



**India's Strategic Conventional Weapon Systems:  
Implications on Strategic Stability in South Asia**

Hina Shahid,<sup>1</sup> Hassam Ahmed Siddique,<sup>2</sup> & Ummal Baneen<sup>3</sup>

**Abstract:**

India has been working on the modernization of its strategic and conventional weapon systems. So far, in terms of numbers, it holds a conventional ascendancy vis-à-vis Pakistan. India is investing in the various domains including space technologies, ballistic and cruise missiles and conventional weaponry. In the recent past, India has worked on multiple military deals with the US, Russia and France. More so, it has gone through doctrinal shifts that sum up the amount of research and development that has been invested in building up the Indian military might. Under the umbrella of CSD, India has plans for the amelioration of its conventional forces. In 2019, India became one of the four nations to possess an anti-satellite weapon. With Indian provocative measures under the CSD, Pakistan has been forced to respond back by shifting from Credible Minimum to Full-Spectrum Deterrence. Hence, strategic stability in South Asia is prevailing but with advanced strategic and conventional weapon systems, chance of a limited conflict escalating into an all-out war is a very likely scenario.

**Keywords:** Pakistan, India, South Asia, conventional weapon system, strategic stability, doctrine

**INTRODUCTION**

With states gaining independence and borders being specified, next comes the task of protecting their territorial integrity and ensuring security. Pakistan and India gained independence after a sanguinary partition. Keeping in mind the pre- and post-independence scenario, both the states sought for their survival in arms buildup. With time Pakistan and India strived for making headway in modernizing their forces by joining defense pacts and establishing military doctrines. With the existence of conventional asymmetries, arms race and nuclear capabilities, threats of a potential conflict between the regional powers are alarmingly high (Bibi, 2019). And with Pakistan, India both possessing NWs, instability within South Asia might lead to the use of nuclear weapons (Ladwig III, 2007/8).

This paper aims to investigate modernization of Indian strategic and conventional weapon systems that gives New Delhi ascendancy vis-à-vis Pakistan with far reaching security implications for the

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<sup>1</sup> Assistant Professor, Department of Arts and Media, Foundation University Islamabad, Pakistan. Email: hinashahid@fui.edu.pk

<sup>2</sup> PhD Scholar, Department of International Relations, NUML, Islamabad, Pakistan. Email: hassamsiddiqi@yahoo.com

<sup>3</sup> PhD Scholar, Department of Journalism, College of Communication, Arts, and Sciences, Michigan State University, East Lansing, Michigan, USA. Email: baneenum@msu.edu

latter. The study involves a detailed surveys of the modernization programs pursued by India military, air force, and navy as well its space and missile programmes.

### **LITERATURE REVIEW**

In contemporary era, India is considered to be a major power in Asia that is modernizing its military might be keeping under consideration strategic interests vis-à-vis the changing geopolitical scenarios (Ullah, 2019). According to Global Firepower, the Indian military is one of the top five powers in the world (Global firepower, 2020). The Stockholm International Peace Research Institute (SIPRI) reports that India was the greatest importer of large weaponry in the world between 2013 and 2017. India has allocated billions of dollars through a variety of programs for the development of its conventional and strategic forces. All this has led to an element of discrepancy in South Asia, which might lead to a strategic imbalance, regarding Pakistan (Khattak, 2019). And this lack of strategic equilibrium is evident as India is spending huge sums on military buildup by allocating magnanimous defense budgets. For the year 2020, it was 73.5 billion USD. This accounted for a 9% increase from last year (Cheema, 2020). Alone in 2020, India had conducted multiple missile tests. It is involved in bilateral deals with states including USA, France, and Russia. With such a massive budget and foreign assistance, India intends to invest on the purchase of lethal weaponry, strengthening its missile defense system and working on the militarization of space (Cheema, n. d.). These measures are enough to upset strategic stability in South Asia. With the Indian provocative measures under the Cold Start Doctrine, Pakistan has been forced to respond back by shifting from Credible Minimum to Full-Spectrum Deterrence. Therefore, strategic stability in South Asia is prevailing but with advanced strategic and conventional weapon systems, chance of a limited conflict escalating into an all-out war is a very likely scenario.

