



CISSS
CENTER FOR INTERNATIONAL STRATEGIC STUDIES SINDH



**Dynamics of Strategic Stability and Nuclear
Deterrence in 21st Century South Asia**

Editor-in-Chief

Executive Director

Ambassador Qazi M. Khalilullah (Retd)

Editor

Director Research

Mr Mohid Iftikhar

Research Supervisor

Associate Director Research

Lt Col Azfar Bilal Qureshi TI (M) (Retd)

Contributors

Research Officer

Ms Syeda Sabiha Mehreen Rizvi

Research Officer


Mr Anwer Ali


Research Assistant

Ms Areeba Azhar

Contact Us

 House 16/1, Khayaban-e-Muhafiz, D.H.A Phase 6, Karachi

 +92-21-35340881 & +92-21-37120330

 info@cisss.org.pk

 @ CISSS_Karachi

 www.facebook.com/CISSS-Karachi

 www.instagram.com/cisss_karachi

Dynamics of Strategic Stability and Nuclear Deterrence in 21st Century South Asia

Introduction

The world order has repeatedly evolved since the last century and is now visibly shifting towards multipolarity. In the evolving international order, states have different levels of power and strategic interests.

Global trends such as the great-power competition and technological advancement have had significant impact on the concepts of strategic stability and nuclear deterrence. South Asia is no exception, as it is home to the two nuclear-armed states, Pakistan and India.

This booklet aims to discuss the concepts of strategic stability and nuclear deterrence and their dynamics in the twenty-first century. It also attempts to examine the impact of latest developments and emerging technologies on strategic stability at the global and regional levels, particularly South Asia.

Defining Strategic Stability

Strategic stability is a complex and dynamic concept. The idea of strategic stability can be traced back to the early 1950s when Washington and Moscow began to build nuclear arsenals and engage in an arms race.

There are several definitions of strategic stability that explain its application beyond conventional environment.

According to Liana Fix, Programme Director, Körber Foundation's Department of International Politics, and Ulrich Kühn, Director Arms Control and Emerging Technologies Programme, University of Hamburg (2020), "Strategic Stability is a situation in which nuclear weapons offer the advantage of deterrence without generating the incentive to strike first."

Edward L. Warner III, former US Secretary of Defense Representative to the New Strategic Arms Reduction Treaty (the New START) (2011) has observed that the strategic stability is used in three broad ways:

- The absence of incentives to use nuclear weapons first (crisis stability) and the absence of incentives to build up a nuclear force (arms race stability);
- The absence of armed conflict between nuclear-armed states;
- A regional or global security environment in which states enjoy peaceful and harmonious relations.

Pavel Podvig, Senior Researcher, Weapons of Mass Destruction Programme, at United Nations Institute for Disarmament Research, (2012) defines strategic stability as "state of affairs in which countries are confident that their adversaries would not be able to undermine their nuclear deterrent capability."

Significance of Strategic Stability

Strategic stability aims to prevent a military confrontation between nuclear-armed states. It is helpful in managing regional rivalries. It

encourages nuclear adversaries to exercise parallel or unilateral restraint in deployments and doctrines.

According to Dr Pervaiz Iqbal Cheema, four significant factors contribute to strategic stability in any region:

- The absence of any ongoing/persistent major dispute
- The absence of pronounced asymmetry in forces
- The existence of a large network of both conventional and military Confidence-Building Measures (CBMs)
- An active, but the judicious role of the great powers in conflict prevention.

Defining Nuclear Deterrence

The concept of nuclear deterrence builds from the principle of military deterrence, which includes threatening an adversary with the use of military force. It has long been considered a political and psychological function of armies as a prelude to combat. The purpose is to influence and shape an adversary's behaviour impacting its risk assessment and decision-making processes.

Thomas Schelling (1966) defines the classic concept of deterrence as an effort "to stop the foe from taking a certain action; it is passive and cedes initiative to the opponent."

Kenneth Waltz (1981) explains nuclear deterrence as a function that "bolsters state security by alleviating the prospect of direct attack, essentially ensuring peace through fear of retaliation."

Lawrence Freedman (2004) discusses that the main objective of nuclear deterrence is "to encourage the development of an international order in which there are formidable restraints on the use of force."

Significance of Nuclear Deterrence

Nuclear deterrence is one of the primary factors that govern the function of strategic stability. It is a psychological strategy aimed to prevent war through the assurance of retaliation.

