

INDIA'S HEGEMONIC NUCLEAR DETERRENCE PROGRAM: RISKS AND RESULTS FOR SOUTH ASIA

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Abstract

This research aims to elucidate the consequences of India's advancing nuclear deterrence program for South Asia's stability, spotlighting its perceived regional hegemonic ambitions. Utilising comprehensive methodologies, including in-depth analysis of missile development timelines, evaluations of nuclear stockpiles, and an understanding of strategic intent, this study contrasts India's proactive nuclear trajectory with Pakistan's primarily responsive approach. A meticulous examination of the SIPRI data reveals discrepancies, especially when weighed against assertions by renowned scholars like Bharat Karnad. Furthermore, the study deciphers the multifaceted repercussions of the U.S.-India 123 Agreement, highlighting its unintended role in accelerating Pakistan's nuclear aspirations and exacerbating regional disparities. Drawing insights from the stability-instability paradox, which originates in Cold War dynamics, the research unravels the intricate and nuanced nuclear relationship between the two South Asian giants. Findings accentuate the significant perils posed by escalating nuclear prowess in the region. Consequently, this research strongly recommends initiating arms control protocols, bolstering diplomatic engagements, and heightened regional collaboration to defuse potential crises and foster a sustainable peace framework for South Asia

Keywords: India, Pakistan, South Asia, nuclear arms race, nuclear deterrence, hegemonic designs.

INTRODUCTION

India's pragmatic deliberations have influenced the stability of South Asia in developing military might on the idea of a reliable atomic deterrent supported with reliable second-strike capability. Strangely, since both rival nations secretly developed nuclear weapons capability in the 1980s, South Asia's strategic stability has been weak, even after official disarmament in 1998 (Cheema, 2013). Following their nuclearisation, India and Pakistan have

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repeatedly engaged in military conflicts that have the potential to worsen. These conflicts are said to have been avoided in part because of the diplomatic efforts of the international community, especially by the United States (US). Besides, both countries were unwilling to be the cause of a nuclear holocaust; therefore, the two nations made efforts to. Despite all these efforts, proper regional nuclear stability has not been attained (Khan, 2003).

It is a fact and largely justified that both countries have developed covert capabilities to build their nuclear bombs that helped sustain the South Asian crisis of the 1980s. However, according to Sean Gregory, nuclear arms have played only a minor part in the Brass Stack exercise and the rebel crisis in Kashmir. At that time, neither India nor Pakistan had activated their nuclear weapons capabilities (Gregory, 2005). There is no doubt that in the Kargil warfare, Pakistan and India displayed restraint. For example, throughout India's Operation Vijay invasion in opposition to intruders, Pakistani soldiers did not help the escaping invaders. In his research about the clash in Kargil, the writer Kenneth Waltz contends that the existence of nuclear weapons halted the escalation from major engagements to all-out war (Sagan & Waltz, 2013).

Pakistan and India utilised "core triangular coercion"[‡] during the Kargil crisis to pressurise American engagement. He said that as the dominant extra-regional power, the US had predicated its approach on "pivotal deterrence"[§] (Kirk, 2010). A central tenet of deterrence is managing pledges and countering threats from third parties, which try to escalate the conflict by instilling fear in potential adversaries (Crawford, 2003). India's strategic culture is based on the "Kautilya philosophy, its proactive approach to international affairs and substantive economic contacts between the two nations are other significant factors that increase the danger of conflict. Institutionalisation to manage the lack of established mechanisms and resolution. And complex ideological and structural conflicts and terrorism like Kashmir, Sir Creek, Siachen, etc.

[‡] These situations of "triangular coercion" describe a phenomenon in which a coercer who lacks direct leverage over a resilient target coerces a third party who does have control over the target and to whom the target is vulnerable and manipulates it into a conflict of interests with the target.

