International Journal of Education and Science Research Review
Volume 11, Issue-1 January-February- 2024 E-ISSN 2348-6457
(Peer-Reviewed, Open Access, Fully Refereed International Journal) P-ISSN 2349-1817
www.ijesrr.org Impact Factor - 7.02 Email- editor@ijesrr.org

Mitigation of Nuclear Risk Associated with India and Pakistan

Abhishek Kumar

Department of Political Science

CCS University, Meerut

Abstract

Two hostile neighbours have established a precarious nuclear confidence-building framework 25 years after India and Pakistan were overtly nuclearized. These nuclear confidence building measures (NCBMs) were agreed by India and Pakistan in an effort to reduce nuclear risks, promote openness, foster trust, and avoid misconceptions and misinterpretations. However, both nations must acknowledge the importance of transparency and trust-building for the NCBMs to be implemented smoothly. As their communication deteriorates, there is a chance that they may become complacent in fulfilling their bilateral responsibilities, which could result in the termination of agreements. This is more likely because of the reversible nature of current NCBMs and the negligible effects on either state. Furthermore, there are ongoing risks of a catastrophic escalation of misperception-based crises. The establishment of a review and monitoring process, the operation of a crisis communication infrastructure, and the isolation of the nuclear discourse from political pressures can all contribute significantly to the reduction of nuclear hazards associated with the India-Pakistan NCBMs regime. This paper thus, tries to navigate the tough water of Nuclear confidence building measures between the two hostile neighbours.

Introduction

Nuclear adversaries use Nuclear Confidence-Building Measures (NCBMs) to promote trust and reduce tensions, serving as essential tools for mitigating the likelihood of accidental or intentional nuclear escalation. Since India and Pakistan both became nuclear powers in 1998, their relationship has been marked by the persistent threat that any military confrontation could escalate to a nuclear level. In response, both nations have established an NCBM regime through four key agreements designed to manage this risk. Despite these efforts, questions remain regarding the sufficiency of the existing NCBMs in fostering genuine confidence and trust between India and Pakistan. The current measures may not be comprehensive enough to ensure long-term stability. True confidence-building requires the implementation of more substantive NCBMs, coupled with a genuine commitment to address core concerns. This suggests that there is significant room to strengthen the NCBM regime through more meaningful measures and sincere engagement with the underlying issues. In this context, this article examines the challenges and opportunities associated with implementing more effective NCBMs between India and Pakistan. The goal is to reduce nuclear risks in South Asia by enhancing the existing framework and ensuring that both countries are committed to building a stable and secure nuclear environment. By addressing these challenges and seizing opportunities for improvement, India and Pakistan can work towards a more robust and trustworthy NCBM regime.

NCBM implementation between Pakistan and India

Nuclear Confidence-Building Measures (NCBMs) encompass a set of actions and policies designed to foster trust, transparency, and stability among nuclear-armed states. The primary aim of NCBMs is to enhance trust and understanding through open dialogue and information-sharing, thereby reducing the risk of nuclear conflict and managing the arms race. However, it is important to note that NCBMs are complementary measures, not substitutes for formal arms control agreements.[1]

Following their nuclear tests, India and Pakistan swiftly agreed on a framework for nuclear dialogue. The Lahore Memorandum of Understanding (MoU), signed in February 1999, acknowledged the need to address the inherent risks associated with nuclear weapons and underscored the significance of Confidence-Building Measures (CBMs) and arms control agreements.[2] Given that the presence of nuclear weapons heightened the risks of escalation and crisis instability between the two nations, the MoU aimed to mitigate these risks and promote stability by instituting measures to prevent the use of nuclear weapons and reduce the likelihood of a nuclear conflict. Additionally, the agreement sought to advance arms control and disarmament efforts to prevent the further proliferation of nuclear weapons.[3]

