



Delhi Policy Group

Advancing India's Rise as a Leading Power



DPG POLICY BRIEF

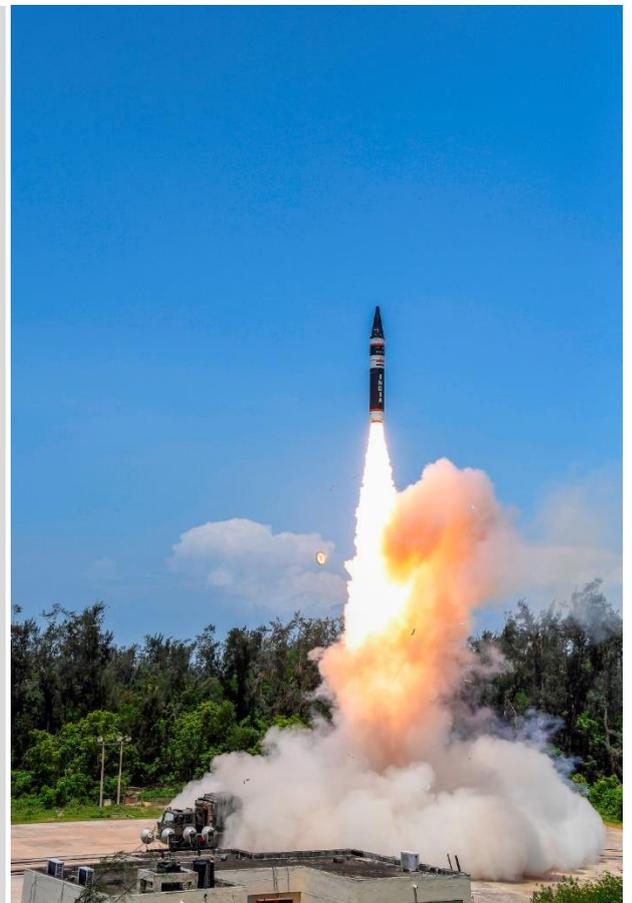
**Rethinking India's Strategic Deterrence
to Address the China Challenge**

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New Generation Agni-P Missile flight tested by the Defence Research & Development Organisation (DRDO) from Dr. A. P. J. Abdul Kalam Island off the coast of Odisha, Balasore, June 28, 2021. Source: Press Information Bureau

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by
Arun Sahgal

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Introduction

The persisting two year long border stand-off in Eastern Ladakh has led to a serious deterioration of India-China bilateral relations, and above all the erosion of trust. Despite attempts at disengagement through a series of military commander-level and diplomatic meetings, there is little progress. China is not only violating existing agreements, it is also consolidating its presence in the disputed pockets along the border by deploying mechanised forces, artillery, air defence, EW and surveillance systems. It is also upgrading its air and air defence posture, alongside deployments of rocket forces in the region. Furthermore, China is undertaking large scale infrastructure development.

There is an estimated deployment of three to four Chinese divisions, comprising some 40,000 to 50,000 troops, which include recently constituted combined infantry and mechanised formations deployed in depth areas of Northern Xinjiang as Western Theatre Command Reserves. It is apparent that China is preparing for the long haul, with no signs of a pull back on the cards.

Importantly, China's aggression is not merely Ladakh centric. Satellite imagery indicates preparations for transgressions in Shipki La in Himachal Pradesh, Barahoti in Uttarakhand, and opposite the Chumbi valley at the India-Bhutan-China tri-junction. To improve logistical management, it is constructing new roads and extending high speed rail close to the disputed LAC in Arunachal Pradesh.

Added to the above build-up is the strategic and economic collusion between Pakistan and China, with the former practically turning into a Chinese proxy.

From all indications, China is attempting to maintain coercive pressure by enlarging the frontage of border intrusions and creating new facts on the ground. These developments should leave no doubt that through large-scale territorial aggression, show of force and collusion, China is signalling its geopolitical intent to coerce and intimidate India. India is directly at the

receiving end of China's expansionism and the latter's current approach is one of outright domination, not of accommodation or co-existence.^{1,2}

The on-going standoff cannot be mistaken as a continuation of the past pattern of border intrusions. The reality is that China perceives India as a rival and a key strategic partner of the United States that needs to be contained and perhaps taught a lesson before the India-US relationship develops into a major challenge. This foreshadows a new reality: the emergence of an aggressive China which is willing to leverage nationalism and military might in pursuit of its core national interests in total disregard of international law and bilateral agreements.

