

INDIA'S STRATEGIC FORCE MODERNIZATION AND ITS IMPLICATIONS ON STRATEGIC ENVIRONMENT OF PAKISTAN

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Abstract

South Asia is one of the most volatile regions in the world due to presence of two belligerent neighbors – Pakistan and India. The region has witnessed numerous wars and skirmishes. The advent of nuclear weapons in the region in 1998 has added more to the complexities. With aspirations of being a big power, India has initiated a comprehensive military force build up. India is modernizing its strategic/nuclear forces even beyond its security needs. This is a perfect example of a state being a power maximizer as believed by offensive realists. This aggressive behaviour of India has some serious implications for Pakistan, which has always sought a strategic stability in the region. Knowing that arms race is an expensive enterprise, Pakistan would not get into parity with India but will look for cost effective solutions to keep the balance. This research looks into the major development in India's strategic forces and analysing rationale behind offensive force build-up through perspective of Offensive Realism. The research also discusses the implications of the Indian strategic force enhancement for Pakistan.

Keywords: Strategic Thought, Arms Race, Arms Modernization, Offensive Realism, Balance of Power.

Introduction

The year 1947 observed violent division of sub-continent and creation of two independent states, Pakistan and India. There have been several outstanding issues among them, predominantly the Kashmir issue, due to which both have been into war several times in the past. Both countries have been unsuccessful in resolving their differences in 73 years of their existence. As mentioned, the unresolved Kashmir issue is a bone of contention between Pakistan and India. In

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1948, right after their independence from Great Britain, both the states went to war over Kashmir. 1965 saw another war and the most recent Kargil conflict 1999 was also due to Kashmir quagmire. This belligerence has resulted in a military competition between them which reached the climax in 1998 when both states detonated nuclear weapons. Since then, there has been a nuclear arms competition between these two big and important states of South Asia. India, being a big industrial country with economic prowess, has always considered itself as a natural hegemon of the region. It considers other South Asian countries as its subordinate/satellite states. Such ambitious behavior is very vital in India's military buildup. Pakistan's approach has been reactive and has always sought to balance the strategic equation with India in order to not get marginalized. History witnessed that India has followed an aggressive military posture to further its long-term agenda of regional dominance. India is already enjoying numerical superiority in conventional domain and is one of the largest militaries in the world. In 1974, India stepped into nuclear enterprise by conducting its first nuclear tests with a codename of "Smiling Buddha", was portrayed as a "Peaceful" nuclear explosion and technology demonstration. Pakistan, after Dhaka fall, was uncomfortable with the said so-called peaceful test. Pakistan commenced its own military nuclear program to ensure its survival and to keep balance with New Delhi.

In mid 1980s, India massed up its offensive corps in an aggressive exercise, Operation Brasstacks, along its western border with Pakistan. This created a war like atmosphere and Pakistan was compelled to counter-mobilize its troops and was fully on guard. It was the first time in South Asia that the "fear of nuclear weapons" played a role in keeping India at bay because Pakistan had signaled that any war with India would not be like previous wars. India kept on enhancing its military and decade of 1990s saw significant development of Indian missile program. Prithvi and Agni programs were matured and India thus got a reliable mean for delivering nuclear weapons capable to cover length/breadth of Pakistan. To counter India, Pakistan initiated its own missile program. Hatf-1 and Hatf-1A in late 1980s and the development of Ghaznavi, Abdali and Ghauri missiles gave Pakistan a certain degree of parity with India. After the failed Operation Parakaram (2001-2), India embarked upon a comprehensive plan of building small, lethal, independent and highly mobile Integrated Battle Groups (IBG) to exploit chance of limited war with Pakistan under to nuclear threshold, generally known as Cold Start Doctrine (CSD). This offensive military doctrine focuses on rapid deployment of IBGs to capture a shallow territory of Pakistan in retaliation to any "terrorist" attack in India. Theoretically execution of CSD is developed to done with utmost speed to catch Pakistan off the guard while not crossing the nuclear threshold. This offensive

doctrine forced Pakistan to go for the Full Spectrum Deterrence by ensuring a nuclear option at tactical, operational and strategic levels. This has effectively deterred India and despite having several occasions, India never openly implemented CSD. India tried to conduct “surgical strikes” and to create a new normal. Recent past skirmish is an example. After an attack on Indian Central Reserve Police Force (CRPF) convoy in occupied Kashmir that killed 40 soldiers, IAF conducted a tactically failed attempt to strike Pakistan on 26th Feb 2020. PAF response right the next morning and the shooting down of two Indian fighters proved that India failed to coerce Pakistan².