The 1999 Kargil Crisis and the 2001-2002 standoff between India and Pakistan starkly revealed the weaknesses of the Lahore MoU, resulting in a prolonged stalemate in NCBM negotiations. Despite these setbacks, both states eventually agreed to resume dialogue, launching a composite dialogue process in 2004. This renewed effort led to the negotiation of three additional NCBMs. Over the past four decades, India and Pakistan have established four NCBMs, striving to mitigate nuclear risks and promote stability in the region.[4]

At first glance, it appears that Nuclear Confidence-Building Measures (NCBMs) between India and Pakistan have endured and successfully met their initial objectives. For instance, Islamabad and New Delhi reliably exchange lists of nuclear facilities every January 1, as stipulated by the 1988 Non-Attack Agreement, a practice they have maintained without interruption for three decades.

Both nations also adhere to protocols regarding ballistic missile tests, typically notifying each other and issuing the customary notice to airmen as required. This consistent communication demonstrates a level of trust and adherence to agreed measures aimed at reducing the risk of misunderstandings and potential escalation.[5]

Moreover, there have been no reported accidents involving nuclear weapons in either country, leaving the 2007 agreement on managing such incidents untested in real-life situations. This suggests a level of safety and precaution in the handling of nuclear arsenals, contributing to regional stability.[6]

Finally, the hotline established for direct communication between the foreign secretaries of both countries exists as a crucial tool for resolving misunderstandings. Although it has not yet been employed during a crisis, its presence underscores the commitment to maintaining open lines of communication to prevent escalation.

Scope as a parameter refers to the breadth and depth of the applicability of Nuclear Confidence-Building Measures (NCBMs), encompassing the specific problems, fields, or operations that these measures address. The scopes of the NCBMs established in 1988, 2004, 2005, and 2007 are all relatively narrow. For instance, the lists of nuclear facilities exchanged annually by New Delhi and Islamabad do not include newly constructed nuclear facilities. As noted by Antoine Levesques et al., "As the lists seldom change and are assumed not to include all possible targets of concern (especially those related to nuclear weapons), this agreement is now largely symbolic, but it is not insignificant that both parties have adhered to the exchange stipulation every year regardless of the state of bilateral relations." Other studies have also pointed out that these lists are incomplete and partial.

These issues also touch on the parameter of transparency, which assesses the level of accessibility and openness of data. The fact that the lists are incomplete suggests a need for greater transparency. Strengthening this aspect of NCBMs is crucial for building genuine trust and confidence between the two states. Enhanced transparency would ensure that both parties have a clearer understanding of each other's nuclear capabilities and intentions, thereby reducing the risk of misunderstandings and potential conflicts.

The Symmetric between the Nuclear Relations of India and Pakistan

Unclear definitions limit the clarity in the scope of Nuclear Confidence-Building Measures (NCBMs). For instance, the 1988 agreement defines "nuclear installation or facility" but offers a vague delineation of the term "attack," which is only mentioned in the title and not in the preamble or operational paragraphs. The agreement describes an attack as "any action aimed at causing the destruction of, or damage to, any nuclear installation or facility." This broad wording could include armed attacks, sabotage, terrorism, and state-sponsored cyber-attacks, even though these were not the original intent or objective of the agreement. However, the lack of explicit language can lead to inconsistent interpretations, disagreements, and potential exploitation. This ambiguity is particularly concerning given the increasing threat of cyber-attacks on nuclear facilities.[7]

The 2005 agreement further illustrates the narrow scope of these measures, as it is limited to ballistic missiles, omitting cruise missiles. This omission leaves unaddressed the dangers of misinterpreting cruise missile launches and deployments. The 2022 BrahMos missile misfire incident, the first inadvertent launch of a cruise or ballistic missile by one nuclear power into the territory of another, underscored the need to include cruise missiles in the agreement. Pakistan might have been better prepared to respond if the 2005 agreement had required pre-notification of cruise missile tests. While such a provision could not have

prevented the accidental launch, it would have allowed Pakistan to anticipate the test and prepare for contingencies, reducing the risk of misinterpretation and misperception during crises or heightened tensions. Advanced notice of missile tests is crucial for preventing accidental nuclear war by reducing misinterpretation risks.[8]

