India's Growing Strategic Capabilities and Doctrinal Shift: Implications for Strategic Stability

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Abstract

Despite the overt nuclearization of South Asia in 1998, this region has remained volatile due to the on-going rivalry between India and Pakistan. After declaring itself a nuclear weapon state, having an operational doctrine is crucial for any rational state. India claims that it faces a two front war dilemma, from China in the north, and Pakistan in the west. Furthermore there is a conventional asymmetry among the regional rivals i.e. China, Pakistan and India. India therefore developed a nuclear doctrine that could counter threats from both the adversaries. Although Indian nuclear doctrine is based on the declared No First Use policy and maintaining a small nuclear arsenal for credible minimum deterrence, but the Indian threat perception has changed over time. Therefore ambiguities have emerged in its official doctrine. The paper discusses the growing Indian nuclear capabilities and their impact on its doctrinal thinking. With its growing strategic capabilities, the Indian leadership is incentivised to make a doctrinal shift towards pre-emptive counterforce strategy. Additionally, political dynamics within India posit aggressive action against its rivals in the region. This paper would also discuss whether this doctrinal shift has possibly happened, and the evidence supporting this claim, and what is its impact on arms race and deterrence stability in South Asia.

Keywords

Nuclear Doctrine, Deterrence, Strategic Stability, Counterforce Strategy, India, Pakistan.

Introduction

The United States brought a major shift in strategic thinking by using nuclear weapons towards the end of the Second World War. Erstwhile Soviet Union too became a nuclear power four years later. Global security structure since then pushed the great powers towards arms competition and nuclear proliferation. Deterrence postures too pre-dominantly shifted from conventional to nuclear, and major powers devised either explicit or ambiguous nuclear doctrines. During cold war, mutually assured

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destruction (MAD) and arms race between the two super powers, the USSR and the United States, drove their security and nuclear policies.

Some other states too acquired nuclear weapon capability during subsequent years. Presently there are nine nuclear weapon states in the world, India being the first nuclear power in South Asia and Pakistan too tested its weapons a few weeks after India. Having a large population, bigger economy and military power, India aspires to be recognised as a major player in the international politics. In order to achieve that end, it intends to first become a regional hegemon. Its growing strategic capabilities coupled with its political ambitions in the region and globally may push India to employ counterforce strategy against its adversaries particularly Pakistan. Pakistan is an important power in South Asia. There are unresolved disputes between India and Pakistan. Similarly India has border disputes with its neighbour in the north, China. However, this may have implications for the regional stability, and in particular for Pakistan.

According to the neo-realists perspective, it is the anarchic and power centric structure of international system which makes a state either more defensive or offensive in its security policy.

In the South Asian region, it is the quest for regional hegemony which pushes India to maximize its own power and aggressively pursue an offensive doctrine. [1] While Pakistan tends to be a structural modifier, staying on the defensive side, and not disturb the status quo. The US is also balancing its power in the Indo-Pacific against China, through US-Indo strategic partnership and other security agreements, which hypes the security dilemma in the South Asian region as well. The complex network of the deterrence theory is applicable in this situation since all the three players, China, India and Pakistan are nuclear powers, and want to deter their adversaries from aggression.

Due to the dynamic nature of threats in South Asia, India's military and nuclear modernization and indications of its doctrinal shift have raised serious security concerns for Pakistan. Nuclear arsenals are not only needed for deterrence against possible aggression by a state but also ensure maintenance of strategic stability regionally. Thus, it is important to see the Indian nuclear modernization programs in that perspective and how India has made room for change in its declared nuclear doctrine. Close

examination of Indian Nuclear Doctrine (IND) shows that it is couched in the language that skilfully covers up contradictions in the doctrine.

Nuclearization of South Asia

Since its independence in 1947, nuclear weapons have been emblematic to the Indian defence policy. The first Indian prime minister, Jawaharlal Nehru laid the foundation of Indian nuclear program, and a Cambridge educated nuclear physicist, Homi Bhabha was the architect of Indian nuclear program.

