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The Drivers of Indian MIRV TEMPTATIONS

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Introduction

On 11 March 2024, India tested its Agni-5 ballistic missile, codenamed 'Divyastra.' This missile boasts a range exceeding 5500 kilometers, making it India's longest-range missile.

Regarding its firepower, the Divyastra carries Multiple Independently Targetable Re-Entry Vehicle (MIRV) technology, allowing it to deliver multiple warheads to separate targets with a single launch. This technology will significantly strengthen India's nuclear deterrence capabilities as MIRV technology enables Agni-5 to carry several nuclear warheads at once so they can split up and hit different targets.

The continuous increase in numbers of Indian nuclear warheads, building Ballistic Missile Defenses (BMDs), and acquiring MIRV capability is an operational extension of Indian counter-force pre-emptive nuclear strikes, which can lead to the triggering of a potential nuclear war with catastrophic consequences for the region and beyond.

This will be a sharp 'coup-de-grâce' to the strategic stability in the Pakistan-India dyad, where the onus of maintaining strategic stability will rest with Pakistan through a measured and restrained response.

What are MIRVs?

Besides overwhelming ballistic missile defense shields, MIRVs are instrumental in destroying military targets successfully. Such capabilities are also termed Hard-target-kill (HTK), Which is a missile system's capacity to neutralize fortified targets like missile silos, command and control centers, and leadership bunkers.

MIRVed ballistic missiles carry a payload holding multiple warheads. Each warhead can be aimed independently to hit multiple targets simultaneously. These multiple targets can be released post-boost stage independently on different trajectories and targets and at different speeds.

The induction of HTK capabilities through MIRVs, first developed by the United States, increased accuracy, guidance, control, and precision-fueled counterforce targeting.

This resulted in an arms race between the United States and the Soviet Union, which turned arms control and Strategic Arms Limitation Talks (SALT) into a mere façade. Besides the United States and Russia, the United Kingdom, France, China, Pakistan, Pakistan, and Israel and have MIRV capability – with India recently joining the club.

Indian MIRVing of Missiles

Since the BJP came into power, there has been a rising trend in government circles to re-think nuclear doctrine from 'No First Use' (NFU) to 'First Use.' As the elections are drawing closer and PM Modi wants to be re-elected, he has worked on this shift by developing offensive military capabilities and a willingness to employ them – marking a departure from previous principles.

Indian officials have been advancing the logic of counterforce targeting and force multiplication, and they have begun to lay out exceptions to India's long-standing NFU policy to allow for the preemptive use of nuclear weapons.

In 2013, Indian Defence Research and Development Organization (DRDO) Chief Dr VK Saraswat said, 'Agni I, Agni II, Agni III, Agni IV, Agni V, getting into production mode, the next logical corollary as far as the long-range ballistic missile deterrent capability of this country is concerned, we will switch over to force multiplication.

In the case of ballistic missiles, force multiplication will be by way of MIRVs. Our design activity on the development and production of MIRV is at an advanced stage.'

In 2017, the DRDO announced its tentative plans to begin test flights of the Agni-VI, possibly equipped with MIRV capabilities. On March 11, 2024, India successfully tested a new Agni-V missile with MIRV having a range above 7000 kilometers. This Intercontinental Ballistic Missile (ICBM) covers China, Pakistan, Russia, Israel, North Korea, Europe, and US territory

Main Drivers of Indian MIRV Temptations

It is essential to analyze the true drivers of Indian MIRV temptations in order to understand the motivations behind the Indian pursuit of advanced nuclear capabilities and their potential impact on regional security dynamics.

Firstly, Indian temptation reflects that India is working on the principle of 'techno-nationalism,' where the government has linked its security and economy to technological innovation through the 'Made in India' initiative. This strategy has been an extension of Indian ambitions to garner regional and global technological supremacy.