In view of the above, the paper finds out the rationale behind India's strategic force modernization. Some of the latest developments in the Indian nuclear arsenal is also been highlighted. It also discusses Pakistan's approach and various steps taken to ensure a full spectrum nuclear deterrence in the region. It illustrates that with immense modernization of Strategic Forces, India aspires to be a regional hegemon and to indulge Pakistan in arms race but Pakistan wants to avoid it and keep the balance via cost-effective solutions.

India's Strategic Thought and its Theoretical Considerations

States acquiring more weapons and building up military beyond its security needs is best explained by Offensive Realism. John J. Mearsheimer states that the ambitions of being a global, or at least a regional, hegemon propels a state towards acquiring and enhancing its military power. States are power maximizers and aspire for becoming superior to others. According to famous scholars; like Thucydides, Chanakya Kautilya, Machiavelli, Thomas Hobbs and Hans J. Morgenthau who believes that there is no morality in international politics and absence of higher authority results in lawlessness³. In Offensive Realism power is not a mean and states are power maximizers unlike Defensive Realism which sees power as a mean of ensuring security and that state tries to maintain the status-quo. According to John J. Mearsheimer, the anarchic nature of International System harnesses a state towards power maximization. Survival is the main objective but some states have hegemonic designs. These attributes collectively shape the offensive nature of big powers⁴.

India's strategic thinking is highly influenced by a notion that it has a natural hegemony in the region. Having big population, enhanced economy, and industrial technology aspires to have every weapons technology which other powerful states are possessing. From acquiring nuclear weapons to the

establishment of space command, the actual driving force is the sense of superiority embedded in the Indian thinking. Military modernization plan upon which India is embarked is beyond its security needs. It reflects the hegemonic behavior of the New Delhi. Concept of “Greater India” or “Akhand Bharat” is embedded in the thinking of India’s policy makers⁵.

India’s Strategic Force Modernization and Conventional Buildup

Over the years, India has invested a lot in enhancing and modernization of its strategic forces. The country now has a diverse arsenal of delivery means and has completed its nuclear triad. In May 1998, the South Asia became nuclearized when India and Pakistan detonated nuclear weapons and becoming an overt nuclear weapon state. Development of nuclear warhead is one half of the equation. Second half is the development of a reliable delivery mean. Missile program of India dates back to 1980s when it developed Prithvi-1 a short-range ballistic missile. Since then, it has expanded range payload capacity by fielding numerous missile systems.

Conventional force buildup of India cannot be neglected while studying the strategic environment of South Asia. Conventional asymmetry between India and Pakistan has forced the latter to adopt a “First Use” nuclear policy. Indian military is modernizing rapidly and is inducting some major offensive weapons. They have commissioned a Kiev-class aircraft carrier, INS Vikramaditya, from Russia which is equipped with MiG-29K naval fighter jets⁶. IN has commissioned the Kolkata-class Destroyers, Shivalik and Talwar-class Frigates from Russia. These ships are considered to be latest platforms, equipped with anti-air, anti-ship and ground attack missiles. In submarines domain, the country has started induction of six indigenously built Kalvari-class submarines, which are variant of French Scorpene conventional submarines. Indian Navy (IN) has also inducted US made Boeing P-8I long range maritime patrol aircrafts which are considered to be a latest anti-submarine platform⁷. In Army domain, the country is upgrading its armoured regiments with the induction of new T-90 tanks from Russia. Indian Army (IA) has also started induction of M-777 ultra-light 155mm howitzer from US and K-9 Vajra Self-Propelled Artillery systems from South Korea. This will enhance the offensive/strike capabilities of IIBGs to execute CSD against Pakistan. Indian Air Force (IAF) inducted new strike and support platforms. Five French Dassault Rafale fighters equipped with latest Active Electronically Scanned Array (AESA) radars and Meteor beyond Visual Range (BVR) air-to-air missiles inducted in IAF that significantly increase their offensive punch. Service also received C-17 Globemaster

strategic transport aircrafts, AH-64E Apache attack helicopters and CH-47 Chinook transport helicopters from America. IAF has also inducted SPYDER Quick Reaction Surface to Air Missile (QR-SAM) system from Israel which has enhanced the service's air defence capabilities⁸.

