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FOREWORD

1. The 'USI of India' has remained steadfast in its endeavour to contribute towards the development of India's Strategic thoughts for over 155 years. Their signature publication 'The Strategic Year Book', since its inception in 2016, has continually attempted to delve deep into the ever changing dynamics of geopolitics, national security and international relations.

2. Today, the global geopolitics is in a state of flux. The ongoing conflicts

in Europe and Middle East clearly vindicate that the established norms and maxims of diplomacy are fading and new ones are emerging. Events are unfolding at a pace that exceeds the ability of decision makers to react effectively. The existing geopolitical uncertainty needs the reassessment of both strategic and tactical perspectives.

3. Amidst this VUCA geopolitical landscape, India is at a cusp of transition and is striving to become the third largest economy by 2030. The vision of 'Viksit Bharat' by 2047 and the roadmap enunciated for its accomplishment have injected a new hope and optimism for India to attain its rightful place in the comity of nations.

4. As Bharat embarks on this journey of unprecedented economic growth and military modernisation, our strategic thinkers have an extremely onerous task of meticulously examining this fluidity of global dynamics, challenges - both from internal and external threats, as also, the opportunities that are in the offing for strategic capability building. Our strategic thinkers must advocate indigenous, innovative, sustainable and cost effective solutions to the challenges that confront Bharat, professing effective employment of all elements of power (DIME) and 'a whole of nation approach'.

5. It is indeed a matter of pride for me to introduce the 'Strategic Year Book 2024' as it veritably captures this essence and offers an adroitly assorted bouquet of extremely relevant and contemporary articles. The

Strategic Year Book has progressively evolved with time, so as to include more analytical insights and strategic viewpoints through continual environmental scan.

6. I extend my appreciation to all the erudite and multi-domain strategic thinkers who have contributed to this Journal. I am sanguine that the insights presented in this year's edition will serve as a valuable resource for policymakers, scholars and members of the strategic community and be a reference point for them for deeper introspection and debate.

Jai Hind!

(Anil Chauhan)
General
Chief of Defence Staff

MESSAGE FROM THE CHIEF OF INTEGRATED DEFENCE STAFF TO THE CHAIRMAN CHIEFS OF STAFF COMMITTEE & PRESIDENT OF THE USI COUNCIL

1. It is a matter of pride to pen down the message for the 2024 edition of the USI Strategic Year Book for 2024. This publication stands as a testament to the USI's commitment to fostering discourse and knowledge sharing in the realms of geopolitics, international relations, and national security.

2. The strategic Year Book, with its insightful articles, serves as a valuable resource for professionals and scholars alike, offering deep insights into the complex dynamics shaping our world today. Its comprehensive coverage of critical issues provides readers with a nuanced understanding of global challenges and opportunities.

3. By taking the initiative to compile and disseminate such essential information, the USI demonstrates its dedication to advancing strategic thinking and promoting informed decision-making in matters of national and international significance.

4. I commend the USI for their commitment and diligence in producing this invaluable publication. May the strategic Year Books continue to serve as a beacon of knowledge and inspiration for all those engaged in the pursuit of peace, security, and prosperity.

Jai Hind!

(JP Mathew)
Lieutenant General
CISC

The Year Book 2024 – At a Glance

We are delighted to present the Strategic Year Book 2024 of the United Service Institution (USI) of India. Over the last seven years, the USI Year Book has established itself as a prominent source in the realm of strategic discussions. The Year Book 2024, a culmination of insightful articles and analyses from esteemed experts in the field of national security and strategic affairs. These articles delve into global, regional, and domestic issues that impact our national security and offer recommendations on policies, strategies, and organisational structures to effectively address them. It is evident that individuals involved in both internal and external security dynamics and strategic affairs require a comprehensive understanding of regional and global strategic perspectives, which the Year Book aptly provides. In addition to aiding strategists and leaders in making informed decisions, the Year Book serves as a valuable resource for researchers, postgraduate students, and individuals preparing for competitive examinations focusing on contemporary security and international affairs. Organised into five distinct sections, this Year Book offers a comprehensive glance at India's security landscape, internal challenges, regional dynamics, global issues, and efforts towards national security capacity building.

Section I: India's National Security Overview

In this section, Major General BK Sharma, AVSM, SM** (Retd), the Director General of USI, discusses in his article *Geopolitical Scan 2024: Strategic Implications for India,* how India navigates a multi-vector foreign policy amidst global polarisation in a volatile, uncertain, complex, and ambiguous world. He illustrates India's strategic outlook in geopolitics, examining internal and external challenges and opportunities in the 2024 Strategic Scan. Serving as a curtain-raiser, it contextualises subsequent articles in the volume. Additionally, Shri DB Venkatesh Varma, IFS (Retd), in his contribution titled *Drivers of Strategic Instability: Impact on the Global Arms Control and Disarmament Regime*, delves into the nuances of India's foreign policy amidst a changing world order, shedding light on global strategic dynamics and India's role on the international stage. He discusses the heightened recognition within the strategic community of the current international landscape's increased fragmentation and unpredictability.

Section II: Internal Security Issues

Section II of the Year Book delves into internal security concerns, featuring insights from esteemed experts. Lieutenant General (Dr) Shokin Chauhan PVSM, AVSM, YSM, SM, VSM (Retd) examines the strategic significance of Manipur and its pivotal role in India's 'Act East Policy' in his article *The Crisis in Manipur: Appraisal and Way Forward.* He navigates the complex socio-political landscape of Manipur, focusing on the conflict between the Meitei and Kuki-Zomi communities over the Meiteis' demand for Scheduled Tribe status and underscores the need for inclusive dialogue and reconciliation efforts to address entrenched grievances and establish lasting peace. In his contribution *Increased Social Cohesion: Tailwind for India's Rise*, Shri Jayanto N Choudhury, IPS (Retd), traces India's historical journey from colonial divide-and-rule tactics to post-independence socio-political movements. He explores the intricacies of identity, religion, and ethnicity, highlighting India's diverse socio-political fabric, affirmative action measures, and ongoing challenges of regionalism and separatism. Major General AK Chaturvedi, AVSM, VSM (Retd), in *Impact of Climate Change on the Future of the World*, emphasises the complex ramifications of climate change on global lives and economies. He underscores that climate

change is not solely a consequence of natural factors but also of human activities, notably the pursuit of technological advancement. Lastly, Lieutenant General (Dr) BS Sandhu, AVSM, VSM (Retd), in his article *Development of Northeast for Furtherance of BIMSTEC*, addresses the challenges faced by India's North Eastern Region, including isolation due to inadequate connectivity. He suggests that integration efforts through groups like BIMSTEC could mitigate these challenges and enhance development prospects.

Section III: Pakistan-China

This section of the Year Book turns its attention to the intricate relationships involving India, Pakistan, and China. Lieutenant General (Dr) Rakesh Sharma, PVSM, UYSM, AVSM, VSM (Retd), in his article *India-China Border Dispute: Intransigent from Generations Past, to the Present and the Future*, delves into the strategic collaboration between Pakistan and China in Ladakh. He traces the historical backdrop of the India-China border, assesses its current state, and projects future developments. Major General (Dr) GG Dwivedi, SM, VSM** (Retd), in his contribution titled *China's Vibrant Border Villages Programme Strategic Ramifications: India's Response*, evaluates China's Xiaokang project, its strategic implications, and India's response in the context of the prevailing territorial dispute. Dr TCA Raghavan, IFS (Retd), provides a comprehensive overview of the complex socio-political landscape of Pakistan in recent times in his article *Pakistan's Future Perspectives: Implications for India.* He highlights the convergence of multiple crises, including civil-military tensions, political instability, security threats, and economic challenges, discussing their implications on Pakistan's future. Dr Soumya Awasthi, examines the evolving dynamics between Pakistan and the Taliban in *Pakistan-Taliban Relations: Implications, Challenges, and Prospects for India*, emphasising the interconnectedness of recent political shifts in Afghanistan with global geopolitics. Additionally, she underscores India's strategies toward Afghanistan aimed at safeguarding its geopolitical interests amid Islamabad's assertiveness.

Section IV: India's Strategic Neighbourhood

Embarking on an exploration of India's strategic engagements, this section of the publication offers multifaceted insights into India's relations with China, Bhutan, Nepal, and ASEAN, along with security provisions in the Indian Ocean littoral regions. Lieutenant General (Dr) KJ Singh, PVSM, AVSM** (Retd), in *Bhutan-China Border Problems and Boundary Talks: Implications for India* provides a comprehensive analysis of the unresolved border issues between China and Bhutan, particularly focusing on the strategic significance of the Sino-Bhutan border for India. Dr Pramod Jaiswal's contribution, *India-China Strategic Competition in Nepal: An Assessment*, explores the evolving dynamics of geopolitical competition between India and China in Nepal, highlighting implications for Nepal's sovereignty and development. Shri Yogendra Kumar, IFS (Retd) in *India-ASEAN Relations: Challenges and Opportunities*, discusses India's relations with ASEAN, emphasising India's 'Look East/Act East' Policy integral to its post-Cold War foreign strategy. Finally, in his article *Strategic Deterrence: Challenges in Maintaining Stability in Sino-India-Pak Triangular Relationship,* Vice Admiral Satish Soni PVSM, AVSM, NM (Retd) evaluates India's role as a provider of security in the Indian Ocean littoral regions, emphasising the need for mitigating initiatives to address complex regional strategic challenges effectively.

Section V: Global Issues

Section V of the Year Book delves into global affairs. Lieutenant General Anil Ahuja, PVSM, UYSM, AVSM, SM, VSM** (Retd) in his article *Russia–Ukraine Conflict: Five Strategic Lessons for India,* emphasises the importance of securing India's frontiers and borders, advocating for prioritising consolidation and ensuring security. He also stresses the need for India to maintain strategic autonomy in decision-making, aligning with national interests rather than external influences. In his analysis of West Asia, Shri Sanjay Singh, IFS (Retd) examines the conflict between Israel and Hamas, focusing on

broader regional developments and major actors' roles. He brings out the broad developments in the region in 2023, focusing on the role of major actors against the background of global trends. Additionally, Shri Jayant Prasad, IFS (Retd) in his contribution titled *Great Power Contestation and India's Strategic Balancing* does a comprehensive analysis of the current global landscape, characterised by great power contestation, rising populism, and disruptions in international order. The article emphasises the potential for cooperation among major powers to address common challenges and calls for a reimagining of the international order based on multilateralism and shared values. Dr Roshan Khanijo in her article *Nuclear Risk and Global Security* highlights the escalating global nuclear risks, which are exacerbated by inadequate existing security frameworks and identifies a diverse threat matrix ranging from nuclear terrorism to concerns about nuclear safety, security, and the rise of disruptive dual-use technologies. To address these challenges, the article underscores the necessity for nations to recognise mutual risks and engage in formal bilateral and multilateral agreements to navigate these complexities effectively. Dr Kumari Mansi in her contribution Security *Dynamics in the Taiwan Strait amid Great Power Rivalry* explores potential conflict scenarios in the Taiwan crisis, analysing the intricate security dynamics of the Taiwan Strait amid escalating great power competition. She assesses the possibility of a Chinese invasion of Taiwan and the likelihood of US intervention, drawing insights from various sources.

Section VI: National Security Capacity Building

In the concluding segment of the Year Book, attention turns toward enhancing India's national security capacity through various initiatives. It begins with summaries of discussions by the Navy and Air Force service chiefs, providing insights into modernisation efforts within their respective services. Following this, Shri Sanjeev Sanyal and Akanksha Arora present a forward-looking perspective in their contribution titled *Process Reforms for a Viksit Bharat* (Developed India), outlining their idea for India's development in the *Viksit Bharat* Vision 2047. They emphasise the necessity of integrating process reforms into both public and academic discourse to ensure their continual utilisation for sustained economic progress. Major General Sanjeev Chowdhry (Retd) explores reforms in national security architecture and strategic decision-making in his article, *Reforms in National Security Architecture and Strategic Decision Making*, stressing the need for comprehensive reforms to address coordination issues and the absence of a comprehensive National Security Strategy (NSS). Dr Rajan Katoch, IAS (Retd), in his manuscript *Strengthening National Security: A Defence Economics Perspective for India*, discusses defence economics and operational management measures, advocating for enhancing combat capabilities within budgetary constraints. Through concrete examples and pragmatic insights, the article underscores the urgency of aligning defence investments with strategic imperatives and urges prompt action towards this end. Lieutenant General AK Singh, PVSM, AVSM, SM, VSM (Retd), addresses challenges encountered by military leadership in his contribution titled "Military Leadership in the 21st Century," emphasising adaptability and preparedness. He brings out a forward-looking perspective on reinforcing core values, civil-military relationships, and ethical responsibilities to ensure the armed forces remain a robust and adaptive institution In his article In his article *Future Warfare: Trend Lines for Modernisation of the Indian Army*, Lieutenant General Arun Sahni, PVSM, UYSM, SM, VSM (Retd), aligns India's security strategy and the modernisation efforts of the Indian Army with the realities of 'new age warfare.' He underscores that the modernisation drive must support India's vision of becoming a 'resurgent' nation, considering its growing aspirations and future responsibilities. Lieutenant General (Dr) RS Panwar, AVSM, SM, VSM (Retd), examines the potential of digital solutions in India's theaterisation, discussing the risks and benefits of AI-based military systems and proposing a risk-based approach to mitigate complexities. The article emphasises the need for India, particularly its Armed Forces, to develop strategic thinking regarding AI in warfare, an area that has yet to receive adequate attention. Vice Admiral AK Chawla, PVSM, AVSM, NM, VSM (Retd), provides insights into India's maritime capabilities within a theaterised context, focusing on the proposed Maritime Theatre Command (MTC) and its integration of various national agencies. Major General RS Yadav, VSM (Retd), and Colonel Dheeraj Kumar delve into strategic leadership in the era of social media in their article 'Strategic Leadership in the Era of Social Media Proliferation', highlighting

challenges and the need for nuanced competencies. Air Marshal Diptendu Choudhury PVSM, AVSM, VM, VSM (Retd), in the concluding contribution titled 'Convergence of Air and Military Strategy: Theatres and Beyond', sheds light on India's aerospace strategy within a theaterised framework, stressing the importance of integrating air power into warfare strategies alongside surface domains.

The editorial team is grateful to the eminent writers for their valuable contributions. As always, we keenly look forward to our reader's valued reviews, feedback and suggestions for improving future editions of the USI Year Book.

Wish you happy reading!!!

Major General BK Sharma, AVSM, SM ** (Retd)

Major General Sanjeev Chowdhry (Retd)

Ms Komal Chaudhary

Mr Vinayak Sharma

Mr Mihir S

Section I

India's National Security Overview

Geopolitical Scan 2024: Strategic Implications for India

Major General BK Sharma, AVSM, SM** (Retd)@

"It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of light, it was the season of darkness, it was the spring of hope, it was the winter of despair".

-Charles Dickens in 'A Tale of Two Cities'

Abstract

India has articulated a lofty vision of Viksit Bharat (Developed India) @2047, with well-defined strategic guidelines for its accomplishment. At the same time, Government of India has deftly pursued its multi-vector foreign policy to pursue India's national interests in a polarised world characterised by Volatility, Uncertainty, Complexity, Ambiguity (VUCA). India is at the cusp of its strategic destiny to transform into a leading world power. The article aims at dilate on India's strategic outlook and direction in the evolving geopolitical milieu. Strategic scan 2024 seeks to critically examine the internal and external strategic environment with a view to identify challenges and opportunities. The article serves the purpose of a curtain raiser for the reader to contextualise other articles contained in this Volume.

Introduction

A buoyant India has emerged an important player in the transition towards a multi-polar world order. India's growing economic and diplomatic heft backed by a strong military power has led to its recognition as a major Asian power and a responsible global stakeholder. The mission of *Viksit Bharat* (Developed India) *@2047* provides India a vision to develop Comprehensive National Power and its strategic configuration to realise the nation's expanding strategic interests. However, the strategic environment in which India will have to navigate its national interests is marked by Volatility, Uncertainty, Complexity, and Ambiguity (VUCA). The great power contestation that determined geopolitics in a post-Cold War scenario has been accelerated by four consecutive strategic shocks viz. COVID pandemic, Talibanisation of Afghanistan, Ukraine war and Gaza conflict. A new 'Great Game' is underway in Eurasia and Indo-Pacific with potential to expand to other strategic frontiers viz, the Arctic region, cyberspace, outer space and cognitive space.[1] There is a revamping of the Euro-Atlantic alliance, East Asian Security Alliance, Quadrilateral Security Dialogue (QUAD) and Australia-United Kingdom-United States Security Partnership (AUKUS) on one hand, and China and Russia's strategic embrace on the other. Israel, Iran and North Korea are other players in the evolving geopolitical calculus.

The emergence of Global South[2] is another significant geopolitical development in the tug for the balance of power. Also, the world is witnessing multi-domain warfare and grey zone conflicts that combine politics, economy, diplomacy, military, technology, and other elements of national power. Historical animosities, conflicting core interests, presence

@ *Major General BK Sharma, AVSM, SM** (Retd)* is the Director General of USI of India. He specialises in strategic net assessment, scenario building, and strategic gaming.

of volatile flashpoints, dangerous military posturing amid deepening strategic mistrust in an era of dysfunctional United Nations (UN) Security Council heighten the risk to global peace. Weaponisation of dollar, de-risking of supply chains and geopolitics of technology are the dominant drivers in strategic brinkmanship.

India continues to face collusive hybrid threats from the Pak-China. China's strategic forays into India's neighbourhood and politico-economic instability in South Asia pose added challenges to India's statecraft. Pakistan's alleged support for cross-border terrorism in India, particularly in the Kashmir region, remains a major concern. The evolving geopolitical scenario, therefore, demands a nuanced and sophisticated understanding of the strategic environment and its impact on India's strategic interests and positioning. This article serves the purpose of a curtain raiser for readers to contextualise other articles contained in this Volume.

Viksit Bharat @2047

India's contemporary geopolitics is guided by the ancient philosophy of '*Vasudhaiva Kutumbakam*'; a phrase found in ancient Sanskrit scripture '*Maha Upanishad*' implying that the 'World is One Family'.[3] The universal appeal of the concept 'One Earth, One Family, One Future' promoted by India during the Group of 20 summit is well received by the international community. The vision of *Viksit Bharat*, articulated by Prime Minister (PM) Modi, represents India's ambitious vision to transform the nation into a developed entity by the centenary of its independence in 2047. It seeks comprehensive national development complemented by credible deterrence in a multipolar world. The vision encompasses diverse facets of development such as infrastructure modernisation, sustainable economic growth, social advancement, and technological leapfrogging. Realising this vision demands adoption of whole of nation approach with emphasis on youth participation in nation-building. The PM has extended an invitation for the youth to actively engage in a transformative agenda through a youth movement called 'Ideas from Youth for *Viksit Bharat*@2047'.[4]

India's contemporary geopolitics is guided by the ancient philosophy of '*Vasudhaiva Kutumbakam*'; a phrase found in ancient Sanskrit scripture '*Maha Upanishad*' implying that the 'World is One Family'.

The operative guidelines for the accomplishment of aforesaid vision are enunciated in the form of epithets such as NARA (National Ambition and Regional Aspiration), '*Sabka Saath-Sabka Vikas, Sabka Vishwas-Sabka Prayas'* [5] (Participative Inclusive Growth), Security and Growth for all in the Region (SAGAR)[6], Digital India and *Atmanirbhar Bharat* (Self Reliant India). India is adherent of five Principles of *Panchseel* (Sovereignty, Non-aggression, Non-interference, Equality and Peaceful Coexistence). It forms the backbone of India's strategic autonomy practiced through a multi-vector, foreign policy engagement. India is a staunch proponent of rule based, non-hegemonic and multipolar world order. It is against joining any blocks or military alliances, advocates free access to global commons, non-discriminatory policies towards trade and technology, non-militarisation of space and unilateral imposition of models of governance. It has mooted the initiatives of International Solar Alliance, International Yoga Day and Coalition of Disaster Resilient Infrastructure. It champions the cause of the Global South and reforms in the UN and other international organisations making them more representative, inclusive and effective. It has shown firm commitment to meet the obligations towards climate change, by striving to become 'Climate Neutral' by 2070.

The Big Picture

Notwithstanding the aforesaid vision, a conducive internal and external strategic environment is paramount to accomplish India's strategic objectives in a globalised world. However, the present geopolitical developments point towards continued hostility. Realpolitik suggests that the behaviour of states will continue to be driven by 'Social Darwinism', where the national interest will remain paramount and the contending hegemonic powers will jostle for influence; thus, exacerbating the risk of falling into the Thucydides' trap. A series of strategic shocks, such as the

COVID Pandemic, Talibanisation of Afghanistan and Ukraine and Gaza conflicts have deeply polarised the world and plunged it into a perpetual crisis. We are witnessing a 'New Cold War' or as some strategists call it the 'New Great Game' of the 21st Century.[7] The evolving geopolitical dynamics are marked by the following trends:

- The ideological contestation has assumed the dimension of a civilisational rift with the western civilisations aligned on one side and China and Russia's on the other. At the heart of this struggle is the portrayal of divergent models of state governance such as liberal democracy, vis-à-vis authoritarianism.[8]

- Powerful states are vying for domination of locations in the Indo-Pacific,[9] Eurasia, Arctic, outer space, cyberspace and cognitive space, monopolising resources such as energy, water, food, rare-earth metals, semiconductors, microchips and submarine cables; using these as tools of strategic coercion. Decoupling and derisking of manufacturing hubs and supply chains away from China has emerged a key driver of geopolitical alignments.

- The weaponisation of dollar has disrupted the global financial system leading to the rise of inflation, food crisis, creation of alternate economic blocs, trading systems. The affected countries are finding new ways to circumvent economic sanctions on trade, currency swaps and alternative trading blocs such as Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, Iran, and the United Arab Emirates (BRICS).

- The wars in Afghanistan, Ukraine and Gaza have shown how the nature and character of warfare is changing. The world is witnessing multi–domain wars and grey zone conflicts. The lines between declared and undeclared wars are becoming amorphous, thus, compounding security-insecurity dilemmas. Induction of niche and disruptive technology is bound to provide impetus to asymmetric warfare that will alter the very dynamics of deterrence and use of force. Swarm drone and missile attacks as shown by Iran and its proxies have become order of the day.

Post the Second World War, the world order has seen significant transition. From bipolarity to unipolarity to an asymmetric and diffused multipolarity. At the heart of geopolitical competition is the so-called relative decline of the reigning hegemon (US) and a challenger (China).

- The world is witnessing a new arms race; countries across Europe and elsewhere have increased their defence budgets and are reviewing their force structuring and development programmes. Forward military posturing and dangerous manoeuvres as seen in the Baltics, South China Sea and Taiwan Strait, are fraught with risks of intentional or accidental flare-ups. These risks are exacerbated by strategic mistrust and hyper-nationalism.

- Most of the nuclear disarmament/force reduction treaties stand abrogated.[10] Nuclear weapons have re-emerged as a significant instrument in the strategic calculus of nuclear states. The doctrine of escalate to de-escalate, US producing low yield nuclear weapons, Pakistan's doctrine of full spectrum and zero range nuclear deterrence and China's endeavour to increase its nuclear arsenal as well as review its nuclear doctrine are the trends worth watching. The nuclear sabre-rattling by North Korea has reignited the debate in South Korea and Japan to consider nuclear options should the US dither in providing them much wanted nuclear defence umbrella. A nuclear Israel and potentially nuclear Iran point towards a plausible nuclear Armageddon scenario in West Asia.

- Post the Second World War, the world order has seen significant transition. From bipolarity to unipolarity to an asymmetric and diffused multipolarity. At the heart of geopolitical competition is the so-called relative decline of the reigning hegemon (US) and a challenger (China). The US, under President Biden, has sharpened its Indo-Pacific vision, that in one measure or the other is echoed by Japan and some European

countries. The growing traction towards expansion of QUAD, AUKUS, North Atlantic Treaty Organisation (NATO), Five Eyes and resolve such as 'America is Back' and 'Build Back Better World' are the new ways of America's assertion of power.

➢ Beijing, on the other hand, strives towards a China centric Asia. As part of its much-touted China dream, it has recalibrated implementation of the Belt and Road Initiative (BRI) and wooing the developing countries with slew of initiatives namely Global Development Initiative,[11] Global Security Initiative,[12] Global Civilisational Initiative[13] and lately Global Mediation Initiative.

➢ Post 2014, Russia has embraced its 'Pivot to Asia Policy' that besides China seeks to trade with the thriving economies of Asia. One significant prong of this policy is the development of resource-rich Far East, operationalisation of Northern Sea Routes and development of the second trans-Siberian pipeline to China. The second notable prong is the connectivity with India through the International North-South Transit Corridor (INSTC), Vladivostok-Chennai transit corridor and the planned Caspian Railway line.

➢ Russia and China are striving hard towards multipolarity by seeking the expansion of Shanghai Cooperation Organisation (SCO) and BRICS. In this milieu, stands out the professed neutrality of Association of Southeast Asian Nations (ASEAN) in the Indo-Pacific and India promoting the cause of Global Group of 21. However, at this juncture the most critical uncertainty would be the outcome of US elections that will have far-reaching ramifications for wars in Ukraine, Gaza, Taiwan contingency, NATO and stand on World Trade Organisation and climate change. Ironically, in this highly polarised geopolitical landscape, strewn with conflicts and flashpoints, the only custodian of global peace and security i.e., the UN is rendered dysfunctional and a mere mute bystander.

India has emerged as an island of stability in a region that is plagued by socio-political and economic instability. Long spell of political stability, growing economy (2024 Projected Real Gross Domestic Product per cent change is 6.5) and a powerful military, places India in the league of major powers.

➢ How a buoyant India navigates its strategic interests in the aforesaid geopolitical tapestry needs highly sophisticated statecraft and deft diplomacy. To this end, it becomes pertinent to highlight some specific areas of concern that are enumerated in the succeeding paragraphs.