Nuclear deterrence has introduced the concept of 'balance of terror' which has been more effective than 'balance of power' in maintaining stability.

The success of nuclear deterrence was evident during the Cold War era as the US and the former Soviet Union were actively engaged in an arms race but refrained from a nuclear exchange.

In 1962, the Cuban Missile Crisis brought the world to the brink of a global nuclear war. Yet both the US and Soviet Union agreed to withdraw their warheads from Turkey and Cuba respectively.

In South Asia, nuclear deterrence has played a crucial role in preventing nuclear escalation between Pakistan and India. However, military mobilisations and low intensity conflicts have been unavoidable. Some examples include Operation Brasstacks (1986-87), Kargil conflict (1999), Operation Parakaram (2001) and Balakot incident (2019).

Strategic Stability and Nuclear Deterrence in the Global Context

Strategic stability at the global level is being challenged due to the contemporary great-power rivalry. For instance, Ukraine crisis, Taiwan issue, eastward expansion of the NATO, and the new security arrangements such as the Quadrilateral Security Dialogue (QUAD) and the Australia-UK-US security pact (AUKUS), all contribute to instability. In this regard, the nature of the relationship between the US, on one hand, and Russia and China, on the other, is central.

Non-Proliferation of Nuclear Weapons (NPT).

Pakistan, India, Israel, and *North Korea* are non-NPT nuclear weapons possessor states. North Korea was initially Party of the NPT, but withdrew from the treaty in 2003.

According to the Stockholm International Peace Research Institute (SIPRI) report (2021), all nine nuclear-armed states together possess an estimated **13,080** nuclear weapons.

More than 90 per cent of the total **13,080** nuclear warheads belong to Russia and the US. The two countries have