So far, India has followed a doctrine of 'strategic restraint' through counter mobilisation that includes upgrading military posture and infrastructure development to prevent escalation. This, unfortunately, is being read by China as India's failing or weakness, because of increasing political and economic costs, leading to the question of what India's strategic options are in the prevailing scenario of continuing Chinese belligerence. Is India willing to accept an indefinite status quo of continued military deployment and its attendant economic costs, or is escalation inevitable?

So far, the standoff has been marked by the absence of the "Nuclear" word. The issue that arises from this is that if the standoff persists and Chinese intransigence endures, is there a case for some manner of strategic signalling? Can nuclear equations remain outside the ambit of the present standoff?

Against this backdrop, this brief examines the various nuances of strategic stability in the context of the India-China nuclear dyad.

India-China Nuclear Dyad

There are two operational nuclear dyads in South Asia. First is the India - Pakistan strategic equation. Pakistan's doctrinal thinking and capability development are attuned to undermining India's favourable conventional asymmetry through continued nuclear weapons development and the posturing of shallow thresholds in the 'First Use' framework. It is claimed that this is designed to counter India's attempts at exploiting conventional superiority under the doctrine of 'massive and punitive retaliation' by creating space for a 'Limited War under Nuclear Overhang'. Such thinking is also posited

¹ https://www.delhipolicygroup.org/uploads_dpg/publication_file/a-moment-of-reckoning-1835.pdf

² https://www.delhipolicygroup.org/uploads_dpg/publication_file/china-india-border-standoff-and-chinas-india-dilemma-1852.pdf

in response to massive retaliation, should Pakistan's attempts at nuclear brinkmanship and coercion fail. India's proactive doctrine and military modernisation is seen by Pakistan as attempts at leveraging growing conventional asymmetry (even though the Pakistani military believes that it is not as pronounced as it is made out to be), thereby reinforcing the stability/instability paradox.

Second, is the India-China dyad. The Chinese tend to play down bilateral nuclear equations on various pretexts, ranging from attempts at containing confrontation to flexing favourable conventional asymmetry including rocket forces, maintaining impartiality in the India-Pakistan dyad, and being unwilling to discuss nuclear issues with non-NPT states. China's deterrence focus is claimed to be on the US and strategic stability in East Asia. This orientation is being exacerbated by the increasing US-China strategic confrontation and the emergence of new frameworks like AUKUS with a nuclear overhang.

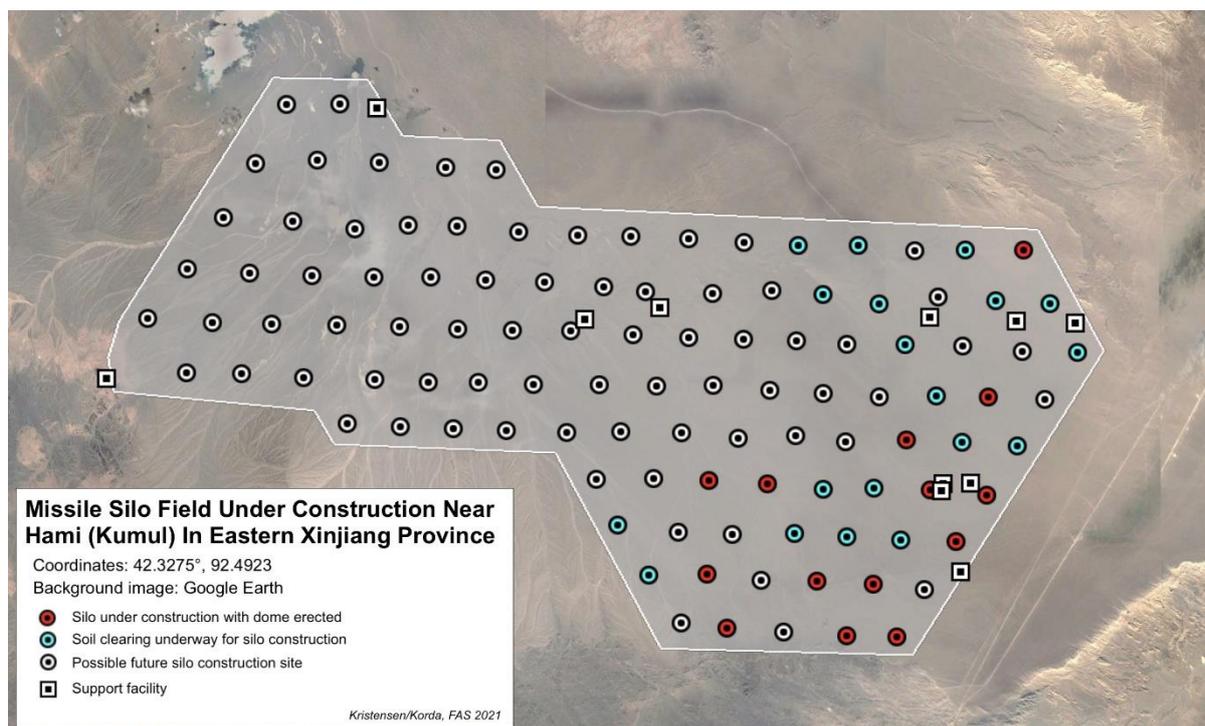
From the Indian perspective, China is no longer a challenger but a major threat with a powerful and credible nuclear capability, which is further enhanced by Sino-Pak collusion. This underscores the necessity of a serious review of strategic stability in an escalatory India-China equation.