[§] According to Timothy Crawford, nations may also be interested in using deterrence in a third circumstance to prevent two enemies from attacking one another. This scenario's deterrence, according to Crawford, is a "pivot" between the other parties, hence the term "pivotal deterrence."

Research Methods

This study uses qualitative and descriptive methods to examine South Asia's stability and deterrence program despite having two nuclear powers, India and Pakistan. Secondary sources (books, research articles, newspaper articles) are researched to obtain exact material, information, figures, and facts through diachronic data. Furthermore, the thematic analysis technique has been used to analyse the data.

Comparison of Nuke Profiles of Both Countries

As part of a credible minimum deterrent approach, the nuclear arsenals of both international locations are made from nuclear warheads and shipping structures. The accompanying narrative suggests that India's nuclear skills are supposed for a bigger goal, i.e., its pursuit of regional hegemony. At the same time, India justifies its army and nuclear build-up by bringing up the hazard posed by China and Pakistan. George Perkovich argues that "fear of the military capacity of China and subsequently Pakistan does not fully explain Indian nuclear development in this environment", but this claim is difficult to refute. (Perkovich, 2002).

Table 1: India's Nukes (Kaur & Sharma, 2014)

Nomenclature	Class	Payload	Range (km)	Status/Remarks
(Dhanush)	SRBM	500 Kg	250-350	Operational
(Prahar)	SRBM	200 Kg	150	Under development
(Agni-I)	SRBM	1-2 Ton	700-1,200	Operational - MIRVable with 3 x warheads of 20-30 KT each
(Prithvi-I)	SRBM	1.0 Ton	150	Operational
(Prithvi-II)	SRBM	0.5-1 Ton	350	Operational
(Prithvi-III)	SRBM	0.5-1 Ton	300-350	Under development
(Agni-II)	IRBM	1.0 Ton	2,000-3,500	Operational - MIRVable with 3 x warheads of 90-150 KT each
(Agni-III)	IRBM	1.5 Ton	3,500-5,000	Operational - MIRVable with 3 x warheads of 300 KT each

(Agni-IV)	IRBM	1.5 Ton	4,000	Operational - Stage 3 added to Agni-III
(Agni-V)	ICBM	1.5 Ton	5,000-8,000	Under development
Surya (Agni-VI)	ICBM	2-3 Tons	10,000-12,000	Under development - 8xMIRVed warheads of 125-150 KT each
Sagarika (K-15)	SLBN	1.0 Ton	650-700	Under development

Besides Prithvi, all the above-noted (ballistic missiles) are primarily based on potent gasoline. In 2017, India had 120–hundred thirty nuclear weapons, akin to Pakistan's hundred thirty–hundred and forty, in keeping with the SIPRI evaluation (Kile & Kristensen, 2017).

This analysis demonstrates how far from factual this number is. India's sea-based deterrent is concentrated on the recently introduced and locally produced Submersible Ship Ballistic Missile Nuclear. According to researchers like Rajesh Basur, India does not need a guaranteed second-strike capability for minimal deterrence. As a result, he views India's introduction of the SSBN as unnecessary, which would only spur Pakistan to construct its own. The Jaguar (Shamsher), Su-30 MKI-III, MiG-29K, Dassault Mirage-2000H/TH and MiG-27 (Flogger) are in the stockpile of Indian Force_for aerial deterrence (Lele & Bhardwaj, 2013)—an extensive ballistic missile defence program and a strong C3 air defence network support this regime.

Norris and Kristensen (2013) claim that India had 26 nuclear weapons in 2001–2002, compared to Pakistan's 23. In contrast, Ramachandran believes that Pakistan only had 15–16 warhead-grade plutonium, whereas India had 30-35 WGP in 1999. According to estimates, the United States has highly enriched uranium (Mattoo, 1999). It is widely acknowledged that India's nuclear abilities are extensively more potent than Pakistan's nuclear weapons competencies because of the India-US nuclear deal. China, which can manufacture more and is a primary avowed foe, has more military might. Does India need to have such a sizable arsenal of nuclear warheads? Prominent stockpile supporters believe that India must equal China's capacity. These widespread misconceptions are that nuclear stockpiles are unnecessary or that deterrence strengthens as nuclear capabilities develop (Mishra, 2014). Nuclear deterrence is unaffected by the relative distribution of nuclear forces, and historically, except for India and Pakistan, nuclear deterrence has been

successful in times of crisis even when the ratio was obviously in the weaker country's favour (Basrur, 2014).