Geopolitical Scan

India has emerged as an island of stability in a region that is plagued by socio-political and economic instability. Long spell of political stability, growing economy (2024 Projected Real Gross Domestic Product per cent change is 6.5)[14] and a powerful military, places India in the league of major powers. India strives to build a USD 30.0 tn by 2047 for an estimated population of 1.65 bn. However, India remains beset with internal security challenges that are inextricably linked with external security threats. As per Ministry of Home Affairs reports, 35 districts across seven states are categorised as Left Wing Extremism affected.[15] The sporadic incidents of sensational ambushes by the Maoist continue. There is a need to give impetus to civic action programmes in the tribal areas to wean away civil population from the Maoist influence as well as enhance the capacity of Central Armed Police Force to mount a sustained campaign to reclaim the 'Dandakarnaya' tribal belt from the Maoist influence.[16]

India needs to work assiduously to improve the state of security in the states bordering Pakistan and China. The capacity of Pakistan to foment trouble in Jammu and Kashmir and Punjab should not be underestimated. The entire terrorist eco-system in Pakistan remains intact. Its hand in reviving militancy in South of 'Pir Panjal' Ranges and Kashmir Valley is visible. It will try its best to scuttle the election process and instigate anti-national elements. Likewise, Pakistan's complicity in aiding Sikh militants on foreign shores and engineering terrorist incidents in Punjab is well-

known. With regard to Ladakh, the region's strategic importance vis-à-vis collusive threat from China and Pakistan needs no emphasis. Simmering socio-political discontent capitalised by the Kargil Democratic Alliance and Leh Apex Body in the form of demands for statehood, granting the 6th Schedule, job, land and environment protection and restoration of grazing rights along the Line of Actual Control (LAC) merit political intervention for early reconciliation.

Zooming out to the Northeast, PM Modi has announced a lucrative package for *Viksit* Northeast 2047.[17] However, protracted ethnic strife in Manipur on one hand, and lingering issue of Naga Framework Agreement, on the other, could potentially hamper sustainable peace in the region, thus derail India's Act East Policy. The challenge is further compounded by China's creeping assertiveness on the McMahon line and Myanmar being in the throes of civil war. Security of the Siliguri corridor, India's jugular vein to four countries and eight states, is impacted by China's strategic forays in Nepal, Bhutan and Bangladesh. China's investment in critical infrastructure projects in Nepal,[18] growing influence in the Eastern Nepal bordering Darjeeling and West Sikkim and three-step boundary negotiations with Bhutan have serious strategic implications. Any concessions on the Doklam plateau in western Bhutan and China's presence in Illam/Jhapa or Terai region (which has ISI sleeper cells), will have implications for the security of Siliguri Corridor. China's influence in terms of trade, arms sale and infrastructure development in Bangladesh is significant. In the absence of a viable oppositions the Islamists who are inimical towards India fill the vacuum. India ought to brace itself for post-Sheikh Hasina scenario by investing in pro–India constituencies across the political spectrum. Although India has reclaimed much of space in the three countries, more push is needed to make the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation and Bangladesh, Bhutan, India, and Nepal, and (BBIN- a subregional architecture of countries in Eastern South Asia) initiatives successful. Equally important is to ensure effective management of India's porous borders with Bhutan, Nepal, Bangladesh and Myanmar.

China's investment in critical infrastructure projects in Nepal, growing influence in the Eastern Nepal bordering Darjeeling and West Sikkim and three-step boundary negotiations with Bhutan have serious strategic implications.

India's South Asian neighbours, barring Bhutan, have joined China's BRI.[19] Likewise, Bangladesh, Sri Lanka and Maldives are signatories to China's maritime silk route passing through Indian Ocean Region (IOR). China's major transit corridors such as China-Pakistan Economic Corridor, China-Nepal Economic Corridor and China-Myanmar Economic Corridor and development of about 22 dual use Infrastructure projects in the IOR could potentially swing the regional balance of power to China's favour. The present regime in Maldives has adopted an outright pro-China stance. The situation in Maldives demands strategic patience and deft diplomacy to keep engaged with majority of political class and public at large, who are favourably inclined towards India. In the wake of recent economic crisis in Sri Lanka, Indian help worth USD 4.0 bn came as a big boon that not only salvaged Sri Lanka from a state collapse but also hugely swung public opinion in India's favour vis-à-vis China. Sri Lanka in deference to India's security concerns has placed a moratorium on the visit of foreign ships (mainly Chinese) and played right tunes to nurture strong bilateral relations. However, the controversy over the Kachchtheevu[20] has temporarily dampened the public mood in Sri Lanka.

As far India's Eurasian strategic outreach, formidable challenges exist. China's forward deployment along the LAC and obduracy in maintaining the status quo in Dapsang, Chumar and Demchok in the Eastern Ladakh, have seriously undermined the prospects of any thaw in Sino-India relations in the foreseeable future.[21] India's pivot to the northern borders has enhanced India's dissuasive deterrence capabilities at the LAC. However, considerable strategic military capacity gap exists between India and China, particularly in the domains of disruptive technology enabled domains such as rocket force, Information Support Force, anti-ship ballistic missile, anti-ship cruise missile, nuclear submarines, aircraft carriers, Artificial Intelligence (AI), swarm drones, electronic warfare, cyber, space and counter space capabilities. Moreover, pulling out of resources from the western borders and its deployment on the Line of Actual Control (LAC) has created certain voids in our offensive capabilities vis-à-vis Pakistan. There is a need to have a de-novo look at our

military force structuring, development and posturing, more so, at a critical juncture when Indian military is taking a transformational leap into theaterisation.

Geopolitical dynamics in Pakistan, Afghanistan, Iran and Central Asia are not favourably poised towards India. Pakistan's chronic hostility, Talibanisation of Afghanistan, consequences of US economic sanctions on Iran, latter's proclivity towards China and the Dragon's economic sway in Central Asia impinge on India's 'Connect Central Asia Policy'. Russia's distraction in Ukraine has further led to China occupying strategic space in Central Asia. One of the major limiting factors for India's outreach is its direct geographical connectivity to the region. Establishing a working relationship with Taliban in Afghanistan, engagement with Iran, despite US economic sanctions, and fast-paced operationalisation of INSTC (including Chahbahar), are the strategic imperatives for India to become an important player in Central Asia and Caucasus. The regional groupings such as SCO, BRICS, Eurasian Economic Union, Collective Security Treaty Organization and Central Asia plus India are the important platforms where India needs to leverage its economic, digital technology and politico-diplomatic heft to balance China and promote its strategic interests in the region. Strong India–Russia alignment in Eurasia is a *sine-quo-non* for India to maximise its policy options in Eurasia.

The Gaza conflict has plunged West Asia into a deep crisis with far reaching global ramifications. The conflict has caused unprecedented human suffering, particularly to innocent civil population. This is the longest war Israel is fighting since its inception. Israel is facing a three-front scenario, Gaza, West Bank and Lebanon. Houthis in the Red Sea have opened another front. Recent attacks by Israel against Iranian targets in Damascus have evoked strong response from Iran. Any further escalation is fraught with the risk of a major war breaking out in the region. The Red Sea crisis has seriously disrupted supply chains through the Suez Canal route, made shipping a risky venture, thus, forcing the containers to take a circuitous route via Cape of Good Hope. Consequently, apart from time delay, the container and insurance costs have seen sharp spikes.[22] The region is getting militarised; US has already deployed combined maritime forces (Task Force 153) for the security of Red Sea, Bab-al-Mandeb and western Gulf of Aden.[23] India too has resorted to a mission-based ship deployment in the region, albeit independently, and has conducted successful anti-piracy operations. New Delhi has adopted somewhat a nuanced position on the crisis; while condemning Hamas attack as an act of terrorism, it vouches for a two state solution and adopts non-committal policy on UN resolutions. What impact India's stand has on relations with the Muslim countries of the region merits a close watch. The Gaza conflict could further worsen the security scenario in the region, thus, adversely affecting India's energy security and security of 9.0 million Indian diasporas[24] who send about USD 90 mn remittances home.[25] The conflict has also cast a shadow on the I2U2 alliance (Israel, India, US, UAE), operationalisation of India, Middle East, Europe Economic Corridor and energy security.

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Strategic importance of Africa is growing due to the abundance of natural resources in the region. Many African countries, however, are mired in civil wars. China and Russia wield significant influence in the region in terms of trade and development of infrastructure. With almost 17.0 per cent of oil imports from the Western African nations, India was by far the largest importer of crude oil from Nigeria.[26] Nigeria has secured investment promises of around USD14 bn[27] from many Indian corporations and the Indian government has made a noteworthy contribution. New Delhi's endeavour to include the 55-nation African Union as the new member of the Group of 20 has earned us the goodwill. Africa has approximately 3 million strong Indian diaspora,[28] some of them in very influential positions. African countries have always looked at India as a benign partner to their development needs. India-Africa Summit and several other frameworks provide robust platforms for deepening our relations. Defence diplomacy inter-alia shows promising prospects. However, India needs to scaleup its capacity to deliver on the pledges that it makes from time to time.

Indo-Pacific has emerged as the centre of gravity of global powershift. At the heart of Indo-Pacific geopolitics lies the issue whether China is able to nudge US away to become the predominant power in Asia. US, on the other hand, has followed a policy of retrenchment so as to focus its energy in the Indo-Pacific. Washington's vision of Indo-Pacific has many convergences with similar visions enunciated by Japan and some European countries. The US has security treaty alliances with Japan, South Korea, Philippines and Australia. QUAD, AUKUS and Five Eyes add multi dimensions to such collaborative endeavours. There are efforts afoot to add gravitas to QUAD, include Japan in AUKUS and interface Japan, South Korea and Australia with NATO. The National Security Strategy of US posits integrated and extended deterrence to Indo-Pacific countries to balance China. The Indo-Pacific is studded with a number of flash points, namely dispute over Senkaku Island, China's 9 dash line claims over South China Sea,[29] contestation over Taiwan and nuclear brinkmanship by North Korea. The ASEAN, an important stake holder in the region, propounds a neutral outlook (The ASEAN Outlook on the Indo-Pacific) that seeks to keep the region out of any military confrontation. India, apart from being member of QUAD, seeks to develop closer relations with the maritime democracies of the region as part of its external balancing. However, keeping in view that it is not part of any US led security alliance and that it has a contentious border with China, its position in QUAD is somewhat nuanced. The biggest challenge for India is how to balance the great power rivalry being played out in the Indo-Pacific. India portrays itself as a strategic bridge between Eurasia and Indo-Pacific. To play an important role in this Avatar, India will have to assume a leadership role in the IOR, beyond the Indian Ocean Rim Association and Indian Ocean Naval Symposiu. to harness the region's blue economy and become a preferred net security provider for the IOR littorals.

Another important geopolitical driver is the competition over niche and disruptive technologies such as AI, 5G/6G, Cyber, big data analytics, blockchains, robotics, lethal autonomous weapon systems, hypervelocity vehicles, quantum communications, space and counter-space technologies. It needs to be recognised that India still is a technology dependent country with low scientific temper, research and development base and industry. Technological development of the nation and its armed forces should be accorded top most priority as part of our *Viksit Bharat* programme.

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Conclusion

Accomplishment of *Viksit Bharat* is a *sine-qua-non* for an aspirational India. Comprehensive national development, deft diplomacy and credible deterrence adopting a 'Whole-of-Nation Approach' should form the basis of India's strategic guidance. Equally important is to develop skills to undertake a 360-degree horizon scan of India's internal, external and asymmetric strategic environment to understand the challenges and identify opportunities. To this end, USI Strategic Year Book provides a good platform for the cross-fertilisation of strategic perspectives and provides important inputs for the policy framework.

Endnotes

1 Cuthbertson, Ian. "The New 'Great Game.'" World Policy Journal, vol. 11, no. 4, 1994, pp. 31–43. JSTOR, http://www.jstor.org/stable/40209382. Accessed 15 Apr. 2024.

2 Nour Dados and Raewyn Connell, The Global South, American Sociological Association. Contexts, Vol. 11, No. 1, pp. 12-13.

3 Culture Working Group, G20 Member countries https://indiaculture.gov.in/overview, accessed on 15 April 2024

4 Indian Institute of Petroleum and Energy (IIPE), Visakhapatnam, https://iipe.ac.in/iipeviksitbharat@2047/ accessed on 09 April 2024.

5 PM Addresses at Constitution Day Celebrations organized by Supreme Court, https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1775388 accessed on 15 April 2024

6 Maritime Cooperation With Regional Partners, https://pib.gov.in/PressReleasePage.aspx?PRID=1807607

7 Cuthbertson, Ian. "The New 'Great Game.'" World Policy Journal, vol. 11, no. 4, 1994, pp. 31–43. JSTOR, http://www.jstor.org/stable/40209382. Accessed 15 Apr. 2024.

8 Gregorio Bettiza, Derek Bolton, David Lewis, Civilizationism and the Ideological Contestation of the Liberal International Order, International Studies Review, Volume 25, Issue 2, June 2023, viad006, https://doi.org/10.1093/isr/viad006

9 Dominance of Indo-Pacific Region, IDR Blog, Maj Gen CP Singh (Retd.) Date:23 Apr , 2021, https://www.indiandefencereview.com/dominance-of-indo-pacific-region/

10 United Nations Office for Disarmament Affairs (UNODA), Resolutions, https://resolutions.unoda.org/

11 Ministry of Foreign Affairs, the People's Republic of China, Global Development Initiative (GDI), https://www.mfa.gov.cn/eng/topics_665678/GDI/wj/

12 Ministry of Foreign Affairs, the People's Republic of China, The Global Security Initiative Concept Paper, https://www.fmprc.gov.cn/mfa_eng/wjbxw/202302/t20230221_11028348.html

13 Embassy of the People's Republic Of China in the Independent State of Samoa, Global Civilization Initiative, http://ws.china-embassy.gov.cn/eng/xwdt/202305/t20230522_11081047.htm

14 The International Monetary Fund, https://www.imf.org/en/Countries/IND, accessed on 10 April 2024

15 LWE Division, MHA website, https://lwegis.nic.in/lwe/, accessed on 10 April 2024

16 PIB Delhi, Naxal Violence, 02 JUL 2019, https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1576657

17 Viksit Bharat Viksit North East, PIB: Prime Minister's Office, https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2012680

18 AIDIA Policy Brief, Vol.4, May-June 2023, Strategies and Trends: Evaluating Chinese Investments in Nepal, Nihar R. Nayak and Purushottam Poudel

19 Hindsight, Insight, Foresight: Thinking about Security in the Indo-Pacific, Daniel K. Inouye Asia-Pacific Center for Security Studies, South Asia and China's Belt And Road Initiative: Security Implications and Ways Forward, Anu Anwar

20 Ministry of External Affairs, MEA's Summary background note for meeting of the Informal Consultative Committee (March 1968)and Record of Discussion of meeting between then Foreign Secretary and then Chief Minister of Tamil Nadu in June 1974.

21 India Playing Chinese Checkers, https://www.narendramodi.in/india-playing-chinese-checkers-581372

22 The Suez Canal Authority (SCA), https://www.suezcanal.gov.eg/English/About/Pages/WhySuezCanal.aspx

23 CTF 153: Red Sea Maritime Security, https://combinedmaritimeforces.com/ctf-153-red-sea-maritime-security/

24 Ministry of External Affairs, Government of India, Population of Overseas Indians

25 Ministry of Finance, India received highest ever foreign inward remittances in a single year of $89,127 million in FY 2021-22

26 Petroleum Planning & Analysis Cell, Snapshot of India's Oil and Gas Data, December 2023

27 Reuters: Nigeria gets $14 billion investment pledges from India, seeks economic pact

28 Ministry of External Affairs, Government of India, Population of Overseas Indians

29 The Council on Foreign Relations, China's Maritime Disputes 1895 – 2023

Drivers of Strategic Instability: Impact on the Global Arms Control and Disarmament Regime

Shri DB Venkatesh Varma, IFS (Retd)@

Abstract

This article analyses five drivers of strategic instability arising from the emergence of big power conflict, diffusion of economic, military, and technological power and the impact of new technologies on warfare. The global arms and disarmament regime is facing considerable challenges and is unlikely to provide meaningful constraints on the growth of China's military power or its proxy Pakistan. In addressing future challenges, it is important for India to develop its national economic and military power as part of its policy of strategic autonomy. Cooperation with foreign partners can be supplementary in nature and cannot be a substitute for India's own military capabilities. India must be prepared to make its own assessments and make its own decisions to safeguard national security.

Introduction

There is recognition in the strategic community that the international situation is now more divided and unstable than it has been over the past three decades. Further, there is a general sense of pessimism that the situation may not improve anytime soon. Conflicts which were presumed to have been dormant have resurfaced and new conflicts in new regions have added to the growing sense of global instability. Further, it is felt that the traditional mechanisms of conflict management or resolution have either weakened or are proving to be inadequate. Multiple crises, both in traditional and non-traditional security challenges, are also cumulatively feeding into each other, thus, creating what is now being called a 'Poly Crises'. It is important to analyse these trends from an Indian perspective so that India is better prepared to respond to them.

Instability drivers

As the world has moved from unipolarity to multipolarity, there has been an increase in confrontation between the big powers though stopping short of open conflict. This trend has been aggravated by the weakening of nuclear deterrence between United States (US) and Russia, thus, allowing space for confrontation to grow in conventional areas or through the use of proxies. The Russia-Ukraine conflict and the rise in tensions over Taiwan are examples. There are also widespread repercussions on economic, financial, energy, technology, and informational dimensions of globalisation. Domestic instability in many countries has made the global situation more unstable as internal conflicts get linked to external ones more than before.

The second noteworthy driver is the general weakening of international law, rules, and norms as well as institutions that depend for their functioning a certain level of cooperation between the big powers- in bodies such as the United Nations Security Council (UNSC). The World Trade Organisation is no longer able to moderate trade disputes or competition. UNSC resolutions on non-proliferation such as on Democratic People's Republic of Korea (DPRK) are

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openly flouted. The Joint Comprehensive Plan of Action (JCPoA) restrictions on Iran have progressively weakened over time. Bilateral arms control agreements between the US and Russia have decreased over time, with uncertainty hanging over the fate of the New Start Treaty after 2026. The Organisation for Security and Cooperation in Europe (OSCE) is a pale shadow of itself on issues of European security. The ASEAN Regional Forum (ARF) is divided on dealing with the China challenge.

The third set of drivers relate to big power conflict spilling over into regional conflicts through proxies or through instability created out of failed interventions. In turn these have given rise to numerous non-state armed groups many of which use terrorist methods or Islamic radicalism as a means of mobilisation to undercut state control and acquire control over territory spanning over many state boundaries. Old frozen conflicts have flared up again such as the Nagorno Karabakh conflict between Armenia and Azerbaijan or between Israel and Palestine over Gaza. There are now many regions where non-state armed groups are more capable in terms of military capabilities than regular armies, thus, weakening state legitimacy and authority in the states concerned. The fall of Kabul to the Taliban after the hasty withdrawal of American troops is an example of a 20-year-long failed intervention. In the Yemen Civil War, the Houthis were able to withstand attacks from more powerful militaries for over 6 years. Islamic armed groups now are powerful in many parts of north and sub-Saharan Africa-from Somalia, Uganda, Libya, Niger, Mali, Chad, and Burkina Faso. Many of these groups also have conflicts amongst themselves. The spillover effect of the Gaza crisis, disruption of maritime security in the Red Sea, Iranian attacks on targets in Syria, Iran and Pakistan and growing instability within Myanmar are other instances of growing instability.[1]

The Organisation for Security and Cooperation in Europe is a pale shadow of itself on issues of European security. The ASEAN Regional Forum is divided on dealing with the China challenge.

The fourth set of drivers of instability relate to the diffusion of economic, military, and technological power to new regions and actors whose rise is resisted by the established powers. China and India are now main drivers of global growth. There are a whole host of other countries – middle powers as they are called, which have also acquired new power and influence- these include countries in the Middle East and Association of South East Asian Nations and notable new middle powers like Brazil, South Africa, Indonesia, Turkey, Saudi Arabia, United Arab Emirates, Republic of Korea (ROK), Iran and Egypt. Groupings such as the BRICS, which seek to create alternatives to a western dominated world order have gained new popularity.

The fifth set of drivers are the advent of new technologies which have changed the nature of warfare and the increased weaponisation of global interdependence. These in turn have created fundamental changes in the political economy of the western world in terms of economic growth prospects, demographics, and their ability to influence global trends. The diffusion of new technologies such as cyber, space and Artificial Intelligence (AI)/quantum as well in the field of missiles, drones and other delivery system have also impacted on global stability by allowing regional conflicts to fester for long. The international regimes for the control of technologies have not kept pace with the concurrent weaponisation of these new domains of warfare. These in turn have affected the established balance of power, creating new uncertainties and new power hierarchies, thus, adding to the instability that is associated with a global order in transition.

Fading Cold War Era Agreements

The global arms control and non-proliferation regime was largely the result of the bipolar power arrangements during the Cold War period. It was centred around bilateral arms control treaties between the US and the then Soviet Union and in the multilateral context was based on the Nuclear Non-Proliferation Treaty (NPT) which was negotiated in 1967. The bilateral arms control process survived the end of the Cold War with the negotiation of the Moscow Treaty and

thereafter the New START Treaty, which has been extended until 2026. The NPT was extended indefinitely in 1995, and achieved near universality in the 1990s, leading to the strengthening of its related regimes such as the Nuclear Suppliers Group (NSG) and Military Technology Control Regime, and other regimes such as the Australia Group and the Wassenaar Arrangement.

The New START Treaty is now in considerable danger of falling apart as both US and Russia have stopped inspections and other verification measures under the treaty though both have stated their readiness to abide by the numerical limits on warheads and deployed launchers mandated by the treaty. Due to the on-going Russia-Ukraine conflict, there is uncertainty whether both the US and Russia will further extend the treaty or allow it to lapse- which will then result in the absence of any treaty limitations on the nuclear arsenals of the two biggest nuclear powers.

It may be recalled that during the last two decades, major control treaties were set aside- the Anti-Ballistic Missile Treaty, the Intermediate Range Nuclear Forces (INF) Treaty, the Open Skies Treaty and the Conventional Forces in Europe treaty, which were the bedrock of transatlantic strategic stability for many decades. The reasons included the US' attempts to remove constraints on its development of ballistic missile defence systems or intermediate range missiles in a changed international situation where there was considerable proliferation of such missiles with other powers including China. The development of hypersonic missiles by Russia and China, however, offset the initial strategic advantage that the US had in the field of ballistic missile defence.

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The legitimacy of the NPT also came into question with the adoption of the Treaty on the Prohibition of nuclear weapons with the strong support of a number of non-nuclear weapon states of the NPT unhappy with the lack of progress in implementation of Article 6 of the Treaty. The Comprehensive Nuclear Test Ban Treaty (CTBT) has not entered into force. Though, the norm against nuclear explosive testing has generally been upheld after 1998, except for the nuclear tests of DPRK, the recent de-ratification by Russia has cast a new shadow on the future of the treaty. The Conference on Disarmament has continued to see stalemate in the negotiation of the Fissile Material Cut-off Treaty and no new treaty has been negotiated in that body since 1996.

China's Rise

China's rise as a major military power with the largest build-up of its nuclear and missile potential in peacetime history has drawn attention to the fact that the Cold War era bilateral and multilateral arms control and non-proliferation regime had placed little or no constraints on China's rise. Though, China signed the NPT only in 1992, it has done nothing to implement its obligations under the treaty citing its lower nuclear warhead numbers. While taking cover behind P5 solidarity, it has put pressure on countries like India which had to go overtly nuclear in 1998, to preserve its security interests in a nuclearised environment. It further attempted to put hurdles in India securing the NSG exemption in 2008, that would facilitate the resumption of full civil nuclear cooperation between India and the international community. China, of course, continued to provide clandestine support for Pakistan's nuclear and missile programmes.

Though feeble efforts were made during the Trump Administration to get China into a trilateral arms control process along with Russia, it was not until the San Francisco Summit of 2023, that China reluctantly agreed to commence arms control discussions with the United States.[2] However, progress is expected to be very slow as China will take cover from the tense relations already existing between US and Russia due to the ongoing Ukraine conflict. The US National Security Advisor Jake Sullivan stated on 02 Jun 2023[3] that the US was prepared to 'Compartmentalise' for the sake of strategic stability even if they could not cooperate on other matters to undertake bilateral discussions with Russia and

China on further arms control measures – including on numbers of warheads and delivery systems and to reduce the risk of misperception and escalation. The US Nuclear Posture of 2022 considers Russia and China as two near-peer nuclear powers and envisages a nuclear modernisation programme to ensure deterrence capabilities accordingly.[4]

Regional Nuclear Deterrence

The demise of the INF treaty has brought back focus on regional nuclear deterrence equations both in the European and in the Asian theatres. Russia's offer of a moratorium on deployment of INF category missiles in Europe was not accepted by the US, even prior to the outbreak of hostilities in Ukraine in Feb 2022. Russia further deployed tactical nuclear weapons in Belarus, citing North Atlantic Treaty Organisation (NATO) nuclear sharing as a threat. It is expected that NATO too will respond with a more assertive nuclear posture in the context of its expanded frontiers with Russia. Given the heightened concerns about Chinese and DPRK nuclear build-ups the US has strengthened its extended nuclear deterrence relations with ROK and with Japan while with Australia the AUKUS treaty arrangements are intended to strengthen deterrence capabilities of its regional allies.

With Iran reaching near weapon-grade uranium enrichment capabilities, the Middle East region is on the threshold of a new nuclear reality, with declining prospects for a revival of the JCPoA. With the massive proliferation of ballistic and cruise missile capabilities and advent of hypersonic missile capabilities with a larger number of countries, further complicated by the blurring of nuclear and conventional armed delivery systems which are vulnerable to cyber and space attacks. It is clear that on grounds of geopolitical multipolarity and technology diffusion the current arms control concepts and frameworks are inadequate for the emerging security challenges. New changes in terms of new actors, new technologies, and new threats have outpaced the existing frameworks.