China's Nuclear Thinking

In so far as the India-China nuclear matrix is concerned, this is not merely a function of the nuclear capabilities of both sides but has to be contextualised within the overall threat matrix from China, including its collusion with Pakistan. Fundamental to the evolving strategic relationship is the perception of nuclear deterrence, in the overall construct of a strategic challenge from China. Even more important is the question: how does the aspect of conventional asymmetry equate with the "No First Use" (NFU) doctrine of both India and China? Next comes the question of the role, if any, nuclear weapons can play in a crisis escalation matrix of an India-China conflict scenario. Chinese analysts have lately been paying closer attention to development of India's nuclear forces, in particular its nuclear triad, long and intermediate range missiles, and missile defence systems, among others.

Given the conventional force superiority with Pakistan, our policy planners appear reasonably comfortable with NFU and the accompanying doctrine of massive retaliation. The situation with China is in reverse. With strategic asymmetry increasingly unfavourable, how does India maintain deterrence stability based on its fundamental doctrine of 'No First Use'? Is there a case for

seeking similar leverages for deterrence stability like Pakistan is attempting against India? It is useful to look at China's experience and the drivers of its nuclear modernisation in the above context.



Missile Silo Field under Construction in Eastern Xinjiang Province, China.
 Source: Federation of American Scientists.

Trends in China's Nuclear Force Modernisation

China has followed a policy of "Minimum Deterrence", aimed at deterring nuclear aggression and countering coercion. For China, nuclear weapons are part of a "punishment strategy" of assured retaliation and unacceptable damage. Chinese leaders, much like their Indian counterparts, look upon nuclear weapons as tools for deterring nuclear aggression, principally from the United States. The underpinning of their doctrine of 'punishment strategy' is based upon the principles of survivability, credibility and unacceptable damage.

With the US assuming the role of a major protagonist through its Indo-Pacific strategy, China has embarked upon upgrading its nuclear capabilities from silo-based systems, antiquated nuclear command and control systems to more modern digital command and control, and most importantly the development of tunnels and underground firing positions to enhance the survivability of its nuclear forces, backed by Early Warning systems based on space-based ISR capabilities.



China showcases its JL-2 submarine-launched ballistic missiles (SLBMs) for the first time during the National Day parade on October 1, 2019 in Beijing. Source: Global Times

It is this enhanced capability backed by vastly improved situational awareness that is pushing the Chinese shift from mere retaliation to assured second strike, which perforce includes both a qualitative and quantitative increase in its existing arsenal. As a recent US Department of Defence Report on Military Security Developments involving the PRC highlights, China possesses adequate fissile material to expand its nuclear forces from the present 350 weapons to 750 by 2027 and 1000 by 2030. Furthermore, it has developed a fully operational triad with its SLBMs (JL 2/3) having intercontinental ranges from 7,500-12,000 Kms. In addition, it is developing intermediate nuclear forces based on missiles, cruise missiles and hypersonic weapons.