Secondly, India acquired nuclear weapons for prestige and to gain a higher seat on the table of decision-makers in the international system while also furthering domestic politics. To some extent, India reached closer to its prior objective and bagged 13+ nuclear deals and imports of nuclear and military material and equipment as it is the 'Coup-de-Cœur' of the US as a counterweight to China.

This MIRV capability will further enhance Indian prestige as a holder of such an advanced military capability. President Draupadi Murmu said that the first flight test of Agni V under Mission Divyastra marks a significant milestone in India's march towards 'greater geo-strategic role and capabilities.'

Thirdly, on the domestic political front, elections in India are just around the corner, and PM Modi seems to take praise for this significant achievement to cash this in elections to get reelected.

Also aimed at a domestic audience, the indigenous development and testing were termed 'a firm step in the direction of India becoming Atmanirbhar,' i.e., 'Self-reliant India,' a term used by PM Modi to mirror the 'Make in India initiative.'

Fourthly, India is opting for counterforce strike capabilities, while the military leadership and scientists are already aiming for offensive doctrines and capabilities. Indian MIRV capability will alter Indian targeting preferences as well as operational procedures, thereby impelling a long-awaiting Indian doctrinal and policy review.

Indian nuclear modernization also reflects that it is moving towards warfighting capabilities. India already has missiles that can target its adversaries and inflict unacceptable damage.

Hence, increasing its capabilities is redundant and only signals towards a warfighting doctrine. For instance, India will be able to opt for an increased force ratio for the first strike through MIRVs. This is so because, with only one missile, India will be able to inflict more damage on its adversary.

The acquisition of MIRV capability will allow India to attack Pakistani hard targets in a first strike.It will also pave the way for India to opt for damage limitation if deterrence fails.

Hence, India is moving towards counterforce targeting, as the idea of counterforce capabilities is to severely damage an adversary's ability to retaliate.

This, coupled with India's assured second-strike capability, can severely damage deterrence between Pakistan and India by provoking Pakistan into opting for countermeasures to maintain deterrence. This scenario is a recipe for increased instability in the region.

Fifthly, the Indian acquisition of MIRVs is portrayed as a counter to Chinese BMD. China has not responded to this Indian acquisition.

Nevertheless, it has categorically stated that such Chinese developments are defensive in nature and are not directed against India. China practices a 'kezhi' (restrained) nuclear posture.

According to many Western scholars, China opted for its BMD program in the 1960s to counter the US, not India.

At the same time, India's BMD program was initiated in 1996 through the acquisition of Long-Range Tracking Radar (LRTR) decades after Chinese capabilities. In 2015, China deployed DF-5 ICBMs with MIRV capability. Nevertheless, Indian indigenous BMD was tested in 2007.

In 2023, India deployed three batteries of its S400 missile systems imported from Russia. Hence, the preposition of Indian MIRV and BMD capabilities to counter China does not hold ground.

Scholars are also of the view that Chinese BMD is not as advanced as it could trigger an Indian response. Liu Zongyi, Director of the Center for South Asia Studies at the Shanghai Institute for International Studies, said that the Indian portrayal of this test against China is an Indian attempt to curry favor from the West in its competition with China.

He said that China remains unconcerned as there are generational gaps between India and major powers like China, Russia, and the US.

China possesses HQ-9 long-range SAM, which can intercept 500 km range ballistic missiles, is reportedly developing an HQ-19 interceptor to intercept ballistic missiles of up to 3000 kilometers range in low-orbit, and tested a land-based, mid-course SC-19 Anti-Ballistic Missile Interceptor to counter ICBMs in April 2023.

Furthermore, China is the only country to have an unconditional NFU with no caveats, unlike the Indian NFU.

Interestingly, India has built a narrative of two-front war theory to garner US and Western diplomatic, political, and military support for an unchecked modernization of its nuclear weapon program.

Nevertheless, the primary focus of all three of the Indian Army's Strike Corps, as well as 70% of the Indian Air Force, is directed towards Pakistan.