The ongoing Ukraine conflict has shown that battlefields are changing at an ever-increasing pace, combining at the same time technologies and weapon systems of the last century with the very latest.

Changing Battlefields

The ongoing Ukraine conflict has shown that battlefields are changing at an ever-increasing pace, combining at the same time technologies and weapon systems of the last century with the very latest. This has resulted in a revolution in intelligence, surveillance and reconnaissance, shifting the balance in favour of defence and the critical role of standoff weapons. The closer fusion of sensor and striker weapons has been enabled by advances in autonomous and uncrewed systems and the on-going advent of AI in faster processing of information for target acquisition and strike decisions. With the expected proliferation of these technologies into new weapon systems, there are concerns of lowering of the conflict thresholds and uncontrolled escalation of conflict beyond human control as well as impact on the International Humanitarian Law in part due to concerns relating to indiscriminate civilian casualties. The integration of quantum properties along with cryptography will add a further dimension to the military applications of these new technologies. There are also developments in information and communication technologies that are relevant in this regard. Nuclear deterrence is particularly vulnerable to these technological changes if these are incorporated without commensurate controls.

New Technologies

There has been a massive increase in new technologies in the missile and aerospace fields and their availability with a greater number of countries. These developments include increased accuracy, the advent of hypersonic glide vehicles as well as their powered variants, anti-missile and terrestrial anti-satellite systems, space-based lasers, directed energy weapons and electromagnetically propelled weapons, revolution in additive manufacturing and advances in material sciences which enhance protection and stealth capabilities. The synthesis between biology and chemistry has opened vast avenues for potential weaponisation. These have the potential to fundamentally transform future warfare and,

hence, are seen as offering a military advantage to possessor states. This poses particular difficulties in their regulation and control at a time when the technologies are still evolving.

Many of these developments arise from the civilian domain through private sector research and development. Though there are multilateral forums that are grappling with these new technologies such the UN mandated negotiating bodies (Conference on Disarmament, Convention on certain Conventional Weapons, Biological Weapons Convention, Organisation on Prohibition of Chemical Weapons, Group of Governmental Experts, Open Ended Working Groups etc.) the pace of technological development is fasting outpacing the existing international institutional or normative frameworks at the global level. Regional bodies such as the OSCE or the ARF/ASEAN Defence Ministers Meeting Plus or the East Asia Summit are unable to summon the necessary political will to build new frameworks. China has disregarded applicable international law in pursuit of its maritime interests in the South China sea, with no penalties imposed by the international community.

Lessons for India

From India's point of view, the regional and international security situation does not offer any confidence that peace and security can be enhanced through international cooperation leading to agreements in the arms control and non-proliferation fields that would put meaningful restraints on Chinese military capabilities or its nexus with Pakistan. Therefore, the critical importance of India depending on its own military capabilities to ensure sufficient deterrence against aggression. Cooperation with foreign partners can be supplementary in nature and cannot be a substitute for India's own military capabilities based on the principle of strategic autonomy. In doing so, however, India must be cognisant of the interconnected nature of technological development especially in areas of AI, cyber and space which are key elements of network centric warfare. At the same time, there are related risks of over-dependence on the networks of foreign powers that would undercut the ability to conduct war on the basis of sovereign decisions.

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In India's international engagement, the nation must be prepared to deal beyond state centric negotiating situations in the UN related bodies for many of the future situations will require multi-stakeholder negotiations with technology giants in the private sector. In addition, the international engagement should be preceded by an intense preparatory process that breaks down internal silos and should be as inclusive as possible – Ministry of External Affairs, Ministry of Defence, armed forces, scientific community, private sector, legal scholars, strategic experts, all put together that would improve India's ability to do horizon-scanning for new technological and doctrinal trends and setting clear criteria for assessing their impact on national security. This imposes a responsibility on part of the government and the strategic community to work together to seek holistic solutions for the complex security challenges that lie ahead.

Conclusion

The fast-changing international security situation is now characterised by instability, many of whose drivers are beyond national control. The emergence of new actors, new technologies and new threats pose a significant challenge to the traditional framework of assessing risks as part of strategic planning. A careful analysis of global trends of nature detailed here would allow India's strategic community to avoid surprise and enable the country to meet future challenges. With the decline of multilateral arms control and disarmament measures, states will depend even more on national capabilities to defend their interests. India must be prepared to make its own assessments and decisions to safeguard national security.

Endnotes

1 IISS. "Armed Conflict Survey 2023," n.d. https://www.iiss.org/publications/armed-conflict-survey/2023/armed-conflict-survey-2023/.

2 White House, "Readout of President Joe Biden's Meeting with President Xi Jinping of the People's Republic of China," The White House, November 16, 2023, https://www.whitehouse.gov/briefing-room/statements-releases/2023/11/15/readout-of-president-joe-bidens-meeting-with-president-xi-jinping-of-the-peoples-republic-of-china-2/.

3 ibid

4 National Defense Strategy 2022. (2022). *Https://Media.Defense.Gov/*.

Section II

Internal Security Issues

The Crisis in Manipur: Appraisal and Way Forward

Lieutenant General (Dr) Shokin Chauhan, PVSM, AVSM, YSM, SM,VSM (Retd)[@]

Abstract

Manipur is a strategic state in Northeast India. The road from Imphal, its capital, was India's only road axis to Southeast Asia and was the lynchpin in India's 'Act East Policy'. The Meitei people represent around 53.0 per cent of the population of Manipur state, followed by various Naga ethnic groups at 24.0 per cent and different Kuki-Zomi tribes (also known as Chin-Kuki-Mizo people*) at 16.0 per cent. Events post 03 May 2023 and the subsequent months have been worrying and sporadic violence has not abated. Several Kuki-Zomi and Meitei villages were burnt down, and thousands of Manipuris both Metei and Kuki remain in refugee camps. 'The situation in Manipur has not yet been resolved, the violence has not yet abated, and the actual truth is not yet clear. Much of the narrative you hear about the violence in the state depends upon the ethnicity of the people relating to it".*

Introduction

Manipur has a history of over 2,500 years of cultural and economic exchange in Asia. The amalgamation of the independent kingdom of Manipur into the Indian Union since 1949, has been riddled with insurgency and ethnic tensions. The state acts as a gateway to Southeast Asia and East Asia. In recent times the political landscape of the state has been marked by clashes between the ethnic Meitei and Kuki-Zomi communities on the issue of the status of Scheduled Tribe (ST) that may be accorded to the Meiteis. An added layer of complexity to the issue, is the change in the land rights of the state in case they are declared as such, fuelling ethnic rivalry. Successful resolution of this issue hinges on a nuanced understanding of Manipur's history, ethnic dynamics, and geopolitical importance, demanding collaborative efforts that consider all community voices and concerns.

Strategic History- Seeds of Discord

Manipur is a strategic state in Northeast India, geographically bounded by the states of Nagaland to the north, Mizoram to the south and Assam to the west. In the east, it borders two very volatile regions of Myanmar, the Sagaing Region, peopled mainly by the Bamar (Burmans), who live in the dry zone regions and along the Ayeyarwady River to the east and the Chin state to the south. The term 'Chin' initially used by the Burmese in Myanmar referred to all the hill tribes in the western frontier of Myanmar. However, in India, the hill tribes are divided into two groups: the Chin-Kuki and the different tribes of the Naga ethnicity.

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The official and most widely spoken language is the Meitei language, which is native to only the Meitei people. However, it is also used as the lingua franca by smaller communities who speak various other Sino-Tibetan languages in Manipur.

Manipur has been at the crossroads of Asian economic and cultural exchange for more than 2,500 years. It connects the Indian subcontinent and Central Asia to Southeast Asia and East Asia, thereby geographically enabling the migration of people, cultures and religions over these centuries. The road from Imphal, its capital, was India's only road axis to South East Asia and was the lynchpin in India's 'Act East Policy'.

The Manipur Kingdom was an ancient independent kingdom at the India–Burma frontier that was in subsidiary alliance with East India Company from 1824 and became a princely state in 1891. It covered an area of 22,327 sq kms (and contained 467 villages). The capital of the kingdom was always Imphal.[1]

The early history of Manipur is composed of mythical narratives. The Kangla Fort, located on the banks of the Imphal River, is where the palace of King Pakhangba was located. It was built in 1632 by King Khagemba, who had defeated Chinese invaders. In the fort, several temples that had traditional religious significance are located. Kangla means 'Dry Land' in the old Meitei language. Loyumba Shinyen, the written constitution of Kangleipak, was formally developed by King Loiyumba (1074 to 1121) in 1110 AD. He consolidated the kingdom by incorporating most of the principalities in the surrounding hills. After subjugating all the villages within their valley, these Kangleipak kings grew in power and began a policy of expansion beyond their territory. In 1443 King Ningthoukhomba raided Akla (present-day Tamu, Myanmar), an area ruled by Shan people, initiating Manipuri claims over the neighbouring Kabaw Valley. [2]

The Manipur Kingdom was an ancient independent kingdom at the India–Burma frontier that was in subsidiary alliance with East India Company from 1824 and became a princely state in 1891. It covered an area of 22,327 sq kms (and contained 467 villages).

During the days of the British Indian Empire, the Kingdom of Manipur was one of the princely states. Between 1917 and 1939, some people of Manipur pressed the princely rulers for democracy. By the late 1930s, the princely state of Manipur negotiated with the British administration its preference to continue to be part of the Indian Empire rather than part of Burma, which was being separated from India. On 11 Aug 1947, Maharaja Budhachandra signed an Instrument of Accession, joining India. Later, on 21 Sep 1949, he signed a merger agreement, merging the Kingdom into India, which led to it becoming a Part C State. This merger was later disputed by groups in Manipur as having been completed without consensus and under duress. The dispute and differing visions for the future have resulted in a 50-year insurgency for independence from India and repeated episodes of violence among ethnic people.

Communities of Manipur

Three distinct communities constitute the State of Manipur. Two are the Naga and Kuki tribes, while the other is the non-tribal Meitei. Whenever demands are made by the Meitei, the dominant community representing more than half of the population of Manipur, the tribes have not stood in the way, as they have never had any real political power. The Manipuri language is in the Eighth Schedule of the Constitution, allowing the dominant community many benefits as the Manipuri language can be used in the Civil Services Examinations and the Central Armed Police Forces Examinations.

The Meitei people represent around 53.0 per cent of the population of Manipur state, followed by various Naga ethnic groups at 24.0 per cent and different Kuki/Zomi tribes (also known as Chin-Kuki-Mizo people) at 16.0 per cent. Manipur's ethnic groups practice a variety of religions. According to the 2011 census, Hinduism and Christianity are the major religions of the State.

Manipur's geography comprises four major river basins: Barak, Manipur, Yu, and a part of Lanye, with the Barak River being the largest. The Manipur River Basin features eight significant rivers originating from the surrounding hills. The state exhibits two distinct physical regions: rugged hills and narrow valleys in the outskirts, and a flat plain with features like Loktak Lake in the inner area, with altitudes ranging from 40m to 2,994 m.

A History of Insurgency

Manipur has had a long record of insurgency and intercommunity-ethnic violence. The first armed opposition group in Manipur, the United National Liberation Front, was founded in 1964. It declared to gain independence from India and form Manipur as a new country. Over time, many more groups formed in Manipur, each with different goals and deriving support from diverse ethnic groups in Manipur. In 1977 the People's Revolutionary Party of Kangleipak was formed, and the People's Liberation Army and the Kangleipak Communist Party were formed in 1978 and 1980. All these groups had received their initial arms and training from China.[3]

The ST Conundrum

A section of the Meitei community has been demanding inclusion in India's ST Lists, especially since it would give them special land rights and protection, economic packages, job opportunities and other facilities. As they persisted in their demand for ST status, the Ministry of Tribal Affairs, Government of India, wrote a letter on 29 May 2013, addressed to the Government of Manipur asking it to submit a specific recommendation along with the latest socio-economic survey and ethnographic report.

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Since the Manipur Government did not respond, a writ petition was filed in the High Court of Manipur. The High Court of Manipur, vide its order dated 27 Mar 2023, directed the Government of Manipur to submit its recommendation to the Ministry of Tribal Affairs regarding Meitei's demand for inclusion in the ST List.

The All-Tribal Students' Union, Manipur (ATSUM), an organisation of Kuki ethnicity, disagreed with the High Court order, decided on a protest march, and called upon several tribal organisations to participate.

On 03 May 2023, a 'Tribal Solidarity March' under the theme 'Come now let us reason together' was organised by ATSUM in all hill districts of Manipur. It was endorsed by the Indigenous Tribal Leaders' Forum, Joint Co-ordination Committee on Tribal Rights Manipur, and others. ATSUM's march infuriated those Meitei who demanded ST status, considering it the only solution to economic progress, preventing land transfer to immigrants/outsiders, and defending Manipur's integrity. Therefore, Meitei pro-ST activists organised a 'Counter-protest' in the adjoining border areas of Churachandpur and Bishnupur districts.

ATSUM's protest march was effective in Kuki-dominated districts of Manipur, particularly in Churachandpur town; however, Churachandpur on 03 May had not yet lifted the prohibition order under Section 2 of Section 144 of the Code of Criminal Procedure (CrPC) that was enforced on 27 Apr by the district administration.

Events Post 03 May 2023

The events that unfolded in Manipur post-03 May and in the subsequent months have been more than worrying. Several Kuki-Zomi and Meitei villages were burnt down, and there were reports of several alleged encounters between Manipuri State Police commandos and Kuki-Zomi insurgent groups. The Chief Minister claimed that 40 insurgents were killed, and several others were captured in operations and encounters across the foothills of the Imphal Valley, where the Kuki-Zomi and Meitei groups converge. The army did not confirm these encounters with the Chief of

Defence Staff insisting that the ongoing insurgency did not cause this violence and that it was a law-and-order situation that could only be resolved politically.

Insurgent groups under the Suspension of Operations (SoO) pact with the government of India and the state government have denied they were involved in the violence, neither in any attack on civilians nor in shootouts with the Manipur police forces. They, however, hinted that 'Village Volunteers' who defended their villages and land from aggression or attacks have been affected and could be involved.

This ongoing violence sets a dangerous precedent, pushing back peace talks and negotiations for a settlement by decades. The Kuki National Organisations, an umbrella body of many Kuki insurgent groups in this area, have made it clear they want to continue peace talks with the Centre; the nature and complexion of these talks may change. The involvement of these insurgent groups in any form of violence, which the Biren-led Manipur government has been claiming, will affect these groups at the negotiating table.[4]

The SoO agreement protects the insurgent groups from action by Indian or state security forces in exchange for a halt to the insurgency. In Mar 2023, the Biren Singh government unilaterally withdrew from the agreement, which was not accepted by the Centre and the armed forces, which were also a signatory.

The Meitei political establishment lays the blame for this violence entirely on specific segments of the Kuki community and their backing the illegal poppy cultivation as well as providing shelter and protection to illegal Myanmarese Kuki refugees who have entered the Churachandpur district to establish a greater Kuki homeland within the State of Manipur.

Despite the devastation in Manipur, these are still the early stages of a situation that could worsen unless the centre takes quick, decisive and effective action and the law-and-order situation is re-established.

On the other hand, the Kuki leaders point out that the Manipur government's continuing persistent attacks on the Kuki-Zomi people aimed at unlocking protected tribal land as the real reason for the recent conflict. In a recent interview, Mr Ram Madhav, a Bhartiya Janata Party (BJP) leader, stated similarly, emphasising that the clash was 'All about land' said "10.0 per cent of the Manipur is a valley and 90.0 per cent of which is hills, and this 10.0 per cent of this valley is home to 60.0 per cent of the people, that is where the whole clash happened". The BJP leader claimed that the people from the hills try to come down and take possession of the land as the valley is open, whereas specific hill laws control the hills, and this has been a constant concern between hills and valley people.

A two-fold exodus has already occurred; the Meiteis have been driven out by the Kuki-Zomi community on the edges of the Imphal Valley and Kuki-Zomis by the Meiteis from Imphal. Meiteis living in villages adjacent to Kuki-Zomi land have fled to the Imphal Valley, and the exodus was completed with the Kuki-Zomi tribes, leaving the valley to head for the Kuki-dominated Churachandpur district.

Despite the devastation in Manipur, these are still the early stages of a situation that could worsen unless the Centre takes quick, decisive and effective action and the law-and-order situation is re-established.

If the insurgent groups operate in consonance with the state or central forces, it would only work to the detriment of the tribal' cause. The tribal groups need to be cautious not to get drawn into any stand-off and desist from retaliating violently in any way.

Steps to Control the Violence

To control the situation, the army immediately moved several forces, almost 200 plus columns from neighbouring Arunachal, where they were deployed along the Indo-China Line of Actual Control and the Manipur government immediately imposed a curfew under CrPC Section 144 in several districts and suspended mobile phone data services

for five days in the late afternoon. However, video clips, photos, and messages/information/rumours of killing, injuring, raping, plundering, taking hostage, burning, or destroying villages had already gone viral on social media.

It added to the pent-up communal resentment against one of the communities that had been growing for a few years. The Manipur government suspended internet broadband services and authorised the civil authority to shoot at those who defy the law. The broadband continues to be suspended intermittently whenever any inconvenient story or narrative emerges.

After the Home Minister (HM), Shri Amit Shah's visit, widespread violence reduced considerably, but sporadic killings continued. The HM visited the affected areas and spoke with the concerned community leaders and the security forces. The responsibility of the overall command to restore normalcy was transferred from the Director General of Police to a non-local retired Indian Police Service officer by appointing the latter as Advisor (Security). It also opened helplines and relief centres for victims. The Government of India deployed additional military and paramilitary forces. In all these, hundreds of Meitei and Kuki people have lost their lives or suffered casualties. A judicial inquiry has been ordered, and several measures have been taken to reduce the violence.

The Status of the Land in Manipur

'Land' is sacred to the tribals. In the traditional belief system of their forefathers, 'Land is older than man' and 'It is a forbidden thing for the Nagas not to defend their ancestral land and forest from the intrusion of the enemies'. The hill tribal' authority over land was recognised as organic and not granted by the state.

'Land' is sacred to the tribals. In the traditional belief system of their forefathers, 'Land is older than man' and 'It is a forbidden thing for the Nagas not to defend their ancestral land and forest from the intrusion of the enemies'. The hill tribal' authority over land was recognised as organic and not granted by the state. The British accordingly treated the hill tribals as sovereign entities and consistently negotiated with them through separate treaties all throughout its history. Before the application of any land laws in Manipur, the Raja of Manipur claimed absolute ownership of all lands within his territory i.e., the valley area from the earliest time and collected land revenue. On the other hand, during the British period, the administration of the entire hill area of Manipur State was under the responsibility of the President of Manipur State Durbar who was a British Indian Civil Service officer. The hill areas were always separately administered as per a set of rules known as Hill Peoples' Regulation Act. The hill areas were at no point of time under the administration of the Raja of Manipur.

The State of Manipur is divided into two regions the hills and valley. Its physical area measures 22, 327 sq. km. of which the valley portion covers 2,248 sq. km. whereas hill areas cover 20,089 sq. km. The valley area is surrounded by hill and this central plain portion covers about 10.0 per cent of the total geographical area of the State. The remaining 90.0 per cent area is under hill regions. Different tribal communities occupy this hill region. The central region of the state is inhabited by the general population of Meiteis including Muslims and some tribals.[5] There are about 37.0 tribal communities, out of which 33 had been specified as ST under the Constitution of India. These different tribal communities occupy the hill region of the state and the region is divided into five revenue districts and the plain region has four districts. The tribals' representation to the state population, according to 2001 census is 38.43 per cent.[6]

The tribal system of land holding is based on customary and traditional practices. The founder of the village established the village and as the chief, he distributed the land after proper or due rites and appeased the spirits of the evil world in and around the area.

Tribals considered that the land they occupied is out of their merit. Interference to their lands is therefore, opposed, often violently. Every tribal village was an independent republic without outside interference.

As regard to Kuki system of land ownership, the Chief is the supreme authority in village affairs. The tribals as a whole have their own time-tested land holding system based on traditional practices by which they are governed. They consider that the lands they possess are acquired from the nature. As such the tribals do not have any land laws except those of traditional and customary base practices.

The Manipur Land Revenue and Land Reform Act, 1960 was enacted by the Parliament to consolidate and amend the law relating to land revenue in the State of Manipur and to provide certain measures of land reform and it extends to the whole of the State of Manipur except the hill areas thereof. Clearly this Act does not apply to the hill areas of the state. The provisions for protection of the tribals had been curtailed off. The state government under different notification numbers had extended the provision of the Act to tribal areas. To the tribals, the extension of the Act to their areas is encroachment into their territory.[7]

Status of Kukis in Manipur: Indigenous People of Manipur

Historical evidence states that Kuki settlements in India, Myanmar and Bangladesh predate British rule. Also identified as Chin and Zo, the Kuki settlements cover an approximate area of 50,000 sq mi.[8] However, without their consent, the British colonisers made the Kukis and their territory part of British India (Manipur) and British Burma (Chin state) in 1894. In 1947, East Pakistan (now Bangladesh) was carved out of British India. A set of arbitrary man-made boundaries were created. However, the hill area of Manipur has remained a part and parcel of Kuki ancestral land. Kuki indigeneity in the region predates the foundation of the modern Manipur state and definitely existed before the arrival of the British.

Historical evidence states that Kuki settlements in India, Myanmar and Bangladesh predate British rule. Also identified as Chin and Zo, the Kuki settlements cover an approximate area of 50,000 sq mi.

The National Register of Citizens (NRC) to identify illegal immigrants is yet to be adopted by the Government of Manipur. So, any allegation of someone to be an illegal citizen is devoid of law and condemnable. No Kuki leader has thus far opposed in principle any move by Manipur government to implement NRC in the state. [9]

The Kukis have a clear history of living freely in their ancestral lands. The fact that they fought the British in the Anglo-Kuki War from 1917 to 1919 in defence of their ancestral land and freedom is well documented and acknowledged. Ironically, the state government had declared a restricted state holiday to acknowledge the centennial commemoration of the Anglo-Kuki war, also known as the Kuki Rising/Kuki Rebellion.[10]

Till today, there is no formal agreement between the Kukis and the government after the British left India concerning their ancestral land. It is, however, understandable that since the ancestral lands of the Kukis politically fall under India and Myanmar, they will be subjected to the laws of the respective countries.

The government had earlier stated environmental concerns as the reason for declaring reserved forests in Koubru and Thangjing ranges. Notably, the state government had earlier in Nov 2020, through its Art and Culture Department, attempted to declare Mt. Koubru and Mt. Thangjing as sacred sites, ignoring the sentiments of the local populace who practised different religions. The Government of Manipur reportedly mulled evicting from more than 700 places within KK Reserve and many other sites in different reserved areas, taking 1980 as a baseline. Prohibiting their occupations and ordering them to vacate their lands by citing the chronology of the registration of their habitat is a clear violation of the law.[11]

Way Forward in Manipur: Recommendations

Sharing of Infrastructure. The state government should review its policy of instituting all infrastructure of importance in the valley and reserving the hills to cater to its environmental concerns and obligations. By concentrating all major institutes at the union and state level in and around Imphal, the political administration has created pressure on land for establishing various institutions and for roads, utilities and residential houses for the increasing population in the urban centres. As a result of this short-sightedness, the pressure on land in this area has increased exponentially. They must build new state and union-level institutions and sports infrastructure in the hill districts, making equal opportunities available for all the communities/people of Manipur.

Return of Refugees. The influx of refugees following the 2021 military coup in neighbouring Myanmar, particularly those from Sagaing Region, who have strong ties with the Kukis has also created a greater sense of insecurity for the Meitei indigenous community. Though the real decision-making in the conflict lies with those who control the guns, drugs and politics, the ones most affected in both the communities are women and children. The identities of different ethnic communities were weaponised in the current conflict to suit the agenda of a few in power. These refugees must be returned to Myanmar.

Disarmament, Demobilisation and Reintegration.

Any reconciliation must contend with the legacies of violence from multiple insurgencies. With the widescale looting of weapons and ammunition, the violence levels have only increased. Citizen-centric dialogues and engaging civil society will be key to addressing decades of deep distrust and historical hurt that have polarised indigenous communities across the region. Indigenous peace-making initiatives, truth-telling and forgiveness ceremonies could be the basis to start to soothe the fractured hearts and minds of communities who have lived through violence for decades.

The influx of refugees following the 2021 military coup in neighbouring Myanmar, particularly those from Sagaing Region, who have strong ties with the Kukis has also created a greater sense of insecurity for the Meitei indigenous community.

Endnotes

1 Snagajob, Naorem (1988). *Manipur, Past and Present: The Heritage and Ordeals of a Civilizatio*n

2 ibid

3 Hazarika, Sanjoy; *Strangers of the Mist: Tales of War and Peace from India's Northeast;* New Delhi u.a. 1994

4 Indian Express, May 29, 2023, Sukrita Baruah

5 P. Binodini Devi, *Tribal Land System of Manipur*

6 ibid

7 P. Binodini Devi, *Tribal Land System of Manipur*

8 Gazateer of Manipur First published in 1886, by the Superintendent Government Printing, Calcutta under the orders of the Quarter-Master General in India.

9 Lien Chongloi, The Wire, Dispelling Some Misleading Claims About The Violence In Manipur,27 May 2023

10 Gazateer of Manipur First published in 1886, by the Superintendent Government Printing, Calcutta under the orders of the Quarter-Master General in India.

11 Scheduled Tribes and Other Traditional Forest Dwellers' (Recognition of Forest Rights) Act, 2006.

Increased Social Cohesion: Tailwind for India's Rise

Shri Jayanto N Choudhury, IPS (Retd)[@]

Abstract

India is a kaleidoscope of races, religions and communities. Post-independence, the Constitution has assured the rights of religious minorities and diverse cultures. Nonetheless, there has been intense social churning with the assertion of separate identities. Technology has imparted a new dimension to social cohesion and the understanding of how individuals relate to one another. Increased social cohesion is essential, not just as a component of comprehensive national power, but also to provide a tailwind to India's economic aspirations. A working framework for Fundamental Duties is needed as a guide to contemporary 'Dharma'. Driving factors for social cohesion include trust in the institutions of governance and livelihood opportunities.