This doctrinal shift can be termed as going from “minimum deterrence” to “**effective deterrence**”. The focus is to ensure that the “nuclear deterrent” is “safe, reliable, and credible” under “any” circumstance, allowing China to mount an effective counter attack.

Additionally, China's nuclear forces are backed by a large conventional missile force capable of precision attacks using advanced space based ISR systems. Another aspect which is often not fully appreciated is the interface between nuclear and conventional missile forces in the PRC. The science of China's second artillery explicitly states that “during future joint combat operations, PLA Rocket Forces will not merely act as the main force in providing nuclear

deterrence and nuclear counter-strike power, but also act as the backbone force in conventional firepower assaults.”

This implies that China, as part of its “non-contact” campaign against India, could use overwhelming missile forces to degrade and disrupt Indian communications and net-centric infrastructure, including critical sensors, forward and intermediate zone airfields, and command centres. These missile forces could also be utilised against counter value targets, given the proximity of heavily populated areas of central and eastern India that lie within the range of Chinese MRBMs. China could also use EMP (Electromagnetic Pulse) and other types of E-weapons in such a campaign.

In terms of command and control, although China professes to be a No First Use (NFU) power, it often creates ambiguity over this status either by omitting its mention in White Papers (2013) or alluding to massive retaliation in case of an imminent attack (Launch on Warning). Even more importantly, China has refused to join any arms reduction initiatives, under the pretext of a massive difference in the size of arsenals (in comparison with the US and Russia), nor is it willing to make its nuclear build up, which remains shrouded in secrecy, more transparent.

These shifts in China's capability and doctrinal thinking have a great bearing on regional stability and the efficacy of deterrence equations. In the China-India-Pakistan equation, India's nuclear concerns also emanate from the China-Pakistan nuclear dyad which is pitched against India. From an Indian perspective, the impact of this nexus is huge: it front-ends Pakistan with its doctrine of nuclear war fighting as a surrogate to contain India and ensure regional strategic balance, while simultaneously allowing China to coerce India through border intrusions and aggressive posturing, leveraging its asymmetric conventional capabilities.

India-China Nuclear Equations and the Impact on Indian Deterrence

There are several areas of commonality in the declared doctrines of China and India:

- The declared policy of No First Use.
- The long-held adherence to credible minimalism.
- The firm demarcation between controller and custodian of nuclear weapons and a rigid centralisation of command authority.

However, these doctrinal similarities need to be seen from the perspective of the close linkage between the Sino-Pak nuclear equations that provide China with a duality to their combined nuclear posture. Therefore, no examination of Chinese nuclear capability, from the Indian perspective, is complete without coming to grips with the symbiotic relationship between the two nuclear doctrines. China's dualistic approach permits it to chisel a Janus-faced policy: one that it presents to the world at large of a No-First-Use, minimalistic, rigidly controlled nuclear power, while on the other hand retaining the First Use alternative through its proxy Pakistan.

Secondly, taking the NFU declaratory doctrines of both India and China at their face value essentially means that nuclear weapons as tools of deterrence are outside the equation of any conventional conflict scenario. Given the growing state of conventional asymmetry, China with its superior conventional and missile force will always be at an advantage in any limited conflict scenario.



New Generation Agni-P Missile flight tested by the Defence Research & Development Organisation (DRDO) from Dr. A. P. J. Abdul Kalam Island off the coast of Odisha, Balasore, June 28, 2021. Source: Press Information Bureau

Next is the question of the functional effectiveness of Indian deterrence vis-à-vis China. If counter value targeting strategies are at the heart of respective nuclear responses, India is clearly at a disadvantage. The Indian heartland of central and eastern India, comprising some of its most populous states and strategic assets, is within the range of Chinese MRBMs and even SRBMs. On the other hand, the coastal belt of the Chinese hinterland is well outside the ranges of the current Indian arsenal, till such time as the Agni V MRBMs become fully operational and available in large numbers. This differential undermines the Indian doctrine of punishment and massive retaliation. India will have to build a more credible MRBM and even ICBM capability, together with long range sea based strategic deterrence, apart from upgrading space based ELINT, tracking and navigation systems, all at heavy economic costs.

India also cannot overlook China's overwhelming conventional missile capability and credible space based C4ISR systems. China could employ its Theatre-Range Ballistic Missiles (TBMs), equipped with manoeuvrable re-entry vehicles (MaRVs), and Anti-Ship Ballistic and Cruise Missiles backed by cyber and information attacks, to degrade both Indian command and control systems and launch vectors, without technically crossing the nuclear threshold, creating both doctrinal imbalance and imposing a greater onus on India for survivability. India has no option but to develop a credible response capability and to redefine clear redlines and escalation thresholds.

