INDIAN BALLISTIC MISSILE DEFENSE (BMD) SHIELD AND SPACE WEAPON AMBITIONS: IMPLICATIONS FOR SOUTH ASIAN STRATEGIC ENVIRONMENT

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Abstract

South Asian strategic environment pivots around threat perception and security dilemma vis-à-vis India and Pakistan. It encompasses all elements of strategic environment theory i.e. Volatility, Uncertainty, Complexity and Ambiguity (VUCA).The rapid technological transformation and subsequent doctrinal shifts reflect the causal effects. However, the strategic stability largely depends upon the robustness of deterrence stability which is being eroded in purview of armed forces' modernization in the South Asian region. India has been given discriminated memberships of Missile Technology Control Regime (MTCR).Wassenaar Arrangement (WA) –and Australia Group (AG) three out of the four export control cartels, which would enable India to put its BMD program and space weapons ambition on a fast track, thus eroding strategic stability and deterrence equation in the region. In addition, India is being projected as counter weight to rising China at the cost of peace and stability. The article puts in perspective elements of strategic environment with regard to South Asia and epitomizes the causal effects of the Indian operationalization of BMD shield and space weapons which could initiate a new wave of arms race thus compromising South Asian strategic stability.

Keywords: Strategic Environment, Revolution in Military Affairs, Space Weapons, Ballistic Missile Defense (BMD), Export Control Cartels.

Introduction

The transitional nature of international power structure results in the emergence of new power centers, blocs and states. These state actors pursue revisionist policies to bring the balance of power at the regional level in their favor to become a new power center. The international hierarchy of states is determined by Military and Economic power status. Therefore, great power aspiration is coalesced with modernizing military capabilities. Theoretically, structural realists believe that anarchical international system instigate states to achieve absolute power. The rationale for states to acquire unlimited power is

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embedded in their intensions to seek great power status in international system.[1] South Asia is no different.

The paper puts in perspective elements of strategic environment theory on South Asia where security driven competition between India and Pakistan is in full swing. Subsequently the paper enlists regional and global implications of India's aspiration of acquiring military advanced technologies like Ballistic Missile Defense (BMD) System and outer space weapons through its memberships of Missile Technology Control Regime (MTCR) and Wassenaar Arrangement (WA) respectively. In the end a doable and much needed way forward is suggested to address the threats posed by the BMD shield and space weapons to the South Asian strategic stability and environment.

Strategic Environment - A Generic Perspective

Strategic Environment is best defined by Yarger as;

> *A world order where the threats are both diffuse and uncertain, where conflict is inherent yet unpredictable, and where our capability to defend and promote our national interests may be restricted by materiel and personnel resource constraints. In short, an environment marked by volatility, uncertainty, complexity, and ambiguity (VUCA).*[2]

Strategic environment comprises of both internal and external relations, existing threats, risks, and opportunities, and gives a direction to the international relations of a state. It is a dynamic system which evolves with the macro and micro levels of circumstances. It can also be termed as a force, which operates in a complex international political system and remains committed to maintain its equilibrium. Strategy is ways and means to achieve policy, but the environment is crafted in purview of desirable and undesirable effects. Succinctly, an environment is characterized by VUCA which is dynamic in nature and oscillates between stability and instability.

Strategic Environment - South Asia

India's strategic thinkers derive inspiration from ancient strategist Chankaya Kautilya who in his book Arthaashastra laid down the principles of diplomacy and war. Indian strategic thinking reflects Chankaya's six fold policy which directly impact upon South Asia's strategic environment. The six fundamental principles are Policy of Peace, Strategy of War, Policy of Neutrality,

Strategy of Marching, System of Alliance, and Double Policy.[3] These principles are evident in India's foreign and defense policies.