Introduction

India is a sub-continent of 1.4 bn people with an estimated 50 languages, of which 22 are recognised in its Constitution. Its population has all six racial types of the human race. The majority religion is Hindu, but it is divided into thousands of castes. The Shree Raghunath temple at Jammu, where a multitude of *Devis* (Goddesses) and *Devtas* (Gods) are revered, coexist harmoniously with the concept of pure consciousness; the '*Brahman*' of *Advaita Vedanta* (Non-secondness). In addition, different sects of Islam, which are the largest minority, Christianity, Jainism, Sikhism, Buddhism, and Zoroastrianism freely follow their beliefs. There are specific articles in the Constitution that protect the rights of such religious minorities and diverse cultures.

Divide et Impera (Divide-and-Rule)

Alarmed by the *Satyagraha* (Holding firmly to) campaign launched in 1919, the colonial regime encouraged division of the emerging movement along communal lines. They also highlighted the 'Unbridgeable' barriers between lower and upper-caste Hindus, asserting that the British Raj was like 'A vast sheet of oil keeping calm unruffled by storms, an immense ocean of humanity'. These divisive efforts did gain traction, but millions of ordinary people continued to risk jail to support the freedom movement. The refusal of a significant population of Muslims to migrate to the newly-created Pakistan affirmed that cultural bonds stretching back millennia, were deeper than a more recent religious identity. Internal fault-lines that continue within Pakistan confirm the hollowness of the 'Two-Nation' theory, which is why anti-India sentiments fanned by vested interests remain indispensable as its *raison d'etre*.

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Social Cohesion World-wide

There are worldwide examples of political, economic, or religious ideologies that have provided a framework for social cohesion. With the machinery of the state and party/church ensuring compliance, these work temporarily. The Soviet Union survived for over seven decades before imploding in the early 1990's. Continuing tensions within the Commonwealth of Independent States, such as the prolonged Russo-Ukraine conflict, underscore an unsettled socio-political environment in the former Union of Soviet of Socialist Republic.

The United States (US) is a successful example of a multi-cultural society, assimilating migrants from across the world. Social cohesion is based on equal opportunity, individual freedoms (some like the 'Right to bear arms' seem absurd), and a federal structure with significant autonomy for states and local communities. Of course there are serious flaws, not just in its bloody and exploitative trajectory of nation-building, but contemporary practice and residual racism continues. A disproportionate number of African-Americans are killed in police actions or are incarcerated in prison, leading to protests like 'Black Lives Matter'. Extreme economic inequality has created the elite that dominates the best educational opportunities and exerts excessive influence on public policy. The political divide in the US is heading towards an inflection point that could disturb stability as demonstrated in the attacks on 06 Jan 2021 on the US capital. Yet the US experience remains an important template of 'Unity in Diversity'.

Israel, though not officially a theocracy, was established as a Jewish State, with separate laws governing Jews and non-Jews. Despite its brilliant success as a technology hub, its inability to find a viable solution to accommodate Palestinians reveals the brittleness of any exclusionist polity.

A contrarian example is the People's Republic of China (PRC). Till the late 1970's, there were disastrous social experiments such as the 'Great Leap Forward' and the 'Cultural Revolution'. China was, then, at a similar economic level as India. It has now moved far ahead with a Gross Domestic Product (GDP) five times larger than that of India. Yet the jury is out whether 'Hanification' of its minority communities, whether in Tibet or Xinjiang, and ruthless enforcement of the Chinese Communist Party's (CCP) diktats can be sustained. The spectacle of military tanks crushing student demonstrators at Tiananmen Square is a forgotten footnote in China's economic transformation. The 'One Country, Two Systems' policy was intended to assure the people of Hong Kong that their differing eco-political perceptions would be accommodated and was expected to open the door for the future integration of Taiwan. But the experiment seems to be faltering. It was Zhou Enlai, who cryptically observed when asked about the impact of the 18th Century French revolution, 'Too early to tell'. Similarly, it remains to be seen whether the 'Social Cohesion' enforced by the CCP can continue until 2049, the century milestone of the PRC.

Israel, though not officially a theocracy, was established as a Jewish State, with separate laws governing Jews and non-Jews. Despite its brilliant success as a technology hub, its inability to find a viable solution to accommodate Palestinians reveals the brittleness of any exclusionist polity. The collapse of the apartheid regime in South Africa is a historical example.

In India's own neighbourhood, the failure of religion to forcibly supplant cultural-linguistic identities led to the emergence of Bangladesh in 1971. In neighbouring Myanmar, deep ethnic divisions remain unresolved, while in Sri Lanka, the separatist Tamil *Eelam* insurgency could be suppressed only after a quarter of a century and the use of a quantum of force against civilians remains open to interpretation as 'War Crimes'. Nepal's tortuous constitution-making process revealed challenges thrown up by its diverse ethnic make-up.

The Argumentative Indian

Post-Independence India has witnessed social churning, but within a resilient democratic system. Some have ascribed India's apparent chaotic functioning to 'Too much democracy'. Almost immediately after the euphoria of independence, India witnessed 'Language' riots demanding the creation of states on a linguistic basis, which was conceded with the creation of Andhra Pradesh in 1956. This gave rise to many similar demands including Punjab. The subsequent division in 2014 of the composite Andhra Pradesh into Telangana and Andhra Pradesh (both Telegu-speaking) reveals that language alone is insufficient for social cohesion. Other assertive socio-political movements have been based on demands by caste or ethnic groups. The mass movement of the late 1970s in Assam against 'Illegal Migrants' was a social singularity, echoed in the more recent anti-Citizenship Amendment Act protests. Each seems to further fragment Indian society into 'Narrow domestic walls'.

The framers of India's Constitution had rightly decided on the need for affirmative action to provide opportunities for India's historically disadvantaged communities. 1,108 castes and 744 tribes were designated in the First Schedule of the Constitution, for reservations in government jobs and in the political arena. The Mandal Commission Report opened the floodgates in 1990 to further demands. Now over 2,600 additional communities claim special status as 'Other Backward Classes'. This trend continues, with the Bihar government recently carrying out a caste census and the state legislature deciding to reserve 65.0 per cent jobs in the state for 'Backward' castes, which other states are likely to follow. The lack of agreement on a uniform civil code even 75 years after independence tests a philosophy that accepts diversity in cultural practice, even when some are contemporarily retrograde.

However, despite the growth of 'Identity Politics' with consequent dangers of polarisation, and outbursts of intermittent social violence, no credible analyst any longer predicts the 'Balkanisation' of India.

More than 2,500 political parties, registered and unregistered, at national, state, and local levels, reflect the huge diversity of ideological thought. To an outsider, accustomed to two or three major political parties in Western liberal democracies or to authoritarian regimes with a single party in power, this is an obstacle to the consensus needed for socio-economic progress. However, despite the growth of 'Identity Politics' with consequent dangers of polarisation, and outbursts of intermittent social violence, no credible analyst any longer predicts the 'Balkanisation' of India. 'India is a remarkable success story of managing a dazzling diversity in its polity and society'.

A Million Mutinies

Of equal concern are the violent secessionist movements that began soon after independence. 50,000 people have died in internal conflicts in the past 30 years alone, highlighting their severity often aggravated by the efforts of India's adversaries.

The pro-Khalistan movement in Punjab took 14 years to contain. The fall-out cost the life of a prime minister. Militant movements in the Northeast region have been asserting a separate ethno-political identity. Naga Hills in the 1950's, followed by the Lushai Hills; then the Meitei outfits in the Imphal Valley in Manipur and the Tripuri tribal areas of Tripura in 60s and 70s, Assam in the late 80s and finally, Meghalaya, both the Hynniewtrep (Khasi Hills) and Achik (Garo Hills) militances. The ongoing disturbances in Manipur arising from the Kuki-Meitei conflict and the unresolved demands of Naga sub-nationalism reveal the continuing dominance of tribal identities, despite the repeated creation of states/sub-units on ethnic lines. Maoist extremism continues even today in varying intensities in 10 states, a caution against ignoring the widening economic gap and aspirations of those at the 'Bottom-of-the-pyramid'.

Terrorist violence in Jammu and Kashmir (J&K) has dramatically dropped despite sustained efforts by Pakistan-based non-state actors to inject a communal virus into a separatist movement initially based on 'Kashmiriyat', perceived by votaries as a distinct culture. The challenge today is to inspire the people of the state (especially youth) with a convincing counter-narrative that highlights opportunities with the now complete integration into a vibrant multi-community democracy, economically more resurgent than any alternative in the neighbourhood.

Comprehensive National Power (CNP)

CNP is the 'Sum total of strategic resources of a country', estimated by factors like human-capital, military resources, the quality of governance, and the development of science and technology.

Should not 'Social Cohesion' be a component of CNP? Today, a 'Whole-of-Society Approach' is advocated for critical national issues. North Vietnam defeated the world's mightiest super-power, though it was hugely outmatched in every factor that constitutes the CNP. What they had was unbelievable societal resilience forged by committed leadership that inspired a national purpose. Only this, sustained the people through a bombing campaign unprecedented in the history of war that resulted in over 1 mn civilian casualties. The US, unimaginably superior in all measures of CNP, used every available weapon of destruction (barring nuclear), without triggering social disintegration.

The ongoing revolutions in information technology, emerging areas like artificial intelligence, robotics and quantum computing and advances in neuro-science has placed India on the threshold of a major leap to understanding how individuals and societies relate to each other.

How is Social Cohesion Achieved?

A sense of shared purpose and common values is integral to social cohesion at any level. In sports, a team's individual talent alone is not enough. India's cricket team with a amazing record in the recent World Cup (though it lost to Australia in the finals) had players from across the country and varied backgrounds. Similarly, Regiments of the Indian Army are an example of group cohesion, with bonding based on a common pride in '*Izzat* (honour) of the *paltan* (Unit)' and a brotherhood-in-arms. The National Security Guard, India's federal counter terrorism force is another example, though the model is different. Its personnel are drawn for a limited deputation period from all 27 infantry regiments of the Indian Army, every other combat, and combat support arm and service, the state's police and all six Central Armed Police Forces (CAPFs). Despite this unique diversity, the force has acquitted itself with superlative distinction. The commitment to a focused and inspiring common purpose of protecting the nation against terror attacks, and a shared pride in the iconic 'Black Cats' is the glue that binds individuals from different forces together. An organisational ethos that demands exceptional standards of performance reinforces force cohesion.

In more complex social groups, objectives may be multiple or even conflicting. Cohesion can only be achieved by the 'Bridging' provided by a higher common purpose, a shared value framework, and a leadership that inspires trust. Social cohesion begins at the community level, the basic building block of interpersonal trust. At the macro level, drivers for social cohesion are public confidence and trust in the integrity and competence of government and its institutions, an acceptable quality of life for all, without blatant inequalities in terms of conspicuous consumption or privileges. For youth, livelihood opportunities are especially important, as well as an assurance of a future with prospects.

Impact of Technology

Technology has transformed social interaction. The ongoing revolutions in information technology, emerging areas like artificial intelligence, robotics and quantum computing and advances in neuro-science has placed India on the threshold of a major leap to understanding how individuals and societies relate to each other. The spread of the internet and social media has connected people beyond territorial boundaries. Communication has never been faster, with people instantly

connected by satellite and the internet forming digital communities across India. Online social media offers immense promise as a platform to build up constructive social cohesion transcending traditional divisions.

Planning for Social Cohesion

Singapore and Canada are countries that have proactively facilitated social cohesion. In the 1960s, Singapore faced major ethnic and inter-religious conflicts. It now ranks highest in social cohesion among the Association of Southeast Asian Nations countries. By law, religion and politics are kept separate. Its continued efforts towards social cohesion are reflected in a 'Forward Singapore' strategy that includes a Youth Leadership Programme and an International Conference on Cohesive Societies.

Canada, a society of migrants like the US has consciously worked towards improving social cohesion, with indicators like participation in community life, trust in institutions, and has policies designed to encourage understanding across different ethnic and cultural groups. In both Singapore and Canada, improving social cohesion is accepted as a dynamic process, since the flow of immigrants continues. Several European countries are today faced with the dilemma of absorbing a large influx of migrants with a starkly different worldview. At places, there has been a push-back by host populations who perceive a threat to a culture that has evolved over centuries. Rebuilding social cohesion is now a key priority for these countries.

How to increase Social Cohesion in India?

The challenge in India is to transcend caste, religion or ethnic/regional identities that most Indians are rooted in. There is nothing wrong in pride at being a Tamil, Punjabi, Mizo, or commitment to a faith whether as a Hindu, Muslim, Sikh or Christian. To quote Mother Teresa, "By blood I am Albanian. By citizenship, an Indian, by faith a Catholic". In today's inter-connected world, most people comfortably juggle multiple identities. The problem arises when there is hostility to the 'Other', sometimes amounting to xenophobia, or when these sub-identities take precedence over the larger national identity.

The challenge in India is to transcend caste, religion or ethnic/ regional identities that most Indians are rooted in. There is nothing wrong in pride at being a Tamil, Punjabi, Mizo, or commitment to a faith whether as a Hindu, Muslim, Sikh or Christian.

We cannot forget that the modern Indian nation-state is just over 75 years old, but *Bharat* as a civilisation dates back millennia. The traditional concept of *Dharma* (religious and moral duties) provided a framework for everyone to live in a way that benefitted society as a whole. This was essentially a framework that aimed to ensure social interconnectedness despite diversity. *Atharvaveda* says, "All should live together in harmony, supporting one another like the spokes of a chariot wheel connecting its rim and hub".

A common national charter for citizens outlined as Fundamental Duties is articulated in Article 51(A) of the Constitution. These 11 duties range from 'Abiding and respecting the Constitution' and 'Promoting common brotherhood among all the people' to 'Preserving the rich heritage of India's composite culture'. National leaders have stressed their importance. In repeated judgments the apex court has conveyed that all citizens owe the state these duties, though, it has also held that these can only be socially and not legally enforced.

Is a balance possible between individual benefit and the collective good? Can the concept of *Dharma* be incorporated into a working framework as enshrined in the Fundamental Duties? The partial resurrection of Confucianism in China by a Communist regime recognised the utility of a social philosophy that has historically facilitated a remarkable degree of social cohesion.

Defence forces, CAPFs and organisations like the National Cadet Corps already inculcate these values. The Indian Railways and public sector undertakings are strong connectors across India. The All-India-Services also contribute to social cohesion. Officers from Arunachal Pradesh serve in Telangana; those from Kerala serve in J&K, learning the language and culture of their allotted cadres. If built into systemic DNA, they can transmit to their communities, the importance of Fundamental Duties to nation-building. Trade/industry associations like the Federation of Indian Chambers of Commerce and industry/confederation of Indian industry and even social and religious bodies can supplement this.

Below are three suggestions to enhance social cohesion in India.

➢ **Cleanliness-Cohesion Correlation.** A recent proposal of the integrated headquarters of Ministry of Defence (Army) advised army personnel on annual leave to create public awareness of government-funded development schemes and provide feedback on implementation. It's true that there are serious deficiencies in existing systems of reviewing programme outcomes. However, with over 20,000 existing government schemes, identifying those that are relevant and building up capacity for effective review may be difficult. Nevertheless, focusing on just *Swachh Bharat* (Clean India) is feasible, and likely to resonate with soldiers who live in immaculate military campuses. The solid waste that litters cities and villages, defaces historical monuments, degrades natural habitats and pollutes water bodies is a blot on the image of India as a nation on the move. Whether educated and well-off, men or women, old or young, thoughtlessly discarding plastic and other non-degradable waste everywhere. One of PM Modi's first initiatives, *Swachh hi Seva* (Commitment to Cleanliness) was announced on Gandhi Jayanti in 2023. A clean neighbourhood, a litter-free village, town or city, clean *Jheels* (Lakes) and rivers would generate national pride. It is no surprise that countries in Scandinavia and Japan with the highest in social cohesion, are also ranked the cleanest. If every government, corporate, educational, social/religious establishment takes up the mission of preventing desecration of *Vasundhara* (Earth) or *Bhudevi* (Goddess of Earth), keeping their campus's and the proximate area litter-free, the face of India will be transformed. Cities like Indore in Madhya Pradesh, and villages like Mawlynnong in Meghalaya have demonstrated what can be achieved when municipalities and village bodies mobilise such efforts. Cleanliness reflects an organised society that can work cohesively, and generates confidence in its capacity for effective governance.

A recent proposal of the integrated headquarters of Ministry of Defence (Army) advised army personnel on annual leave to create public awareness of government-funded development schemes and provide feedback on implementation.

➢ **Reduce corruption, increase cohesion.** Corruption is perceived as widespread in India, a national epidemic of individual self-interest taking precedence over national interests. A leader, when asked how he planned to work for the people, replied, "First I will look after myself and my family, then my clan, and my friends. If there is time I will work for the people". It's true that 'Fish rots from the head'; unethical actions of those with authority, at any level, negatively impacts the hundreds of millions who lead an ethical life. Social media makes it seem as if society as a whole is corrupt. Extreme self-centredness has replaced pride in public service and a willingness to sacrifice for the nation. A distinguished economist has estimated that 2.0 per cent of India's GDP is lost due to corruption. In fact the ripple effects (aggravated by nepotism) are far wider, impacting adversely on a sense of community and trust in governance. Only a sustained national campaign can change the perception of corruption from being an unavoidable and inconsequential fact of everyday life, to an anti-national act comparable to treason. Recall the stirring words of Lachit Borphukan, the Ahom General who defeated the Mughals. Upon ordering the execution of his own uncle for failing in his national duty, he declared, "My country is dearer to me than my uncle".

➢ **Assimilate Internal Migrants.** Assimilating internal migrants can be a social cohesion multiplier. Tens of millions of people move out of their home states for employment and education across the country. Youth move from Northeast states to Tamil Nadu, from Bengal to Bangalore, labour from Bihar to Maharashtra and Punjab. These migrants have little social interface with host populations, often living in segregated slum clusters lacking civic amenities and sometimes being harassed by authorities. Many come without families simply to earn a livelihood, and make long journeys home for festivals or even to vote at elections though they spend more time in host states. Making the internal migration experience more positive, and facilitating their assimilation into host societies, would leverage national social cohesion. Educational institutions and Zonal Cultural Centres can provide a platform for migrant and host societies to learn about each other's cultures. *Sankardev*, the 15th Century social reformer of Assam, welded diverse communities by enacting of stories from the epics through the medium of the performing art, *Bhaona* (Entertainment with Religious Messages), collective singing of *Borgees* (Lyrical Songs), and regular congregation of all sections in community centres called *Namghars* (Prayer House). Local governments, including the police can be sensitised to understand the culture of migrants. Suitable educational opportunities for children of migrant labour would help acculturation. Government policies encouraging adequate housing and healthcare would be a concrete step to assimilate migrants into 'One Nation'.

Conclusion: Achieving India's Destiny

India aspires to become a USD five to six tn economy. Progress in infrastructure build-up has been impressive, and this itself provides the physical connectivity essential for greater social cohesion. The *Atmanirbhar Bharat* (Self-reliant India) policy will provide livelihood opportunities for the massive demographic cohort of youth. These are necessary for the aspirational economic 'Moon-shot', doubling of the GDP from the current USD 3.0 tn. But greater social cohesion is the indispensable 'Software' needed to make this bold vision a reality. And this will happen only if every *Bharatvasi* (Indian) believes that they are partners in a social contract for a better future. Only then will all citizens be inspired to work towards India's destiny. As did an earlier generation when men and women of all faiths and communities selflessly fight for the freedom, led by a 'Half-naked *Fakir*' who successfully dislodged a mighty empire.

Bibliography

1. Journal of the National Human Rights Commission, India. Volume: 22, 2023 "Fundamental Duties in Indian Constitutional History". By Sudhir Krishnaswamy.

2. 'Churchill and India'. Author, Kishan S. Rana.

3. How China sees India and the world. Author Shyam Saran.

4. West Asia at war. Author Talmiz Ahmad.

5. World Order. Author Henry Kissinger.

6. A Bright Shining Lie. John Paul Vann and America in Vietnam. Author Neil Sheehan

7. The Sentinel 17th Dec 2023."Lachit Borphukan and the battle of Saraighat".

8. Indiatimes News "How corruption impacts economic growth of a country". By Hameed Habibullah.

9. Corruption in India: the DNA and the RNA. Authors Bibek Debroy and Laveesh Bhandari

10. Economic Times, Nov 26th, 2022. "Constitution Day: Fundamental Duties should be the first priority of citizens, says PM Modi".

11. Hindustan Times, Sept 04, 2023 "When on leave do social service, promote govt schemes, Army advises jawans".

12. The Ken. "India has over 20K govt schemes but a family on average uses only 55,shows Haqdarshak data". By Seema Singh

13. New Indian Express. 4th October, 2018. "The Individual and the Collective in Indian Thought". By Michel Danino.

14. Paper in Melbourne Forum of Constitution Building. "Constitution building in culturally diverse states: The case of India". By Suhrith Parthasarthy..

15. "Misleading Reportage: India remains a miracle and robust democracy". By Amb Rajiv Sikri in Vivekananda International Foundation website.

16. CLAWS Journal, Summer 2008. "Elements of Comprehensive National Power". By JS Bajwa.

17. How Singapore built a stable society. YouTube Singapore # History. 11th Sept 2020.

18. Malay Mail. Sept 2022. "Survey: Singapore has the highest level of social cohesion among ASEAN member states".

19. The Business Standard, 27th April, 2023. "75 years of Israel: A Jewish state to a full theocracy?" By Ashraful Haque.

20. Harvard Kennedy School of Government. Dec 2019. "Hong Kong: The rise and fall of "One Country, Two Systems". By William H. Overholt.

21. Times of India, Nov 9th, 2023. 'The Republic of Team India'. By Mudar Patharya..

22. Society at a glance 2016. OECD Social Indicators.

23. Swachch hi Seva. YouTube film 2023.

24. Inclusion for all: A Canadian road-map to Social Cohesion. Department of Justice, Canada.

25. International Conference on Cohesive Societies, 2022.

26. 'Mother Teresa of Calcutta (1910-19970 Vatican Web Archive(online).

27. "Questions around Ram Vijay: Sattriya in a Monastic tradition". Authors Sri Narayan Chandra Goswami, et al. Ed. Performing the Ramayana tradition, Paula Richman & Rustom Bharucha.

Impact of Climate Change on the Future of the World

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Abstract

Climate change is affecting the life and economy of the world as no other event has done before. However, climate change is not an outcome of only natural reasons; human beings are equally responsible because of their exuberance to leverage technology for better quality of life and economic well-being, especially by the developed countries. There is a need to appreciate that countries need to address the ill-effects of climate change collectively. While working out the mitigation strategy it needs to be noted that global warming is only a subset of climate change and both need to be addressed.

Introduction

Some of the visible manifestations of climate change are extreme rise in temperature which is adversely affecting the agricultural production, droughts are becoming longer, tropical storms are becoming more severe and frequent, ice is melting faster than ever in the Arctic Ocean around the North Pole, sea levels are rising, which are threatening coastal communities and estuarine ecosystems. Faster melting glaciers resulting into increase in the volume of water in the rivers with attended adverse impact on downstream communities, and melting permafrost resulting in release of methane, a greenhouse gas, into the atmosphere is finally resulting in frequent cloud bursts. Here it needs to be noted that 'Global Warming' is only one of the aspects of climate change, though people tend to use these terms interchangeably. Global warming is the gradual increase in the average temperature of the earth's atmosphere due to an increased amount of energy striking the earth from the sun, which then gets trapped in the atmosphere and is not radiated back into space. About 23.0 per cent of incoming solar energy is absorbed in the atmosphere by water vapour, dust, and ozone, and 48.0 per cent passes through the atmosphere and is absorbed by the surface.[1]

The current problem is that, too much of sun's warmth is being trapped in the atmosphere. As such the temperature of the earth is going up faster than at any previous time in history. 'Climate Change', on the other hand, refers to the increasing changes in the measures of climate over a long period of time, including precipitation, temperature, and wind patterns. Thus, one of the implications of the climate change is massive migration of affected population, which may be across the national boundaries with attended problems related to national security, massive impact on food security in many of the affected countries, and above all immense damage to infrastructure calling for finding resources to rebuild it.

There are many natural and anthropogenic factors that contribute to climate change. This has always been happening on earth, which can be confirmed by the geological records. However, it is the rapid rate and magnitude of climate change which is happening now, which is of great concern worldwide, as not only has it started affecting the life of people but it also has the potential to threaten health by affecting the quality as well as quantity of food

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which is available to eat, the quality of drinking water, the quality of air available for breathing, and the weather, as natural disasters are becoming more frequent. One of the contributory factors is the release of greenhouse gases in the atmosphere due to the absorption of infra-red radiations emitted by the earth. Human activities are also contributing substantially to climate change.

Factors Affecting Climate Change

Natural Factors. These are those that affect the climate over a period of thousands to millions of years. Some of these factors are as follows:

- **Continental Drift**. This hypothesis (by Alfred Wegener) states that at one point in time, all the continents were joined together as one large mass of land named Pangaea. This broke up and the continents then drifted into their current positions.[2] It happened due to tectonic plate displacement. This impacts climate change due to the change in the landmass' physical features, and position and the change in water bodies' position like the change in the flow of ocean currents and winds.

- **Volcanism**. A volcanic eruption emits gases and dust particles that remain suspended in the atmosphere for a long time and as such, block the sun rays partially, leading to cooling of the weather. Such a phenomenon influences weather patterns.

- **Changes in Earth's Orbit**. Slight change in the earth's orbit around the sun has an impact on the sunlight's seasonal distribution reaching the earth's surface. There are three types of orbital variations: variations in the earth's eccentricity, variations in the tilt angle of the earth's axis of rotation and precession of the earth's axis. These together can cause Milankovitch cycles, which have a huge impact on climate and are well-known for their connection to the glacial and interglacial periods.