NFU Strategy and Second-Strike Credibility

The Indian nuclear doctrine presupposes creating conditions that will ensure the survival of the country's nuclear arsenal against an adversary's first strike, whether it is counter value, counter force, or both. One of the key areas of concern for Indian planners is that while it is reasonably assumed that a major part of its nuclear weapons would survive, the same cannot be guaranteed for the delivery systems. Ballistic missile systems are increasingly becoming vulnerable to new satellite-based intelligence gathering capabilities available to nations either directly or through allies who are in possession of such assets. The challenge is to find ways and means to ensure that road and rail mobile missile systems can neither be detected nor attacked. Insofar as aircraft are concerned, flight refuelling capability and flexibility in weapon storage provide early dispersal capability to survive the first strike.

Nuclear submarines are indeed the most survivable assets when equipped with SLBMs. It is for this reason that India has invested so much to develop a credible Triad. Silos for storage of ballistic missile systems undoubtedly enhance survivability, but are expensive to build. India has adopted the route of land and

rail mobile systems. These can be initially located in depth areas and appropriately redeployed, thereby preserving the arsenal from a decapitating counter force strike. Adequate concealment during movements and dispersal and effective control in an increasingly transparent environment poses a great challenge.

Lastly, there is the perception that deterrence does not imply matching weapons for weapons to achieve the desired degree of deterrence. Even fewer weapons, when backed by a robust and resolute command authority, could signal a high deterrence value. Pakistan's TNWs and rapidly developing nuclear arsenal, as well as India's growing conventional asymmetry vis a vis China, both need to be adequately factored. For instance, a response calculus to TNWs based on massive retaliation looks good doctrinally, but is it politically feasible? What is the appropriate thinking on graduated response and its perceived efficacy?



Maiden Flight Test of Indigenous Pralay Surface-to-Surface Missile by DRDO from APJ Abdul Kalam Island, December 22, 2021. Source: PIB

Similarly, how does India factor strategic deterrence vis-à-vis China? Is there a case for India, too, going the TNWs route to deter China? How do we deal with growing Chinese precision missile strike capabilities, particularly in an operational theatre? More importantly, is there a case for "Prahara" or "Pralay" being converted into an Indian dual use "Missile Strike" force?

Employment of Options and Communication of Intent

Signalling and posturing are important perspectives of a nuclear credible deterrent. India projects an image of being a minimalist nuclear weapon state. There is a growing perception among India's strategic community that it needs to be more forthcoming about its nuclear force-in-being, credibility of its command authority, and above all the political resolve. Absence of such a robust perception has the potential for miscalculation, resulting in an "unintended" escalation.

India, on the other hand, wants to convince the world at large of being a rational nuclear weapons state. While this has undisputedly won us accolades, in the game of nuclear brinkmanship such an approach is only likely to convince adversaries of a limitation of options, lending itself to coercion and shrinking choices.

Translated into the India-China dyad context, this means that India must convey a clear understanding of its "redlines". No doubt the Chinese nuclear forces remain US-centric, but their range and deployment pattern cover an arc that includes most of India. China possesses adequate strategic mobility to shift fairly large components of its conventional strategic missile force from the Taiwan theatre to Tibet. The ability of this sizable force hitting India's population centres in central and eastern India, and other strategic and operational targets, needs to be adequately countered. India has to clearly define an interface between its conventional deterrent and its nuclear posture, as part of a structured policy, to convey an effective Indian response.

Conclusion

This brief has attempted to provide a broad overview of China's nuclear doctrinal thinking and its implications for India. Based on the scenarios outlined above, there is a strong case for integrating nuclear deterrence in India's overall strategic posture, particularly against China. India has to be clear about its redlines and how these are impacted by China's attempts at leveraging its conventional asymmetry. Equally important is developing credible missile capabilities that pose a strategic challenge to China's hinterland. It would be a gross strategic mistake for India to allow China to coerce India in both

conventional and nuclear domains, clearly wresting the advantage in escalation control. The planners and policymakers of India's nuclear deterrence doctrine must act now to remedy and rebalance the evolving strategic scenarios.



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