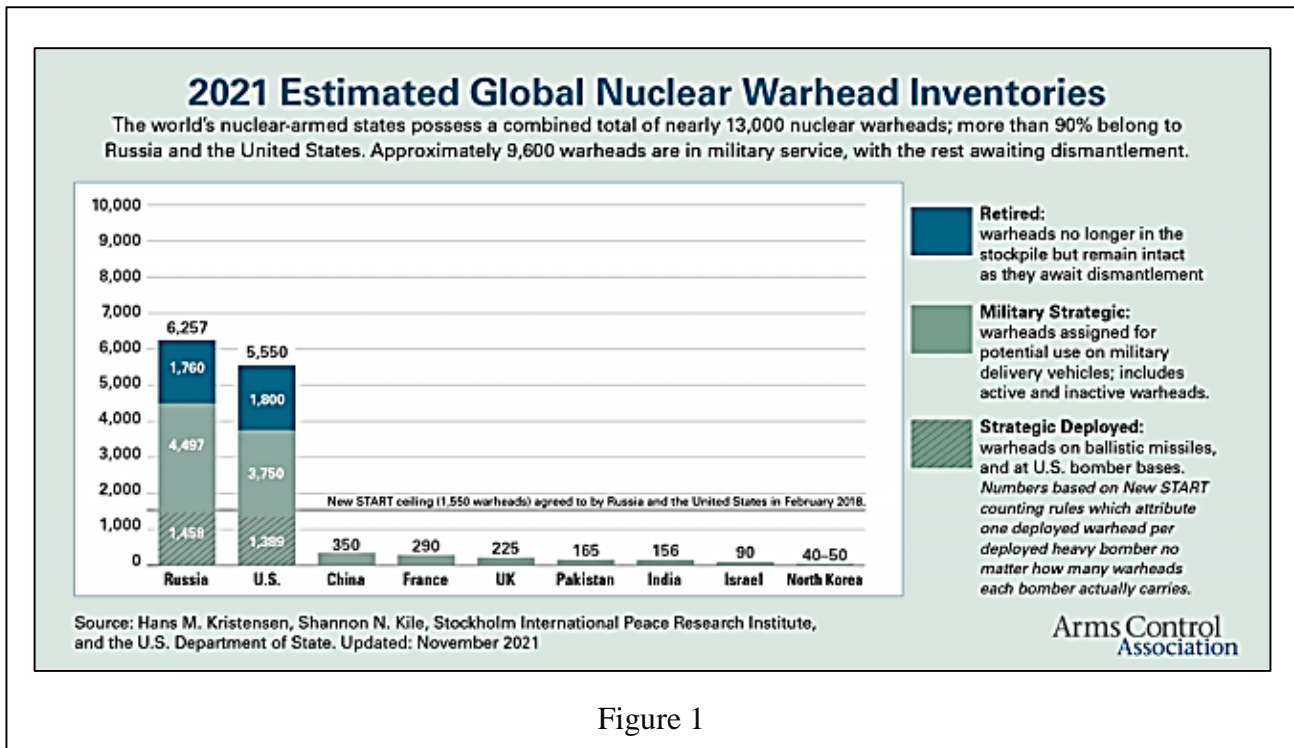


Figure 1

The US (1945), Russia (1949), the United Kingdom (1952), France (1960), and China (1964) are officially recognised as Nuclear-Weapon States (NWS) by the Treaty on the

approximately 9,600 warheads in military service. (Figure 1)

In the 1960s and 1970s, the US and the Soviet Union were actively involved in the vertical proliferation of nuclear weapons. The

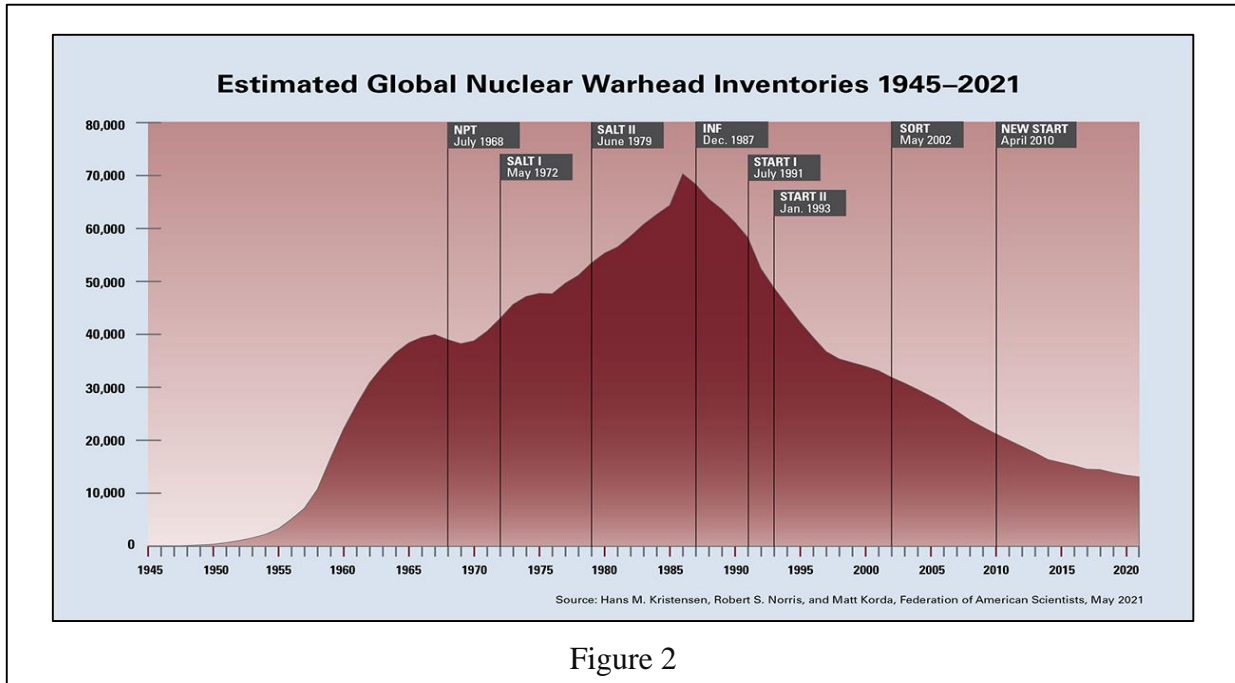


Figure 2

intensifying arms race led the two great powers to negotiate a series of arms control and disarmament agreements/treaties, including SALT I, ABM Treaty, SALT II, INF Treaty, START I, START II, SORT, and the New START treaty (Figure 2). These treaties resulted in significant reduction of nuclear arsenals of the two countries.

Guided by the objective of strengthening strategic stability, the US and the Soviet Union signed Intermediate-Range Nuclear Forces (INF) Treaty in 1987. The treaty led to the elimination of combined 2,692 US and Soviet missiles. The treaty expired after Washington formally withdrew from it on 2 August 2019.