Furthermore, a significant proportion of India's missile arsenal was explicitly tailored for Pakistan, owing to their constrained ranges.

Sixth, Indian MIRV capability has also been displayed as a clear message to Pakistan and is said to contribute to Indian deterrent capabilities vis-à-vis Pakistan. However, Pakistan does not have a BMD against which India would have strived to acquire this capability.

Pakistan’s acquisition of MIRVs was defensive in nature and essential to counter Indian BMDs under its modest nuclear program.

Nevertheless, it does not make sense for India – which has a No First Use (NFU) doctrine – to acquire such a capability as Pakistan does not have a BMD. This reflects that India is pursuing ‘deterrence by punishment’ while planning to move to First Use nuclear doctrine.

Implications of Indian MIRV Temptations

The implications of India's pursuit of MIRV technology extend far beyond its borders, stirring concerns and considerations both regionally and globally. As India advances its nuclear capabilities with the successful testing of MIRV-equipped missiles, questions arise regarding the impact on regional stability, deterrence dynamics, and the broader nuclear landscape.

Some analysts have suggested that India has downplayed the Agni V's 7000 km+ range to surpass international pressure and criticism. Indian army officials have repeatedly suggested extending the range to 10,000 to cover the whole of China. The missile's actual range is kept confidential, which shows that work is still being done to increase it accordingly.

Such enormous firepower, with ranges reaching Europe, Russia, North Korea, and Israel, will be challenging for major powers if India diverts from its primary course as the so-called Indo-Pacific partner to the US.

Indian nuclear and military modernization reflects that India is wargaming a scenario where India can have a deterrent relationship with other nuclear weapon states in the future. Such Indian nuclear and military modernization well beyond its security needs will need to be considered by major powers in their security calculus.

These missiles will continue to undergo technological advancement through further testing. Indian technological advancements, such as miniaturized nuclear warheads for MIRVs, will set the ground for the possible resumption of Indian nuclear testing.

If India resumes nuclear testing, this will necessitate Pakistan's response to follow suit. Indian modernization of its nuclear triad with a vast array of delivery systems, including MIRV capability, reflects a further increase in a stockpile of fissile material. Over decades, India has accrued huge stocks of reactor-grade plutonium (RGPu).

According to estimates by independent scholars, India has the capability to produce a minimum of 356 nuclear weapons. Even after its fuel needs are met for its Fast Breeder 500MW Reactor (FBR), India can produce a maximum of 493 warheads. By 2039, India will be able to add six more FBRs, adding a surplus of 28 warheads yearly.

India is also building a secret nuclear city at Challakere, Karnataka, to add more enriched uranium fuel for military purposes. Rattehalli Rare Materials Plant (RMP) and Bhabha Atomic Research Center's (BARC) facilities collectively amount to 42,300 Separative Work Units (SWUs) of Indian enrichment capacity per year. India only requires 5835-10375 SWUs for its planned SSBNs.

This amounts to only 24 percent of India's total capacity. Hence, the rest of the 75 percent capacity, which is 31,925 SWUs – even if used for the rest of India's nuclear weapons, including MIRVs – will leave room for extreme nuclear buildup.

To top this, the secret Challakere nuclear city, when operational, will enhance Indian enrichment capacity by up to 100,000 SWUs per year. This is the rationale for India's reluctance to add many of its unsafeguarded civil facilities under International Atomic Energy Agency (IAEA) safeguards.

According to Pakistan's Ministry of Foreign Affairs, India also violated Article II of the Agreement between Pakistan and India on Pre-Notification of Flight Testing of Ballistic Missiles by notifying Pakistan, albeit less than three days in advance about this test.

It is also unclear if – as a signatory – India provided pre-notification to commitment to The Hague Code of Conduct (HCOC) for its testing of MIRV missiles as it voluntarily committed to do so.