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Anthropogenic Factors. These are mainly human-caused factors leading to increase in global surface temperature. Some of these are as follows:

- **Greenhouse Gases**. In simple terms, these are gases that trap heat in the earth's atmosphere. They absorb heat radiation from the sun resulting in an increase in global temperature. The greenhouse gases trap heat in the earth's atmosphere and warm the planet. Thus, global warming begins with the greenhouse effect.

- **Carbon dioxide**. It is the main cause of human-induced climate change. It is emitted in vast quantities from the burning of fossil fuels. It needs to be noted that it is a very stable gas that has a very long life, which is the reason for it to be a means to affect the climate system.

- **Deforestation**. With the increase in the population a necessity of enhancing the agricultural production has become the need of the hour. As such most of the forested area is increasingly being appropriated for agricultural purpose or getting converted into grazing grounds, or for industrial or commercial usage. The clearing of forest cover increases solar energy absorption and the amount of moisture evaporated into the atmosphere. Therefore, deforestation is a major contributor to global warming because a mature tree absorbs and stores carbon dioxide. Thus, a healthy forest absorbs carbon dioxide from the atmosphere, and thus, acts as a valuable carbon sink. The lack of trees results into greater amount of greenhouse gases getting released into the atmosphere. These gases cause climate change and lead to an increase in the planet's temperature. Rise in temperature is causing droughts and forest fires. In fact, hurricanes and typhoons are also becoming

more frequent on account of rise in temperature. Deforestation is the cause of around 10.0 per cent of global warming.[3]

➢ **Landfills.** Landfills of garbage are a major source of methane emissions, which contribute to the rise in temperature. Needless to add that the waste generation, world over, has gone up over the years. By an estimate, the earth has become home to about 2.01 bn tons of Municipal Solid Waste (MSW) every year and that figure is anticipated to reach 3.40 bn in about 30 years (a 70.0 per cent increase). High income countries are bigger culprits of waste generation. They constitute only 16.0 per cent of the world's population, but produce about 34.0 per cent of the total waste generated.[4] India itself generates about 62 mn tons of MSW per year.[5] There is a need to use this waste to produce energy for which technology already exists and, this way, instead of being a liability, the waste can become an asset for India. The total estimated energy generation potential from urban and industrial organic waste in India is approximately 5,690 Mega Watt.[6]

➢ **Increased Greenhouse Gas Emissions**. Some other reasons for increased greenhouse gas emissions are industrialisation, fossil fuel-based transportation and the rampant construction. As per scientists at the United Nations Climate Change Conference, COP-27, the global carbon emissions are on the rise. They have risen by 1.0 per cent above 2021 levels. In this regard, India is also being seen as a culprit because, in her case, levels have gone up by 6.0 per cent in 2022. Here it is relevant to note that as per the analysis of the COP-27, the emissions should have been declining by 5.0 per cent every year to meet the climate goals.[7]

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Weaponisation of Climate. A perusal of factors which can cause climate change, mentioned above, suggests that manipulation of many of these factors can cause climate change in a particular geography. Fearing this kind of weaponisation, in 1976, 85 countries signed the United Nations Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques. The convention states that any attempts to weaponise climate engineering techniques are prohibited. However, possibility of certain inimical elements to a particular country, circumventing this convention cannot be discounted. This kind of weaponisation, if perfected to a degree of controllability and accuracy could theoretically be used by militaries or militants to cause droughts, famines, and cloud bursts.

Impact of Climate Change

Greenhouse gas concentrations are at their highest levels in two million years. Emissions are continuing to rise. As a result, the earth is presently around 1.1° C warmer than it was in the late 1800s. The most recent decade (2011-2020) has been the warmest on record.[8]

It is relevant to note that the temperature rise is merely the beginning of the narrative. This rise in temperature will impact food security of less developed countries due to climate change and lead to lesser/less resilient crop infrastructure. If India is taken as a case study then it emerges that out of 573 rural districts (excluding Andaman and Nicobar Islands) 109 districts are very high-risk districts and 201 districts are risk districts.[9] It is further forecasted that by 2049 the mean temperature of these districts will rise by 1.3° C. This change in ambient temperature will affect crop yields. The Carbo dioxide emissions are resulting in frequent climatic fluctuations like intense heat, severe weather and droughts which are a huge threat to in-demand crops like wheat and maize.[10] According to some projections, in the absence of successful adaptation, worldwide yields could fall by up to 30.0 per cent by 2050 and almost two bn people would be struck the hardest.[11] Climate change will also impact availability of water. All these scarcities will result into unrest. Current state in countries like Pakistan is a manifestation of it.

Children will suffer more than adults as they require more food and water per unit body weight and have less resilience against extreme and harsh weather events. Another aspect with respect to children is that they are more susceptible to toxic chemicals, temperature changes and diseases. A recent report by Children's Climate Risk Index, 'Climate crisis is a child crisis', has estimated that an estimated 850.0 million children worldwide live in areas where environmental and climatic shocks overlap.[12]

Impact on India. In the case of India, in the last three decades, India has witnessed a rise in mean temperature and increased frequency of extreme rainfall. According to estimation by National Innovations in Climate Resilient Agriculture, rainfed rice yields in India are projected to reduce marginally by less than 2.5 per cent between 2050 to 2080, irrigated rice yields by 7.0 per cent, wheat yield by 6.0 to 25.0 per cent in 2100 and maize yields by 18.0 to 23.0 per cent. The only bright spot appears to be chickpea production which is likely to rise by 54.0 per cent.[13] These projections indicate of an impending food crisis more so as during this period, population of the country is likely to rise. Reduction in the production of food grains will impact internal security and the resultant state, will have far reaching implications for social and internal cohesion. Milk production has already been reduced by 1.5 mn tonnes by 2020.[14] Increased temperature will result into health hazards. One of the major impacts on health will be felt in terms of child stunting which is projected to increase by 35.0 per cent by 2050 when compared to a scenario without climate change.[15] Increased rainfall will cause the Indian economy to lose 2.8 per cent of its Gross Domestic product (GDP) this year, with projections indicating this figure will rise to 4.5 per cent by 2030.[16]

Climate Change and Natural Disaster. With increasing surface temperatures in the world, the possibility of more droughts and increased intensity of storms has substantially increased. With higher ambient temperature, particularly for longer duration, more and more water is likely to get evaporated into the atmosphere absorbing the latent heat. Water vapour makes clouds heavier and besides becoming a source of cloud bursts, it also becomes fuel for more powerful storms to develop. More heat in the atmosphere and warmer ocean surface temperatures can lead to increased wind speeds in tropical storms. Rising sea levels expose higher locations not usually subjected to the power of the sea and to the erosive forces of waves and currents.[17] Some other statistics are:

With increasing surface temperatures in the world, the possibility of more droughts and increased intensity of storms has substantially increased. With higher ambient temperature, particularly for longer duration, more and more water is likely to get evaporated into the atmosphere absorbing the latent heat.

- The number of disasters due to climate change has tripled in the last 30 years.
- The average rate of sea level rise across the globe during the period 2005 to 2016 has been two and a half times more than what it was during the almost entire 20th Century.
- More than 20 mn people per year are being forced to move out of their homes from those areas of the globe which are going underwater due to rise in the sea level. For example; Bangladesh is likely to see a 17.0 per cent of its landmass going under water by 2050,[18] resulting into massive mass migration to neighbouring countries which will become a source of tension for India and Myanmar.
- The UN Environment Programme has estimated that to adapt to climate change and coping with the damages will cost developing countries as much as USD 140-300 bn per year by 2030. For example, it has been estimated by the World Bank that the damage and the economic loss due to floods in 2022 in Pakistan had been USD 14.9 bn and USD 15.2 bn respectively.[19] Even this year's Himachal Pradesh floods have incurred a damage which has caused a monetary loss of INR 3,738.28 cr.[20]

Mitigation Measures

Ways and Means to Check Global Warming. It has been proposed by scientists that the reflectivity of the sun's infrared rays (The albedo of the earth) can be increased by spraying aerosols into the stratosphere. They believe that this will help in removing or at least, stemming the increase of the greenhouse gas effect temporarily. Here, it needs to be

appreciated that neither global warming nor factors necessary to mitigate it are restricted by the geographical boundaries of the countries and as such addressing of this issue must be the collective responsibility of entire humanity.

Solar Radiation Management (SRM). This needs to be done to effectively manage the earth's climate. Some of the suggested methods are as follows:

- Space sunshades, using mirrors in space, placing vast satellites at Lagrange Point 1, space parasol, etc. Here it needs to be appreciated that India has already started attempting to study the Corona of sun and the ongoing Aditya L-1 mission of India in Sep 2023 is meant for that.

- Stratospheric aerosol injection are methods involving the injection of sulphate aerosols into the stratosphere.

- Marine cloud brightening (spraying a fine seawater spray in the air), and seeding of high cirrus clouds with heterogeneous ice nuclei.

- Surface-based options like whitening roofs, growing more reflective crops, afforestation and reduction in the use of fossil fuels etc.

Analysis of SRM.

- If above measures are implemented, they are likely to mitigate the effects of climate change. It is also relevant to note that in overall terms these methods are cost-effective. However, measures to address climate change will have to be done in a sustained manner.

- Managing solar radiation using stratospheric aerosols injections or cloud cover would involve changing the ratio between direct and indirect solar radiation. This would affect plant life.[21]

There may be unintended climatic consequences of SRM, such as significant changes to the hydrological cycle that might not be predicted by the models used to plan them. Such effects may be cumulative or chaotic.

- There may be unintended climatic consequences of SRM, such as significant changes to the hydrological cycle that might not be predicted by the models used to plan them.[22] Such effects may be cumulative or chaotic. Ozone depletion is a risk of techniques involving sulphur delivery into the stratosphere.

  - However, not all side effects are negative, and an increase in agricultural productivity has been predicted by some studies due to the combination of more diffuse light and elevated carbon dioxide concentration.

  - Here again it needs to be noted that no real-world simulations so far, have been done to study the impact of SRM. It is no secret that many a times computer simulation do not conform to ground realities. Therefore, it is necessary that a pilot project steered over a geographical entity be planned and executed to validate the measures as a part of SRM.

  - Probably, a new international structure could be envisaged under the aegis of the United Nations (UN) as it will entail many countries impacted by Climate change. Funding of the projects and the organisation itself will have to be given a due thought.

Strategy to Address Climate Change

Global frameworks and agreements, such as the Sustainable Development Goals, the UN Framework Convention on Climate Change, and the Paris Agreement, are also in place to steer progress. In 2021, Secretary-General of the UN, António Guterres, organised the Food Systems Summit to inspire renewed global commitment to resilient and

sustainable food systems. The recommended strategy has three elements, namely; reducing emissions, adapting to climate impacts, and financing necessary adjustments.

As part of the mitigation strategy switching from fossil fuels to renewable and nuclear energy will be the way ahead. In this connection, it is relevant to note that several countries have committed to achieve net zero emissions by 2050, and about half of the emissions reduction is expected to be achieved by 2030 to keep global warming below 1.5° C. between 2020 and 2030. One of the preconditions for such a development to be possible is that the fossil fuel production should drop at the rate of about 6.0 per cent per year.[23]

Case of India

The Government of India stands committed to combat climate change through its several programmes and schemes including the National Action Plan on Climate Change (NAPCC) which comprises missions in specific areas of solar energy, energy efficiency, water, sustainable agriculture, conservation of the Himalayan ecosystem, sustainable habitat, health, Green India, and strategic knowledge for climate change. The National Solar Mission under the NAPCC is one of the key initiatives to promote sustainable growth while addressing India's energy security. As on 31 Oct 2022, India's total electric power installed capacity from non-fossil fuel-based energy resources is 172.72 Giga Watts (GW), which is 42.3 per cent of the total electric power installed capacity. India has progressively been continuing decoupling of economic growth from greenhouse gas emissions. India's emission intensity of GDP has reduced by 24.0 per cent between 2005 and 2016. Further in this connection, India has informed the United Nations Framework Convention on Climate Change in Aug 2022 that India stands committed to reduce emissions intensity of its GDP by 45.0 per cent by 2030, from the 2005 level and achieve about 50.0 per cent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030, with the help of transfer of technology and low-cost international finance. Further committing to putting and propogating a healthy and sustainable way of living based on traditions and values of conservation and moderation, including through a mass movement for 'LiFE' i.e., 'Lifestyle for Environment' as a key to combating climate change.[24] Indian commitment was further stressed by the Indian Prime Minister in 2012 at the COP-26 Summit at Glasgow by saying that India is delivering on the Paris Agreement commitments, and would become net zero carbon emitter by 2070, and is working to achieve a capacity of 500 GW of 'Non Fossil Fuel' by 2030.[25]

The world needs to come together and instead of reacting to evolving state, try to address collectively not only the current state but also work out a plan to address future situations and work together to mitigate all the future problems.

It is heartening to note that the Indian Council of Agricultural Research, has launched a flagship network project with the objective of developing and promoting climate resilient technologies in the field of agriculture with a view to develop those varieties of crops which are tolerant to climatic stresses to improve the food grain production in the face of changing climate. It has emerged that the establishment has had success in 1,752 varieties as against a total of 2,122. To share these technologies with the farmers several demonstrations are being organised and so far about 446 villages have been covered. In addition, 'Agromet Advisories' are reaching the farmers through m-Kisan portal, WhatsApp groups and SMS services etc. Per Drop More Crop Scheme is being implemented to increase the irrigation area. Similarly, the Rainfed Area Development Scheme is being implemented to promote sustainable integrated farming systems. [26]

Conclusion

In the light of the above discussion, it needs to be appreciated that the impact of climate change is not limited to national boundaries. What is being experienced is an outcome of human efforts of using technologies to improve the quality of life and economy without realising the ill-effects of such a strategy on the environment. The world needs to come together and instead of reacting to evolving state, try to address collectively not only the current state but also work out a plan to address future situations and work together to mitigate all the future problems.

Endnotes

1 Internet upload: https://byjus.com/free-ias-prep/climate-change-in-india-upsc-notes/#:~:text=The%20periodic%20modification%20of%20Earth's,system%20is%20called%20Climate%20change

2 An internet upload: https://courses.lumenlearning.com/suny-geophysical/chapter/theory-of-continental-drift/#:~:text=The%20continental%20drift%20hypothesis%20was,together%20as%20a%20single%20supercontinent.

3 An internet upload: https://www.wwf.org.uk/learn/effects-of/deforestation#:~:text=Trees%20absorb%20and%20store%20carbon,around%2010%25%20of%20global%20warming.

4 Daniil Filipenco, "World waste: statistics by country and short facts" dated 07 March 2023 and uploaded on https://www.developmentaid.org/news-stream/post/158158/world-waste-statistics-by-country

5 A DRISHTI Report dated 29 Sep 2022 and uploaded on https://www.drishtiias.com/current-affairs-news-analysis-editorials/news-editorials/29-09-2022/print/manual#:~:text=India%20generates%2062%20million%20tonnes,are%20dumped%20in%20landfill%20sites.

6 Archana Rao, "Waste to energy in India: Time to up the ante?", pub by Trade Promotion Council of India dated 10 Jul 2023 and uploaded on https://www.tpci.in/indiabusinesstrade/blogs/waste-to-energy-in-india-time-to-up-the-ante/#:~:text=According%20to%20government%20statistics%2C%20total,India%20is%20approximately%205%2C690%20MW.

7 Aathira Perinchery, "Global Carbon Emissions on Rise; India's Levels to Go Up by 6% in 2022, Say Scientists at COP27" pub by Wire dated 11 Nov 2022 and uploaded on https://thewire.in/environment/global-carbon-emissions-on-rise-indias-levels-to-go-up-by-6-in-2022-say-scientists-at-cop27

8 Climate change: Its Impact on Food and Nutrition Security, Mitigation Strategies in coming Decades, pub by ACTION AGAINST HUNGER and Uploaded on https://actionagainsthunger.in/climate-change-impact-food-nutrition/?gclid=EAIaIQobChMI9OPR15OKgQMVlJpmAh2iLQMXEAAYASAAEgIxiPD_BwE

9 "Vulnerability assessment report" by Indian Council of Agricultural Research

10 Journal article, Influence of climate change on food production and safety: The influence of climate change on food production and food safety – ScienceDirect

11 State of Food Security and Nutrition in the World report

12 UNICEF ,Press Release: One billion children at 'extremely high risk' of the impacts of the climate crisis – UNICEF

13 Climate change: Its Impact on Food and Nutrition Security, Mitigation Strategies in coming Decades, pub by ACTION AGAINST HUNGER and Uploaded on https://actionagainsthunger.in/climate-change-impact-food-nutrition/?gclid=EAIaIQobChMI9OPR15OKgQMVlJpmAh2iLQMXEAAYASAAEgIxiPD_BwE

14 An intenet upload: ignfa.gov.in/document/national-response-to-climate-change-dr-senthil-kumar-pdf

15 https://www.worldbank.org/en/news/feature/2013/06/19/india-climate-change-impacts#:~:text=Health,-What%20we%20know&text=Climate% 20change%20is%20expected%20to,a%20scenario%20without%20climate%20change.

16 https://www.forbesindia.com/article/take-one-big-story-of-the-day/how-climate-change-can-impact-gdp-and-jobs/87673/ 1#:~:text= Climate%20change%20due%20to%20rising,its%20latest%20report%20on%20Currency%20%26

17 An internet upload: https://www.oxfam.org/en/5-natural-disasters-beg-climate-action

18 An internet upload: https://climatecafes.org/will-bangladesh-go-underwater/#google_vignette dated 26 mar 2023.

19 World Bank (Press release), "Pakistan: Flood Damages and Economic Losses Over USD 30 billion and Reconstruction Needs Over USD 16 billion - New Assessment" dated 28 October 2022.

20 An ANI Report, "Himachal floods: 108 deaths, Rs 3738.28 cr monetary loss amid yellow alert in state for 5 days" pub by The Economic Times dated 15 Jul 2023.

21 Crutzen, P.J., "Albedo Enhancement by Stratospheric Sulphur Injections: A contribution to resolve a Policy Dilemma?", an editorial essay, pub on 25 Jul 2006 and uploaded on https://link.springer.com/article/10.1007/s10584-006-9101-y

22 Katharine Ricke, Jessica S. Wen, Maissa Saenger and Nicholas J. Lutsko, "Hydrological Consequences of Solar Engineering", pub in Annual Review of Earth and Planetary Sciences dated 07 Feb 2023 and uploaded on https://www.annualreviews.org/doi/pdf/10.1146/annurev-earth-031920-083456#:~:text=As%20discussed%20in%20Section%202,Stratospheric%20aerosol%20injection.

23 Intergovernmental panel for climate change, Newsroom Post: The evidence is clear: the time for action is now. We can halve emissions by 2030. — IPCC

24 A press notes by Ministry of Forest Environment and Climate Change, "Commitments made under CoP 26" dated 12 Dec 2022 and uploaded on https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1882840#:~:text=As%20per%20the%20updated%20NDC,the%20help%20of%20transfer%20of.

25 Climate change: Its Impact on Food and Nutrition Security, Mitigation Strategies in coming Decades, pub by ACTION AGAINST HUNGER and Uploaded on https://actionagainsthunger.in/climate-change-impact-food-nutrition/?gclid=EAIaIQobChMI9OPR15OKgQMVlJpmAh2iLQMXEAAYASAAEgIxiPD_BwE

26 Impact of climate change on agriculture: https://pib.gov.in/PressReleasePage.aspx?PRID=1884236

Development of Northeast for Furtherance of BIMSTEC

Lieutenant General (Dr) BS Sandhu, AVSM, VSM (Retd) [@]

Abstract

The development of Northeast India for the furtherance of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) addresses the economic potential of India's North Eastern Region (NER) within the framework of BIMSTEC. Despite its rich resources and strategic location, the NER has historically faced isolation and underdevelopment. The article explores the challenges hindering the NER's integration into regional trade networks, such as inadequate infrastructure, insurgency, and geopolitical tensions. It proposes a multi-faceted approach to unlock the NER's potential, including incentivising manufacturing, enhancing connectivity, leveraging hydroelectric power and natural resources, promoting biotechnology and information technology, boosting agriculture and tourism, and addressing security concerns. The success of BIMSTEC and India's Act East Policy hinges on realising the NER's development potential and fostering peace, security, and economic cooperation in the region.

Introduction

India's North Eastern Region (NER) includes eight states, covering an area of 2.5 lakh sq m which accounts for about 7.8 per cent of the geographical area of the country.[1] NER offers immense economic opportunities because of its strategic location amongst India's neighbours in the South and Southeast Asia. The region shares an international border/line of actual control with China, Myanmar, Bhutan, Nepal and Bangladesh. Ironically, NER is connected to the rest of India by a narrow strip of approximately 22 sq km, which has resulted in isolation of the region from the rest of India. Nearly 250 million inhabitants, who speak different languages, belong to different races, tribes, castes and religions inhabit the region. The isolation was further accentuated by the creation of Eastern Pakistan (today's Bangladesh) in 1947, which broke direct connectivity between the eastern parts of India and the Northeast India. Isolation, tribal affiliations, ethnic conflicts and abetment by hostile neighbours to include China and erstwhile East Pakistan resulted in insurgency and secessionism thus impeding growth and development.

The ecstatic beauty of India's Northeast makes it an attractive tourist destination and an abundance of natural resources gives it the potential of becoming a manufacturing hub. There are ample possibilities for Northeast India to reap benefits from members of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) as the process of globalisation provides cross-market accessibility.

At the time of independence, per capita income in the undivided state of Assam was higher than the national average by 4.0 per cent whereas the same is substantially below the national average today. The region is inhabited by 3.77 per cent of the country's population and accounts for a little over 2.5 per cent of India's Gross Domestic Product

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(GDP).[2] The economy of the region is largely agrarian with over 70.0 per cent of the population engaged in agriculture for livelihood while the manufacturing sector is still at a nascent stage.[3] The economic backwardness of the region limits its access to national as well as international markets.

In 1991, with break-up of the erstwhile Soviet Union and the end of the Cold War, India found herself in a strategic wilderness in a unipolar world led by the United States. India, as a matter of strategic necessity opted to be part of regional groups such as the Association of Southeast Asian Nations (ASEAN) and BIMSTEC which comprise countries of South and Southeast Asia. India's primary objective within BIMSTEC is to develop the Northeast region by integrating it with the existing trade networks of Southeast Asia. BIMSTEC could be a 'Potential game changer' for Northeast India's overall development.

BIMSTEC: Origin, Growth and Challenges

BIMSTEC is an international organisation of seven countries of South and Southeast Asia, inhabited by 1.5 bn people having a combined GDP of 3.5 tn (2018).[4] The grouping accounts for 22.0 per cent of the global population. It was founded in 1997, with the aim to integrate littoral economies of Bay of Bengal.[5] BIMSTEC was established when the Indian economy was undertaking liberalisation. The aim of BIMSTEC is to create an enabling environment for rapid economic development through the identification and implementation of specific cooperation projects in trade and investment, industry, technology, human resources development, tourism, agriculture, energy, infrastructure, transport, communication and many more potentialities.

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India's first attempt at making a successful regional grouping was the South Asian Association for Regional Cooperation (SAARC) in 1985, which was plagued by India-Pakistan animosity resulting in stagnation. These two countries are pivotal to SAARC because they control 80.0 per cent of the landmass, constitute 85.0 per cent of the population and 90.0 per cent of the GDP.[6] The formation of a grouping like BIMSTEC in such a regional environment, in South and Southeast Asia gave some hope of collective growth to the region. It was expected that BIMSTEC would connect SAARC (five countries) and ASEAN (two countries) by increasing trade due to their location in the Bay of Bengal region and east coast of the Indian Ocean.[7]

Historically, the Bay of Bengal space has been an integral part of India's strategic and economic area of interest. It is an integral part of India's evolving 'Act East policy'. India has strong civilisational, ethnic, cultural, linguistic, economic and political links with Southeast Asia. The countries surrounding the Bay of Bengal have their own unique history of interdependence through strategic, economic and civilisational bonds.

It was felt that common concerns and convergence of economic interests justified the creation of such an organisation at the sub regional level. Bangladesh, India, Sri Lanka and Thailand were initial members of this grouping and it was called Bangladesh, India, Sri Lanka and Thailand Economic Cooperation (BI-STEC). A brainchild of Thailand, it was formally launched on 06 Jun 1997. Aim of the BI-STEC as per the Bangkok Declaration of Jun 1997 is:

- To provide an environment for quick economic development through the implementation of planned cooperation projects.
- Areas of cooperation for such projects were decided to be in the fields of trade and industry, technology, human resource development, agriculture, tourism, energy for sustainable growth, infrastructure of all types including transportation.

- To enhance economic growth and progress in the social sector through a spirit of equality, fairness and partnership.
- To promote cooperation in the above-mentioned spheres, creating a win-win situation for all stake holders.
- To provide help to members in training and research, especially in the educational and technical areas.
- To cooperate in areas which give tangible benefits to the people by improving their quality of life and employment generation.
- To cooperate with international and regional organisations which have similar goals.
- To cooperate in such projects which are productive and beneficial for the Bangladesh, India, Sri-Lanka and Thailand Economic Cooperation countries and take advantage of their synergies.

The entry of Myanmar in Dec 1997, Nepal and Bhutan in 2003 demanded the reordering of the acronym as the 'Bay of Bengal Initiative for Multi Sectoral Technical and Economic cooperation'. It provided India an opportunity to reinforce its ties with its eastern neighbours, which was in conformity with India's 'Look East Policy'. It aimed at the security of waterways, the eradication of organised crime, piracy, drug trafficking and sharing of expertise in the fields of information technology, space technology, infrastructure development and tourism.[8]

North Eastern Region (NER) has almost 5,000 km border with neighbouring countries, all of whom except China are members of BIMSTEC. Bangladesh, Bhutan and Nepal are connected to India through the NER and form part of both BIMSTEC and SAARC.