Pakistan's nuclear forces are not as good numerically as India's, which is made worse by its relative lack of geographical depth (Jones, 2001). As of 2018, Pakistan has a wide range of successful nuclear missiles, as listed in Table 02 below:

Table 2: Pakistan's Nukes (Kaur & Sharma, 2014)

Nomenclature	Payload	Class	Range (km)	Status/Remarks
Ra' ad (Hatf-8)	1.0 Ton	Cruise	350	Under development
Ghaznavi (Hatf-3)	700 kg	SRBM	290-320	Operational
Nasr (Hatf-9)	400 kg	SRBM	60	Under development
Ghauri-I (Hatf-5)	700-1,200 kg	IRBM	1,300-1,800	Operational
(Zarb)	Not known	Anti-ship	Not known	Under development
Shaheen-II (Hatf-6)	700 kg	IRBM	2,500	Operational
Babur (Hatf-7)	500 kg	Cruise	750	Under development
(Shaheen-1A)	700 kg	SRBM	900	Operational
Abdali (Hatf-2)	(250).-450 kg	SRBM	180-200	Operational
Shaheen-1 (Hatf-4)	700 kg	SRBM	750	Operational

Following SIPRI's estimation, Pakistan's nuclear weapon inventory as of 2017 was one hundred thirty–140, which indicates a kind of same distribution of South Asia's nuclear skills (Kile & Kristensen, 2017). Pakistan continues to share space with India in different areas, particularly second-strike potential. The Babur-three anti-submarine cruise missile, a brand-new version of the Babur-2 ground-released cruise missile that was successfully tested in January 2017 and has a number 450 km, is purportedly being developed by Pakistan (Mustafa, 2017). Furthermore, it is far developing the currently examined Zarb shore-based anti-deliver missile. JF-17 Thunder, F-sixteen Falcon, and Mirage-III/V are the airborne platforms utilised by the Pakistan Air Force to supply nuclear weapons (Lele & Bhardwaj, 2013).

Pakistan does not represent an existential danger to India that would warrant a military expansion, given its perceived lack of military and economic capability in comparison to India. However, considering their continued competition, Pakistan's susceptibility to Indian hegemony has acquired grave proportions. Pakistan's military might, therefore, appear to be a rational reaction supported by defensive realism.

Risks and Results of the Arms Race and Nuclear Stance for the Stability of South Asia

Mian and Ramana contend that both nations are being pushed into the South Asian nuclear arms race because of their consistent development of nuclear-capable ballistic and cruise missiles. Since acquiring the capability to develop nuclear bombs in the 1980s, India has gradually increased its nuclear arsenal and power projection potential. Although this may not necessarily be the consequence of a deep knowledge of the subtleties of deterrence as Amitabh Mattu (1998) claimed that public support for India's nuclear weapons "cuts across party lines" and is essential. They are logically founded on "national pride and self-esteem.

Pakistan falls behind India in terms of the advancement of its missile program and overall nuclear program. They claim that Pakistan only tested two new nuclear-tipped missile systems, the Nasr and Ra'ad cruise missiles, whereas India conducted six nuclear-tipped missile tests between 2006 and 2013 (Mishra, 2014). Pakistan first took a while to respond with comparable actions, probably because of its initial determination to avoid an arms race, which appears to have waned over time. This can be explained by the fact that Pakistan conducted its first ballistic missile test 10 years later, in 1998, unlike India, which started its IGMD program in 1984 and flight-tested the Prithvi missile in 1988.

