nuclear policies. Moreover, international diplomatic efforts highlighted the need for confidence building measures between India and Pakistan to alleviate the risks posed by their respective nuclear arsenals. Regardless of these efforts, Pakistan still remained strong on its stance that its nuclear arsenals are for its national defense strategy, especially against an aggressive and conventionally superior India.

Imbalanced Military Strength and Indian Aspiration of Regional Hegemony

Comparing military strength of Pakistan and India, India is ahead in term of number of forces, aircrafts, submarines, budget and other areas. Along with other areas, India is also developing and increasing its nuclear capabilities. India keeps importing military equipment from USA, France and Russia. Being a smaller nation, Pakistan keeps competing with India in term of military strength. Pakistan keeps investing in its nuclear programmes to modernise it and increase its

capabilities. Though the estimates of number of nuclear warheads of Pakistan and India are not officially stated; however, it is estimated that India has lesser nuclear warheads than Pakistan which is 130 to 140 while Pakistan's number of nuclear warheads is estimated to be between 140 to 150 (SIPRI, 2019). Both countries have fighter jets and short- and long-range ballistic missiles.

Table.1 Comparison Pakistan and India's Military Strength

Comparison Pakistan and India's Military Strength	India	Pakistan
Defense Budget	\$64bn	\$10.8bn
Active Military	1,458,500	651,800
Active Paramilitary	1,585,950	291,000
Army Manoeuvre Divisions	37	22
Principal Surface Combatants	28	8
Surface-to-Surface Missile Launchers	69	165
Artillery	11,003	4,595
Submarines	16	8
Combat Aircraft	814	425
Armoured Fighting Vehicles	7,088	6,067
Fixed Wing	1,391	732

Source: The International Institute for Strategic Studies (2020)

However, India's superiority in term of military strength creates a strategic imbalance in the region. This imbalance is a major challenge towards nuclear deterrence in the region (Kliman, Rehman, Lee & Fitt, 2019).

Ambiguity and Differences in Nuclear Doctrines

Each country has a different nuclear weapons-use doctrine. A nuclear doctrine is made to maintain deterrence or thwart any security threat from other countries. Alike a nuclear doctrine, ambiguity is another ingredient which exists in each nuclear state's policy whether written or unwritten or implicit or explicit. The basic nuclear doctrines are First Use (FU) policy and Non-First Use (NFU) policy. Indian NFU policy maintains that it would not use nuclear weapons until

attacked. Pakistan does not have an officially declared nuclear doctrine; however, through political statements it is clear that Pakistan would use nuclear weapons to deter a nuclear attack or prevent a conventional war (Basrur, 2009; Khan, 2014; Narang, 2014).

India maintains that it would not use nuclear weapons firstly, there is ambiguity regarding the conditions and instances when India becomes compelled to change its stance creating strategic miscalculations. It is still ambiguous regarding India's stance that under what circumstances, it would then retaliate and under what circumstances it would not use its nuclear weapons.

Lack of Trust and Crisis Control Management

Since the partition, the relations between Pakistan and India have remained at low because of lack of trust between each other, which has led to failure of many agreements and accords as a result the hostility between them remains high. On many important issues such as Kashmir issue, nuclear pact between the two nations and water issue, the two nations have been at suspicious of each other. The Pulwama incident brought both nations nearly at war (Tandon & Slobodchikoff, 2019). Lack of direct communication channels increases the chances of misunderstanding and misperceptions, thus exacerbating the risks of escalation between the two nations. Therefore, the trust deficit between both nations is a major challenge towards nuclear deterrence in South Asia especially between Pakistan and India.

Absence of Conflict Resolution Mechanism

The relationship between the two nations is marked by continuous tensions, territorial disputes and military confrontations. There have been many mutual and international efforts for peace process and reconciliation between the two nations; however, due to lack of a robust conflict resolution mechanism between Pakistan and India, efforts for peace and reconciliation have failed. On many occasions such as, Shimla Agreement which was signed in 1972 between Pakistan and India, the agreement did not bring required results as

expected. In 1999, a resolution between the two nations namely Lahore Resolution was signed, however, the Kargil war in 1999 undermined the efforts made the two nations for peace. The continuous failure of the efforts for peace is due to absence of institutional frameworks which can dedicate itself to conflict resolution between the two nations.