Anti-Ballistic Missile (ABM) Treaty which was signed in 1972, limited the US and the Soviet Union to only two ABM deployment sites – one to protect the national capital and another to protect an ICBM launch site. Each

ABM deployment area was limited to 100 launch systems and 100 interceptor missiles. The US unilaterally withdrew from it in 2002 which led to its expiration.

At present, the New START Treaty (officially called Treaty between Washington and Moscow on Measures for the Further Reduction and Limitation of Strategic Offensive Arms) is the only legally binding agreement between the two superpowers that limit each party to have no more than 1550 deployed warheads. It was signed in 2010 for a duration of ten years (until 5 February 2021). The treaty has been extended until 4 February 2026.

On 16 June 2021, the Whitehouse issued a Joint Presidential Statement of the US and Russia on Strategic Stability in which President Biden and President Putin reaffirmed that “a nuclear war cannot be won and must never be fought.” The same was

reaffirmed by the five NWS in a joint statement issued on 3 January 2022.

Strategic Stability and Nuclear Deterrence in South Asia

The main cause of strategic instability in South Asia is deeply rooted in India's aggressive posture in the region and hostile behaviour against Pakistan.

The region became nuclearised with the so-called peaceful nuclear explosion by India, code-named Smiling Buddha, in 1974.

The explosion was a blatant violation of Article III of the Canada-India-Reactor-Utility Services (CIRUS) Agreement which states that "the Government of India will ensure that the reactor and any products resulting from its use will be employed for peaceful purposes only." In response, Pakistan was compelled to develop its nuclear programme.

India conducted its subsequent five nuclear tests on 11 and 13 May 1998. One of India's tests was thermonuclear fusion device.

Pakistan responded with six successful nuclear tests on 28 and 30 May – five to match the Indian tests of 1998 and the sixth one in response to India's 1974 test.

The expansionist nuclear posture of India has serious ramifications for regional stability. Given the existential threat, Pakistan seeks strategic balance in the region.

Pakistan was the first to offer Strategic Restraint Regime (SRR) in 1998 with its

three inter-locking elements: nuclear and missile restraint, conventional balance and conflict resolution. The proposal remains on the table to-date.

Several military CBMs have been negotiated between the two countries over the years. These include:

- Director General of Military Operations DGMO Hotline (1971)
- Prohibition of Attacks against Nuclear Installations and Facilities (1988). Under this agreement, the two countries exchange a list of nuclear installations annually on 1 January.
- Advance notice of military exercises and Maneuvers (1991)
- Prevention of Air Space Violations (1991)
- Agreement on Electronic Communications link between the Indian Coast Guard and the Pakistan Maritime Security Agency (2005)
- Informal Ceasefire along LOC/AGPL (2003)
- Joint Patrolling along the International Border and the non-development of new border posts
- Biannual meeting between Indian border security forces and Pakistani Rangers (2004)
- Advance Notification of Ballistic Missile Tests (2005)
- Agreement on Reducing the Risk from Accidents Relating to Nuclear Weapons (2007).

Despite Pakistan's diplomatic efforts, including its proposal of SRR, India implemented its offensive Cold Start Doctrine (CSD) in 2001. India denied the existence of CSD for more than a decade. Gen Bipin Rawat acknowledged its existence in 2017.

According to Ambassador Zamir Akram (R), CSD marked a destabilisation of deterrence with an obvious impact on strategic stability.

Walter C. Ladwig III (2007) in his article, *A Cold Start for Hot Wars?* stated CSD as a "risky undertaking" that increases instability in South Asia due to "India's awkward national security decision-making system."

The ongoing multidimensional conflict and the competition among great powers in the twenty-first century will influence regional and global dynamics.

Factors Influencing Strategic Stability in South Asia

Several factors influence strategic stability in South Asia besides nuclear deterrence. These include the great-power competition, the US Indo-Pacific Strategy, QUAD, the Indo-US Strategic Partnership, Indo-US Civil Nuclear Agreement (2005), Nuclear Suppliers Group (NSG) waiver to India (2008), outstanding disputes between Pakistan and India, Indian massive arms build-up and its irresponsible behaviour as a NWS.

Great-Power Competition

The rise of China and the resurgence of Russia have significantly diminished the 'sole super power status' of Washington.