In nuclear domain, India is having a diverse arsenal of missiles. Prithvi-1/2&3 missiles are a family of Short-Range Ballistic Missile (SRBM) with ranges from 150km to 400km. These are an early generation of Indian missiles and have liquid fuel rocket systems. The 8 meters long missile can carry a warhead of 1000kg and can be launched from a mobile Transporter Erector Launcher (TEL). It is estimated that about 76 Prithvi missiles are operational with Indian Military. Defence Research and Development Organization (DRDO) in 2002 started working to incorporate Global Positioning System (GPS) in the missiles to make them more accurate and to reduce the circular error probability⁹. India has been developing and integrating its own satellite guidance system, previously called as Indian Regional Navigation Satellite System (IRNSS), and currently as Navigation with Indian Constellation (NavIC). NavIC has been designed with a constellation of 7 satellites and a network of ground stations operating 24 x 7. NavIC is the operational name of the IRNSS which is an autonomous regional satellite navigation system, provides accurate and real-time positioning and timing services. Its coverage area starts from India and a region extending 1500 km around it in diameter. NavIC provides a better positioning accuracy of 10 meters throughout the Indian landmass compared to GPS' accuracy of 20 meters. NavIC is collaborating with USA's GPS satellites network for accurate location mapping and enhance coverage jointly with Israel's satellites while keeping backup satellites on ground¹⁰.

Agni series has number of solid fuel missiles with different ranges and specifications. Agni-1&2 is Medium Range Ballistic Missiles (MRBM) with 900km and 2000km ranges respectively. Agni-3&4 is Intermediate Range Ballistic Missiles (IRBM) with 3000km and 4000km ranges respectively. Agni-5, with a range of more than 5000km, is the only Inter-Continental Ballistic Missile (ICBM) currently fielded by India. All Agni missiles are equipped with Maneuverable Reentry Vehicle (MaRV) and can be launched from a mobile TEL. Apart from this; India currently has two solid fuel Submarine Launched Ballistic Missiles (SLBM) of Kalam or K-series. The short-range K-15 with 750km and the intermediate-range K-4 with 3500km range¹¹.

Parhaar is a solid fuel, Battlefield Range Ballistic Missile (BRBM) with a range of 150km. The principal cruise missile of Indian Armed Forces (IAF) is the BrahMos missile. It is a supersonic cruise missile developed in collaboration with Russia. It has a range of 280km to 500km and can be launched from land, air and sea. To enhance its Nuclear Triad, India has commissioned an indigenous SSBN named INS Arihant. It is a 6000 tons nuclear-powered submarine that carries 12 K-15 or 4 K-4 ballistic missiles. It has offered India an assured second-strike capability and has done several patrols. INS Arihant is a lead ship of four Arihant-class SSBNs. INS Arighat is currently in development and will join IN fleet in coming years. Work on remaining two SSBNs will commence soon after the induction of INS Arighat¹².

India's inclusion in Missile Technology Control Regime (MTCR) has been very significant. India being a member collaborated with Russia to enhance the range of the BrahMos cruise missile to more than 500km and to further extend it beyond 600km. IAF with Russian help has integrated it into the Su-30MKI fighters. Several successful tests have already been conducted and IAF is looking to modify 40 Su-30MKI jets for carrying the BrahMos missile. IAF recently received a first batch of five Dassault Rafale fighters from France capable to deliver nuclear weapons equipped with SCALP missiles (French variant of British Storm Shadow air-launched cruise missile) has a range upto 600km. BrahMos cruise missile has already been integrated on all front-line destroyers and frigates of IN. Three Kolkata-class and Delhi-class destroyers of IN are equipped with sixteen BrahMos missiles each. Similarly, three Shivalik-class and six Talwar-class frigates are also capable of carrying eight BrahMos cruise missiles each. The upcoming four Visakhapatnam-class destroyers will also have a launcher for sixteen BrahMos cruise missiles¹³.