Rapid Escalation Potential

Alike other issues, Pakistan and India share disputes with regard to their bordering areas. The daily clashes on their borders make it further challenging for the two nations to make peace. Clashes on LOC, Siachen and Run of Kuch are some major skirmishes which happen every day between the armies of two nations.

Non-State Actors, Terrorism and Proxies

The issue of non-state actors or terrorists is another major issue or challenge towards Nuclear Deterrence. The non-state actors or so-called terrorists are exploited and used as proxies by both Pakistan and India against each other to disturb peace and stability in either country. For instance, Pakistan supports fighters in Kashmir against India while India supports and finances fighters in Balochistan against Pakistan. The continuity of terrorist attacks in each country may escalate the situation to the nuclear war between the two nations as it happened after Pulwama incident (Kanwal, 2022). Their ability to provoke crisis such as that of Pulwama attack or attacks on Pakistani security forces in Balochistan or other areas of Pakistan complicates nuclear weapons having deterrence value.

CHALLENGES TO NUCLEAR DETERRENCE IN SOUTH ASIA

Nuclear deterrence in South Asia, particularly between India and Pakistan, faces numerous challenges due to the unique and volatile dynamics of the region. For this, enhancement of transparency and communication about nuclear doctrines and capabilities to build trust

and reduce misperceptions is a to-do step. Besides this, establishment of bilateral agreements on nuclear use policies and protocols to clarify intentions and reduce the likelihood of miscalculations should be initiated (Khan, Mustafa & Liaqat, 2022).

Maintaining Balance of Power

The South Asian security environment is defined as well as determined by the relations between Pakistan and India. Both country's economy, defense and nuclear capabilities has been a threat to the other, creating a security dilemma in the region. However, nuclearization in the region presents a unique power structure which differs from the Cold War era between USA and Soviet Union. For instance, India intends to achieve more power to balance the power equation with China while Pakistan does so to equate and compete with India. From the very onset, India is superior over Pakistan in term of unjust distribution of resources, land and assets (Suto, 2004). Seeing the imbalanced power structure and continuous security from Indian hegemonic intentions, Pakistan's policies have been security oriented aimed towards Indian threat. In order to maintain a balanced strategic and nuclear deterrence in the region there must be balance of power between rival India and Pakistan so that no Pulwama crisis emerges in future.

Explicit Nuclear Doctrines

Nuclear weapons deterrence depends on a country's nuclear doctrine. A nuclear doctrine is one of the significant tools for a country to maintain (Hussain, 2020). Due to ambiguity and implicit nuclear doctrines, chances of conventional conflicts in the region can arise. Therefore, for the maintenance of nuclear deterrence and strategic stability in the region, both countries need to clarify and harmonize their nuclear doctrines and postures. Promoting transparency and clarity in nuclear doctrines and enhances mutual understanding and trust when it comes to each other's red lines and thresholds.

Crisis Management

The future of a stable South Asia is in the hands of both Pakistan and India, as they are having a great share and contribution towards South Asia's development, stability and welfare. Pakistan and India need to leverage shared problems and values to manage crises and promote peace between them suggesting that both countries need to reframe their narratives against each other by focusing on non-traditional security challenges as a means of cooperation, shift their crisis management strategies, utilizing shared identities and values to achieve stability and cooperation between the two countries (Batool, 2024).

Crisis management between Pakistan and India is a critical component of regional stability in South Asia, given the historical animosity, ongoing disputes, and nuclear capabilities of both nations. Effective crisis management mechanisms are necessary to prevent conflicts from escalating into full-scale wars, especially in the nuclear context. More efforts should be made to improve crisis management mechanism between the two nations. For instance, direct lines of communication between political leaders can complement military hotlines and facilitate broader crisis management efforts. Besides this, regular meetings between military and civilian officials should be institutionalized to build trust and improve communication along with conducting joint exercises. Crisis management protocols should be developed and formalized which can provide a clear roadmap for de-escalation. Joint emergency response teams should be established which can be activated during crises to coordinate efforts and manage the situation more effectively (Karim, 2019). Both countries need to establish reliable and secure communication channels between military and political leaders of both countries to deal with real-time crisis. Besides this, confidence building measures through regular high-level dialogues should be taken by both nations to build trust and reduce risks of conventional conflicts between them.