India and Pakistan are not engaged in an arms race. They conclude that India and Pakistan pursue divergent goals, that their development initiatives are essentially separate, and that their behaviour does not indicate best rivalry. Contrarily, research done by this author for a different project reveals that both nations' standard missile test patterns show signs of an arms race (Arshad, 2017). The number of missile tests conducted by the two nations at any given time provides the most basic but compelling evidence for this claim. Pakistan's behaviour can only be described in the arms race paradigm due to differences in power potential, asymmetry in military capabilities, and divergent nuclear intentions of the two countries. According to a report by Frank O'Donnell on missile tests undertaken by China, India, and Pakistan between January 2016 and March 2017, Pakistan only carried out five tests with a concentration on Cruise technology, compared to India's fourteen. However, this break from Pakistan's typical pattern of conduct from 1998 to 2012 can be due to its contentment with the advancements in missile technology.

As shown by several studies, some of the missile tests carried out successively by the two sides, in any event, have identical design elements

and are therefore easily comparable to what Dalton and Tandler call tit-for-tat reactions. A few illustrations can support this claim further: First, Pakistan began developing nuclear weapons in response to India demonstrating nuclear technology mastery in 1974 with a nuclear explosion. Second, Pakistan conducted its first ballistic missile test in 1998 after India's Prithvi ballistic missile made its first test flight in 1988. Third, Pakistan's first test firing of the Babur cruise missile in 2005 was a response to India's missile capability, which India has been pursuing since 2001 (Arshad, 2017).

One of the most critical events in South Asia's strategic landscape with the potential to disrupt the region was the US-India nuclear deal, commonly referred to as the 123 deal (Chari, 2013). Given the benefits India has reaped from this agreement, it is sensible to assume that, in keeping with John Mearsheimer's offensive realism, India is driven by a desire to increase its share of global power with the eventual goal of assuming regional hegemony. Defensive realism, or India's search for the power necessary to control China, may also be used to explain the Agreement. Moreover, the aim of the US to establish a relationship with India based on the Grotian model of international relations, which favours collaboration and trade amid disputes rather than the Hobbesian model, may have been motivated by neo-liberal factors.

Pakistan's nuclear program has been impacted by the Agreement, causing it to quicken its pursuit of nuclear parity with India. Michael Crippen determined that Pakistan's precise containment requirements have grown over time based on the rate of Pakistan's nuclear development program since 1998. As an example, consider Pakistan's fourth reactor for producing plutonium. Construction commenced after the India-US Nuclear Agreement was signed in 2011. Notwithstanding the possibility that the reactor had been included in the initial scheme, he asserted that Pakistan was more likely to blame for Pakistan voicing worries about the US-India nuclear pact and rising fears about mending relations with India.

The discussion above leads to the logical conclusion that India's nuclear development operations are directly responsible for the nuclear arms race in South Asia. India has regional (if not global) aspirations driving the growth and capability of its military forces far beyond what is ostensibly required to deal with Pakistan - a situation that undoubtedly contributes to Pakistan's insecurity complex. (Smith, 2013). On the other hand, Pakistan's nuclear development efforts might be seen as an effort to address its power imbalances, which, in the words of John Mearsheimer, encourage conflict by enhancing the possibility of a successful attack (Mearsheimer, 1990).

Application of Stability-Instability Approach in South Asia

Many academics use the logic of the paradox of stability and instability based on Cold War experience to explain the low-level disputes and crises (instability) between the two nations. According to Paul Kapur (2009), the India-Pakistan strategic dyad is not affected by the stability-instability conundrum in the traditional sense, and there is an alternative explanation for why there is instability between India and Pakistan at lower levels. He claims that under the Cold War paradigm, the Soviet Union had a historical edge over the United States in Europe, the latter persuading foes that escalation was likely. He further argues that the relationship between both (South Asian) nations has changed, with Pakistan emerging as a pragmatic country that wants to change Kashmir's status quo. In addition, Pakistan intends to avoid direct conventional conflict in the real world. The desire is a weak power. He urges that Pakistan's revisionist actions are motivated by anticipation of a lesser rather than a more significant likelihood of nuclear reprisal (Kapur, 2009).