Within a system that is anarchic in nature, states tend to upgrade and strengthen their militaries as a mean of ensuring their security. But with this security comes a competition for arms buildup between neighboring states, leading to an arms race. Similarly, in South Asia, India has been working on building and possessing enough capabilities for gaining a stronghold in the region. For decades India has been working on the modernization of its strategic and conventional forces. And so far, in terms of numbers, India holds a conventional ascendancy.

For Pakistan, India has worked on multiple military doctrines since the 1980s. After the attacks on the Indian parliament, India initiated Operation Parakram which ended after a 10 months long military standoff. Fact of the matter is that mobilizing a corps for retaliation is a massive task and this was one of the reasons that India went with the doctrinal shift.

### **RESEARCH METHOD**

The study is qualitative and analytical in nature. Descriptive method has been used to investigate Indian modernization program of its arms forces. Both primary and secondary sources have used to collect the data. Primary data includes official reports, speeches and interviews of Indian national leaders available online as well as interviews with academicians and analysts. Secondary data has been collected from books, research reports and scholarly articles available either in print or electronic form. Thematic analysis method has been used to scrutinize the data, and make generalization and draw conclusions.

## **THE MODERNIZATION OF INDIAN TRI-SERVICES**

The Cold Start Doctrine which was later renamed as the Pro-Active Operations was introduced for conventionally threatening Pakistan. The purpose of the Cold Start doctrine was to respond back with a retaliatory conventional blow. Under the CSD, India had plans for ameliorating its conventional forces. The aim was to wreak Pakistan military and end the operation before any possible intervention by the international community was underway. With this India had planned on reorganizing its three-strike corps into integrated battle groups (Ladwig III, 2007/8). For the fulfillment of her mala fide objectives and hegemonic intentions, India is moving at an unprecedented pace for upgrading its conventional forces.

In 2012, the Long-Term Integrated Perspective Plan: 2012-2027 was introduced, as a mean of inducting advanced weaponry in the tri-services. It was stated that India requires about \$233 billion under this plan for fulfilling its weapon and equipment needs. According to a source from the Indian MOD, the demarche aims at purchasing 500 helicopters, almost 100 single and 120 twin-engine fighter jets, an aircraft carrier and about 12 submarines (Raghuvanshi, 2016). Modern day projects including the purchase of Rafale fighters and S-400 advance air defense system fall under the LTIPP.

### **Modernization of the Indian Navy**

With the race for maintaining and gaining superiority in the waters, Indian Navy is striving to counter the Chinese naval strength. Statistics reveal that India has a naval capacity of 285 assets (Global firepower, 2020). And is the fifth largest navy in the world (Jalil, 2016). In order to achieve its goal of achieving and maintaining superiority, India has been working on projects that fall under the 'make in India' campaign that would aid in strengthening the local industries. IN has also been in favor of collaborations and therefore possesses Russian, French and American technologies.

India owns an indigenously built SSBN known as Arihant equipped with K-15 missiles. It has been operating the Russian built nuclear-power attack submarine 'Chakra' on lease and is equipped with S-30 anti-shipping cruise missiles. Indian Navy also procures 4 'Scorpene' class boats that are made in India. Along with this it has a powerful diesel-attack submarine 'Flotilla' (Hollingsbee, 2020). Indian Navy in partnership with Israel worked on MRSAM AND LRSAM for Indian Army and Navy. According to the Israel Aerospace Industries (IAI) a contract for \$777 million has been made for an additional induction of Barak-8 missile defense system. It will be available for seven naval ships ("From Russia's S-400," 2018). Barak-8 is a Surface to Air Missile Defense System that has an ability to counter airborne threats ("Barak-8 missile," 2019).

In comparison to Pakistan Navy, IN has an aircraft carrier 'Vikramaditya' while a second one 'Vikrant' would be incorporated by 2022. According to General Rawat, Indian Navy is also working on to acquire a third aircraft carrier (Philip, 2020). The former Naval Chief, Admiral Sunil Lanba states that by 2025 India would have 200 ships and 500 aircrafts. The government has also approved for the induction 56 warships and six submarines over the next 10 years (Woody, 2018).