India started its indigenous Ballistic Missile Defence (BMD) program right after the Kargil War in 1999 and has two phases. Phase-I consists of two layered systems designed to destroy incoming ballistic missiles. It comprises two missiles – Prithvi Air Defence (PAD) for high altitude (exo-atmospheric interception) is a derivative of Prithvi-1 SRBM and is designed to intercept missiles at 80-120km while Advanced Air Defence (AAD) for low altitude (endo-atmospheric) interception is designed to intercept at altitudes of 15-30km. Then Chief of Indian DRDO, V.K. Saraswat, said that the Phase-1 of the indigenous Ballistic Missile Shield is ready to protect two Indian cities i.e Delhi and Mumbai¹⁴. DRDO in 2nd phase plans to develop two new ballistic missile interceptors, AD-1 and AD-2 capable to intercept Intermediate Range Ballistic Missiles (IRBMs) and Intercontinental Ballistic

Missiles (ICBMs). India has procured S-400 Air Defence System from Russia. An advanced air defence system primarily designed to shoot down combat aircrafts, helicopters, and drones at long range 400km, and intercept incoming ballistic missiles at close ranges. First battery and package of S-400 is delivered to India in Jan-Feb 2022¹⁵.

For a robust nuclear force, Intelligence, Surveillance and Reconnaissance (ISR) capability is very vital. In this aspect, satellites play an important role. India has been establishing a comprehensive network of military satellites. India has proposed a Space Command for its Military. Space program is possessed by a few powerful states. Secondly space is becoming a domain for future wars so to compete other rivals like China; India wants to have a formidable military space command. Indian Space Research Organization (ISRO) is the backbone of the country's space ambitions¹⁶. Since 1980s, India is pursuing its space program for military purposes. ISRO and DRDO in 2001 have come up with a rocket named Avatar which can take military and civilian satellites into orbit. India has also made Geosynchronous Satellite Launch Vehicle (GSLV) to launch satellites in geostationary orbits. India has sent nearly fifty-five satellites into space including both for military and civilian purposes. Country is also working on the development of space-based laser technologies to have balance with its other competitors. On 27th of March 2019, India tested an indigenous missile to hit one of its own satellites in low earth orbit. This test is named as Operation Shakti and is a major achievement in India's technological history¹⁷.

Future Programs

In the conventional domain, India is building an indigenous aircraft carrier, INS Vikrant. It is a 40,000 tons carrier that will be equipped with MiG-29K fighter jets. It has recently completed the harbor trials and will soon commence basin trials, before formal sea trials¹⁸. IN planned to construct another carrier, INS Vishal. It is a 60,000 tons carrier and IAF is evaluating different jets for deployment on the carrier. IN has constructed four Visakhapatnam-class destroyers fully equipped with long range radar and latest weapon systems. India is acquiring more Talwar-class frigates and leased one more Akula-class nuclear attack submarine from Russia. India has procured 21 MH-60R Seahawk maritime helicopters from US. India is developing indigenous artillery systems like Dhanush guns, Advance Towed Artillery Gun System (ATAGS) and new variant of Pinaka Multiple Launch Rocket System (MLRS)¹⁹.

IA procured six AH-64E attack helicopters and tactical drones from US. IAF is upgrading its entire fleet of 270 Su-30MKI fighters to Super Sukhoi standard with the help of Russia. This will incorporate new AESA radar, avionics, enhanced Electronic Warfare (EW) suit and latest generation weapons. IAF has recently issued a tender for the procurement of 114 medium weight multi-role fighter jets to replace its aging fleet of MiG-series²⁰. For them American F-16 and F-18, Russian MiG-35 and Su-35, Eurofighter Typhoon, French Dassault Rafale and Saab JAS-39 Gripen are the main contenders. They are also working on an indigenous 5th Generation fighter with technical assistance from Russia. In force multiplier category, IAF is looking to induct two Airborne Early Warning and Control Systems (AEW&CS) from Israel. After getting membership of MTCR, IAF has received long endurance Unmanned Combat Aerial Vehicles (UCAV) from US that enhance India's surveillance capability²¹.