Nehru laid down the foundation of Indian foreign policy and advocated the principles of non-violence and peace. However, this policy was transformed in 1962 after Sino-India war, where India incorporated the principles of real politik. Indo-Pak wars of 1965 and 1971 are the manifestations of Kautilya's waging wars policy i.e. wage war when you are superior in capabilities vis-à-vis enemy. India's out of proportion military spending[4] and continued military modernization besides evolving war fighting doctrines for instance, Cold Start and Pro-active doctrines are indicative of its offensive posture.[5]

South Asia is peculiar in its outlook as it comprises of proximate nuclear weapons states i.e. China, India and Pakistan whose relationships are shaped by mutual deterrence. The strategic triangle between the three define strategic environment of South Asia.[6]

South Asia nuclear competition became a reality in the aftermath of nuclearization. The deteriorated relations between India and Pakistan determine the future of millions of people of the subcontinent.[7] The political and security dynamics is continuously evolving in bilateral relations of India and Pakistan.[8] The historical relationship between the two remained in doldrums since their inception in 1947 and they have been at loggerheads with each other. Technological advancements and advent of nuclear weapons in the region have introduced a new dimension to the conflict riddled bilateral relationship i.e. Mutually Assured Destruction (MAD) scenario.[9]

Nuclearization of South Asia has induced caution in both Indo-Pak relations and policies towards each other.[10] The volatility and chances of inadvertent escalation demand to keep crises stability mechanism intact.[11] India and Pakistan are in the process of assimilating the strategic implications of the nuclearization of South Asia[12] and are aligning their doctrines with evolving RMA. There could still be miscalculations, of course, but both sides have demonstrated awareness of the risks posed by escalation and took compromises to avoid such risks.[13] Thus, the parity between India and Pakistan nuclear equation is imperative for South Asian peace and stability.

Elements of Strategic Environment Theory and South Asia Volatility

VUCA thinking maintains that the strategic environment is subjected to swift and volatile change and reaction, often characterized by violence. In South Asia, the strategic environment remains hostage to factor of volatility. The nature of relationship between India and Pakistan is characterized by mistrust and hostility.[14] Their past experiences are bitter as they have fought wars and experienced low intensity conflicts. The escalation ladder is less time taking and there is always an element of inadvertent escalation.[15] The composite dialogue process between the two states is stalemated. The only working strategic communication link is between National Security Advisors (NSAs) of the two states besides a few tactical level communication links such as occasional talks held between Pakistan Rangers and Indian Border Security Force (BSF).[16] There is yet another hot-line which is between the two foreign secretaries;[17] however, it generally remains dormant. Preference of NSA hotline over foreign secretaries' one, amply illustrates primarily security based bilateral relations between the two nuclear armed neighbors and that, there is very less space for the diplomatic channels to take the roots in building grounds for the better bilateral relations.

Uncertainty

Uncertainty also embodies the South Asian strategic environment, which is intrinsically challenging and unhinged. Technological transformation, RMA and doctrinal shifts South Asia is undergoing in the region. It's but natural that enhancement of security by one state in-turn reduces the security of others in vicinity.[18] The action-reaction syndrome is common feature of South Asian stability and strategic environment. Each strategic move either in terms of new weapon system's introduction in the region is bound to receive counter measures that adds to the volatility and uncertainty to the South Asian strategic environment.

India is excessively building its military muscles while on the parallel track champion peace and Gandhi's non-aggressive narrative. India tries to hedge behind the Gandhi's saying, "Non-violence is the first article of my faith. It is also the last article of my creed".[19] India, for instance, professes 'No First Use (NFU)' nuclear posture[20] which goes well with the Indian 'Smiling Budha' approach followed in its 1974 testing of nuclear device.

Complexity

The South Asian strategic environment is extremely complex as well. Sometimes the environment is so complicated and entangled that complete understanding and permanent solutions are improbable to be prioritized.

Overall, contemporary political system is identified by its anarchic nature; in which all sovereign states remain conscious of their survival; however, ironically, once survival is assured, states do not hesitate to opt for hegemony. It could only be achieved if maximization of hard power is pursued relentlessly. In South Asian perspective, complexity of the region stems from Indian quest for the great power status. India after attaining major regional power status is also likely to exercise hegemony thereby dictating and imposing its political will on its neighbors. As an Indian military analyst notes,

> *'India has achieved a near super power status.... to consolidate this mantle of responsibility, and also to safeguard our political and economic aspirations within the region, we need a viable military capability, which besides being a deterrent force, could be used in a 'first strike' scenario if the need arises.*[21]

Recently, in a presentation at Stimson Centre Washington, Gurmeet Kanwal acknowledged Indian desire of getting major power status. He stated:

> *"India is all set to join world's major powers' club through attaining capacity to undertake 'out-of-area' operations."*[22]

The optimism of becoming a major or super power sounds good but it has a cost to pay as all revisionist approaches are bound to be resisted. Evidently, India is exponentially building its military muscles not only in numbers but in quality as well. Resultantly, Pakistan feels insecure and tries to balance the stability equation by matching the perceived threat by appropriate and corresponding counter measures.