The US has described China and Russia as revisionist states and considers them as a threat to its national interests.

The US Indo-Pacific strategy aims to promote security ties between its allies and "like-minded partners" in the so-called Indo-Pacific region and beyond. The Indo-Pacific Strategy heavily criticises China, alleging 'coercion and aggression' across the globe, particularly in the region.

In order to contain China, the US has increased its cooperation with India and other regional states through multiple bilateral and multilateral agreements.

Moreover, the current crisis in Ukraine is a reflection of the ongoing great-power competition between the US and Russia. The eastward expansion of the US-led NATO alliance is perceived as a threat by Russia.

QUAD: The New Alliance?

The QUAD is a coalition of four powers, which includes the US, India, Japan, and Australia. It was initiated in 2007.

The US has accorded the QUAD countries Strategic Trade Authorisation-1 status (STA-1), which allows these countries to have access to sensitive US military technologies.

Washington's increasing military cooperation with QUAD member states is posing security challenges for China.

Indo-US Strategic Partnership

According to the US Department of State (2021), "the US supports India's emergence

as a leading global power and vital partner in efforts to ensure that the Indo-Pacific is a region of peace, stability, and growing prosperity and economic inclusion.”

The US views India as a net security provider in the so-called Indo-Pacific strategy. In

Table 1: India’s Military Agreements with the United States		
S. No.	Agreement Name	Year
1	General Security of Military Information Agreement (GSOMIA)	2002
2	Logistics Exchange Memorandum of Agreement (LEMOA)	2016
3	Communications Compatibility and Security Agreement (COMCASA)	2018
4	Basic Exchange and Cooperation Agreement (BECA)	2020

2016, Washington designated India as a “Major Defense Partner”.

India is the only South Asian state which has been given the STA-1 status. The status gives India the leverage to purchase important military hardware from the US.

India and the US have signed four foundational agreements which have an impact on strategic stability in South Asia. (Table 1)

According to the US Department of State (2021), the defence trade between the US and

India reached to USD 20 billion in 2020 from nearly zero in 2008.

The armed forces of the US and India have cooperated through joint military exercises since the early 1990s such as Yudh Abhyas and Vajra Prahar (Land forces), Malabar and Exercise RIMPAC – the Rim of the Pacific (Naval force) and Red Flag (Air force).

The two countries signed Indo-US Civil Military deal in 2005, under which India was granted NSG waiver and other concessions. It also expanded US-India cooperation in energy and satellite technology.

NSG Waiver to India

The NSG was created in response to the Indian nuclear explosion of 1974. It consists of 48 member states, called Participating Governments (PGs). The group oversees the transfer of civilian nuclear material and nuclear-related technology and equipment.

The US is trying to promote India’s membership in NSG. Whereas, China has been insisting on a criteria-based approach,

The US willingness to grant India NSG membership would make India the first non-NPT state of the group – though the signing of NPT is a pre-condition to join NSG.

Pakistan has also applied for the NSG membership owing to the fact that it has the same credentials as India. However, a discriminatory approach is visible vis-à-vis Pakistan.

The US-sponsored NSG waiver in 2008 allows India to import nuclear fuel for its civilian nuclear reactors.

The NSG waiver has enabled India to use its indigenous fissile material for making nuclear weapons, resulting into vertical nuclear proliferation in South Asia.

Outstanding Indo-Pak Bilateral Issues

Pakistan and India fought wars in 1948, 1965, 1971, and a low-intensity Kargil conflict in 1999.

Both states continue to have unresolved disputes including Kashmir, Siachen, and Sir Creek. Among the three, Kashmir is considered a nuclear flashpoint for any future conflict.

India's continued illegal military occupation in the Indian Illegally Occupied Jammu & Kashmir (IIOJK) is a blatant disregard for UN Resolutions on Kashmir.

Pakistan continues to support the right to self-determination of Kashmiri people and seeks to resolve the dispute in accordance with the UNSC resolutions and the wishes of the Kashmiri people.

On 5 August 2019, the current Bharatiya Janata Party (political offshoot of RSS) government changed IIOJK's autonomous status revoking article-370 and 35-A of Indian constitution and included Kashmir and Ladakh as union territories.

India now claims that it has a two-front war threat. The two-front war mantra projects a

collusive threat to it from Pakistan and China in an amplified manner. India uses this to extract political and military concessions from the West for its arms build-up. This endangers the regional strategic stability and disturbs the existing state of deterrence.