India's most ambitious is the development of Hypersonic Glide Vehicle (HGV) incorporated on existing missile systems, fly at a speed of more than five times speed of sound, is maneuverable and difficult to intercept in mid-course. HGV could dodge and bypass any BMD System held with US, Russia and China only. India aspires to make it operational till 2024. Defence Research and Development Laboratory (DRDL) in Sep 2020, conducted a successful test of HSTDV by mounting it on an Agni-1 ballistic missile, capable of flying at speed of >Mach 5, more than five times the speed of sound, and can maneuver while in flight. Indian DRDO announced its full development giving India a great advantage and unparalleled capability in the region. HGV presence in Indian arsenal depicts that India could deliver a nuclear warhead against China and Pakistan in a very less time. This decreases decision-making time for China & Pakistan and would push them into "Use them or Lose them" dilemma²².

Development of sub-sonic long range cruise missile is another ambitious program. DRDO is also in process of developing Nirbhay cruise missile. It is a ground-based; long-range subsonic cruise missile with a proposed range of 1000km. Nirbhay cruise missile system is a competitor with the venerable American Tomahawk cruise missile. Nirbhay is a ground Transporter Erector Launcher (TEL) based sub-sonic, low flying cruise missile with a range of 1000km. Such missiles are deployed against foes airfields, naval bases, defence industrial hubs and other important infrastructure. Nirbhay is a 6 meters long two-stage missile, carries a 3000kg of nuclear warhead, has a nap-of-the-earth flying capability at 100m altitude,

difficult to be detected. DRDO is working on the naval and aircraft-launched variant of Nirbhay and is also improving its range up to 1500km.

To guarantee an assured second-strike capability, India is working on different projects of Nuclear Powered Ballistic Missile Submarines (SSBN) and Submarine Launched Ballistic Missiles (SLCM). They have commissioned INS Arihant SSBN which is operational with a K-15 missile of 750km range. Kalam series or K-series is a family of Indian SLBMs with variable ranges. DRDO inducted K-4 that is an intermediate-range SLBM with a range of 3500km. DRDO developed a long-range SLBMs i.e K-5 and K-6 missiles with 5000km and 6000km ranges respectively. These missiles are equipped with Multiple Independently-Targetable Reentry Vehicles (MIRV) technologies which would enable them to carry multiple warheads. India initiated a SSBN program and development INS Arihant in 2009. Four submarines are commissioned collectively known as Arihant-Class SSBN. They are 6000 tons nuclear powered submarines capable of carry K-series SLBN. INS Arihant and INS Arighat are capable of carrying 12 K-15 short range and 4 K-4 intermediate range SLBMs. These submarines carries 24 K-15 short range or 8 K-4 intermediate range SLBMs. K-5 and K-6 long range SLBS are also integrated on the fleet. Induction of Arihant-class submarines made India joined exclusive club of SSBN production countries like US, Russia, China, UK and France²³.

India investing to enhance air leg of Nuclear Triad. In this regard, IAF has integrated BrahMos cruise missile on Su-30MKI fighters. Successful tests have been conducted and so far, two Su-30MKI jets have been modified, with Russian help, to carry the missile. IAF has a plan to modify 40 jets in near future for which collaboration with Russia is underway²⁴. Apart from this, IAF is also upgrading its fleet of Jaguar fighters with latest technologies. Jaguars are relatively old jets and are serving as a principal nuclear strike fighters of IAF since many decades. Hindustan Aeronautics Limited (HAL) is upgrading Jaguar jets to DARIN-III standards. It enhances Display, Attack, Ranging & Internal Navigation (DARIN) of the fighters and makes them more potent. After the DARIN-III upgrades, Jaguars will serve in IAF till 2030²⁵.

Unsafeguarded Nuclear Program of India

Along with rapid modernization program of strategic force, another aspect which is worth mentioning is the unsafeguarded nuclear enterprise of India. India has many nuclear reactors and reprocessing plants that are not under IAEA safeguards and are contributing in increase of stockpiles of fissile material. This will

enable India to produce hundreds of warheads. The details regarding the unsafeguarded nuclear program were presented by scholars of Institute of Strategic Studies Islamabad in a book *“Indian Unsafeguarded Nuclear Program: An Assessment”*²⁶ published in 2016.