In an article Trevor Hollingsbee state that Indian Navy is currently focusing on Pakistani naval activities along with maintaining its strategic presence in the Middle Eastern waters and the Indian Ocean (Hollingsbee, n.d.). Chietigj Bajpae, an expert on Indian military states that India has plans

to modernize and bring its Navy equal to that of China (Mazumdar, 2015). In order to counter the Chinese Naval might, India has been working on agreements for gaining access to military bases and therefore has approach to the Indonesian deep-sea Sabang port which can also be utilized (Thakker, 2018). It is being suggested based on the recent reports that India plans on temporarily halting its target of becoming a 200-ship navy in favor of building up more submarines (Hollingsbee, n.d.).

### **Modernization of the Indian Air Force**

The number of assets under the IAF have significantly expanded in the last few years. While in the 60s India's air assets comprised mostly of the ones from the US but now it has a wide range of options. Total strength of the assets under the Indian Air Force is 2,123 (Global firepower, 2020). With enough of a capacity, India has started purchasing more. On July 3rd with the fear of a conflict escalating in Ladakh, India decided to spend around \$5.55 on 21 'MiG-29' and another 12 'Su-30MKI' aircrafts (Raghuvanshi, 2020). Over the years Indian Air Force has modernized its fleet to an extent, that now it is numerically superior to Pakistan. Air power plays a vital role in the delivery of warheads and India has a wide range of aircrafts which have the potential to do so. Initially, Mirage 2000 and Jaguar were the only available options for the task but now India has multiple choices.

SU-30MKI is one such aircraft that is considered to be the backbone of the Indian Air Force (Ullah, 2019). It was in 2002 that the very first fleet comprising of ten Russian-made 'Su-30MKI' aircrafts were delivered to the IAF. As of January 2020, IAF has a power of 260 Su-30MKIs and a dozen more are expected to be delivered soon (Raghuvanshi, 2016). Su-30MKIs can deliver different kinds of warheads (Ullah, 2019).

It was in September 2016, that India had signed an \$8.7 billion deal with France for the procurement of 36 Rafale fighter jets. It is expected that all 36 jets would reach India by September 2022. According to the Indian Defense Minister Rajnath Singhit, this would enhance the capabilities of the IAF. Rafael can be equipped with a wide range of lethal weaponry. As Rafale has the potential of delivering a nuclear payload therefore chances are that it would be modified for playing a nuclear role.

In 2015, a deal for 22 Apache helicopters was signed between IAF, U.S. Government and U.S. aerospace major (Gurung, 2019). According to Lt Gen BS Pawar (Retd), this helicopter would aid the IAF in regards to the anti-tank capabilities and the precision striking capacity from stand-off ranges (Pawar, 2020). Currently it is one of the most lethal helicopters with the ability of shooting air to air missiles, rockets and other ammunition. One thing unique is that Apache can control UAVs. In 2016, IAF inducted the first ever 4th generation, fighter aircraft; the LCA. Admiral Arun Prakash (Retired) believes HAL Tejas is a step towards self-reliance in Indian weaponry (Prakash, 2016). Tejas can fire air to air missiles like Python 5. It can also fire air to surface missiles like Kh-35 and Kh-31 and bombs (India strategic, 2016). In 2016, Defense Acquisition Council of India had allowed for 83 Tejas Mk1A, making a total of 123 orders (Raghuvanshi, 2016). Last year, it was announced that Indian Air Force is planning on inducting almost 114 medium-weight multirole fighters which would be made in India. The project would cost about \$17 billion.

### **Modernization of the Indian Army**

With the Indian Air Force thriving for amelioration, Indian army is working at an equal pace to procure and induct technology that can be utilized based on its doctrines. With conflictual relations prevailing against China in Ladakh, the Indian Defense Acquisition Council on emergency basis approved a huge sum under which the Army was to buy ammunition for T-90 tanks, as well as the BMP-2 vehicles, rockets, artillery guns, missiles, and mortars (Raghuvanshi, 2020).