The 2007 agreement also has a limited scope, excluding accidents involving nuclear and radioactive materials in the peaceful nuclear programs of both countries. Such incidents can lead to transboundary contamination and should ideally be covered in the agreement. This omission relates to the parameter of monitoring, which is crucial for ensuring compliance and the effectiveness of NCBMs. Effective monitoring involves mechanisms to verify adherence to agreed measures, increasing transparency, information sharing, and bilateral verification arrangements. However, given India and Pakistan's past track record, it is unlikely that either country would agree to a verification regime without a significant change in political leadership thinking.[9]

Regularity is another important parameter, referring to the consistent and predictable implementation of NCBMs over time. This parameter evaluates the frequency and dependability of these measures. While there is regularity in implementing the 1988 agreement, with lists consistently shared annually for 33 years, the same cannot be said for other agreements. There are conflicting views regarding the notification of short-range ballistic missile incidents, and with no reported nuclear weapon accidents, the 2007 agreement's effectiveness remains untested. Similarly, the hotline established for crisis communication has not been used effectively. For example, the Indian Foreign Secretary's failure to inform his Pakistani counterpart about the March 9, 2022, missile misfire was a missed opportunity to establish communication and build trust, potentially easing tensions and refuting claims that the missile firing was intentional. A similar incident during a period of heightened tension could have severe consequences.[10]

India-Pakistan NCBMs also fall short on the parameters of irreversibility, follow-through, and diffused reciprocity. Irreversibility involves commitments that are difficult to reverse once implemented, which is not reflected in these NCBMs. Both states can theoretically refuse to share lists of nuclear facilities or stop advance notifications of ballistic missile tests. Irreversible agreements create enduring restraints and require confidence that both sides will honor their commitments. Follow-through means executing actions and fulfilling commitments without delays, building trust in an adversary's intentions. However, gaps in follow-through are evident, such as incomplete lists of nuclear facilities and the lack of advance notifications for submarine-launched and short-range ballistic missiles. Consequently, the parameter of diffused reciprocity, which offers mutual benefits and security gains, is not achieved. Diffused reciprocity incentivizes cooperation and can lead to further agreements. For example, effective implementation of the 2005 agreement could have led to its amendment to include cruise missiles or a new agreement on cruise missile test notifications, paving the way for more comprehensive NCBMs.[11]

Nuclear Confidence-Building Measures (NCBMs) are crafted to diminish nuclear risks by improving transparency, communication, and trust between nations possessing nuclear weapons, thereby lowering the probability of nuclear conflict. Bilateral NCBMs encourage dialogue and cooperation, contributing to

stability and security within the global system. Despite their intentions, these measures have had limited success in enhancing strategic stability, crisis prevention, and managing escalations, as evidenced by ongoing crises and military standoffs. However, the requirement for advanced notification of ballistic missile tests has somewhat increased predictability. The 2005 agreement between India and Pakistan aimed to enhance mutual confidence and provide transparency regarding intentions. During crises, missile tests are often seen as a signal of deterrence, while advance notification offers uneasy reassurance that obligations are being upheld and situations are not escalating.[12]

The expectation of predictability may have contributed to Pakistan's discontent when India conducted an SLBM test in 2016 without prior notification, as argued by Adil Sultan. Such selective application of agreements risks undermining their credibility and fostering distrust between regional adversaries. Before the 2005 agreement, missile tests often triggered suspicion and alarm. For instance, during the 2001-2002 military standoff, Pakistan responded to India's deployment of Three Strike Corps by swiftly conducting missile tests, causing concern in India and prompting diplomatic engagement in Western capitals. Since then, neither country has conducted tests during crises such as the 2008 Mumbai attacks or the 2019 Balakot crisis. This cautious approach suggests that while missile tests were previously used for crisis signaling, both nations have learned to exercise restraint in nuclear signaling during tense periods.