After its humiliating defeat in war with China in 1962 and China's first nuclear detonation in 1964, India avidly focused its attention to nuclear weapon program that Pakistan perceived as a threat. India also did not sign nuclear non-proliferation treaty (NPT) calling it unfair and discriminatory in nature.[2] Being a non-NPT signatory India could legally develop nuclear weapons.

Perceiving potential threat from pursuit of nuclear programme that could possibly lead to acquisition of nuclear weapons by India, Pakistan wanted to initiate talks on the regional non-proliferation, but India rejected the offer because a regional non-proliferation programme could become a hurdle in the way of its nuclear program. India then argued that regional non-proliferation could not be achieved without international disarmament. Although India participated in disarmament talks like Fissile Material Cut Off treaty (FMCT) and Comprehensive Test ban treaty (CTBT) but it did not sign the CTBT saying that it heavily favoured the P5.[3] Eventually, India tested its first nuclear fission device on 18 May, 1974 which it called a Peaceful Nuclear Explosion.[4] Indian nuclearization prompted the formation of Nuclear Suppliers Group (NSG), a nuclear exports and non-proliferation regime. The purpose of NSG formation was to control proliferation of nuclear weapons, and material that can be used for making these weapons. The action reaction-syndrome in South Asia beset a nuclear competition between India and Pakistan.[5] A subsequent Pakistani nuclear response had become inevitable after India's nuclear test in order to maintain a balanced strategic environment.

Bhutto was the architect of Pakistani nuclear program and asserted that Pakistan must have its own nuclear weapon capability before India began nuclear blackmailing. After Bhutto, General Zia skilfully steered country's

nuclear programme. Though, the US was opposed to Pakistan developing nuclear weapons it had to stop strongly opposing it albeit reluctantly, when the US needed Pakistan's support for Afghan Jihad against the Soviet forces in Afghanistan. Eventually both India and Pakistan became declared nuclear weapon states in May 1998 when both states tested their nuclear devices.

Understanding Indian Nuclear Posture

India maintained an assured retaliation posture or 'credible minimum deterrence' (CMD) since it became an overt nuclear power and formalized it in its official doctrine as well. Main goal of adopting such a strategy is to deter the enemy and coerce it into de-escalation. Success of such a strategy is obviously contingent on the survivable second strike capability, and No First Use (NFU) of nuclear weapons.[6] To ensure survivability deployment patterns are kept ambiguous and nuclear arsenal is kept in dispersed and disassembled form. It is important to do so to ensure the safety of weapons, mobile silos are preferred due to revolution in military affairs (RMA) and precision in reconnaissance and intelligence capabilities.

Post Overt Nuclearization of South Asia

The world witnessed a huge strategic shift in the South Asian political environment because the two die hard enemies and neighbours became declared nuclear weapon states in May 1998. International community severely condemned these tests, and put sanctions on both. The two nuclear armed adversaries however have not yet developed a diplomatic mechanism to establish a stable deterrent equation. Yet it can also be argued that mere presence of nuclear weapons has also deterred escalation in all sub-conventional conflicts since the two rival states became nuclear powers.

Indian Nuclear Doctrine

A doctrine is a set of ideas about how and when to operationalize state's military capabilities. After Kargil conflict in 1999, India basically developed a limited war doctrine under nuclear overhang. After becoming a nuclear power, India wanted to be identified as a responsible nuclear state with a predominantly defensive doctrine. Therefore, it committed itself to the No

First Use (NFU) of nuclear weapons (NWs) and a credible minimum deterrence posture in its 1999 draft nuclear doctrine (DND) and subsequent official nuclear doctrine of 2003. India released its DND in August 1999, immediately after the Kargil conflict because it wanted to assure its people that it could deter its adversary, and that Pakistan did not pose a serious threat to its security in the wake of Kargil.