India’s rapid modernization program of strategic force possess demerits highlights vital aspect of its unsafeguarded nuclear enterprise. Various nuclear reactors and reprocessing plants which are not under IAEA safeguards, contributing in increase of fissile material stockpiles, enabling India to produce hundreds of warheads. India’s domestic production of uranium is sufficient to meet its long-term needs. Out of twenty-one nuclear reactors of India, eight are unsafeguarded and are devoted to military purpose. The current uranium reserves of India stand at 199.428 tons, but they are also procuring nuclear fuel from Russia, Canada, France and Kazakhstan. With the identified uranium reserves, India has an adequate capacity to generate enough nuclear fuel to keep its currently operational and few planned nuclear reactors functioning for more than a century. Highly Enriched Uranium (HEU) produced at Rattehali plant will be more than stated requirement of fueling the entire fleet of IN’s nuclear-powered submarines²⁷.

Apart from Uranium-235, Plutonium-239 is also a fissile material and can be used in nuclear weapons. But this isotope of Plutonium is not natural occurring and it is obtained from spent fuel of nuclear reactor through a sophisticated process, known as the Reprocessing of Spent Fuel. Nearly all reprocessing plants of India are outside IAEA safeguards. The main reprocessing plants of Trombay, PREFRE-1 (Power Reactor Fuel Reprocessing Plant), KARP (Kalpakkam Atomic Reprocessing Plant) and PREFRE-2, if operated at 50% output, collectively has the capacity to reprocess over 400 tons of spent fuel each year. This could extract up to 8 tons of Plutonium which is sufficient to produce twenty eight Plutonium-239 based nuclear weapons with a 4-6kg of the warhead. At present, India has capacity to enrich 4230 SWU/Yr (Separative Work Unit per Year) sufficient for development of thermonuclear weapons (Hydrogen Bomb). Thus, India has sufficient stores of fissile material including modern delivery means to maximize its nuclear warheads²⁸.

These statistics demonstrate that, along with the development of new and modern delivery means, India has sufficient stores of fissile material to maximize its nuclear warheads. This also gives India the capacity to build more lethal thermonuclear weapons – also known as the Hydrogen Bomb. These fissile development is heavily investing towards development of nuclear missiles and

nuclear warhead development which is creating a strategic disbalance in the South Asia specifically for Pakistan while increasing its security challenges and forcing Pakistan to compete with them in such development.

Motive behind India's Strategic Force Modernization

India is introducing indigenous weapon systems under the "Make in India" program of Prime Minister Narendra Modi. Various reasons behind India quest of modernizing its strategic force so rapidly with three core reasons like its prestige factor, insecurity from China and weakening Pakistan economically. India's Hegemonic Aspirations best elucidated with the perspective of Offensive Realism which suggests that states seek power beyond their security needs. India eager to have powerful status in world politics and is exponentially spending on its defense sector. India is already one of the largest arms buyers in the world and its defense spending has increased from \$30 billion in the years 2000-13 to about \$90 billion in 2013-22²⁹. India's current military force is well sufficient for fulfilling its security needs but the country's ambitions are to be a regional hegemon and in quest of achieving "Greater India" ideology. Policymakers under Narendra Modi's premiership believe that India's influence should expand from Afghanistan to Bay of Bengal and from the Indian Ocean to South China Sea. In a TV interview with journalist Mehdi Hassan at Al-Jazeera, the General Secretary of BJP Ram Madhav said that:

"Rashtriya Swayamsevak Sangh (RSS) still believes that one day these parts, which have for historical reasons separated only 60 years ago, will again, through popular goodwill, come together and Akhand Bharat will be created."³⁰

Globally, China has emerged as a big power maintaining its numerically largest military and has invested a lot in its nuclear arsenals and armed forces. This decade has witnessed significant enhancement of Chinese military and being a 5th nuclear country has excelled a lot in arms research and development. China has invested heavily in indigenous development and has now fielded some of the latest weapon systems. India sees China as its competitor being a nuclear competitor. Since Sino-India war of 1962, both states have hostile relations been in numerous military standoffs, the latest being the ongoing Ladakh standoff. To cope with Chinese military capability, India is modernizing its armed forces. Brig Naeem Salik(former DG ACDA -SPD Pakistan) claimed that role of China cannot be excluded while analyzing the strategic stability in South Asian region. Indian Strategic analysts repeatedly hinted that their real challenge is China³¹.