When it comes to a state's conventional power, the eminence of ground forces is quite perceptible. An initiative of soldier modernization program by India began in 2005 when a demarche titled as the Future Infantry Soldier as a System- (F-INSAS) was introduced. According to Chris Lo, the program was to be pursued in between 2012 to 2020. The pre-eminent idea was considered to be the development of a rifle for replacing the ageing ones along with new helmet, a modern battle suit. And a GPS for staying connected with the commander and battalion (Lo, 2020). But due to certain constraints, Indian army decided to move on with two separate projects as following: the first one was a newfangled approach via which soldiers of infantry would be provided with assault rifles, helmets, and bullet-proof jackets (SoldierMod, 2015). And this was the reason that the army had acquired about 65,000, 7.62 mm rifles (Khattak, 2019). The second project was related to the BMS or the Battlefield Management System (SoldierMod, 2015).

T-90 tanks are an important part of the Indian army. In early 2000s India had ordered hundreds of T-90 tanks. The Indian Ministry of Defense has approved the order for another 464 T-90S tanks (Larson, 2020). The billion-dollar deal has been approved for the tank regiments at the Chinese border (Dunlop, 2020). By 2020, India plans on inducting 1,640 tanks (Army technology, n.d.). T-90 is equipped with a 125mm gun and anti-tank missiles. It can also target low flying helicopters at a range of 5km. With all these features it is a lethal technology.

In 2017, Indian army had signed a deal with South Korea worth US\$720 million for the acquisition of 100, K-9 self-propelled howitzers that are to be delivered by 2021. K-9 Vajra can target the enemy at a distance of 40 kilometers with an operational range of about 450 kilometers. These howitzers would aid the Indian mechanized forces against Pakistan during offensive operations (Khattak, 2019).

On the basis of statistics provided by the Global Fire Power, India possesses 4,292 combat tanks, 8,686 armored fighting vehicles, 235 self-propelled gun (SPG) vehicle, about 4,060 towed field artillery strength and 266 Rocket projectors (Global firepower, 2020). These figures are satisfactory enough for India to maintain deterrence against its northern and north-western neighbors.

### **Space Program**

India had developed its nuclear capabilities long before declaring the potential power. The reason for this long abstention was the absence of any launch vehicles for the nuclear weapons. Without the SLVs the capability remained incomplete. And this is the reason that in 1980 after the launch of an Indian SLV, the head of India's Space Sciences Technology Center stated that India can now walk on two legs (Nuclear Threat Initiative [NTI], 2019). The underlying meaning was that, after launch of space vehicles, India possessed a delivery system for its nuclear warheads.



India has been working on its space programs since 1920s. With the assistance of physicist Vikram Sarabhai, India founded the Indian National Committee for Space Research in 1962. When an Indian SLV was launched by the Indian Space Research Organization (ISRO) in 1980, a significant milestone was reached. Later on, ISRO launched newer and more sophisticated variants of SLVs. A PSLV was successfully launched in 1993, and a GSLV was launched in 2001 (Indian Space Research Organization [ISRO], 2021).

India is currently preparing to escalate the conflict. The Chiefs of Staff Committee had proposed the establishment of combined commands for special operations, space, and cyber in 2012. Dealing with dangers connected to national security space issues would be the responsibility of India's Defense Space Agency. It would work closely with both the Indian Space Research Organization and the Indian Defense Research and Development Organization. PM Modi approved the establishment of a new organization named the Defense Space Research Agency in 2019 to improve the ability of Indian military to fight in space (DSRO). The task of the DSRO would be to work on the creation of weapon systems and technologies for space warfare. In its efforts to acquire an upper hand in space technology, India in March 2019 conducted the ASAT test and became the fourth state with such a capability (India today, 2019).

### **Missile Program**

In order to support its air, land and sea forces, India has been extensively working on building up its missile program for decades. With the extensive investments aimed at ameliorating the strategic triad, India now holds the potential to deploy a wide range of missiles from the K series sea-based ballistic missile to the variants of Agni and Prithvi series. In the last two decades, India has been pursuing all sorts of strategic weapon systems (Joshi, 2019).