Building Mutual Trust

Due to lack of trust, crisis after Pulwama incident worsened and both nations reached on the verge of conventional war. In order to build trust, in the first place, both should work mutually to end their support for proxies present either in Pakistani province of Balochistan and KPK or Indian occupied Kashmir. They need to enhance mutual cooperation and build counterterrorism measures to address security threat posed by terrorists to both nations, an end to terrorism in both countries will reduce chances of state-level conflicts.

End to Global Power Interventions

Support to India by global powers such as USA, France, Israel and Russia to modernize and strengthen Indian military is a major concern for Pakistan and region in term of nuclear deterrence and the strategic stability in the region has been greatly disturbed. In order to address this challenge, international powers should understand the regional power dynamics and other political issues so that one country's security should not be a tool of insecurity for the other country. Though international organizations and powers should facilitate dialogue and mediation efforts to reduce regional conflicts and manage crisis; however, they should not be a tool to increase insecurity in the region for the sake of their own interests.

CONCLUSION

The nuclear weapons contain huge deterrence between Pakistan and India, the study finds that there are political and strategic factors which pose as grave challenges to nuclear deterrence in South Asia. One of the most pressing challenges posed to nuclear deterrence in the region is; imbalanced military strength between both states and India's continuous aspiration of regional hegemony aiming to forge ahead Pakistan and compete with China. India is far ahead than Pakistan in term of military strength such as it has a bigger defense budget thus can buy more advanced technologies and more weapons than Pakistan, it has a larger military force, more artillery,

submarines, combat aircrafts and armoured fighting vehicles. India's superiority in term of military strength and capabilities creates a strategic imbalance in the region as well as posing challenge to nuclear deterrence in the region and Pakistan does not take it a pleasing gesture.

Secondly, India's continuous efforts to build partnerships with global powers and to achieve regional hegemony have resulted in weakening effect on the existing strategic stability and insecurity for other nations in the region especially rung alarms for Pakistan.

Thirdly, one of the major challenges to nuclear deterrence in the South Asian context is ambiguous nuclear doctrines of both nations. Pakistan and India's nuclear doctrines pose widespread ambiguities regarding the use of nuclear weapons. Indian nuclear doctrine though mentions that it would not use nuclear weapons firstly or until it is attacked with a nuclear weapon. Pakistan's nuclear strategy is ambiguous in term of not explaining when it would resort to use of nuclear weapons and what it means when its existence as a state is in danger while not clarifying the danger. Thus, the study argues that ambiguities in nuclear doctrines create risks of miscalculations and increase chances of escalations of nuclear war.

Furthermore, the absence of a formal mechanism for managing crisis and conflict resolution between two nuclear-powered countries poses a grave challenge to nuclear deterrence in the region. Though there have been various bilateral efforts for establishment of peace between them; however, the study finds that the continuous failure of the efforts is due to absence of institutional frameworks.

Lastly, one of the major challenges is the existence of non-state actors and proxies with support from each other causing difficulty in building stability and peace between the two nations. The continuous attacks in each other's territory by terrorists can escalate the situation to the nuclear war.

This study further suggests some steps to address the challenges to nuclear deterrence and strategic stability in the region. In order to

ward off future crisis such as that of post-Pulwama crisis there must be balance of power between the two nations. Both Pakistan and India need to clarify and harmonize their nuclear doctrines and postures so that risks of miscalculation are ridden off. The study further suggests that Pakistan and India need to enhance mutual communication and establish mechanism for future crisis management. The study includes that reliable and secure communication channels between military and political leaders of both countries should be established with mutual agreement to deal with real-time crisis. India and Pakistan should work mutually to resolve common disputes between them to build confidence and trust between each other. Both nations need to work jointly to counter terrorism and need to enhance mutual cooperation and build counterterrorism measures to address security threat posed by terrorists to both nations. Finally, the study suggests that international powers should work towards arms control and initiate other initiatives for establishment of peace and promotion of strategic stability in the region.

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Received: October 14, 2024

Revision Received: October 26, 2024

Published: December 31, 2024