The most critical NCBM during crises is the Foreign Secretaries' hotline, which, ironically, has not been utilized in any India-Pakistan crisis to date. The lack of communication and absence of expert-level dialogue on nuclear issues over the past decade are worrying signs for reducing nuclear risks in South Asia. A sustained dialogue is essential to comprehend each other's perspectives, evaluate adversary actions, and avoid destabilizing policies. Historical intelligence misjudgments in South Asia have led to unforeseen conflicts, underscoring the importance of addressing misperceptions and misunderstandings about intentions between India and Pakistan, which could otherwise heighten the risk of escalation.

Despite their existence, these NCBMs have not prevented crises or facilitated substantive nuclear arms control agreements. The 1988 Non-Attack Agreement played a pivotal role in risk reduction before India and Pakistan openly declared themselves nuclear powers, particularly assuaging concerns about potential targeting of nuclear facilities during crises or conflicts. The annual exchange of nuclear facility lists remains the most enduring NCBM between the two nations; however, its routine nature suggests it holds little contemporary significance for regional peace and security. Manpreet Sethi has noted that while this agreement remains unviolated, the overall atmosphere between India and Pakistan continues to be marked by low trust and confidence.

Conclusion

Nuclear Confidence-Building Measures (NCBMs) are designed to reduce nuclear risks by improving transparency, communication, and trust among nuclear-armed states, thereby decreasing the likelihood of nuclear conflict. These bilateral agreements aim to foster dialogue and cooperation, which are crucial for enhancing stability and security in the global arena. However, despite their intended purpose, NCBMs have shown limited effectiveness in enhancing strategic stability, preventing crises, and managing escalations, as evidenced by ongoing military standoffs and crises between nations possessing nuclear

capabilities. Despite these challenges, the requirement for advanced notification of ballistic missile tests has provided some degree of predictability in military activities.

The 2005 agreement between India and Pakistan was established with the primary objective of enhancing mutual confidence and ensuring transparency of intentions. During periods of heightened tension, missile tests often serve as a means of signaling deterrence. However, the practice of advance notification aims to provide uneasy reassurances that both parties are adhering to their obligations and not escalating the situation unnecessarily.

Instances like India's SLBM test in 2016 without prior notification to Pakistan have underscored challenges in maintaining trust and adherence to NCBMs. Adil Sultan has argued that selective application or interpretation of these agreements risks rendering them meaningless and could exacerbate distrust between regional adversaries. Before the establishment of the 2005 agreement, missile tests were typically viewed with suspicion and alarm, triggering heightened diplomatic activities and concerns about escalation. Since then, both countries have refrained from conducting tests during sensitive periods such as the aftermath of the 2008 Mumbai attacks or the 2019 Balakot crisis, indicating a cautious approach to nuclear signaling during crises.

Despite these efforts, the Foreign Secretaries' hotline, established as a crucial NCBM during crises, has never been utilized in any India-Pakistan crisis to date. The lack of communication and absence of high-level dialogue on nuclear issues over the past decade are troubling indicators for reducing nuclear risks in South Asia. Sustained dialogue is essential for both nations to better understand each other's perspectives, accurately assess adversary actions, and prevent potentially destabilizing policies.

Historical intelligence misjudgments in South Asia have previously led to unexpected conflicts, emphasizing the critical need for addressing misperceptions and misunderstandings about each other's intentions. While the 1988 Non-Attack Agreement effectively mitigated concerns about targeting nuclear facilities before India and Pakistan openly declared their nuclear status, the annual exchange of nuclear facility lists, while enduring, appears to hold limited contemporary significance for regional peace and security. Despite its routine implementation, the overall atmosphere between India and Pakistan continues to be characterized by persistently low levels of trust and confidence.

In conclusion, while NCBMs play a crucial role in mitigating nuclear risks and promoting stability, their effectiveness in preventing crises and facilitating substantive nuclear arms control agreements remains questionable. The challenges in implementing these measures underscore the ongoing complexities and mistrust between India and Pakistan, necessitating continued efforts to enhance transparency, communication, and mutual understanding in the realm of nuclear security.