### ***Ballistic Missiles***

India has a wide range of missiles and continues to expand its ballistic missile arsenal with newer and better versions of the existing series. The purpose behind the investments on the ballistic missile arsenal is to maintain its military superiority and deterrence.

Short-range ballistic missiles are a substantial part of the arsenal. The Prithvi series form an integral part of the SRBM arsenal. Prithvi-I is a SRBM that has a range of 40 to 150 km. Prithvi-II and Prithvi-III are two variants of the series. Prithvi-II has a range 250 to 350 km. The development of Prithvi-III started in the year 2000 and at an appropriate time would be used as a tactical weapon against Pakistan and China. Prithvi-III has a range of 300 to 350 km ("Prithvi-I/II/III," 2019). Agni-I is another addition to the SRBM category. It has a range of 700-1,200 km. Agni-I if made operational at a range of 1,200 km holds the capacity to target the whole of Pakistan ("AGNI-I," 2016). In 2018, Indian army had successfully tested Prahaar; a surface-to-surface short-range tactical ballistic missile, with a range of 200km ("Indian army test," 2018).

Other than the SRBMs, India holds the capacity to deploy SLBMs: submarine-launched ballistic missiles. The main reason for the investments on SLBMs is for strengthening the SSBN fleet. K-15 and Dhanush are two major categories in this. Dhanush has a range of 400km. Many experts tend to compare Dhanush with Prithvi-III. The K-15 Sagarika is another SLBM, and its development began in the 1990s. Sagarika is believed to have a range in between 700-750 km and was deployed in the

year 2017 ("Sagarika/Shaurya," 2016). However, an impediment exists with Sagarika, with its limited targeting capacity; it lacks the ability to target Pakistan and China. In October 2020, a land variant of K-15 was successfully tested, with a range in between 700 to 1,000 km. According to Indian officials, 'Shaurya' is one of top 10 missiles in the world. Another strategic aspect is the fact that if placed against either of India's adversaries, Shaurya would not be detectable via satellite imaging (The Hindu, 2020).

India's medium range ballistic missile is the Agni-II which is a variant from the Agni series. Agni-II has a range in between 500-2,000 km but it is believed that if the payload is reduced, the missile has the potential to reach 3,500 km ("AGNI-II," 2016). With such an extended range Agni-II can strike anywhere in Pakistan.

The intermediate-range ballistic missile arsenal of India is made up of Agni-III and Agni-IV (IRBM). Depending on the payload, Agni-III can travel up to 6,000 kilometers, however its range is typically between 3,000 and 5,000 km. It was made to keep Pakistani and large portions of Chinese targets from across Indian border. Another IRBM is the Agni-IV. The range was estimated to be between 3,500 and 4,000 km after a successful test in 2014, but there is potential to increase that to 5,000 km (Missile threat, 2016).

Since 2012, India has been working on acquiring a capability that would aid in targeting more of the Chinese conurbations within its range. In 2018, India was successful in conducting another test of Agni-V, an intercontinental ballistic missile. It has a range between 5,000-8,000 km (Missile threat, 2016). This missile would be equipped with the MIRV capability and numerous warheads. India's DRDO has also been working on another ICBM, the Agni-VI which would have a range in between 8,000- 12,000 km (Katoch, 2019).

### ***Cruise Missiles***

India has been working on building up its arsenal for halting the nuclear deterrence equilibrium prevailing in South Asia. In its quest for regional dominance, India in 1998 had signed an inter-governmental agreement with Russia. The venture took place between the DRDO of India and the NPOM of Russia which led to the establishing of BrahMos Aerospace. BrahMos is a supersonic cruise missile and was initially launched in 2001. Since then, the missile has been deployed in the Indian army, navy and air-force ("Indian navy tests," 2020). It is the only missile that flies three times the speed of sound (Philip, 2020). And has a flight range of 290 km ("BrahMos supersonic," 2013). Not being part of the MTCR restricted India from developing missiles beyond a 300 km range with Russia, which was part of the regime. Therefore, in 2016, India joined the MTCR and now both the states are working on developing BrahMos with an extended range (NTI, 2019). Last year in September, India had successfully tested a 500 km extended range variant of BrahMos ("India tests multiple," 2020). In the coming decades India aspires to fulfill its hegemonic intents and in this regard is working on modifying and modernizing the existing missile series. Sources revealed that a hypersonic version of BrahMos is under way and it would travel five times the speed of sound. Work is also being done on a 1,500 km range of the missile (Philip, 2020).