Since Agni V is canisterized, the warheads will be in mated form rather than installed before the launch. This canisterization will, therefore, help India move towards high levels of readiness while further decreasing the short flight time.

Because of such a short time, this situation can also become a 'modus operandi' for preemption or miscalculation in a crisis, which can have drastic consequences for the region and beyond.

In sum, due to India's geographical contiguity with both China and Pakistan, mated warheads, and ready arsenal, once India opts to use its MIRVs, there will be no time for Kahn's rungs of an escalation ladder. Nuclear thresholds will be crossed in minutes, and nuclear use will be the ultimate escalation.

After India canisterized its missiles, deployed its missiles on Ballistic Missile Submarines (SSBNs), and acquired BMDs, the Indian military – focused on operational capabilities of nuclear weapons – will drive the deployment of the Agni V missiles as the next step. There is a strong indication that India will move towards equipping its SSBNs with MIRV missiles.

This will be a recipe for decreased confidence in deterrence between Pakistan and India. Indian acquisition of MIRVs and BMD, coupled with its assured second-strike capability, will be destabilizing in South Asia until Pakistan also has an assured second-strike capability.

The repercussions of such capabilities will be twofold. Firstly, India will be willing to go to conventional war under a nuclear overhang. It will be so because India will have confidence that it can counter any Pakistani nuclear first strike. Hence, India may opt for conventional strikes, including so-called surgical strikes, vis-a-vis Pakistan.

Secondly, through such perceived confidence in its capabilities, India can also opt for a first strike against Pakistan in the future. This will damage the already fragile strategic stability between Pakistan and India, where the onus for stabilizing deterrence will rest with Pakistan.

Although Pakistan has always given a restrained response to Indian attempts, it is not a guarantee that Pakistan will not respond to Indian offensive attacks in the future. Pakistan may opt for its declared policy of quid-pro-quo-plus against any future Indian limited attack.

Outlook for Pakistan

Indian MIRVs will have a profound impact on Pakistani security calculations. In order to restore deterrence, the onus of a calculated and restrained response will rest with Pakistan.

Although Pakistan will not get involved in any arms race, it still has to opt for countermeasures, thereby seeking to redress the imbalances caused by Indian nuclear modernization.

Major powers have invested in spaced-based interceptors to deter, detect, and destroy MIRVs. Nevertheless, Pakistan is constantly opposed to the weaponization of space. Pakistan may gauge its own options to detect, deter, and defeat Indian MIRVs by advancing its own MIRV capability.

Furthermore, it will also be challenging to detect and kill these missiles, albeit the idea of US 'glide breaker technology' to counter HGVs that can carry MIRVs can be researched. Pakistan Air Force has indicated that it has hypersonic-capable missiles, which could be added to the countermeasure calculus.

Pakistan can also opt for Conventional Prompt Regional Strike (CPRS) to foster long-range conventional weapons that could reach the whole of Indian territory in a short period. Tout ensemble, Pakistan will have to enhance its MIRV capability.

As deterrence is dynamic, what may be yielded as enough may not be sustained in the future if an adversary modernizes its nuclear technology. Hence, Pakistan may need to acquire or develop a BMD of its own in the light of growing threats from its neighbor.

The continuation of Western powers' policy of exceptionalism for their vested interests will further fuel Indian nuclear modernization. This will be a sharp coup-de-grâce to the strategic stability in the Pakistan-India dyad.

When Pakistan tested MIRVs, though as a defensive measure, there was in-depth criticism by Western scholars. It is yet to be seen how nuclear non-proliferation pundits, major powers, and scholars will react to this fresh Indian development.

Nonetheless, now is the time for all other stakeholders to pressure India to show responsibility, give diplomacy a chance, and opt for dialogue with Pakistan to promote bilateral risk reduction and nuclear confidence-building measures in South Asia. It is the only way forward, as there are no winners in a nuclear war.

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