NER and BIMSTEC

NER has almost 5,000 km border with neighbouring countries, all of whom except China are members of BIMSTEC. Bangladesh, Bhutan and Nepal are connected to India through the NER and form part of both BIMSTEC and SAARC. Bangladesh, Myanmar and NER of India connect South Asia with Southeast Asia. Therefore, the region has immense potential for the creation of a collective ecosystem where almost one third population of the world can flourish in a mutually beneficial manner.

The NER had a history of international trade with Tibet. Eastern and Southern India had seamless cultural and trade links with Southeast Asia. The British traded with the outside world in tea and oil sourced from NER for their own benefit but they did not undertake the export of any traditional goods like woven cotton, silk or traditional handicrafts. On the contrary, the import of cheap industrial products from the West decimated the traditional handloom industry. During the 1970s and 80s, India was engaged with now defunct organisations like Non-Aligned Movement while countries of Southeast Asia like Thailand followed truly independent policies thereby becoming global manufacturing hubs of textiles and electronics.

As a follow up to launch of India's 'Look East Policy' in 1991, she became a sectoral dialogue partner of ASEAN in1992, a full dialogue partner in 1995, a member regional forum in 1996 and signed a free trade agreement with ASEAN in 2009. In continuation of this change in her foreign policy, India also became a member of East Asia Summit, BIMSTEC and Ganga Mekong Meeting. As a result of this changed policy, India's trade with ASEAN increased from USD 10.5 bn in 2005-06 to USD 25.10 bn in 2015-16. Unfortunately, even with enhanced volume of trade, only 4 per cent of India's trade with Southeast Asian countries is through NER due to exorbitant logistic costs and a lack of manufacturing in the region.

As per BIMSTEC Secretary General M Shahidul Islam, "Northeast India could play a key role in BIMSTEC Master plan for Transport Connectivity. The potential is immense, but it would need large resources and an enabling security environment".

Impediments to Growth of NER and Impact on BIMSTEC

Historically, NER of India has been pivotal for international trade for centuries from the time of the Ahom Kingdom to the colonial British era. The Government of India has set up a separate ministry, Department of Development of North Eastern Region and the North East Council to oversee the development of the region. Prime Minister Modi, during one of his visits to Assam had reiterated his government's aim of making NER as launch pad for India's 'Act East Policy' but the results are far below the expected targets due to the challenges explained in the succeeding paragraphs.

Connectivity within NER, with the rest of the country and with Southeast Asian countries is primitive which adversely impacts integration and growth. The supply chain within NER is more complex than in other parts of India. Movement in hilly areas of Arunachal/Sikkim has different dynamics, vis a vis, plains of Assam. Floods in plains, landslides and snow in the mountains are a regular feature. The supply chain of the states of Tripura, Mizoram, Arunachal Pradesh and Manipur which are geographically located at the end of the road network is affected by disruptions/ events in the states en route. The trilateral Asian Development Bank -backed 1,360km highway project running from Moreh in India to Mae Sot in Thailand through Myanmar, has already been delayed after Myanmar raised certain apprehensions. Both India and Thailand have plans to extend the highway to Cambodia, Laos and Vietnam, to achieve seamless South to Southeast Asia road connectivity but that can happen only after construction is completed in Myanmar.

NER is located near the golden triangle which often acts as a transit route for drugs between Myanmar and the rest of the world. Narco-terrorism is a reality which adversely affects security and development thereby compromising the objectives of this sub regional grouping.

On the economic front, the Indian economy grew at a peak growth rate of 9.57 per cent net domestic product in 2006-07 against 4.15 in 2000-01 without a corresponding impact on NER. The partition of Bengal in 1947, followed by disruption of eastward trade due to annexation of Tibet by China in 1950, adversely affected the economy and trade of NER. Post-independence, there were separatist movements resulting in insurgencies and violence which discouraged investment and industrialisation. During the period 2000-2015, India received USD 2,44,418 mn in foreign investment out of which only USD 83.0 mn was invested in the NER.

Lack of development and absence of democracy in Myanmar is a big stumbling block to the integration of South and Southeast Asian countries of BIMSTEC. The ongoing diplomatic row between Myanmar and Bangladesh is not only jeopardising the BIMSTEC initiative but also the future of India's 'Act East Policy'. The success of various transnational projects is reliant on Myanmar's cooperation and more importantly on how it proposes to settle its differences with Bangladesh on the Rohingya crisis. The exodus of Rohingyas from Myanmar to Bangladesh seems to be casting a shadow on India's efforts to give momentum to the BIMSTEC.

The absence of peace and security due to prevailing insurgencies in both NER and Myanmar hinders the achievement of BIMSTEC's stated goals. The causes of insurgency range from illegal immigration to secession and ethnic conflicts. Lack of accountability gives rise to an unending cycle of violence, corruption and governance deficit.

NER is located near the golden triangle[9] which often acts as a transit route for drugs between Myanmar and the rest of the world. Narco-terrorism is a reality which adversely affects security and development thereby compromising the objectives of this sub regional grouping. It also undermines financial security of India by generating black money, *hawala* (the transfer of money without actually using it) transactions, money laundering and enabling cross border terrorist activities.

China is the most dominant power in Asia, whose aim is to contain India. This containment strategy of China adversely impacts the growth of BIMSTEC.[10] To counter India's proposal to invest in connectivity in Myanmar, China has already undertaken the establishment of an industrial corridor connecting Yunnan province of China to Bay of Bengal through Myanmar. Bangladesh army is currently being equipped with Chinese weapons and hardware. Lease of Hambantota port, and recent developments in Maldives ensure that India will always have to deal with China to attain any leverage in her neighbourhood.

Way Forward

Economy. There is an urgent need to incentivise manufacturing in NER so that benefits from the markets both in India and other neighbouring countries can accrue to the region. There must be greater integration with economies of Bangladesh and Myanmar. Access to the Bay of Bengal through ports located in these two countries can offset the land locked tag of NER and make supply chain more viable.

Hydroelectric Power. NER is rich in water resources. The region possesses a total hydropower potential of 60,000MW, though the installed capacity is less than 2.0 per cent. NER can become a big contributor to the BIMSTEC power grid thereby spurring growth in a mutually beneficial way for all members of the grouping.

Oil and Gas. NER is a major contributor to indigenous production of crude oil which can be enhanced. Tripura is rich in natural gas and capable of producing 4 mn cubic metres a day. Myanmar and Bangladesh have gas reserves, which when connected through a pipeline can benefit India and the donor countries since they will get paid for the gas supplied. This can enable the establishment of manufacturing industries in Exclusive Economic Zones developed in the NER or jointly with Bangladesh and Myanmar when it becomes stable. Access to global markets both through land and sea will bring prosperity to the region. Economic interdependence amongst NER and friendly neighbours like Bhutan, Nepal, Bangladesh and Myanmar will help the entire BIMSTEC fraternity.

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Connectivity. Multi modal connectivity is a prerequisite for economic development. Road and rail connectivity to Bangladesh and road connectivity to Thailand through Myanmar must be implemented with the highest priority. Bangladesh, Bhutan, India Nepal (BBIN) highway if and when implemented, will enhance integration and growth. Waterways connecting NER to eastern part of India through Bangladesh must be reactivated because waterways are the cheapest means of mass transportation. Connectivity will give big impetus to economic activity and even discourage insurgency as people will find legitimate means of livelihood. Extension of the rail network into Manipur, increased emphasis on inland water transport will go a long way in integrating the NER with the rest of the country which is a pre-requisite for connecting with other member countries of BIMSTEC. Opening of an international airport at Guwahati has enhanced accessibility from neighbouring countries.

Biotechnology. NER is endowed with exotic flora and fauna due to its unique geographical location. The Indian biotech industry is worth USD 11.6 bn accounting for 2.0 per cent of the global biotech business. Instead of transporting raw materials from the region, it would be more viable to establish processing units in the area, which will add to the economy. With as many as 44 varieties of medicinal and aromatic plants existing in the NER, this industry can become a hub of global biotechnology business.

Information Technology (IT) and Telecommunication. Telecommunication infrastructure and connections in the region are far below the national average. NER was allotted Rs 15000 cr to improve telecommunication connectivity in rural areas and gram panchayats.[11]Better telecom and data connectivity can make NER an IT hub.

Agriculture. Despite the large geographic area, the land available for cultivation is limited due to hills and forests. Compared to the all India average of 64.0 per cent arable land under use, the cultivable land in the NER is less than 40.0 per cent. Favourable climatic conditions and terrain make this area suitable for high value organic farming which can contribute immensely to the economy.

Tourism. The natural beauty, serenity, and exotic flora and fauna of NER are invaluable assets for the development of eco-tourism. The region is endowed with diverse tourist locations and each state has its own distinct tourist attractions ranging from cultural dances, fabrics and handicrafts. Adventure tourism has immense potential to include mountaineering in the Himalayas, river rafting, tracking in the hills and jungle terrain, rock climbing and host of other adventure activities. There is a need to develop international linkages/packages to invite foreign investment thereby increasing international stake in the region. Tourist circuits involving more than one country must be marketed.

External Strategy. India needs to address two external security threats for the development of NER; namely conventional threats from China and abetment of insurgency by any neighbouring country providing safe havens to insurgents. Due to its unique geographical location of the NER, her security lies as much outside the region by engaging with neighbouring countries as within the region.

Insurgency. It has been one of the prime reasons for the backwardness of the region. As on the day of writing this article, the Naga and Manipur insurgencies are still active. The improvement of relations with Bangladesh has resulted in tremendous cooperation in tracking down insurgent leaders taking shelter in that country which has immensely improved the situation in Assam. To make NER a pivot to India's Act East Policy, policy of zero tolerance for violence and insurgency must be strictly implemented in the entire region.

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Drug Trafficking. The dimensions of drug trafficking and narco terrorism extend much beyond trafficking and smuggling. For economic growth and success of BIMSTEC as a grouping drug trafficking must be dealt with as a regional problem in a synergetic manner.

Financial Management. Contrary to the belief that NER has been neglected, considerable funds have been pumped into the region by the central government without proper accountability. The states in the NER have to start revenue generation at the state level and reduce their total dependence on the central financial support. Allocated funds must be judiciously utilised to develop infrastructure and assets.

Conclusion

The success of BIMSTEC and India's Act East Policy lies to a great extent in the development of NER. With the evolution of the society, there are practically no secessionist tendencies, though issues of economic and political aspirations must be resolved through dialogue. Long borders with neighbours must be treated as an opportunity and not a handicap but the region must be made globally competitive to harness these benefits. Tourist destinations in the NER must be made extremely attractive so that they come to the 'Must Visit' spots both nationally and globally. A well thought out industrialisation road map must be made and executed so that the Indian Government's aspiration of making NER as a launch pad for her 'Look East Policy' can be met. The NER desperately needs access to the Bay of Bengal through Bangladesh and Myanmar, who are also members of BIMSTEC. NER along with Bangladesh and

eastern states of India can make a massive global business ecosystem and a manufacturing hub which can make all three countries prosperous because the economies of these areas still have a lot of room for growth.

To begin such a process of development, there needs to be collective resolve to have zero tolerance for terrorism and violence. Economic activity can only flourish in a peaceful and secure environment which all three countries must jointly work for.

Endnotes

1 Agnihotri S.K. & Ray B Datta. (2005). *Perspective of Security & Development in North East India*. Indian Political Science Association. Vol 66. No 3.

2 Goswami Chandram & Saikia Karuna Kanta. *FDI and its relation with exports in India: Status and Prospect in North East region*'. at www.sciencedirect.com

3 Nirmala Devi T. (2007). "*India and Bay of Bengal Community- The BIMSTEC Experiment*". New Delhi

4 https://economictimes.indiatimes.com/news/economy/foreign-trade/customs-cooperation-pact-may-conclude-by- 2019-bimstec -secretary-general/articleshow/65690725.cms?from=mdr

5 Wikipedia.org

6 Tripathi Amitava. (14 February 2013). *Greater Connectivity and Regional Integration in South Asia*. MEA Distinguished Lecture at UMISARC. Pondicherry University.

7 https://about.jstor.org/terms (accessed on 19 Dec2019)

8 Bimstec, bimstec.org

9 Bhatacharyya Rjeev, https://thediplomat.com/2019/05/indias-northeast-emerges-as-a-drug-trafficking-corridor-between-myanmar-and-bangladesh/

10 https://about.jstor.org/terms, BIMSTEC: Political implications for India(accessed on 19 Dec2019)

11 https://economictimes.indiatimes.com/news/politics-and-nation/northeast-to-get-rs-15000-crore-for-improving-telecom-connectivity/articleshow/62524256.cms?from=mdr accessed on April 12,2020

Section III

Pakistan – China

India-China Border Dispute: Intransigent from Generations Past, to Present and the Future

Lieutenant General (Dr) Rakesh Sharma, PVSM, UYSM, AVSM, VSM (Retd)[@]

Abstract

The India-China border dispute spans generations, reflecting a complex historical backdrop influenced by colonial legacies and evolving geo-political ambitions. From the British era to present-day dynamics, this article navigates through the intricate evolution of the border conflict, shedding light on key historical milestones, diplomatic exchanges, and contemporary provocations. Delving into the historical baggage of un-demarcated borders and post-independence efforts to define boundaries, the analysis scrutinises the intricacies of bilateral negotiations and agreements aimed at maintaining peace and stability. However, recent events, notably the premeditated expansionism by the People's Liberation Army in 2020, have challenged existing protocols and escalated tensions. Looking ahead, the article examines future trajectories, emphasising the divergence in India-China positions, the imperative of precise border delineation, infrastructure developments, and the geopolitical implications for regional stability. It concludes by advocating for a pragmatic approach, emphasising India's need to bolster its military capabilities, maintain vigilance, and prioritise technological advancements to ensure secure borders amidst evolving geopolitical dynamics.

Introduction

The history of India-China border is singularly intricate, with the dubious role of the British, with Lord Curzon having stated that "The idea of a demarcated frontier is itself an essentially modern conception and finds little or no place in the ancient world". He also tellingly remarked that, "It would be true to say that demarcation has never taken place in Asiatic countries except under the European pressure, by the intervention of European Agents".

After the First Sikh War and the Amritsar Treaty in 1846, the British recognised Maharaja Gulab Singh of Jammu and Kashmir, under their suzerainty. What followed was a history of 'Lines' that attempted to delineate the boundary between Ladakh and Tibet by William Johnson, a bureaucrat with the Survey of India - the 'Johnson Line' in 1865, the Ardagh–Johnson Line of 1897 and the Macartney–MacDonald Line of 1899. The 5,540 m Karakoram Pass, on the Karakoram Range, got formalised as a boundary between India and China in 1892.

Though the 1913-14 Tripartite Conference at Shimla had three plenipotentiaries from Tibet, China and Britain, the British and Tibetan representatives signed the Convention settling, under Article 9, the boundary east of Bhutan. Except for the line Sir McMahon drew on the map, there was no description of the boundary accompanying the map.[1] China in a formal statement did not recognise any bilateral Agreement between Britain and Tibet.[2] Inexplicably, the contents of the Convention were kept hidden, till published in 1938 edition of Aitchison's compilation of Treaties.

This article examines the historical baggage of the India-China border, its evolution to the present and attempts to prognosticate for the future.

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The Historical Baggage of Un-demarcated Border

After independence, the Ministry of States headed by Vallabhbhai Patel, published two White Papers; in Jul 1948 and Feb 1950. Both showed the entire northern boundary from the Indian-China-Afghan trijunction, to the India-China-Nepal trijunction as 'Undefined', in contrast to a clear depiction of the McMahon Line in the east. On 01 Jul, 1954, the Prime Minister (PM) wrote to the Secretary-General of the Ministry of External Affairs: "All our old maps dealing with the frontier should be carefully examined and, where necessary, withdrawn. New maps should be printed showing our northern and north-eastern frontiers without any reference to any line. These new maps should also not state there is any un-demarcated territory... this frontier should be considered a firm and definite one which is not open to discussion with anybody".[3] In 1954, India published revised maps with the Johnson-Ardagh Line as the international border, extending the Indian frontier in the western sector to the Kunlun Mountains.

There is a protracted correspondence between PM Nehru and Premier Zhou Enlai on the vexed issues of the border. A letter written by Premier Zhou Enlai dated 07 Nov 1959 postulated, "Each side withdraw 20 kilometres from the line up to which each side exercises actual control in the west (Ladakh)". In 17 Dec 1959 letter, PM Chou had Zhou Enlai stated that "The reason for the present existence of certain disputes over the Sino-Indian boundary is that the two countries have never formally delimited this boundary and that there is a divergence of views between the two countries regarding the boundary. The Chinese Government holds that the so-called McMahon Line is wholly illegal it is known to the world that the Shimla Convention itself is void of legal validity". The stark differences of opinion were evident in the exhaustive Apr 1960 talks between PMs Nehru and Zhou in India, with the latter reiterating about the Line of Actual Control (LAC) stating that "The boundaries have to be defined in terms of latitude and longitude; but this was not done".

The reason for the present existence of certain disputes over the Sino-Indian boundary is that the two countries have never formally delimited this boundary and that there is a divergence of views between the two countries regarding the boundary.

India never accepted the so-called unilaterally defined 1959 LAC proposed by Premier Chou. This position has been consistent and well-known, including to the Chinese side. Shivshankar Menon has written in his book 'Choices: Inside the Making of India's Foreign Policy' that the LAC was "Described only in general terms on maps not to scale" by the Chinese. China has been insisting on 1959 LAC, a line proposed by Premier Zhou.

Meanwhile, to reconcile the differences, the two countries agreed to form a Joint Working Group (JWG) on the border issue. A total of fifteen meetings of the JWG were held between 1989 and 2005, with the last meeting on 30–31 Mar 2005. The foundations of the management of the LAC are the Protocols and the Confidence Building Measures (CBMs), the four formal agreements of 1993, 1996, 2005 and 2013. The 1993 Agreement on Maintaining Peace and Stability predetermined that there would be no use of force or a threat to use force and respect and obey the actual control line. The reference to the LAC was unqualified to make it clear that it was not referring to the LAC of 1959 or 1962 but to the LAC at the time when the agreement was signed.

The 1996 Agreement laid down CBMs and was like a no-war pact dictating no use of military capability against the other side, especially within two kilometres of LAC. The Special Representative (SR) mechanism on the India-China boundary question was constituted in 2003 to explore from the political perspective of the overall bilateral relationship the framework of a boundary settlement, and hence differed in scope from the alignment of LAC. The 2005 Protocol included that if the border personnel of the two sides come to a face-to-face situation due to differences on the alignment of the LAC or any other reason, they shall exercise self-restraint, and on coming face to face, shall not use force or threaten to use force, cease their activities in the area, not advance any further, and simultaneously return to their bases.

What were called 'Transgressions', happened with regularity and most were mutually and amicably resolved without reaching the media, under the provisions of the various agreements by 'Banner Drills' or 'Border Personnel Meetings' (BPM). The India-China Border Agreement of 2013 emphasised that neither side shall use military capability against the other side, and that their respective military strengths shall not be used to threaten or attack the other side.

It soon became apparent that the Line of Actual Control (LAC) was inherently flawed. This was primarily due to the absence of formal delineation and demarcation, an issue studiously and deliberately procrastinated by the Chinese.

Since 2013, gross violations of protocols happened in Raki Nalla, Chumar, Pangong Tso, Demchok and Doklam, with the 'Stand-Offs' having transcended to another level. These stand-offs did not lead to disengagement for a very long time, and involved fisticuffs, brawls, use of batons and finally firming up in an adversarial atmosphere for a long time, till resolved through BPMs.

Dai Bingguo, then State Councillor, Director of the General Offices of Foreign Affairs and SR for boundary negotiations with India from 2003 to 2013, had stated on 02 Mar 2013 that, "The disputed territory in the eastern sector of the China-India boundary, including Tawang, is inalienable from China's Tibet". Inexplicably, China did not consider the McMahon Line illegal while settling the boundary dispute with Myanmar.

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Premeditated Expansionism by People's Liberation Army (PLA) in 2020

In one stroke, in May 2020, 32 years of intensive negotiations, agreements, CBMs and protocols stood discarded and thrown away to waste. In many firsts on the LAC, PLA undertook premeditated expansionism on the LAC in Eastern Ladakh, in total contravention of the existing protocols and CBMs. First, military formations under exercise in early 2020 south of KunLun Range were sidestepped to opposite and in proximity of Eastern Ladakh. Second, incursions were undertaken at multiple areas simultaneously. Third, despite well-established systems to avoid clashes, PLA refused to vacate from the areas intruded. And four, and more importantly, at Galwan Valley, the routine fisticuffs and brawls turned violent that led death of 20 Indian soldiers including a commanding officer, and an indeterminate number of PLA soldiers.

The eventology sums to PLA having deliberately and in a well-planned manner broken the systemic of understandings and behaviour based on agreements, protocols and norms. There are two larger rationales for China's belligerence in Eastern Ladakh that commenced in May 2020. Firstly, China's geopolitical aims and global ambitions are not a secret. President Xi sees China as the most pre-eminent power in Asia and eventually, the world, to achieve glorious heights. Regional primacy, therefore, becomes the springboard to global ambitions.

India is a geopolitical competitor for China, despite the economic, military, and technological asymmetry in its favour. India has focussed on steady growth, exhibited tremendous growth potential. It is a credible military power and a challenge in the geostrategic peninsular location at the head of all-important Indian Ocean. China does not want persistent security challenges along its territorial periphery, to focus its energies on creating global influence. For China, India has to be, hence, distracted from the growth path and embroiled in a web of inimical peacetime activities.

Secondly, China has often stated that "We cannot lose a single inch of the lands we inherited from our ancestors", and seeks to safeguard Chinese sovereignty and keep the peace at the same time. China has hence pursued a policy of a more favourable environment along the LAC since 2013, altering the status quo in its favour with an increasingly varied toolkit, the most prominent being the 'Soft Use' of 'Hard Power', well short of the direct use of military force to avoid escalation to a conflict. This was followed by belligerence at Chumar in Sep 2014, and Doklam in 2017. It was over a

large frontage that PLA undertook major transgressions in Eastern Ladakh in May 2020 that led to the tragic incident in Galwan on 15 Jun 2020.

What PLA had not probably anticipated was the robust and strong response by the Indian Armed Forces, on establishing an eye-ball confrontation at all locations transgressed and the ferociousness and tenacity of Indian soldiers at Galwan on 15 Jun 2020, without even using firearms. A quid-pro-quo operation was undertaken by the Indian military in the South Bank of the Lake and Kailash Range on 29-30 Aug 2020. All this was being undertaken while continuing 20 rounds of laborious negotiations at Chushul-Moldo and through diplomatic Working Mechanism for Coordination and Consultation, aimed at obtaining a verifiable disengagement, de-escalation and return to status quo ante.

A significant change happened in the management of LAC between PLA and Indian Army post the 10th round of talks at Chushul that led to phased, coordinated, verified and synchronised disengagement at north and south of Pangong Tso. After the 16th Round of China-India Corps Commander Level Meeting in Eastern Ladakh, consensus was reached on the disengagement of the Chinese and Indian troops in the area designated at Patrolling Point 15 (PP 15) in the Gogra-Hot Springs area of Eastern Ladakh.

Inevitably, there is a changed character of LAC with differing distance buffer-land (moratorium on patrolling) agreed upon. This, in fact, fixates the LAC in the Aksai Chin, into a kind of belt of actual control. It can be inferred that the push for patrolling moratoriums at the key decision points along LAC in Aksai Chin, is a deliberate design of PLA, as this arrangement suits PLA as it avoids patrol-clashes, chanced fisticuffs and stand-offs.

There is fundamental divergence in positions of the two sides. India firmly believes that as long as peace and tranquillity is not restored in border areas and the state of borders remain 'Abnormal', the overall India-China relations, too, cannot return to 'Normal' track.

The Future of the India-China Border Dispute

That brings out the inevitable question, what next? There is a need for a reality check to crystal gaze in four distinct trends. First is the issue of achieving status quo ante, and peace and tranquillity, the persistent demand of India. The Chinese Foreign Ministry spokesperson, Mao Ning on 09 Sep 2022, while calling PP 15 consensus a 'Positive Development', categorically reiterated that it would not accept India's demand to restore status quo prior to China's transgressions. She stated that, "We don't accept the so-called status quo created by India's illegal crossing of the LAC".

The previous Chinese Foreign Minister Wang Yi had previously clearly indicated the position that India and China "Need to take a long-term view, shift from emergency management to normal border management and control mechanisms". The statement plainly specifies the official Chinese position on the LAC in Eastern Ladakh. The inference of what China has been stating is, that where the forces exist today should be taken as firm dispositions and normal border management control should commence hereafter. After the Dec 2022 clash at Yangtse near Tawang, it is apparent that the probing by the PLA to find weaknesses in the LAC management posture by the Indian Army units will continue, and the PLA might attempt to take advantage where feasible. The existing much heightened and escalated military dispositions across the entire length of the border, hence may be firmed in for a long time in the future.

There is fundamental divergence in positions of the two sides. India firmly believes that as long as peace and tranquillity is not restored in border areas and the state of borders remain 'Abnormal', the overall India-China relations, too, cannot return to 'Normal' track. On the other hand, China is seeking to delink the issue of peace and tranquillity in border areas from normal development of relations including political and economic relations.

Second, modern borders must be precise, well demarcated and delineated separating geographical, political and economic jurisdiction on either side of the line, as correct symbols of sovereignty and territorial integrity. Frontier clarity is the *entente cordiale* (friendly understanding) between neighbours. The Chinese goalposts and motivations regarding India are clear and steady, as if etched in stone.

If borders are not precise and taken seriously, conflicts will continue to arise over transgressions by PLA. It is becoming evident for India that, despite irrationality of history, building consensus on border resolution will remain elusive and the trust deficit on the border will stay for a long time. At this juncture, forward movement on demarcating and delineating the currently flawed concept of LAC, seems inconceivable.