The development of Nirbhay began in 2007. It is an intermediate-range subsonic land-attack cruise missile and is an indigenous effort by India (Raghuvanshi, 2020). It was successfully flight tested in 2014 and has a range in between 800-1,000 km ("Nirbhay," 2016). Experts believe that another 20

tests are required before the missile could be inducted in the arsenal. India's MOD in July 2020 had placed an order of about 300 Nirbhay missiles for the armed forces. This specific category is important as the conventional radars would find it difficult to detect these, making Nirbhay's quite lethal.

India also has an anti-ship cruise missile which was inducted in 1975. Exocet has six variants which are different based on the levels of modernization and launch platforms. It has a range in between 40-180 km ("Exocet," 2021).

Last year, India had test fired a variety of missiles. In October 2020, India had tested the supersonic anti-submarine missile known as SMART or the Supersonic Missile Assisted Release of Torpedo. The capability has been labeled as 'game changer' by many experts in anti-submarine warfare. This would enhance India's naval strategic potential. During the same period, India had also test-fired its very first indigenously built 'New Generation Anti-Radiation Missile' Rudram-I from a SU-30 MKI jet. The missile has a range of 200 km and can target adversary's communication sites along with surveillance and fire control radars ("Anti radiation missile," 2020). India is also aspiring to work on modernized variants of the K-series. K-5 and K-6 are believed to be under the process of development with 5,000 km and 6,000 km of ranges respectively (NTI, 2019).

With a missile program augmenting at such a pace, question arises as to whether this much of an arsenal is enough to maintain a posture of credible minimum deterrence. The numbers that exist are far beyond what is needed to subdue Pakistan. Therefore, these numbers are a reflection of India's hegemonic intentions. Its missiles are spread across the country and their ranges have the capacity to reach and target the whole of Pakistan. India has deployed almost 10 Agni-III along with 8 Agni-II missiles in northeast India. Another 20 Agni-I and 24 Prithvi-II are positioned near Pakistan's border (Donnell & Bollfrass, 2020). With such deployments and modernization, India intends to maintain a stronghold in the region. But it has indirectly generated a competition between the two neighboring states.

### **Missile Defense System**

India has an advance and a modern missile program that continues to expand both via indigenous and joint efforts. Its missiles are located strategically to target any part of Pakistan, but the tables can turn in case Pakistan chooses to retaliate. Therefore, since 1990s India had been working on attaining a Ballistic Missile Defense system. So far, India has conducted ten tests of the BMD system out of which seven have been successful (Bhatti, 2020). The indigenously built system has the capacity of intercepting missiles traveling at speed between 3 to 8 Mach (Sultan, 2020). Pakistan holds the opinion that the system would encourage India to strike first and take offensive measures, as the incoming missiles from Pakistan could be easily targeted using the defense system (Bhatti, n.d.).

India's missile defense shield is based on a two-pronged structure. The first tier comprises of the Prithvi Air Defense which aids in intercepting missiles with a range up to 2000 km. The second tier makes use of the Advanced Air Defense, it can target the incoming missiles at an altitude of 30 km (Sultan, 2020.). In order to further strengthen its capability to target and render an incoming attack useless, India has been working on procuring a system from Russia. In 2018, India had signed a deal for acquiring the S-400 air defense system. By 2023 India would receive the complete order



("Delivery of all," 2020). S-400 air defense system is a modern technology which can trace objects at a distance of 600 km and can destroy its targets from a range of 400 km. It has a speed of 17,000 km/h. This system can detect more than 100 flying objects at the same time (Philip, 2020).