A closer look at the DND may show dissonance in its language just like the official doctrine's incongruities discussed later in the study. It focuses on its commitment to NFU and disarmament while it also emphasizes upon completion of the nuclear triad. It has contradictory concepts in its composition which have been criticized since its release. Firstly, it talks of retaliation against nuclear attack from 'any state or entity' without clearly identifying the entities. An entity is basically a euphemism used for terrorists here. It implies that India would retaliate with nuclear weapons against acts of terrorism. India also routinely alleges that acts of terrorism on its soil are sponsored by the Pakistani state. It is therefore a veiled threat to Pakistan. Indian declaration of using nuclear weapons against a bunch of terrorists is neither feasible nor credible. Furthermore it entails nuclear exchange with Pakistan with disastrous consequences for both the states, the region and beyond. These are the questions that remain unansweredlack. DND proposed that 'highly effective conventional capabilities will be maintained' which implies that nuclear attack will not be the first option exercised by India in a conventional or sub-conventional conflicts. After crisis of 2001-2002 (Twin Peak) standoff, India decided to release its official nuclear policy. In Twin Peaks crisis, Jaish-e-Muhammad (JeM), was alleged to have attacked Indian parliament in December 2001, and reignited the crisis when terrorists attacked Indian forces in May 2002 in Indian Occupied Kashmir. Although India amassed a large number of forces on Pakistani border but nuclear deterrence, timely USA's diplomatic intervention and lack of effective conventional options against Pakistan prevented the crisis from escalation. India had hoped to coerce Pakistan to agree to its terms for peace but failed in its attempt. It had to withdraw its forces from the Pakistani borders without achieving its stated objectives. In order to calm down the criticism from its public that India could not prevent such crisis despite being conventionally superior, it issued its official nuclear doctrine. Basic tenets of the doctrine are summarized here:

- Building and maintaining a credible minimum deterrent.

- A posture of NFU; nuclear weapons will only be used in retaliation against a nuclear attack on Indian Territory or on Indian forces anywhere.
- Nuclear retaliation to a first strike will be massive and designed to inflict unacceptable damage.
- Non-use of nuclear weapons against non-nuclear weapon states.
- In the event of a major attack against India or Indian forces anywhere, by biological or chemical weapons, India will retain the option of retaliating with nuclear weapons.
- The fundamental purpose of Indian nuclear weapons is to deter the use and threat of use of nuclear weapons by any state or entity against India and its forces. India will not be the first to initiate a nuclear strike, but will respond with punitive retaliation should deterrence fail.
- Continued commitment to the goal of nuclear weapon free world, through global, verifiable, and non-discriminatory nuclear disarmament.[7]

There are not many differences between DND and the official press release. Comparing the two, one may find that official nuclear doctrine has retained the same contradictory concepts as in the DND with a few exceptions. 'Punitive retaliation' is replaced by 'massive retaliation' to inflict unacceptable damage. Scope of the nuclear response has been extended to include chemical or biological attacks as well. The statement of 'Indian forces anywhere' indicates that India would also provide nuclear shield to its conventional forces outside the Indian territory.

Credibility of India's CMD posture

Indian credible minimum nuclear deterrence is in itself quite ambiguous. India has explicitly stated that its number one enemy is China which means that India would acquire sufficient number of survivable nuclear weapons that can deter China. Chinese nuclear capabilities are more developed than India, so what is minimum for China might not be minimum for Pakistan. This heightens the security dilemma in the region because Pakistan, in response to Indian nuclear modernization effort, would also try to reconsider its choices, which may not only lead to arms race in the region but also puts a question mark on the credibility of the Indian nuclear doctrine.[8] It cannot rely on dual nuclear postures for projected main threat

from China and peripheral threat from Pakistan because no NW state has ever had two nuclear postures, not even the super powers.[9]

India has started a massive military modernization program which will be discussed later in the study. In the Joint Doctrine of Indian Armed Forces (JDIAF) 2017, it is enunciated that maintaining 'credible deterrence' capability is one of the objectives of national security. Now this shift from minimum credible deterrence to credible deterrence is not omission of, only a word, it indicates India's deliberate and unequivocal shift in strategic approach.