In addition, the history of South Asian region has remained thunderous. Super powers divergent interests in the region have added to the complexity of the region besides making it unpredictable.[23]

Ambiguity

The South Asian strategic environment is also characterized by ambiguity. The environment can be interpreted from multiple perspectives with

various conclusions that may suggest a variety of equally attractive solutions, some of which will prove to be good and others bad.

South Asia presents entirely different picture than Cold War. The détente is missing. There is no arms control bilateral mechanism exists between India and Pakistan. The learning nuclear curve is slow. In a complex system, the numerous independent elements continuously interact and spontaneously self-organize and adapt for survival in increasingly more elaborate and sophisticated structures over time. Cause and effect are not proportional to each other and often cannot be related.

Revolution in Military Affairs (RMA) and South Asian Strategic Environment

The anarchic international system warrants sovereign acts for survival which include invention of new weapon systems through RMA. The South Asian strategic environment is very much affected by the military modernization. Academically, there are mainly four transformations which encompass RMA process i.e. induction of new weapon systems, formulation of corresponding doctrines for effective employment of newly invented or inducted weapon systems, increasing the capacities of armed forces in terms of quality and quantity and lastly, the impact on society.[24] In nutshell, RMA is technology driven.

The contemporary advanced technological era has further enshrined the importance of RMA which is being considered to be an important tool for meeting the strategic objectives.[25] South Asia region is also affected by the technological transformations where new weapons are being introduced and researched.

India tops the list of arms importers and has been the largest importer of the weapon systems from 2012-2016.[26] Indian acquisitioning of the Ballistic Missile Defense (BMD) shield through foreign defense cooperation ventures as well as indigenous production could severely impact upon strategic stability of the region as the RMA always leads to new conceptual approach to war.[27]

Indian Discriminatory Memberships of the Missile Technology Control Regime (MTCR),Wassenaar Arrangement (WA) and Australia Group (AG)

Indo-US civil nuclear deal of 2005 changed the strategic scenario of South Asia. It did not only offer India with access to civil nuclear technology at par with other Nuclear Suppliers Group (NSG) members but also included provisioning of access to technology related to BMD shield. In fact, BMD cooperation has been one of the main elements of the Indo-US nuclear deal.[28] The discriminated Indo-US nuclear deal was followed by the US commitment and efforts to get India full membership of the four technology control cartels:[29]

- NSG- controls nuclear technology proliferation
- Missile Technology Control Regime (MTCR) - exercises control over missile related technologies
- Wassenaar Arrangement (WA) - controls transfers of dual use technologies besides conventional arms those could contribute to destabilize a region
- Australia Group (AG) - deals with export controls over Chemical and Biological weapons

It may be recalled that it was Indian Peaceful Nuclear Explosion (PNE) of 1974 which resulted into creation of the NSG.[30] Despite the Indian track record of diverting civil nuclear technology towards making Budha to Smile thereby opening the South Asian region towards overt nuclearization, the US support for Indian membership of the NSG and other export control regimes is discriminatory and destabilizing for the region especially in the context of Indo-Pak traditional security based competition.

Due to the US perusal and support, India has until now won the memberships of three export control cartels i.e. MTCR in June 2016,[31] WA in December 2017[32] and Australia Group (AG) in January 2018 as stepping stones towards full membership of the most desired NSG membership.[33]

Indian Wassenaar Arrangement (WA) Membership and its Space Weapons Ambition

As an indicator of Indian double policy, it has been accusing US for being part of a triangular nexus comprising of US, China and Pakistan that posed

threat to Indian interests in South Asia. It had also been making political pressures on US by rhetoric such as,

> *"India and the US [bilateral relations would remain] …at strategic cross roads and US policy regarding dual-use will be the real sign of US acceptance of the China factor in Indian strategic behavior".*[34]

The same has now actualized and India has been given access to the dual use technologies through WA membership. Indian membership of WA implies that India would be at free will to divert dual use technologies to exponentially advance its military modernization programs. For instance, WA membership would enable India to advance its space program which if desired so, could be diverted towards building space weapons. Space weapons are perceived to be an important tool to exercise control over outer space - the strategic center of gravity for extending power and strategic reach.[35] The evolving numbers of space faring and aspiring nations have increased the corresponding interests which virtually swelled the probability of space based conflicts.[36]