India's Massive Arms Build-Up

According to the SIPRI yearbook 2021, India's military expenditure was USD 72.9 billion in 2020. Indian military expenditure from 2011 to 2020 is given in table 2. The data reveals that India is the second largest arms importer in the world.

According to SIPRI, India had 156 nuclear warheads as of 2021.

India has been given access to diverse channels to import high-tech military systems from major NWS, including the US, Russia and France. Its acquisition of advanced weapon systems includes the Russian S-400, the French Rafale jets, naval assets and the US Predator Drones.

In 2016, India spent €7.87 (approx. USD 10.64) billion on purchase of Rafale jets under Intergovernmental Agreement from France and USD 5.4 billion on purchase of Russian S-400.

India completed its nuclear triad in 2016 with the commissioning of INS Arihant– resulting in nuclearisation of the Indian Ocean Region.

In the past, Russia also exported BrahMos to India. Based on this supersonic missile technology, India is developing its indigenous hypersonic version “BrahMos-II”.

India’s ASAT tests

On 27 March 2019, India conducted an anti-satellite (ASAT) missile test, also known as Mission Shakti, under which at least 400 pieces of orbital debris have been created. This is placing both the International Space Station (ISS) and its astronauts at risk. NASA Administrator Jim Bridenstine termed the Indian ASAT test as a “terrible thing”.

New Delhi’s development of ASAT weapons is an offensive and destabilising act, as it enables India to target other states’ satellites in the event of a conflict. This increases the risks of an arms race in outer space. India also conducted its first space warfare exercise, IndSpaceEx, in July 2019.

It has deployed numerous space satellites for defence purposes to achieve better communication, surveillance, tracking and targeting. India is using advanced military communication satellite GSAT-7A for its land and air forces. New Delhi is also planning to develop GSAT-7R for its Naval forces by 2022.

According to Nuclear Threat Initiative (NTI), India has 16 submarines including 14 diesel-powered submarines and two nuclear-powered submarines in its fleet.

India’s Irresponsible Behaviour

Year	Military expenditure by India	Year	Military expenditure by India
2011	54555	2016	62567
2012	54361	2017	67522
2013	53961	2018	69285
2014	56756	2019	71469
2015	56773	2020	73001

India has consistently displayed irresponsible and callous behaviour towards regional peace and stability. Over past few decades, the world has witnessed repeated attempts and activities by India against Pakistan that could further destabilise South Asia. To name a few: (i) Military misadventurism and conducting false-flag operations; (ii) Propaganda against Pakistan on regional and international forums; (iii) fermenting terrorism in Pakistan; (iv) Claiming the ‘integration’ of Azad Jammu and Kashmir (AJK) in India by 2024; (v) Refusing to resolve the Kashmir dispute as per United Nations Security Council Resolutions; (vi) Repeated intrusion attempts by Indian Navy submarines in Pakistan’s territorial waters; (vii) “Accidental firing” of a supersonic missile on Pakistan; and (viii) Opposition to the China-Pakistan Economic Corridor (CPEC).

Moreover, the RSS Chief Mohan Bhagwat has called for “undoing the partition” at

numerous occasions which unveils the intentions of the extremist Hindutva ideology. Lt Gen Khalid Ahmed Kidwai (R), Pakistan's former DG SPD has said that "India is now well and truly Hindustan, of the Hindus, by the Hindus and for the Hindus."

Pakistan's Response to India's Aggressive Posture

Pakistan's National Command Authority (NCA), the custodian of the state's nuclear assets, expressed concerns over ongoing massive arms build-up in South Asia (2021) and asserted that Pakistan will take all measures to ensure the strategic stability in the region without entering into an arms race.

Pakistan responded to Indian CSD and its massive military build-up by developing low-yield tactical nuclear weapons and a well-articulated nuclear policy of Full Spectrum Deterrence.

In 2020, during Indo-Pak heightened tensions over Kashmir, Indian Defence Minister Rajnath Singh, hinted that India might change its nuclear doctrine of No First Use (NFU). It is an attempt to mislead the international community as it extends only to non-nuclear-armed states.

According to Lt Gen Khalid Kidwai (R), "Pakistan's nuclear capability comprises a large variety of tactical, operational and strategic nuclear weapons - on land, air and sea - designed to comprehensively deter large-scale aggression against Pakistan."