From Punitive to Massive *Retaliation*

Massive retaliation in case of a nuclear attack rather than punitive retaliation may require more advanced capabilities and larger number of nuclear weapons.[10] It is an ill-defined response as it indicates that a massive response could involve use of all available means, be it from air, sea or land based delivery systems, which was less ambiguous than the term 'punitive retaliation'. If India employs its cold start doctrine against Pakistan and the latter responds with deployment of short range ballistic missiles (SRBMs), tactical nuclear weapons (TNWs), how would India respond to it. Whether it would massively retaliate with nuclear forces or try to keep the response limited. Probability of India responding with massive retaliation against a border skirmish or a limited conflict is not credible.

NFU pledge

The doctrine asserts that nuclear weapons will only be used in retaliation against a nuclear attack on Indian territory or on Indian forces anywhere. Later the doctrine says that India would use nuclear weapons in case of a chemical or biological attack on India or on its forces anywhere. These caveats in the doctrine contradict its commitment to NFU. If India responds with nuclear weapons against a chemical or biological weapon attack, it would be considered First Use (FU) by the adversary. It is also not clear whether it would opt for limited FU in defence or first strike in pre-emption to disarm the enemy. A first strike may be massive and hence start a nuclear exchange. Even many Indian scholars have criticized this NFU

policy. They think it does not serve Indian national security adequately. Hence, the Indian NFU pledge is controversial.[11]

Indian Strategic Capabilities

India continues to modernize its strategic capabilities in order to strengthen its nuclear triad. It is estimated that India has a nuclear stockpile of 156 nuclear warheads.[12] However, it has enough weapon grade plutonium to build at least 200 nuclear warheads. Although, India has a nuclear competition with Pakistan but the rapid pace of its military modernization indicates that it also takes Chinese threat into calculations while crafting a strategic policy. It has developed long range Agni-V, and improved versions of other missile are also being developed. Beijing therefore is now in the range of its nuclear weapons.[13] US-India civil nuclear deal was signed in 2005 and India also got the NSG waiver in 2008. NSG waiver allowed India to participate in the global nuclear trade. Under US-India Nuclear deal, India agreed to put certain number of its civil nuclear reactors under IAEA watch but not all. Out of twenty two nuclear reactors India has kept eight reactors out of IAEA safeguards. It is the success of its nuclear diplomacy that it has now nuclear cooperation deals with Russia, US, UK, France, South Korea, Canada, Japan, Australia etc.

India is also in the process of inducting Intercontinental Ballistic Missiles (ICBMs), Multiple Independently Re-entry Vehicle (MIRV), along with Antiballistic Missile (ABM) system in its strategic force. It has more precise delivery vehicles including aircrafts, land and sea based ballistic missiles and unmanned aerial vehicles (UAVs). It has also made a successful deal for purchase of Russian ballistic missile defence (BMD) system S-400. The pace at which operational Indian systems have multiplied over a short period is reflected in its nuclear doctrines from 2003,[14] to 2021.[15] The changes in the language of the doctrine over the eight years period show that India's nuclear posture has shifted from defensive to an offensive one. It has now integrated counterforce strategy option in its nuclear policy.

Aircrafts[16]

It is estimated that India possesses three or four squadrons of Mirage-2000H and Jaguar IS/IB which are both nuclear delivery aircrafts. The Indian Mirage-2000H fighter aircraft is undergoing upgradation[17] in order

to enhance their capabilities. Its modern version is called Mirage-2000I. Cost of upgradation of Jaguar aircraft is quite high due to which India has decided to replace it with some other modern planes. India in 2016 signed a deal for purchase of 36 Rafale aircraft from France. However, due to covid-19 pandemic their delivery has been delayed.