Therefore, India is doing indigenous efforts, self-help as realists call it, and is also collaborating with other big powers like US and Russia for formation of alliance for Balancing the Power. For India, China is a regional rival and for US it is the global rival. This is the “security perspective” of India’s strategic force modernization, as highlighted by Scott D. Sagan. Likewise, India has always tried to marginalize Pakistan. Thus, India aspires to push Pakistan into arms race having small economy and political quagmire which will be an economic nightmare for Pakistan. This seems to be another factor of India’s strategic force modernization that is a by-product of the “prestige” and “security” factors³².

Implications for Pakistan

a) *Security Dilemma for Pakistan*

Brig Feroz H. Khan (former DG Arms Control and Disarmament (ACDA) directorate of Pakistan’s Strategic Plans Division (SPD)) said that Dhaka’s fall was a “Never Again” moment for Pakistan³³. It compelled Pakistan to adopt such measures to avoid disaster, like 1971, in the future. That was a time when Pakistan initiated its own nuclear weapons program in response to India’s “Smiling Buddha” test in 1974. Since then, Pakistan has always maintained strategic stability in the region in best possible manner. Nuclear posture of Pakistan has been successful in deterring India from aggression. Indian strategic moves are detrimental to regional stability. India has an upper hand in the strategic realm of South Asia which makes them confident to take any aggressive step, like launching a preemptive strike on Pakistan’s nuclear assets or against the delivery systems. It makes Pakistan vulnerable, thus having negative impact on the deterrence stability in South Asia. Region is a more volatile and prone to war as both countries, from inception, are arch rivals. History has seen four major wars between these nations. Secularization of South Asia has almost created a balance of power and deterrence in place between the two states. Indian capabilities are causing security dilemma for Pakistan enforce to take necessary steps to counter Indian threats, provoked an arms race between arch rivals³⁴.

b) *Increase Conventional Disparity*

In recent years, New Delhi has developed some threatening and aggressive military doctrines. In 2017, IA Chief Gen Bipin Rawat publically acknowledged the idea of CSD ³⁵. It is a doctrine formulated to launch a quick offensive and to capture a shallow territory of Pakistan, under the nuclear threshold, in wake of any major “terrorist” attack by the country. For a quick response, Indian military aims to raise several brigade-sized Integrated Battle Groups (IBGs), each equipped with its own air and armored elements for conducting independent operations. In Dec 2018,

while giving an interview with Strategic News International, Gen Rawat explained the concept of IBGs and also announced that the army will conduct its first IBG exercise by next year³⁶. IAFs have commenced a rapid modernization drive to materialize the concept of IBGs. All force developments like 4+ Generation medium multi-role fighters³⁷, K-9 Self Propelled Howitzers (SPH) from South Korea³⁸, T-90 Main Battle Tanks (MBT) from Russia³⁹, 4+ Generation Dassault Rafale fighter jets⁴⁰ have serious consequences for the security of Pakistan.

c) *Disturbing Strategic Stability through Doctrinal Changes in Nuclear Policy*

At policy level too, India is hinting a doctrinal change in the nuclear posture. Draft Nuclear Doctrine of India, published in 1999 (amended in 2003 for inclusion of clause for chemical and biological weapons) suggests India will use nuclear weapons only if its citizens are attacked with nuclear, biological or chemical weapons anywhere in the world. This reflects No First Use (NFU) policy of India, regarding nuclear weapons. But recently, in Aug 2019, Defense Minister of India, Rajnath Singh, hinted at a change in India's NFU policy. These developments increased vulnerabilities for Pakistan. This hawkish approach may harness Indian policy makers towards undermining Pakistan's deterrence, thus disturbing the stability⁴¹.