Third, there is a feverish pace of improvement in the infrastructure across the board that has ominous portends for the use of ground and air forces, missiles and rockets by China. The rail-line Lhasa-Nyangchi and the super highways to Tibet and Xinjiang do indicate a much-shortened mobilisation cycle. There have also been very significant changes in the Tibetan and Xinjiang strategic geography. The newer strategic assets include planned construction/upgradation of roads in proximity to the LAC (G695 National Expressway), underground silos, blast pens in airfields, missile sites, positioning of People's Liberation Army Air Force aircraft, new road-rail structures, and changing the demographics of border areas expanding PLA's capacity to induct and maintain additional troop deployments. The 14th Plan will witness Chengdu-Chongqing world-class airport cluster and 30 more civilian transport airports.

The LAC is based upon 'Perceptions'. In regular press-briefings too, the word perceptions finds its place, thereby, weakening own stance and trust on rationale of own border.

Fourth, apparently, it is well-nigh impossible to outguess the Chinese, in the trajectory forward. The Chinese are busy rewriting the rules-based international system, to better reflect their own interests. The balance of power has been severely disrupted in China's favour, and this unbalanced power has become a potential threat. The current force levels deployed by the PLA in Aksai Chin do not indicate a significant conventional war threat along the LAC. However, with sharp trends of national growth, her immense potential and geostrategic location, India will be seen as a geopolitical challenger to China's regional and global ambitions.

The Future Thrust for India on the Border Issue

The issue gets drawn into what should be Indian policies to thwart Chinese long-term designs. There are four pathways that need to be considered. First, it is apparent that the architecture of LAC management with China will obviously remain problematic. Invariably, peace will be guaranteed by retaining strong positional deployments by the Indian Army denying further incursions, availability of strong reserves in proximity, and deterrence created by the Indian Air Force and Indian Navy. This escalated deployments and the feverish pace of infrastructure development for the Indian Armed Forces, hence, must continue.

Second, the temporary patrolling moratoriums in Eastern Ladakh have become kind of fixated, and may stay on for substantive time. Past history does not give confidence in any new agreements. There are bounds to be serious repercussions on infringement of these buffers. It is, however, necessary to create failsafe mechanisms to avoid escalation. With total distrust, the patrolling moratoriums and force posturing by PLA, necessitate the Indian Armed Forces to maintain intense vigil, lest the PLA take advantage and creates adverse situation and *fait accompli*.

Third, the LAC is based upon 'Perceptions'. In regular press-briefings too, the word perceptions finds its place, thereby, weakening own stance and trust on rationale of own border. What China believes in or perceives is immaterial to its firmness and convictions. India's perception of the border, and where McMahon Line is, must not be negative and create imbroglio in minds about the truth. It is about the confidence in India's truth that matters maximally. As a border

resolution mechanism is not on the horizon, the word perceptions of the LAC must stand jettisoned from the lingo. The Chinese Communist Party/PLA's versions (or perceptions) of the border should become irrelevant.

Fourth, evidently tensions along the borders will persist, and in fact with increased military infrastructure and military build-up in permanence will remain 'Threat in Being'.

Status quo of the escalated deployments may remain for a long time. It is obvious for India, that being a strong nation in comprehensive power terms, alone will ensure secure borders and will be the recipe for peaceful coexistence with China. It is imperative that modernisation thrusts for the armed forces include technological advancements in warfare like information warfare, space, cyber, artificial intelligence, quantum, robotics, and disruptive technologies.

Conclusion

It is well understood that China is the second largest global economy and the largest manufacturing hub and exporting nation. Despite some economic moderation and evident internal turmoil, China's current global trade and global influence indicate resilience. India too has a burgeoning trade with China and is politically/diplomatically linked through many global and regional organisations.

However, borders are inherent to sovereignty and territorial integrity and border control is a quintessential exercise of sovereignty. Sovereignty is the authority of the Indian Nation to govern the territory. Rightly, an international boundary should delineate the space between India and China as sovereign states. Within the borders, the Indian government has complete authority, an authority that cannot be impeded by other governments. The border serves to represent the limit, the furthest extent, of space over which a government has sovereignty. As a corollary, therefore, China has no plans or intention to settle the border with India.

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Endnotes

1 Bhasin AS, Nehru, Tibet and China, Penguin Random House India, 2021, p14

2 Bhasin AS, Nehru, Tibet and China, Penguin Random House India, 2021, p13

3 AG Noorani, Facts of history, Frontline, Volume 20 – Issue 18, August 30 – September 12, 2003 accessed at https://web.archive.org/web/20111002095213/http://frontlineonnet.com/fl2018/stories/20030912002104800.htm. This article in detail traces out a survey of the treaties and engagements that have dealt with the status of the western sector of the Sino-Indian boundary in Jammu and Kashmir, in the 19th Century.

China's Vibrant Border Villages Programme: Strategic Ramifications - India's Response

Major General (Dr) (Prof) GG Dwivedi, SM, VSM** (Retd)@

Abstract

Since the time of the Yellow Emperors, Chinese rulers have followed aggressive policies to ensure conducive periphery and subdued neighbourhood. Consequently, the Communist leadership waaith penchant for history have pursued a comprehensive border management strategy, encompassing multiple facets. China's recent approach towards border development, particularly in Tibet, labelled as 'Xiaokang'- (moderately prosperous society) is an innocuous concept with dubious intent; centred on expansion through coercion. These chains of villages are intended to act as the forward posts. Given the serious strategic implications of China's 'Xiaokang' (Well off Society) project in the light of the prevailing territorial disputes and contested borders, India has responded by initiating the 'Vibrant Villages Programme'. To effectively counter the dragon's malicious design, the vibrant villages ought to be co-opted into the 'Border Defence Management Mechanism', part of the national security policy.

Introduction

As per the Chinese traditional belief, conducive periphery along with strong central authority are paramount for the progress and prosperity of the state. Going by Chinese ancient history, since the time of the Yellow Emperors, whenever the core was weak and outlying states were autonomous, China found itself in utter chaos. Thus, its rulers extensively used force to expand their empires and sought tribute from the vassal states, in a bid to secure borders besides ensure subdued neighbourhood. This was in consonance with the Chinese concepts of '*Zhong Guo*' (Central States), '*Zhōng Wángguó*' (Middle Kingdom) and '*Tianxia' (*All Under Heaven).

The Chinese have penchant for history and strategic culture, evolved over millenniums. Consequently, right after coming to power in 1949 with the establishment of the 'People's Republic of China' (PRC), the Communist leadership accorded highest priority to secure its frontiers and dominate the backyard, resulting in territorial disputes with all its neighbours. China fought a number of wars including the Korean (1950 to 1953), Sino-Indian (1962), Vietnam (1979); besides skirmishes with Russia and Taiwan, primarily to secure its borders. While Beijing has resolved land border issues with most neighbours (barring India and Bhutan), yet it has ongoing maritime disputes with more than half a dozen nations in the South and East China Seas.

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PRC has a comprehensive border management strategy, encompassing multiple facets. These include territorial integrity, national security complemented by high-tech surveillance systems, economic interests, diplomatic considerations and dual use infrastructural development. China's border management policies are dynamic and continuously evolving over a period of time. Its recent approach towards border development, particularly in Tibet, labelled as '*Xiaokang*' (Well off Society) is an innocuous concept with dubious intent, centered on expansion through coercion. These strings of villages are intended to act as the forward posts, duly co-opted into the border defence system. Given the serious strategic implications in the light of the prevailing territorial disputes and tension along the 'Line of Actual Control' (LAC), India has responded by initiating the 'Vibrant Villages Programme' (VVP). However, this needs to be integrated into the comprehensive border management system, part of the National Security Strategy.

This paper takes an in-depth review of China's *Xiaokang* project, its strategic ramifications and India's response in the realm of prevailing territorial dispute.

China's Vibrant Border Villages Programme

The concept of 'Xiaokang' was revitalised by Deng Xiaoping in 1979, as part of 'Four Modernisations'. The aim was to ensure equitable development of the Chinese society through poverty alleviation in the rural areas[1]. President Xi Jinping, in consonance with his aggressive policies has transformed the 'Xiaokang' initiative into primarily a security one, with strategic overtones. The reoriented approach seeks closer integration of border areas with the mainland and enhancing the security of its land boundaries, particularly in the 'Tibet Autonomous Region' (TAR) opposite Arunachal Pradesh.

The concept of 'Xiaokang' was revitalised by Deng Xiaoping in 1979, as part of 'Four Modernisations'. The aim was to ensure equitable development of the Chinese society through poverty alleviation in the rural areas.

Under the outcomes of 19th Party Congress in Oct 2017, Xi Jinping called for talented Chinese individuals to work in remote areas with ethnic minority population. It entailed relocation of people in the Tibet's frontiers resulting in the change of demographic profile and building border defence villages. A sum of approximately USD 4.6 bn was allocated for construction of these habitats including supporting infrastructure. As part of this project, a total of 628 administrative villages have been constructed; 427 are on the front line and 201 in the second tier.[2] These villages are spread across 21 border counties to include important border town of Xigaze, Lohka, Nyingchi and Ngari. In Lohka, which shares its border with Bhutan and India (Arunachal Pradesh), China has constructed 354 prosperous border communities.

To act as the first line of border defence, almost a third of the vibrant villages have been built in close proximity or astride the LAC. To encourage permanent settlement in the border villages, monetary subsidies for the first and second tier residents has been increased significantly; from 1,700 Yuan and 1,500 Yuan per capita per year to 6,000 Yuan and 5,400 Yuan respectively. Through this initiative, PRC is in the process of moving 62,000 border residents besides 2,41,835 people from other areas into 62,160 households across the 628 villages.[3]

Simultaneously, China has undertaken massive infrastructure upgrade particularly in the Tibetan Plateau. All the border villages have been provided with internet connectivity through fibre optics, 4G coverage and have been electrified, especially bordering India, Nepal and Bhutan.[4] Almost all the border villages have been provided with high standard amenities and roads. To this end, 130 border roads, totalling 3,080 km, have been renovated. In addition, nearly 206 industrial projects are under construction. As part of the 14th Five-Year Plan (FYP), China aims to increase 5G access across the region.[5.] Besides, eight districts and 66 counties in the TAR have been connected to the central power system since 2020.

By 2021, road network in Tibet covered 1,18,000 km. Preliminary work on Hotan-Xigaze, Gyirong-Xigaze and Chengdu-Wuhan-Shanghai high-speed railway lines has already been completed. The 14th FYP targets to achieve world class Chengdu-Chongqing airport cluster, besides upgrading 39 civilian airports. Currently, a dozen airports are operational or under construction in Tibet-South Xinjiang. The new 1,076 km 'Snow Mountain Oil Dragon Pipeline' will raise the number of oil depots in Tibet to 10.[6]

Strategic Ramifications

China passed two national laws that have immense bearing on the border management. The new 'National Defence Law' was passed on 01 Jan 2021 which provides the People's Liberation Army (PLA) greater role in conjunction with civil agencies to further the national interests, particularly in the development of infrastructure both in the outlying areas and overseas. Exactly a year later, the PRC passed 'Land Border Law'. Its articles 10 and 43, specifically challenge the status quo between India and China with regards to the development of border infrastructure. It, inter alia advocates that states shall take effective measures to strengthen the border defence framework. In fact, Article 43 lays down; "The State supports the construction of border towns, improve their system and functioning".[7]

Xi has accorded high priority to Tibet, as is evident from his remarks at the 'Communist Party Central Symposium on Tibet Work' in Aug 2020, wherein he sought to make Tibet an 'Impregnable Fortress' and 'Ironclad Shield' to maintain its stability as also encourage people to fight against separatism.[8] In Jul 2021, Xi Jinping undertook a surprise visit to Lhasa, the first one as President, accompanied by the Vice Chairman of the 'Central Military Commission' and senior generals of the PLA. The visit coincided with the 70th anniversary of the so called 'Peaceful Liberation of Tibet'; signifying immense strategic significance of TAR in the Chinese policy calculus.[9] Intriguingly, complete absence of media coverage on the visit indicated the sensitivity of issue, Communist dispensation and lack of confidence about its legitimacy among the Tibetan people. During the visit, Xi Jinping is known to have inspected various crucial infrastructure projects.

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As per the pact signed between India and China in 2005, 'The two sides shall duly safeguard the interest of their respective population in the border areas'.[10] However, as evident from the above, China has gone about systematically adopting a multi-prong approach, to strengthen its border posture. Besides enacting the 'Land Border Law', Beijing has undertaken 'Dual Use Strategy', combining the socio-economic development alongside military infrastructure buildup.[11] This ensures seamless fusion and synergy between the civil and military, with PLA enjoying vast powers in steering the mega projects.

PLA has gone in for a massive build-up of defence infrastructure in Tibet. The border villages have been integrated into the overall defence plans, supported by essential infrastructure in the form of electric grids, surface communications and internet connectivity. It is in sync with the Chinese strategy of 'Grey Zone Warfare' (GZW), wherein civilians and militia forces engage in non-contact warfare. Case in point is South China Sea where the Chinese Coast Guard along with the marine militia continuously indulge in the expansion activities through 'Nibbling Actions' and surreptitiously legitimising the claims.

Similar actions are being replicated on the land borders like the creation of the border villages. To this end, Han Chinese with preference to the former PLA personnel are being settled in the border areas. It is estimated that the Chinese government has forced around two million Tibetan nomads from their lands into urban settlements. The demographic invasion is a planned ethnic cleansing of the Tibetan population, alongside economic marginalisation by exploiting the region's rich natural resources. Over the last decade, Han population in Tibet has risen by approximately 12.0 per cent. The ultimate aim of the Communist regime is to further its grand design of Sinicization of TAR, so as to wean away the locals from their culture and assimilate them into the Chinese mainstream.

The border villages are designed to act more like the forward outposts, especially those in close proximity of the LAC, in the disputed areas like Doklam, and Longju (Tsai Chu-Upper Subansari). With the chain of border villages, the profile of the LAC, per se, is bound to change. These habitats will not only provide manpower and resources for the PLA, besides strengthening the legitimacy and legality of the territorial claims based on the existing arrangement of not disturbing the settled population along the borders (as per the 'political parameters and guiding principles for the settlement of the boundary issue 2005').[12]

India's Response

Due to the lack of a clear national policy, India's border areas have remained underdeveloped, especially opposite China. It is only after China's massive infrastructure development in Tibet and Xinjiang, particularly along the LAC that India too began to upgrade its roads and surface communications. In response to China's *Xiaokang,* India has launched the VVP project. The concept was introduced by Prime Minister Modi in 2018 to provide the best facilities to the people living in the border villages.[13]

The underpinning is to open up livelihood opportunities across the board including leveraging of tourism potential, development of sustainable eco agri-business by ensuring inclusive growth.

It is in sharp contrast to the Chinese centrally controlled model; the Indian programme envisages a 'Hub and Spoke' template which is driven by the district administration and gram panchayats; role of the Union Government is limited to only disbursal of funds. The main focus of VVP scheme is on the promotion of 'Socio-economic' initiatives by giving impetus to youth empowerment through skill development and entrepreneurship. The underpinning is to open up livelihood opportunities across the board including leveraging of tourism potential, development of sustainable eco agri-business by ensuring inclusive growth.

As per the Home Minister, Shri Amit Shah, while speaking at the 62nd Raising Day Parade of the Indo-Tibetan Border Police on 10 Nov 2023, 168 villages along the China border that lacked connectivity are set to be linked by roads and other form of communications by next year. He said that the Central Government wanted the border villages as not only first in geographic terms but also by way of facilities. A budgetary allocation of Rs 4,800 cr has been made to create adequate infrastructural provisions in 663 border villages of 19 districts under the VVP scheme.[14] Unlike China, India's VPP initiative is based on the sustainable development model while protecting and promoting the local heritage and culture

Alongside the VVP, India is undertaking large infrastructure projects which includes the Frontier Highway-Railway, airports, and hydropower in Dibang-Kameng and waterways. These are funded under the 'Gross Budgetary Assistance' provision amounting to INR 12,882.2 cr, towards the holistic development of the 'North East Region'.[15] These will go a long way in boosting the socio-economic development of the region. However, for the dual use of the facilities by both civil and defence, an integrated border management policy is imperative to meet the challenge of Chinese *Xiaokang*-border villages.

Conclusion

China's *Xiaokang* project is in sync with its strategic culture of ensuring conducive periphery through coercive actions. The underlying rationale is the integration of border areas with the mainland to maintain effective central control over the outlying regions. In the garb of development of the border areas; the twin grand objectives sought to be achieved are sinicisation and enhancing the security of the geographic boundaries. The whole *Xiaokang* programme has been put into place systematically including legal dimensions by introducing new laws.

China's vibrant border villages initiative has serious strategic ramifications for India, given the contested borders. Most of the villages are located in the proximity of the LAC, especially in the sensitive areas, structured to act as forward posts, integrated into the border defence plan, and hence, of immense strategic significance. PLA's aggressive posture marked by massive military infrastructure build up and heavy troops deployment along the LAC is bound to impact the prevailing configuration of the LAC, consequently the border management per se. Given China's strategy of GZW, these border outposts are bound to play a crucial role in furthering Beijing's expansionist designs.

India's border areas, have remained devoid of even basic amenities due to the lop-sided national policies. It is only since the last couple of years, primarily as a sequel to the Chinese aggressive behaviour that border area development has got much needed attention. VVP Initiative is India's response to the Chinese *Xiaokang* project. India's approach is diagonally opposite to that of Chinese, with emphasis on sustainable development and preserving the local culture. However, to defeat the malicious intent of China, India ought to formulate a border management doctrine, duly co-opting the vibrant villages into the defence plans. The present mechanism of multiple agencies involved in the border guarding needs to be replaced with a single force under the operational control of the Army. Maximum personnel must be recruited from among the locals in keeping with 'Home and Hearth' concept.

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To ensure territorial integrity in the wake of aggressive neighbourhood, effective border management merits highest priority. China's design to unilaterally alter the status of LAC will gain further impetus with the *Xiaokang* villages. This new challenge can be effectively countered by India only through a de-novo approach; implying a review of the whole gamut of border management and optimisation of the potential of vibrant villages as part of the national security policy.

Endnotes

1 (2021, December 16). "Poverty Alleviation: China's Experience and Contribution.' Published by *The State Council Information Office of the People's Republic of China*. Retrieved from Embassy of The People's Republic of China in Republic of Zimbabwe: http://zw.china-embassy.gov.cn/eng/zgjj/202112/t20211216_10470554.htm

2 Kim Xiangde, (2020, December 18) "The decisive battle is in full swing and the snow-covered plateau plays a triumphant song - a summary of the Tibet Autonomous Region's efforts to build a moderately prosperous society in all border areas", *China Ethnic Network*. https://www.56-china.com.cn/show-case-4208.html

3 Zhao Juehui, (2020, August 12) "在西藏边境小康村看固边安民：小康村建设有声有色，守土固边队伍不断壮大" Published by *Huanqiu*. Retrieved from: https://china.huanqiu.com/article/3zQuUtOxclU

4 (2021, March 24). "2021 Tibet Autonomous Region Government Work Report". Issued by *General Office of the People's Government of the Tibet Autonomous Region*. Retrieved from: https://www.xizang.gov.cn/zwgk/xxfb/zfgzbg/202103/t20210324_197174.html

5 (2021, March 12). "The 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Outline of Long-Range Goals for 2035". Published by *Xinhua News Agency*. In Beijing. Retrieved from: https://www.gov.cn/xinwen/2021-03/13/content_5592681.htm

6 Sharma Rakesh Lt Gen. (2022, January 31). "China: Coercion as National Policy". Published by *Vivekanand International Foundation*. Retrieved from: https://www.vifindia.org/article/2022/january/31/china-coercion-as-national-policy

7 "Land Border Law of the People's Republic of China-2021". Published by *Advocatetanmoy Law Library- Legal Database and Encyclopedia*. Retrieved from: https://advocatetanmoy.com/2021/10/31/land-border-law-of-the-peoples-republic-of-china/

8 Xin L. (2020, August 30). "Xi's speech sets policy direction for Tibet", Published by: *Global Times*, Retrieved from: https://www.globaltimes.cn/content/1199356.shtml

9 Mai J & Lau M. (2021, July 28)." What message was Xi Jinping trying to send on his visit to Tibet?" Published by: *South China Morning Post*, Retrieved from: https://www.scmp.com/news/china/politics/article/3142911/what-message-was-xi-jinping-trying-send-his-visit-tibet

10 (2005, April 11). "Agreement between the Government of the Republic of India and the Government of the People's Republic of China on the Political Parameters and Guiding Principles for the Settlement of the India-China Boundary Question". Published by *Ministry of External Affairs-GOI*. Retrieved from: https://www.mea.gov.in/bilateral-documents.htm?dtl/6534/Agreement+between+the+Government+of+the+Republic+of+India+and+the+Government+of+the+Peoples+Republic+of+China+on+the+Political+Parameters+and+Guiding+Principles+for+the+Settlement+of+the+IndiaChina+Boundary+Question

11 Lanlan H. & Yuzhu Y. (2021, October 24)"China adopts land borders law amid regional tensions, vowing to better protect territorial integrity at legal level", Published by: *Global Times*, Retrieved from: https://www.globaltimes.cn/page/202110/1237171.shtml also see. "Land Border Law", *NPC Observer,* https://npcobserver.com/legislation/land-borders-law/

12 (2005, December 01). "Framework to resolve Indo-China Border dispute". A report by Ministry of External Affairs Published by *Press Information Bureau*. Retrieved from: https://pib.gov.in/newsite/PrintRelease.aspx?relid=13771

13 (2022, March 29). "Vibrant Villages Programme". A report by Ministry of External Affairs Published by *Press Information Bureau*. Retrieved from: https://pib.gov.in/PressReleasePage.aspx?PRID=1811258

14 (2023, February 15). "Cabinet approves Centrally Sponsored Scheme- 'Vibrant Villages Programme' for the Financial Years 2022-23 to 2025-26 with financial allocation of Rs. 4800 Crore". A Cabinet report Published by *Press Information Bureau.* Retrieved from: https://pib.gov.in/PressReleasePage.aspx?PRID=1899446

15 (2023, January 05). "Cabinet approves continuation of Schemes of Ministry of Development of North Eastern Region, with an outlay of Rs.12882.2 crore, for the balance period of the 15th Finance Commission (2022-23 to 2025-26)". A Cabinet report Published by *Press Information Bureau.* Retrieved from: https://pib.gov.in/PressReleasePage.aspx?PRID=1888880

Pakistan Future Perspectives and Implications for India

Dr TCA Raghavan, IFS (Retd)[@]

Abstract

The political flux in Pakistan reflects the deep structural crisis confronting the country but also shows how the civil-military dynamic exists almost as an independent dynamic in Pakistan. Between former Prime Ministers Imran Khan, Nawaz Sharif and the Pakistan military things have moved full circle in the past five years. The Feb 2024 general election may well see the return of Nawaz Sharif and his party to power, given the extent of the tilt against Imran Khan. Nevertheless, Pakistan's structural challenges will remain, as will the questions it poses for India's diplomacy.

An overview of Pakistan Today

It is evident that if a bird's eye view is attempted what would be most evident is how four different arcs of crises have jostled for primacy in Pakistan this past year-at least in terms of public attention. The headlines, thus, consequently shifted from day to day and from week to week oscillating from civil military tensions to political conflict and uncertainty to major terrorist attacks representing, once again, an emergent national security crisis and, finally, to the financial and economic crisis represented by spiralling inflation, the eroding rupee and disrupted supply chains.

The magnitude of these multiple crises, poly-crisis is the term usually employed, had already made Pakistan's devastating floods of 2022 a distant memory to be invoked for tactical reasons in international fora as a talking point, but no longer a principal point of focus at least for public narratives.

Even as these arcs are framed and defined for 2023 in Pakistan, each also has a long history and independent trajectory. Nor is it by any means the first time that each of these, or combinations thereof has surfaced and erupted with intensity. Pakistan's history is, to a great extent, a history of different kinds of crises. Nevertheless, what has made Pakistan's recent past so exceptional is the intensity with which these different crises have coincided and superimposed on each other.

The current civil-military contestation has the former Prime Minister (PM) Imran Khan as the principal protagonist on the civilian side of the equation. The obvious irony here is that until his unseating and the denouncement of his government in Apr 2022, he was regarded as the spearhead of the most formidable 'King's Party' the Pakistan army had ever put together. Since Apr 2022, Imran Khan and his Pakistan Tehreek-i-Insaaf have demonstrated once again that 'Hybridity' is a fragile if not a flawed concept in Pakistan: The Pakistan Army's efforts to identify and work with a pliant

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politician usually ends in failure. And yet even in late 2021, it would have been impossible to predict that the Imran Khan phase would end with such a spectacular falling out between the PM and his former mentors and supporters.

Also paradoxical is the location of the Pakistan Muslim League (Nawaz) and the Pakistan People's Party in the civil-military divide. Nawaz Sharif and the Asif Zardari-Bilawal Bhutto duo have been, for at least the past quarter century, the pole from which the strongest critique of the military's role in Pakistan politics has emanated. The fact that the military now weighs in on their side in the political contest underway since Imran Khan's ouster in Apr 2022, underwrites how fluid Pakistan politics has become.

Over the past year, the Pakistan Army has gone through a messy and bruising transition at its highest echelons alongside an intense civil-military contestation. Its image today is more dented than at any time in the past decade and a half. While the possibility of serious dissension within the army command structure can be discounted, the fact remains that we have heard more about the army's internal squabbles and jostling for top jobs in the past few months than at any time in the recent past. The former Chief of Army Staff, General Qamar Javed Bajwa stands diminished, at least in public narratives, as someone who got involved in political dogfights not as an impartial and ultimate power centre but as someone advancing his personal interests. The charge is that he played both sides of the political divide with an eye to securing a further extension for himself as Chief of Army Staff. He, not unexpectedly, is also being castigated for being soft and defeatist on India and here the actual facts are less important, even immaterial than perceptions. Although a 'New' (since end Nov 2022) Army Chief is in place and has since made his own impact on the chain of command yet the controversies of the past month are not forgotten. Amidst this, the heightened rhetoric and even more the recent terrorist attacks, do not bode well for the months ahead.