Land-based Ballistic Missiles

India has six types of land based nuclear capable ballistic missiles built by Defence Research and Development Organization (DRDO). Following missiles are in service currently; short range Prithvi-2 (350 km) and Agni-1 (700 km), medium range Agni-2 (2000 km), intermediate range Agni-3 (3200 km), intermediate range Agni-4 and long range ICBM Agni-5. India also carried out a successful canisterized ballistic missile test of Agni-5 in 2015. Both Agni-4 and Agni-5 can reach the Chinese mainland, and India can use them against Pakistan as well.[18] There are speculations that India would add MIRV system to Agni-VI but there is no official word on this yet. However India is likely to induct MIRVs in its missile force keeping in view the Chinese threat, and also Pakistan test launch of Ababeel missile. In 2019 India also conducted an anti-satellite interceptor test.

Sea-based ballistic missiles

Indian Navy currently has a submarine launched ballistic missile (SLBM) K-15 Sagarika (750 km), and ship launched ballistic missile Dhanush (400 km). The range of Dhanush is considered to be very small. It would therefore have to be moved very close to Pakistani or Chinese waters to attack these countries, risking its own survivability. India is still far from developing its own credible sea deterrent. The Arihant class nuclear submarine K-4 has a range of 3500 km which was successfully tested in January 2020 having zero error as claimed by DRDO. Arihant however had an accident in 2017 which required large scale repairs. Although, India claims to build a much more sophisticated deterrent in the form of K-4 but it is still in development phase.

Cruise Missiles and Satellites

India has a medium range supersonic cruise missile Brahmos, which is the fastest cruise missile in the world having a maximum speed of Mach 3.5. Its

improved version Brahmos II is being jointly developed by Russia and India. DRDO has also developed a hypersonic missile Shaurya, having a range up to 800 km (7.5 Mach). India is also developing Nirbhay, a subsonic long range cruise missile, which can be launched from multiple platforms. It is also reported that Nirbhay is capable of carrying both nuclear and conventional warheads. India has acquired advanced national and commercial imagery and radar satellites including Cartosat-2 Series, Digital-Globe Worldview-4, RISAT-1/RISAT-2 and TerraSAR-X,[19] enhancing its intelligence and reconnaissance capabilities.

In sum, one may say that despite Indian commitment to NFU and disarmament, it is pursuing advanced capabilities.

Indian Doctrinal Shift and Counterforce Options

There have been many debates on the Indian nuclear strategy since the promulgation of its nuclear doctrine in 2003. Many scholars have suggested that India should revisit its nuclear policy to remove inconsistencies in its declared nuclear policy, its technological advancements, and challenges stemming from the nuclear China and Pakistan.[20] India maintains the counter value assured retaliation posture against China because it cannot match its capabilities. But India has attempted the decoupling of its nuclear strategy vis-à-vis Pakistan. As noted before even the US and Soviet Russia could not maintain different nuclear strategies against different enemies, because of the complexities involved. But India believes it can manage to adopt a counterforce strategy against Pakistan and counter value strategy against China.[21]

India wants to come out of its strategic paralysis against Pakistan since the latter's acquisition of tactical nuclear weapons.[22] Pakistan has signalled to use the tactical nuclear weapons (TNW) if India crosses certain redlines. Now that India has multiple options but they are not without consequences and limitations.[23] According to the Indian doctrine, it may resort to massive retaliation if attacked by nuclear weapons anywhere, hence in order to operationalize that massive retaliation concept, India has pursued counterforce objectives as massive retaliation does not necessarily have to be directed against counter-value targets. But massive assured retaliation against the use of TNWs against Indian forces on Pakistani soil can be highly questionable and immoral due to counter-value attack on millions

of innocent civilians. Another option can be of tit-for-tat response but this would again give the nuclear initiative back to Pakistan. This places extra pressure on the Indian nuclear command and control system. However, the third option could be to launch a hard counterforce strike on Pakistani nuclear weapon installations and military leadership and disarm them. If some NWs still remain which could be used for retaliation, the threat from them would not be much credible. They can be easily disrupted by the Indian BMD system. This situation can prove quite alarming not only for Pakistan but India as well because it can have serious repercussions. This preemption or preventive strike if incorporated in nuclear strategy can prove to be absolutely contradictory to the CMD and the NFU posture.