During an international conference (2021) organised by the Center for International Strategic Studies (CISS), Lt Gen Kidwai (R) cautioned India "not to consider Pakistan's robust nuclear capability as a bluff, and if an irresponsible military adventure were to be undertaken, Pakistan will respond forcefully under its retaliatory doctrine of Quid Pro Quo Plus."

Lt Gen Kidwai (R) added that "in the strategic stability-instability paradigm of South Asia, it has become Pakistan's responsibility to ensure that strategic stability will not be disturbed to Pakistan's disadvantage at any stage despite India's consistent efforts to swing the pendulum towards instability."

Pakistan successfully laid out an effective tactical demonstration of its Quid Pro Quo Plus doctrine in response to India's attack of 26 February 2019 in Balakot, by launching airstrikes around three sensitive Indian military targets: shot down two Indian fighter jets, captured an Indian pilot, and paralysed Indian Air Force System.

In a press statement, the Ministry of Foreign Affairs of Pakistan emphasised that "the sole purpose of this action was to demonstrate our right, will and capability for self-defence. We do not wish to escalate, but are fully prepared if forced into that paradigm."

Pakistan's strategic policies are designed to deter India from undertaking any misadventure against Pakistan.

Pakistan's nuclear capability is a national asset, and successfully serves the purpose it was built for.

Challenges to Strategic Stability and Nuclear Deterrence

Technological Advancement

Technological and weapons advancement have enhanced the significance of information and added new dimensions to the concepts of strategic stability and nuclear deterrence.

Low-yield tactical nuclear weapons may lower the nuclear threshold. However, the combination of low-yield warheads with long-range stealth delivery systems creates an enhanced capability of precision strikes against highly protected targets as a part of counter-force strategy.

During the Cold War, the command-and-control systems were a product of operational knowledge, but lacked real-time information to assist in decision-making. The twenty-first-century advancements can allow these systems to collaborate with an advanced cyber system, Artificial Intelligence (AI)/Artificial General Intelligence (AGI), autonomous weaponry and decision-making algorithms.

Interfacing of cyber systems with nuclear command-and-control systems through Artificial Intelligence may also have repercussions for the employment of weapon systems in the context of International

Humanitarian Law (IHL) and International Human Rights Law (IHRL).

Multiple Independently-targetable Re-entry Vehicles (MIRVs) can be countered with greater efficiency through improving the performance of ballistic missile defences and laser weapons with advanced technologies like quantum computing, Artificial Intelligence, and man-machine interface.

Missile defence technologies are a potential threat to satellites on which states rely for alerts, as well as surveillance and navigation. Loss of satellite networks may leave states blinded for the warnings, thus resulting in miscalculations.

The Hypersonic Glide Vehicles can penetrate the missile defences, as they are difficult to detect due to their high speed, and destroy the target directly.

The Age of Hybrid Threats

Hybrid warfare refers to the use of unconventional strategies as a part of a multi-faceted warfighting approach to dismantling adversary's capabilities, where non-military means of war counterbalance the conventional military power.

Hybrid threats or warfare are designed to evade detection. However, their dependence on technology and information can turn the situation around.

It involves tactics and synchronised threats that target vulnerable points of rival states covering their military, economic, political, religious, information and cyber spheres.

Conventional forces embedded with advanced technologies, economic and trade wars, disinformation, propaganda, use of proxies, diplomatic pressure, and nuclear force coercion are forms of hybrid warfare and threats.

Hybrid attacks may result in unconventional military response. For instance, the US in its 2018 Nuclear Posture Review (NPR) declared that cyberattacks on critical infrastructure will constitute a “non-nuclear strategic attack” and could provide justification for the use of nuclear weapons in response.

Conclusion

The great-power competition, strengthening of the Indo-US strategic partnership and India’s aggressive policies against Pakistan adversely affect peace and stability in South Asia.

South Asia has experienced relative stability with Pakistan’s nuclear capability and its policy of Full Spectrum Deterrence.

To ensure strategic stability in South Asia, all outstanding disputes between Pakistan and India need to be resolved peacefully through talks. The Kashmir dispute must be resolved in accordance with the United Nations Resolutions.

Contributors

Syeda Sabiha Mehreen Rizvi, Research Officer, CISSS

Anwer Ali, Research Officer, CISSS

Areeba Azhar, Research Assistant, CISSS