Reference

1. Johan Jørgen Holst, "Confidence-Building Measures a Conceptual Framework," Survival 25, no. 1 (January 1983): 2-15, https://www.tandfonline.com/doi/abs/10.1080/00396338308442072.

2. Alexei Arbatov, "The Ten Aporias of Our Time. The Theory and Practice of Nuclear Deterrence," Полис. Политические исследования (Polis. Political Studies) no. 4 (July 2021): 88-111, https://www.politstudies.ru/article/5798.

3. Feroz Hassan Khan, "Prospects for Indian and Pakistani Arms Control and Confidence-Building Measures," Naval War College Review 63, no. 3 (Summer 2010): 105-22; and Dwi Impiani, "Escalation of Military Conflict between India and Pakistan in the Post Lahore Declaration (1999-2019): Security Dilemma Perspective," Global: Jurnal Politik Internasional 21, no. 2 (December 26, 2019): 219, https://doi.org/10.7454/global.v21i2.403.

4. Christopher Clary and Vipin Narang, "India's Counterforce Temptations: Strategic Dilemmas, Doctrine, and Capabilities," International Security 43, no. 3 (February 2019): 7-52, https://direct.mit.edu/isec/article/43/3/7/12216/India-s-Counterforce-Temptations-Strategic; and Zafar Khan, "Balancing and Stabilizing South Asia: Challenges and Opportunities for Sustainable Peace and Stability," International Journal of Conflict Management 30, no. 5 (October 14, 2019): 589-614, https://www.emerald.com/insight/content/doi/10.1108/IJCMA-08-2018-0093/full/html.

5. Gibran Naiyyar Peshimam, "Pakistan Says It Has Provided List of Nuclear Facilities to India under Annual Practice," Reuters, January 1, 2023, https://www.reuters.com/world/asia-pacific/pakistan-says-it-has-provided-list-nuclear-facilities-india-under-annual-2023-01-01/.

6. Zee News, "Pakistan Planning Missile Test, Issues NOTAM and Naval Warning," August 28, 2019, https://zeenews.india.com/world/pakistani-planning-missile-test-issues-notam-and-naval-warning-2230514.html.

7. Holst, "Confidence-Building Measures a Conceptual Framework"; Lisbeth Gronlund, "From Nuclear Deterrence to Reassurance: The Role of Confidence-Building Measures and Restrictions on Military Development," Arms Control 14, no. 1 (April 1, 1993): 146-79, https://www.tandfonline.com/doi/abs/10.1080/01440389308404021; and Sultan, "Nuclear Confidence-Building Measures (CBMs) in South Asia."

8. The 1988 agreement "was a response to information … that India would attack Pakistani nuclear installations." (Khan, "Prospects for Indian and Pakistani Arms Control and Confidence-Building Measures, 113.")

9. Frank O'Donnell, "Launch an Expanded Missile Flight-Test Notification Regime," in Off Ramps from Confrontation in Southern Asia, ed. Michael Krepon, Travis Wheeler, and Liv Dowling.

10. Committee on the Review of Capabilities for Detection, Verification, and Monitoring of Nuclear Weapons and Fissile Material et al., Nuclear Proliferation and Arms Control Monitoring, Detection, and Verification: A National Security Priority: Interim Report (Washington, DC: The National Academies Press, 2021), https://doi.org/10.17226/26088.

11. Waheguru Pal Singh Sidhu, "Operation Vijay and Operation Parakram: The Victory of Theory?," in The India-Pakistan Nuclear Relationship: Theories of Deterrence and International Relations, ed. E. Sridharan (New Delhi: Routledge, 2007).

12. Shea Cotton and Anne Pellegrino, "Cruising for a Bruising: How Cruise Missiles Are Threatening Norms Between India and Pakistan," The CNS Missile and SLV Launch Databases (The Nuclear Threat Initiative, November 15, 2019), https://www.nti.org/analysis/articles/cruising-for-a-bruising-how-cruise-missiles-are-threatening-norms-between-india-and-pakistan/.