Although, several Indian policymakers have emphasised that India's credible counterforce strike capability would be in its favour. As India's former National Security Advisor Shivshankar Menon has repeatedly asserted that Indian nuclear doctrine is much flexible than it gets credit for,[24] which indicates that Indian officials already have prepared themselves for this doctrinal shift. It has been said that Indian government released only part of its doctrine and most of its nuclear doctrine is in the form of unofficial briefings. Retired Lt. Gen. Nagel, a former strategic forces commander has been an advocate of ambiguous nuclear doctrine and suggested to abandon NFU. Indian Defence Minister Manohar Parikar has also stated that he believed, in his personal capacity, that India should have never declared policy of NFU.[25]

But Indian inclination towards counterforce capabilities have serious constraints vis Pakistan's threat perception. If Pakistan fears that India will disarm it through a first strike, then Pakistan can also take the initiative in its hand, causing massive damage to Indian forces. It may then resort to its assured retaliation posture only without causing much damage to Pakistan.[26] India is still lagging behind in the acquisition of advanced technologies necessary to operationalize its doctrinal shift. Rajesh Rajagopalan has aptly pointed out in his article 'India and Counterforce: a question of evidence' that the views presented by Vipin and Clary are mostly from retired or former officials which does not define the official government policy.[27] Hence, in an alternative perspective no doctrinal shift has occurred and these are all just theoretical puzzles. But there is enough growing technological evidence which supports the Indian flirtations, as

discussed, with counterforce strategy and modifying its doctrine in order to counter the Pakistani nuclear threat.

Implications for Pakistan

If India is actually in pursuit of counterforce ambitions as discussed in this study, then Pakistan may also revisit its nuclear policy. Indian counterforce strategy would have serious implications for the regional and global security. A never ending arms race may ensue as India's growing strategic capabilities is mounting pressure on Pakistan to respond reciprocally.[28] Pakistan would not hesitate to employ all its strategic resources primarily to deter India, yet if it does not work then it may be forced to lower its nuclear threshold. Crisis instability would also threaten the regional strategic stability. Both sides would not be sure who would attack first so any one of them could take preemptive measure and this could cause first strike instability, leading to mutual destruction. Because of the prospect of disarming strike by India, Pakistan may launch its nuclear arsenal first and India would retaliate massively as per its doctrine causing widespread destructing in very large areas.[29]

Disarming Pakistan would not be easy. In fact it would be impossible to disarm it completely. Pakistan according to some reports has also built a large stockpile of nuclear weapons. It is roughly estimated at 165 warheads. Pakistan's mobile delivery systems, underground and dispersed storage sites would be hard to locate by India.

One of the major threat to the deterrence stability in the region is Indian strategy of limited war under the nuclear overhang. Deterrence stability is in place when both the adversaries possess nuclear forces that deter each other so they avoid conflicts which would lead to escalation. But Balakot airstrike after the Pulwama incident in 2019 indicates that the India is willing to risk limited conventional offensive under the nuclear shadow.[30] This is the stability instability paradox in the region which has been reinforced in the Modi regime. The Indian political party in power presently, had brought considerable pressure on Pakistani security by the Balakot incident, without realizing its consequences.[31] It was purposely done for gains at the upcoming election.

To consolidate its position vis-à-vis Indian counterforce intentions Pakistan tested its MIRV capable missile Ababeel in 2017, along with its

battlefield missiles capability. Pakistan built MIRV technology to counter Indian Ballistic Missile Defence system.[32]

Conclusion

Nuclear deterrence plays a pivotal role in maintenance of peace and stability in South Asia. Growing Indian nuclear and conventional capabilities have led Pakistan to build a credible nuclear deterrent against its adversary. This study discussed the impact of enhanced India nuclear capability on its doctrinal thinking and their implications for Pakistan. It assessed that Indian nuclear doctrine has enough flexibility to accommodate counterforce actions. But its notion of credible preemptive first strike may lose its efficacy due to Pakistani countermeasures. India seems to be adamant with regards to maximizing its strategic capabilities and Pakistan would also not stay behind. An arms race would be only logical consequence of the emerging situation.

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