In 2019, India became the fourth state to possess the anti-satellite weapon system. India conducted the test using a PDV Mark-II missile. The ASAT would aid in further strengthening the defense system of India in space (NTI, 2019).

With a missile defense system India faces a dilemma where it believes that it has the potential to counter any retaliatory move by Pakistan's strategic forces. In reality this behavior would only undermine the prevailing strategic stability of South Asia. India's indigenously built BMD system depicts a defensive posture for India but, it gives an illusion of an offensive move. With such a system at hand, the Indian leadership would be willing to take part in offensive strikes against Pakistan, based on the assumption that Pakistan's retaliatory move would not work against India.

### **IMPLICATIONS FOR PAKISTAN AND THE REGION**

There has been animosity between these two close neighbors ever since they won their freedom from British rule in 1947. This rivalry has manifested as a direct military conflict at least four times in the past 70 years as a result of some unresolved issues, particularly Kashmir, which, in the words of Pakistan's former Chief of Army Staff General Raheel Sharif, is the "unfinished agenda" of the subcontinent's 1947 partition. The Kargil conflict gave Indian strategists the chance to think about the possibility of fighting a limited conflict with Pakistan without resorting to nuclear weapons. This inspired the development of Cold Start Military Doctrine (CSMD). Pakistan retaliated by creating tactical nuclear weapons (TNWs), which are low yield and may be used on the battlefield. Pakistan has made it very apparent that it pursues a nuclear first use policy and that any misstep by India can prompt a use of nuclear weapons from Pakistan.

Particularly after India decided to pursue overt nuclearization in 1998, the mechanics of nuclear deterrence in South Asia have become highly complicated. Since that time, Pakistan has been forced to maintain a credible nuclear deterrence posture to counter India's conventional and non-conventional threats. Pakistan's doctrinal stance changed because of India's military philosophy. The adoption of a broad-spectrum deterrent posture in accordance with the mission of "credible minimum deterrence" for thwarting all forms of aggressive measures was announced by Pakistan's National Command Authority in September 2013. Zafar Jaspal claims that Pakistan's change in attitude is qualitative in character, and it is India's provocative doctrine that has led to this adaptation (Naz, 2018). The policy of full spectrum deterrence covers the threat of a conventional as well as a nuclear attack. Nevertheless, Lt. Gen. Khalid Kidwai had made it very clear in 2002 that Islamabad would only use nuclear weapons "if the existence of Pakistan as a state is at stake."

The so-called Indian Draft Nuclear Doctrine of 1999 and the one-pager published in 2003 are no longer in force, according to the Indian Army Land Warfare Doctrine of 2018 and the BJP Manifesto of 2019. The three main tenets of the old Indian doctrine—no first use, enormous retribution as a threat, and a credibly minimal deterrence policy—are no longer applicable to contemporary Indian nuclear or conventional discussions and actions. With nuclear weapons being stored in mated form, the current Indian administration has turned to punitive first strike options, a renewed dependence on false flag operations, hot pursuit activities, and greater alert levels.

The addition of TNWs to the equation ensured stability in South Asia but for a short while because India's nuclear program continued to proliferate vertically. India continued its quest to UNSC permanent seat. India is a strong contender for acquiring sea-based second-strike capability and Anti-Ballistic Missile Defense System (ABM) and has made significant progress towards attaining that capability. If India acquires ABM technology, it will certainly undermine the deterrent capabilities of Pakistan which in response will be left with no option except to enhance its number of warheads besides modernizing its delivery systems. Pakistan's nuclear arsenal is fastest growing in the world, and it is estimated that till 2025, Pakistan will be the third largest nuclear weapon state surpassing China, France and the United Kingdom, only behind US and Russia (Salik, 2016). Pakistani officials cite the Indian threat for this rapid enhancement and modernization. At conventional level there lies asymmetry between both the countries and this asymmetry compels Pakistan to rely more on nuclear weapons to ensure its security against an imminent Indian threat but this uplift for the sake of own security certainly puts India under stress which then pursues ABMs to protect its cities from Pakistani missiles which possess the capability to target its major cities. This ABM technology supposed to be used for defense against incoming missiles is highly aggressive because once a state is confident that it is safe from incoming adversary's missiles, it can strategize to pre-empt adversary's nuclear weapons which can escalate into a full-scale nuclear war leading both the states towards catastrophe.