Indian MTCR Membership and its BMD Program

Indian scientists' community has already claimed to have developed its indigenous multi-layered consisting of Advanced Air Defense (AAD) and Prithvi Air Defense (PAD) systems, capable of engaging missiles in exo and endo atmospheric domains with a joint kill possibility of 99.8%.[37] The indigenously built BMD shield capability makes it member of elite BMD capable club inter-alia the US, Russia, Israel and China.[38] In addition to the above narrated traditional BMD shield capability, India is also carrying out an extensive research and development for acquiring laser based BMD shield which would be capable of engaging targets at the speed of sound.[39]

BMD is directly linked to the viability of strategic stability and there has been a debate with regard to deterrence and defense differentiation. As Wyn Q. Bowen claims that Europeans during the Cold War and thereafter has been supportive of MAD based deterrence instead of building missile shield. On the flip side, the US has been supportive of adding BMD shield to deterrence quality for filling credibility gap especially in the South Asian strategic environment.[40] With regard to India, it is also seen in favor of US way of adding credibility to deterrence value by introducing BMD shield to its arsenal i.e. adding flavor of

defense with deterrence. MTCR blessed access to high end technologies to India would augment subject Indian approach.

Political and Diplomatic Implications of MTCR and WA Memberships on South Asian Strategic Stability and Environment

Indian evolving BMD shield, although a non-starter has a threat value for the Pakistani deterrence equation and merited a response as per the action-reaction syndrome attached to the South Asian strategic environment. Pakistan, thus tested its MIRV based *Ababeel* ballistic missile as a counter measure to Indian BMD shield program[41] - an initiation of the missile race in South Asia. Missile race would not remain restricted to missile arena only but could spill over to the nuclear fissile material side as well.

BMD shield could put Pakistan command and control apparatus into a kind of nervousness and also add to the denseness of the fog and uncertainty related to war. It could bring into play nuclear brinksmanship and lowering of nuclear threshold. Incentive for launching preemptive strikes both in conventional and unconventional terms could increase manifold for India and on the parallel, same rate would be there for Pakistani military planners to relegate their claimed restrained approach in favor of preventive strike – a nuclear preventive strike. Whether preventive or preemptive strikes, both kinds are least desired in a heavily populated region.

Way Forward

Out of proportion strengthening of India as part of US recently declared strategy of 'Afghanistan and South Asia' is detrimental to South Asian strategic environment and stability. The US is all set to empower India vis-à-vis Pakistan and China while keeping Afghanistan issue in front. The claim can be substantiated by the new US vice President's visit Afghanistan in December 2017.[42] Though not exhaustive, two of the major stability seeking measures are:-

Bilateral Treaty or Moratorium on Non-Acquisitioning of Space Weapons

India has a full fledge space program and it is in advanced stages of securitizing the outer space. Scientists ex Indian Space and Research

Organization (ISRO) and other military/ political leaders have indicated the Indian will to have space weapons for countering threat against Indian space assets. On the other side, Pakistan's outer space program is in evolving phase and in process of developing own satellites. Indian space weapons ambition could lead to another destabilizing act and pose a direct threat to Pakistan's command and control mechanism. Foregoing, a bilateral moratorium or treaty is the need of time so as to address the evolving security threat right in its initial stages.

Bilateral Declaration on Non-Deployment of Anti-Ballistic Missiles (ABMs)

Pakistan and India maintain divergent positions on impact of ABMs on deterrence stability in the region. Pakistan perceives development and deployment of ABM counter-productive to strategic stability and environment in South Asia, while on the other hand India considers it as a defensive measure against pre-emptive missile threat from Pakistan and China. Rationale behind proposing the CBM is based on the spirit of an earlier Pakistani proposal of declaring South Asia as an 'ABM Free Zone'.

Conclusion

Pakistan's co-existence with India has never been a peaceful endeavor. In a region which is marred by history of conflicts and mistrust, Pakistan's nuclear deterrent has brought comparative peace in the region. Various crises thereafter for instance, Kargil, Mumbai Crises and 2001-02 military standoff are testament to the fact that it was nuclear deterrence stability which kept the two sides away from initiating an all-out war. Any revisionism in terms of armed forces modernization thereby disturbing the deterrence stability would be counterproductive. Pakistan cannot remain oblivious of its security concerns which pose a direct threat to its existence.

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