d) *Credible Strategic Policy - Filling Strategic and Conventional Arms Gap*

Pakistan has repeatedly stated that it would not indulge in arms race or in the weapon development competition but will take the necessary steps to maintain strategic stability. Lt Gen (r) Khalid Kidwai (former DG SPD of Pakistan) once stated that Pakistan has always endeavored to maintain stability in the region and to make deterrence more effective. Pakistan has never believed upon NFU policy of India and will respond to any destabilizing moves by India with cost-effective solutions⁴². In wake of the recent delivery of Dassault Rafale fighters to India, the Foreign Office spokesperson, Aisha Farooqui, said that:

"India continues to amass military capabilities beyond its genuine security requirement. Pakistan had been consistently highlighting the risks of massive Indian arms build-up their offensive security doctrine and force postures, which were adversely affecting strategic stability in South Asia. Pakistan cannot remain oblivious to these developments and remains confident of its ability to thwart any ill-considered act of aggression ⁴³."

On 28th May 2020, speaking to a webinar to mark Youm-e-Takbir, the Foreign Minister Shah Mehmood Qureshi said that:

“Our conduct as a nuclear weapon state will continue to be defined by restraint and responsibility. Pakistan’s desire for peace “should not leave anyone in doubt regarding our capability and we will defend ourselves effectively against any form of aggression. The irresponsible statements made by senior members of the BJP government, including on nuclear issues and threats of dismemberment, left little doubt about the reckless mindset at work. Flawed notion of the establishment of a ‘new normal’ and fantasies of ‘punishing Pakistan’ while remaining below the threshold of a nuclear conflict demonstrate irresponsible and dangerous behavior by India ⁴⁴.”

e) *Strategic Imbalance – India’s offensive Buildup & Nuclear Arms Race*

Pakistan showed its concern and reflects the country’s resolve to keep the strategic balance vis-à-vis India. To ensure this balance, Pakistan has adopted the policy of Full Spectrum Deterrence. It is to deter India across the spectrum i.e Tactical, Operational, and Strategic from indulging in any sort of arms race. India’s offensive force buildup is threatening Pakistan’s security. Weapon systems like long-range cruise missiles, NavIC, HGV, SSBNs, and BMD systems are detrimental to strategic stability of South Asia. India’s offensive force multiplier-based weapon systems are detrimental for strategic stability in the region. Pakistan is always reactive and has sought a balance in the region. Islamabad has developed a variety of delivery means and missile systems. Well aware of the nature of arms race and weapon competition, Islamabad is not looking for parity with New Delhi, and preferred taking cost-effective measures to maintain the strategic balance of the region in the best possible way. In the future too, Pakistan would not follow India in an arms race but will look for efficient asymmetric solutions, tailored according to the national interest and economy. Pakistan’s missile system is capable to ensure full spectrum deterrence and to maintain strategic stability in the region.

Pakistan has been working on Self-reliance and Indigenous Development, Integration, Synchronization and Synergy within Pakistan Armed Forces, effective and credible second strike capability to maintain and achieve credible nuclear deterrence so that various combat echelons in Armed Forces respond to any military action from India with an appropriate response. Pakistan’s Armed Forces must uprightly enhance its C4I infrastructure/system and should regularly engage in joint military drills to test its defense doctrine and develop new strategies for gaining an advantage in contemporary combat situations.

Conclusion

Indian government has initiated a comprehensive modernization of its strategic forces. It is inducting new delivery means, SSBN and is developing a dedicated BMD system. Indian government ideology of Akhand Bharat considers India as a natural hegemon of the South Asian Region. Therefore, India is heavily investing in military to be a formidable might. Modernization in nuclear domain seems to be on priority of the Modi's regime. India has a diverse arsenal of delivery means and has completed its nuclear triad. Membership of MTCR allows Pakistan to get hands on latest missile technology. Enhancement in ranges of BrahMos and other missile shows India aspiration to achieve status of a regional power enforced Pakistan into an expensive arms race. Islamabad for stability has been taken measures to keep strategic balance. Pakistan being well aware of the consequences of a nuclear arms race will not respond to India in the same coin but will intelligently whenever require. Maintaining parity with India affects economy of Pakistan. Pakistan seeks stability with cost effective measures. Response to Indian INS Arihant with Babur-3 SLCM and to New Delhi's BMD program with MIRV missile shows strategic approach of Pakistan.

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