It was in 1998 that Pakistan and India acquired the nuclear weapon capability and became the only ones possessing such potential in South Asia. With both acquiring the capacity, threats of a conventional war escalating into a nuclear one seemed like an inevitable scenario. Up to the present, the two neighboring states, with confrontational relations have come face to face across multiple instances like Kargil, Parliament, Mumbai, and Uri but have not engaged in a major war despite the presence of such advanced weaponry. In 2019, Pakistan and India came close to an all-out war for the fifth time, where nuclear weapons could have been used. But despite the severity of the incident, neither Pakistan nor India declared war against one another.

This very scenario leads to the question that how is it possible for Pakistan and India to survive the above mentioned five conflicts in the last two decades, without the use of the nuclear weapon. And the answer lies in the theory of nuclear deterrence. As stated by Jaspal that nuclear deterrence basically is to threaten the enemy regarding a nuclear attack, in order to prevent the adversary from using violence and with this the usefulness of nuclear weapons is around the prevention of a military confrontation (Zafar, 2009) Therefore the use of nuclear weapons or the chances of a conventional war escalating into a nuclear exchange are quite unlikely in South Asia. Rationality to an extent prevails on either side and with a devastating outcome; Pakistan and India would abstain from utilizing their nuclear weapons. But with the Indian weapon modernization at such an unprecedented pace the prevailing strategic stability is likely to be impacted.

## **CONCLUSION**

Strategic stability and the balance of nuclear deterrence in South Asia are seriously threatened by India's aggressive development of conventional forces and a wide range of strategic nuclear and conventional warhead delivery systems with supersonic and hypersonic speeds, its strategic relations with the US, bilateral defense and civil-nuclear agreements with numerous states, and the introduction of offensive war doctrines. The dynamics of nuclear deterrence in South Asia have

been quite convoluted specifically after India went for the overt nuclearization in 1998. Since then, Pakistan as a strategic compulsion had to maintain a posture of credible nuclear deterrence for countering the conventional and non-conventional threats from India.

Pakistan's doctrinal stance changed as a result of India's military philosophy. The adoption of a broad-spectrum deterrent posture in accordance with the mission of "credible minimum deterrence" for thwarting all forms of aggressive measures was announced by Pakistan's National Command Authority in September 2013. Pakistan's position has changed qualitatively. And this adaptability has been made possible by India's controversial doctrine. The threat of a conventional as well as a nuclear assault is covered by the full spectrum deterrence strategy.

In order to overcome India's plan of fighting a limited conventional war, Pakistan developed the Tactical nuclear weapon (TNW) NASR. For countering the Indian Cold Start forces, NASR and RAAD are significant as they hold the potential to carry nuclear weapons. These can even be deployed against India's conventional forces as a first use option. Therefore, Pakistan holds the capability of using its strategic and tactical nuclear weapons against India. However, Lt. Gen. Khalid Kidwai had made it plain in 2002 that Islamabad would only use nuclear weapons "if the viability of Pakistan as a state is at jeopardy." However, despite these promises, South Asia's strategic stability is challenged by the sheer fact that both sides have lethal and destructive capabilities.

Therefore, maintaining conventional and nuclear deterrence between the two nuclear neighbors is crucial for the strategic security of South Asia. The use of ASAT, hypersonic missiles, and the non-deployment of ABM systems, which enhance the risk of nuclear and conventional entanglement in South Asia, are some of the crucial confidence-building measures that Pakistan and India must pursue. With this Pakistan should opt for quantitative and qualitative modernization of its tactical and strategic weapons. This would not only ensure nuclear deterrence but would also discourage India from opting for a misadventure. Parity can never be achieved in between the two states but a balance can certainly be maintained with such investments.

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