Paul Kapur's analysis is founded on fallacious presumptions in this study, which makes it different. First, Cold War reasoning is based on fundamental assumptions rather than practical data, as the two major nuclear powers never engaged in direct, low-level conventional engagement during the bipolar system. Second, Pakistan's opposition to a full-scale conventional conflict no longer reduces the chance of nuclear reprisal because of India's military superiority. The likelihood of a nuclear collision would rise in this scenario. Notwithstanding this premise, it has already been noted that Pakistan is not significantly disadvantaged against India in a purely conventional military sphere. As a result, the presumption that Kapur's argument is based on is shown to be false. In the event of a large-scale conventional battle, Clary (2013) states that past precedent and present force balances, while favouring India, do not imply that India will certainly triumph against Pakistan.

This debate leads to three propositions. First, India's nuclear initiatives are primarily responsible for the two countries' arms race. This will have detrimental effects on the stability of preemption in South Asia and urgent human security requirements. While it cannot be said that China's activities, whether intentional or not, do not provoke a response from India, Pakistan cannot be held responsible for the arms race. As a smaller nation, Pakistan has been continually hunting for security from its neighbour, India. As was extensively covered before, Pakistan's adoption of the nuclear option as a defensive realism reaction to India's existential threat was caused by conventional imbalance. Also, it is demonstrated by the fact that both nations have maintained restraint amid extended periods of tension and recurrent

military crises. Finally, it is impossible to rule out the possibility that military tension will worsen without a *détente* if anything goes wrong or is miscalculated.

Lack of expertise among nuclear personnel is not the only root cause of nuclear tensions in South Asia, other factors include the absence of regular interactions between the neighbours of nuclear-weapon states, the existence of those attempting to sabotage more normal relationships, and the events that usher in a new era of warfare (Mishra, 2014). According to Zulfiqar Khan, the two nations' nuclear deterrent capacities are likely to maintain some uncertainty, especially during times of crisis, because diplomatic communication and dispute resolution procedures are absent.

To maintain tactical stability, South Asia requires a system of treaties that, in the words of Jaspal (2005) nuclear weapons reduce the chances of conflict, decrease the cost of war, and lessen the cost of peacetime. Undoubtedly, the situation calls for a South Asian arms control and disarmament (ACD) framework. Abbasi (2018) lists three additional difficulties for the region's nuclear systems. First, the NPT will (a) establish a new nuclear-weapon state status that is not a party to the NPT, (b) strike a balance between the non-proliferation and peaceful uses of nuclear technology, and [and] (c) the domestic level, but strengthening deterrence, thereby linking regional nations to global disarmament efforts. The second issue is the India-Pakistan imbalance, which places Pakistan at a severe disadvantage and forces it to look for balancing measures that only make matters worse. The third issue results from the US's decision to grant India an NSG waiver by providing her access to the nuclear market and denying the same to Pakistan.

Conclusion

Nuclear weapons have deterred both significant and low levels of military battles between Pakistan and India. This paper concludes that the statement of Richard Russell, which claims that nuclear weapons escalate conflict between nuclear countries, is unrealistic. It is naïve to anticipate nuclear deterrence in an unstable environment owing to complicated regional rivalry, which is categorically refuted by the study. In terms of reality, the gloomy assessment of the unfavourable effects of India and Pakistan's nuclear weapons appears correct for "arms race stability" but not for "crisis stability". However, given the deep animosity between Pakistan and India and the lack of a suitable framework for resolving disputes, both nations' nuclear weapons are likely to cause "uncertainty," which is dangerous for crisis stability.

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