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Rent Seeking Capacity.

To those even sketchily familiar with even the bare bones of Pakistan's recent history will find that none of this is particularly new and each of these crisis points is a recurrence of past patterns. But perhaps there is something different in these different arcs of crises maturing and intersecting together.

What may also be different is the regional and global environment. Devastated by a crippling pandemic and in the midst of the most acute geopolitical crisis in at least the past quarter century in the form of a war in Europe, Pakistan's external environment today is certainly different. The United States (US) withdrawal from Afghanistan, ending a twenty-year commitment, meant that Pakistan's North West was no longer a major factor in great power priorities. In brief, Pakistan found itself marginal to and isolated from the principal themes that dominate international politics. Leveraging its geopolitics for economic gains, thus, became that much more difficult and challenging and this in itself is a relatively novel situation for Pakistan's policy makers.

A sense of this predicament can be understood from the handling of the International Monetary Fund (IMF) by the government of Pakistan in the first half of 2023. The IMF program would have stabilised the economy and opened a channel for other funding arrangements to fall into place. It would have certainly meant a great deal of domestic pain in terms of devaluation, inflation, financial stringency etc., all deeply unpalatable given the daily political battles rocking Pakistan. The view that emerged was that it would be possible to 'Stare Down' the IMF and get better terms that would ease the pain to some extent. This strategy was underwritten by the assessment that Pakistan was geopolitically too important for the IMF not to play ball.

In fact, the IMF did just that; it refused to proceed further unless Pakistan took the difficult decisions needed to bring back some economic sense in its policy approach. For three to four months a dangerous drift had however prevailed, a situation which is generally being blamed on the then Finance Minister Mohammad Ishaq Dar. There is, however, a wider mindset that sustains such views and it has been nurtured for a long period of time by seeing the possibilities of leveraging geopolitics for economic ends.

The crisis, until the IMF agreement was finally stitched up demonstrated how that older approach now faces numerous limitations. Many traditional bilateral partners, the US in particular, are simply less interested in themselves as an outcome of the Ukraine situation combined also with equal exasperation and exhaustion with their interface with Pakistan in Afghanistan. Saudi Arabia and others in the Gulf are helpful, but, they also showed greater caution and forbearance about wading in the absence of a clear plan of how Pakistan intends to manage this latest financial crisis. China similarly does try and help, but it too has learnt the difficulties of too much ambition from its experience of a decade of executing the China-Pakistan Economic Corridor. The point is that foreign capital faces the same headwinds in Pakistan as do its domestic businesses and the state has singularly failed in addressing the concerns of the latter.

The Tehreek-e-Taliban Pakistan (TTP) crisis and the downturn in relations with the Taliban in Afghanistan both also point to the phenomenon of the narrowing of Pakistan's options and equally the erosion in its capacity to address the issues concerned. In brief, leveraging geopolitics is becoming more and more of a difficult option for Pakistan's strategic elite. Whether and how a traditional rentier state can transform itself into something different is the question that poses itself to Pakistan and the jury is definitely out on whether this question will be addressed at all, leave alone answered.

The Tehreek-e-Taliban Pakistan (TTP) crisis and the downturn in relations with the Taliban in Afghanistan both also point to the phenomenon of the narrowing of Pakistan's options and equally the erosion in its capacity to address the issues concerned.

A Death in Exile and a return from Exile: Two Points of Entry.

Amidst these general considerations, a return from exile and a death in exile also provide two separate points of entry into Pakistan's tangled politics over the past year. In Feb 2023, General Parvez Musharraf died, in effect in exile, in Dubai. He was permitted a burial with military honours in Karachi, but the general point was widely accepted in Pakistan – military interventions may take place effectively in Pakistan but their after effects are getting increasingly difficult to handle.

In Dec 2019, a special court in Pakistan found General Parvez Musharraf guilty of high treason awarding him the death penalty. The charge was overthrowing the Constitution of Pakistan by imposing an emergency in Nov 2007 and arresting a number of superior court judges.

This verdict was soon overturned but its pronouncement shocked Pakistan given the near iconic position the army occupies. The judgement of one of the three-member bench of the special court attracted the most attention. In case, it read, Musharraf died before the death penalty could be executed "His corpse be dragged to the D Chowk, Islamabad and be hanged for three days".[12]

These remarks and the accompanying outrage in the Pakistan Army sum up Musharraf's legacy. His long stint in power is outranked by the length of tenures of earlier dictators, Generals Ayub Khan and Zia ul Haq. Yet it was immensely significant nevertheless. In the western doghouse after his 1999 coup, 9/11, the Global War on Terror and the US intrusion into Afghanistan provided an opportunity which he grasped with both hands.

Becoming a critical US ally certainly cemented its domestic legitimacy. Foreign assistance poured in and Pakistan from being a pariah became the cynosure of western narratives. But to his critics Pakistan was ending up with the short end of the stick. Military action to prevent regrouping of the Taliban in Pakistan's northwest sparked the consolidation of a local variant of the Taliban which soon became a formidable internal security threat. For Musharraf and his

acolytes' domestic extremists posed the real threat to Pakistan. To the critics he was never going to really commit himself to exorcise Pakistan from its dependence on terrorist groups to advance strategic interests in Afghanistan and India.

By the time he finally exited as president, Pakistan was in the midst of an internal security crisis with no one seemingly safe from terrorist attacks.

The late Benazir Bhutto demonstrated this ability to return from exile twice; former PM Nawaz Sharif ending his exile in London and returning this October to spearhead his party's effort to regain political power is an even more striking illustration of the same screenplay.

With his return to Pakistan last month, a sliver of clarity over Pakistan's political direction has started emerging- the general election will be in early Feb 2024. The pressure on the other former PM, Imran Khan, now in jail, continues and the vectors in favour of Nawaz Sharif appear to have irreversible traction. There are still naysayers however; after all, Feb is still some time away.

Nawaz Sharif being a key element in a military led concert expected to form the next government is ironic. He had been ousted by the Army thrice-through backroom conspiracy, through a real military coup and finally through what was a judicial coup. His countrymen have taken this in their stride: Things in Pakistan are seldom straightforward, as Benazir Bhutto once wrote: "There are always circles within circles, rarely straight lines".[3]

But the other aspect of this story is seldom heard outside Pakistan- that it has shouldered an extraordinary burden of 3 to 4 million refugees for such a long period of time, notwithstanding its own resource constraints.

Will Nawaz Sharif's return to power and a smooth interface with the military provide Pakistan with the stability it so desperately needs? Many hope so, but even the most optimistic are daunted given the scale of issues Pakistan confronts even beyond its splintered politics and perpetually imbalanced civil military relationship. A tottering economy for which there are no easy answers is easily at the top of the list. Perhaps even more serious is the erosion of public confidence and morale as terrorist attacks acquire a frequency and intensity very reminiscent of Pakistan's age of trouble between 2007 and 2015.

The contrasting trajectories of former PM Nawaz Sharif and the late General Parvez Musharraf do offer some insights into Pakistan today. While the political role of the military cannot be discounted at any stage, nevertheless, the exercise of that role is hemmed in by an increasing number of limitations. Secondly, political longevity is quite robust in Pakistan and exile is not a permanent state for a politician with clout.

The Regional Context- Afghanistan and India.

The latest attack on a Pakistan Air Force base in Mianwali, Punjab, Nov 2003 recalls earlier episodes when defence installations were targeted almost at will by the TTP. This latest attack also coincided, as has been the case in the past, with a deterioration in Pakistan Afghanistan relations. There is in Pakistan a deep sense of grievance that the Taliban, in power since Aug 2021, has not done anything to curb the TTP and its attacks on Pakistan. This accumulated tension has now acquired a new front. After a series of terrorist attacks, Pakistan has started deporting large numbers of Afghan refugees regarded as unregistered and 'illegal' residents.

The large number of Afghan refugees in Pakistan has been a central factor in the relationship between the two countries for four decades. It is well known that Pakistan used these refugees to advance its interest; the different mujahideen groups and the different iterations of the Taliban were all incubated in refugee camps in Pakistan. But the other aspect of this story is seldom heard outside Pakistan- that it has shouldered an extraordinary burden of 3 to 4 million refugees for such a long period of time, notwithstanding its own resource constraints. It is a measure of the

failure of Pakistan's Afghan policy that its search for the elusive 'strategic depth' in Afghanistan has meant that it has comprehensively squandered the goodwill it could have legitimately earned from the refuge it has provided for so long to so many Afghans. The large-scale deportations now underway mean that even more trouble in the coming months can be easily forecast across the Durand Line.

For India Pakistan relations the best prognosis for the immediate future would be a continuation of the minimal stability in place since the Mar 2021 reaffirmation of the ceasefire on the Line of Control. Perhaps, once a new government is in place in Pakistan or after the general election in India opportunities for political initiatives may emerge to impart some positive elements in a relationship that is otherwise overwhelmingly adversarial and negative.

Is a more positive orientation desirable and worth working towards? To many in India's strategic community a new normal has crystallised in India's approach to Pakistan over the past six to seven years. This new normal comprises a highly securitised prism through which Pakistan is viewed given its persistent record of state sponsored terrorism directed at India. In this perspective a Pakistan policy is best limited to a narrow security approach as, for a multitude of reasons, nothing is really going to work given the prevailing mindsets in Pakistan.

Time will tell whether such a policy constitutes a new normal or only a particularly negative phase of India Pakistan relations. The burden of history informs us that these relations follow a cyclical path with both positives and negatives and do not rest at any one single point with any degree of permanence.

This means that relations will seldom proceed for any length of time on the trajectory we want or plan for and yet, neighbours and neighbourhoods being permanent, diplomacy is the only real instrument which is sustainable in the medium and long term to deal with them.

Conclusion

How should we now situate ourselves vis-a-vis a most difficult neighbour in its current state? From different viewpoints come different answers. A tiny, repeat, tiny minority advocates putting history and memories aside and helping Pakistan. This was a sentiment during the devastating floods in 2022. It again surfaced during the critical foreign exchange situation with Sri Lanka, the helping hand to it being cited as an example. 'Helping Pakistan' is a leap of faith argument but does not address the question of whether such assistance would be accepted. More significantly it ignores Pakistan's size and complexity, a country of 230 mn and the fifth largest in the world and our own limitations in providing such assistance.

The more popular, even dominant view, is to let Pakistan stew in its own juice. This view is less polemical than it may appear and is also grounded in an appreciation of the limitations of our own capacity and bandwidth. Pakistan's crisis with all its different dimensions is almost entirely the outcome of the country's own internal dynamics. We have no role in impacting it either positively or otherwise.

But there is also a third possibility. This would see the current long downturn in India Pakistan relations not as a new normal but in the longer span of their curious history. Bursts of positive movement follow not from linear trajectories but from realistic initiatives that base themselves on opportunities that arise at the right tactical moment. That moment may not be upon as yet, but it will certainly come at some point. Secondly, it is also useful to see India Pakistan not as something *sui generis* but in the larger framework of difficult neighbourhood relations. This means that relations will seldom proceed for any length of time on the trajectory we want or plan for and yet, neighbours and neighbourhoods being permanent, diplomacy is the only real instrument which is sustainable in the medium and long term to deal with them.

Endnotes

1 The News, December 21st 2019, *Special Court Issues Detailed Verdict*, https://www.thenews.com.pk/print/585908-special-court-issues-detailed-verdict-musharraf-must-be-hanged-on-five-counts (accessed on 14/02/2024. See also BBC News, The judge who stood up to Pakistan's military, 20th November, 2020, https://www.bbc.com/news/ world-asia-54961079 (accessed on 14/02/2024)

2 ibid

3 Benazir Bhutto, *Reconciliation- Islam, Democracy and the West*, Harper Perennial (2009), P 18.

Pakistan-Taliban Relations: Implications, Challenges and Prospects for India

Dr Soumya Awasthi@

Abstract

Recent political shifts in Afghanistan underscore the nation's undeniable interconnection with the volatile landscape of global geopolitics, presently witnessing significant changes in the role of the entire South Asian region within global strategic realignments. The withdrawal of the United States from Afghanistan has placed India and Pakistan in a fresh competitive landscape, each seeking to foster their respective relations with Afghanistan. Against this intricate backdrop, the article delves into India's policy choices in Afghanistan, initially touching upon the evolving regional geopolitics and the emerging global order. Considering these new geopolitical dynamics, it becomes clear that despite inherent distrust and reservations vis-a-vis Pakistan, India's strategies regarding Afghanistan must be resilient, centred on safeguarding its geopolitical interests and concerns amid Islamabad's coercive policies in Kabul and towards New Delhi.

Introduction

The relationship between Pakistan and the Taliban since the 1990s is marked by both support and contention. Pakistan significantly contributed to the emergence of the Taliban during the 1990s. The Inter-Services Intelligence reportedly provided crucial support to the Taliban in their initial years, seeing them as a potential stabilising force in Afghanistan aligning with Pakistan's strategic interests, especially against arch-rival India. Additionally, Pakistan aimed to counter the influence of its regional nemesis through proxies and maintain a strategic depth in Afghanistan. Pakistan was among the few countries to officially recognise the Taliban regime in Afghanistan when it came to power in 1996.[1]

Despite official disavowals, accusations persisted that elements within Pakistan continued to support the Taliban even after the US led intervention in Afghanistan in 2001. These claims included offering sanctuary to people like Osama bin Laden and much alike and logistical support to the Taliban insurgency against the Afghan government and international forces.

Over time, Pakistan's stance towards the Taliban underwent shifts due to altering geopolitical dynamics. Despite preliminary support for an Afghan-led peace process, Pakistan faced international pressure to curtail any backing of the Taliban insurgency. Efforts were made to engage with Afghanistan and the international community to facilitate peace talks and contribute to regional stability.

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The Pakistani-Taliban relationship is a complex interplay of geopolitical, strategic, and internal dynamics, balancing their interests and addressing international pressure for a peaceful Afghanistan. The Taliban were once a vital strategic asset for Pakistan's security establishment in its anti-India policies.[2] Presently, strained relations have emerged due to Pakistan's forced expulsion of Afghan refugees, condemned by the UN and the Afghan Taliban as 'Inhumane'. Pakistan justifies this action, citing its economic challenges, and accuses undocumented Afghans of terrorist and criminal activities, reflected in the conspicuous escalation of militant incidents within Pakistan.[3] A report by the Centre for Research and Security Studies in Oct 2023 revealed Pakistan's significant loss of 386 personnel in the initial nine months of 2023, the highest in eight years. Examining this relationship requires contextualising it within broader regional geopolitics and the complexities of the Afghan conflict.[4]

Importance of analysing these relations concerning India's strategic interests

Analysing the relationship between Pakistan and the Taliban concerning India's strategic interests is crucial as it directly impacts the security landscape in the region. The proximity of Pakistan to Afghanistan and its historical connections with the Taliban can significantly influence the security environment in neighbouring India.[5] Pakistan has been accused of providing support to certain factions of the Taliban. This has raised concerns for India, which sees the Taliban's resurgence as a potential security threat, particularly if the group's activities spill over into the Kashmir region or foster instability along the shared border.

Analysing the relationship between Pakistan and the Taliban concerning India's strategic interests is crucial as it directly impacts the security landscape in the region. The proximity of Pakistan to Afghanistan and its historical connections with the Taliban can significantly influence the security environment in neighbouring India.

Further, India is cautious of Pakistan's historical alliances and perceives the deepening ties between Pakistan and the Taliban as a strategic manoeuvre to encircle India. A strengthened Taliban-Pakistan nexus may not only challenge Indian influence in Afghanistan but potentially create a broader security crisis that could affect India's interests. By comprehending the equation between the two, India can engage in nuanced diplomatic efforts to promote regional stability. It allows India to navigate complex relationships and foster ties with various stakeholders to counterbalance potential threats.

Pakistan-Afghanistan Relations- A Historical Context

Pakistan and Afghanistan have harboured longstanding animosity since 1947, mainly rooted in border disputes. Three key factors fuelling this sense of paranoid are:

- First, the unity of diverse linguistic and ethnic groups in Pakistan relied heavily on Islam post-1947. However, the separation of Bangladesh in 1971, primarily inhabited by Bengali speakers, raised concerns in Pakistan. The Pakistani authorities feared a similar Pashtun separatist movement in Balochistan and Khyber Pakhtunkhwa. To counter this, Pakistan established numerous Deobandi madrassas, teaching fundamentalist Islam, influenced by Saudi Arabia's Hanbali School, aiming to suppress Pashtun nationalism and maintain influence in these regions. Consequently, Islamabad supported the Taliban as they emerged against the Communist Soviet state.[6]

- Secondly, Pakistani authorities have endeavoured to establish intimate ties with the Taliban in Afghanistan since 1947 to circumvent the Durand Line controversy. For the Pakistani government, the Durand Line has become a phantom from the past. Conflicts over borders drawn during the colonial era—most notably, Pakhtunistan—remain a frequent cause of friction. Pakhtuns are a sizeable ethno-linguistic community that lives mainly in Pakistan's North-West Frontier Province and Balochistan provinces as well as across the Afghan border. They are also known as Pathans or ethnic Afghans. This tribe, known

for their Islamic customs, Pashto language, and dedication to *Pashtunwali* (an ancient code of honour and culture that predates Islam), maintains the idea of Pakhtunistan, an ancestral homeland split by the Durand Line in 1893, a border established by the British for their strategic defence interests in the Indian subcontinent. The refusal of Kabul to acknowledge the Durand Line as an international border has repeatedly brought the two nations to the brink of conflict, particularly in the 1950s and 1960s.[7]

- Thirdly, Pakistan seeks an Afghan administration aligned with its interests to counter perceived Indian interference exploiting linguistic and ethnic divisions. Despite India's past ties to Ashraf Ghani's administration, Pakistan remains wary and sees a Taliban-dominated government as a potential anti-India ally, providing sanctuary to groups opposing India.[8]

Impact of Taliban rule in Afghanistan on India

The Taliban's resurgence in Afghanistan significantly impacts Pakistan-India relations, complicating an already strained regional landscape. This situation prompts both countries to reassess security priorities, realign geopolitical strategies, and reshape diplomatic approaches. India faces heightened concerns about cross-border terrorism and potential insurgent activities targeting its interests. The ramification of strengthened Pakistan-Taliban affiliation poses security risks, threatening India's stability and necessitating a vigilant response from policymakers.

Moreover, trade routes traversing Taliban-affected regions face vulnerability to attacks, disrupting the flow of goods and economic activities between India and Central Asia. Such interruptions could impact trade relations and infrastructure.[9] The subsequent sections will discuss the significant implications of the Taliban's governance in Afghanistan on the Pakistan-India relationship for a nuanced diplomatic approach.

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Security Concerns

India's security and strategic interests rely on the stability of Afghanistan. Post-US withdrawal from Kabul in the year 2021, the Taliban, supported by the Haqqani Network, impinged on India-Afghanistan relations. The potential spillover of violence, including cross-border terrorism, remains a primary concern for New Delhi. There are three prime concerns for India which could emanate from Afghan soil:

- The rise of Al Qaeda in the Indian Subcontinent (AQIS) using social media has broadened the horizon by actively addressing Indian Muslims about issues like *Hijab* (Headscarf), *Ghazwa-e-Hind (*The righteous battle in India*)*, and Article 370 in Kashmir. AQIS attempted to establish *Ansar Ghazwat-ul-Hind* (AGH-The ultimate conquest of India) for the liberation of Kashmir.[10] However, these efforts faced resistance from Indian Muslims, notably in Kashmir, with AGH eliminated by Indian Security Forces during counterinsurgency operations. The evolving scenario significantly impacts regional stability, security dynamics, and economic ties between India, Afghanistan, and Pakistan. The interplay of these factors underscores the complexity and urgency of addressing these multifaceted challenges.[11]

- In 2014, the Islamic State (IS) magazine Dabiq mentioned plans to swamp Kashmir with IS volunteers. Concurrently, Indian Mujahideen and *Ansar-ut-Tawheed* (Supporters of monotheism) pledged allegiance to the Islamic State-Khorasan (IS-K). IS established Wilayah Hind and, through its magazine *Al-Naba* (The Announcement), urged to kill Hindus working in the Gulf. IS also claimed responsibility for the Kabul Gurudwara attack in 2020. IS-K's affiliate *Al-Qitaal* (War on the. Battlefield) Media Centre, in its publication *Sawt-al-Hind (*The Voice of Hind), highlighted a violent protest in New Delhi as communal during President

Donald Trump's visit to India in Feb 2020.[12] Islamic State aimed to incite Indian Muslims on domestic issues like Babri Masjid, *Hijab*, Kashmir, and Citizenship Amendment Act, but Indian security agencies thwarted these attempts, supported by Islamic clerics and institutions like *Jamiat-e-Ulema-e-Hind* (Council of Indian Muslim Theologians), the Shahi Imam of New Delhi's Jama Masjid Sayed Ahmed Bukhari and the Grand Mufti of India Shiekh Abubakr Ahmad.[13]

- The ISI-backed Pakistan-sponsored groups like *Hizbul Mujahideen* and *Jaish-e-Mohammad* (JeM), which targeted India's Kashmir region, posing a persistent security threat. Pakistan seeks to use Afghanistan as a base to weaken India, supporting these groups against India's interests.[14] JeM is also sponsoring groups like the Kashmir Tigers and the People's Anti-Fascist Front, who are working as shadows of JeM.[15]

- Pakistan's ambiguity on Islamist extremists and its Afghan policies fuel Islamist radicalism within its borders. Achieving lasting peace with Afghanistan appears unattainable for Pakistan, continuing military actions in Afghanistan and Kashmir under the banner of jihad. A comprehensive shift in Pakistan's conflicting identities, a revisionist stance on Kashmir and a status quo on Afghanistan becomes crucial to avert further crises.

Geopolitical Influence

Pakistan considers Afghanistan as a buffer against India and crucial for its strategic depth. With the Taliban in power, Pakistan may seek to strengthen its influence in Afghanistan, potentially increasing tensions with India, which perceives this as encirclement. Islamabad has been distressed about India-Afghanistan relations since 1947, when Kabul voted against Pakistan's inclusion in the United Nations. The historical and geographical outlooks concerning Pakhtunistan have surfaced regularly, as Kabul never recognised the unjustified Durand Line.

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Trade and Connectivity

India has invested in various development projects in Afghanistan, particularly infrastructure and education. However, with the Taliban's return, uncertainties regarding the safety of these investments and the connectivity between India and Afghanistan have increased. This situation might limit India's involvement in Afghanistan and potentially strain bilateral relations with Pakistan, impacting projects involving Pakistan and India, such as the Chabahar Port, aimed at bypassing Pakistan to connect with Afghanistan and Central Asia.

Pakistan maintains strategic and economic interests in Afghanistan, seeking strategic depth and access to Central Asia. Consequently, it has invested efforts in cultivating ties with the Taliban. In 2021, trade between Afghanistan and Pakistan was USD 595 mn, while imports from Afghanistan also experienced an uptick of USD 833 mn.[16] Notably, the two nations also tried to reinvigorate the Turkmenistan-Afghanistan-Pakistan gas pipeline project to facilitate the construction of an 1,800 km pipeline originating from the Daulatabad gas fields in Turkmenistan, traversing Afghanistan, and concluding in Multan, Pakistan. However, Pakistan's reluctance stems from India's involvement in these initiatives, causing a decade-long stall. India, cautious of Pakistan's agenda and China's presence in Afghanistan, carefully navigated projects like the International North-South Transport Corridor and the Chabahar-Zahedan-Mashhad Railway, prioritising its security interests.

Diplomatic Challenges

The resurgence of the Taliban has added complexities to the region's diplomatic landscape. Pakistan and India face the challenge of navigating their relations with the Taliban-led government in Afghanistan while pursuing their national interests. India's presence in Afghanistan is a sore in the eyes of Pakistan. Furthermore, India provides substantial aid to Afghanistan in infrastructure and humanitarian support, and India also pledged USD 236 mn for building the Shahtoot Dam[17] and the recent agreement for the construction of a dam over the Chitral River where the Taliban is negotiating with an Indian company for the construction of the dam.[18] In its 2023/24 budget, India allocated 200 Cr to assist.

India confronts Pakistan and China in the region, which can influence the Taliban and pose a setback to India's interests in Central Asia. India's strategy is to curb Pakistan's sway within Afghanistan directed against India. This stance is reinforced by New Delhi's conviction that during the Taliban regime, Pakistan facilitated the provision of weaponry and training of insurgents operating in the region of Jammu and Kashmir.[19]

Potential Opportunities for India amidst the Changing Dynamics

Adopting a balanced approach while analysing these impacts is crucial; acknowledging the nuanced complexities involved is vital. The evolving situation in Afghanistan under the Taliban's rule will continue to shape the dynamics between Pakistan and India, necessitating careful diplomacy, strategic manoeuvring, and international engagement to manage potential challenges and foster stability in the region. Here are possible strategies for navigating Pakistan-Taliban relations. In the form of opportunities, approaches, and diplomatic initiatives that India could consider:

De-escalation of the direct military conflict and nuclear action threat between Islamabad and New Delhi may also be achieved by many forms of material, moral, and financial support to Balochistan.

- **Balochistan Card.** Balochistan's only source of sustaining Pakistan's economy is its natural resource base, with one of the country's significant provinces covering almost 44.0 per cent of the country's area but only housing 7.0 per cent of its inhabitants. India needs to draw attention to the historical ties that existed between Balochistan and India during the partition, as well as the human rights abuses committed by the separatist movement since 1948, the ethnic discrimination that occurs between Baloch and non-Baloch people, and the unequal distribution of political, economic, and employment power.

  Adopting a realist stance, India ought to initiate communication with Baloch leaders via diverse channels and employ strategic measures such as disclosing to the media the minutes of meetings between Indian officials and exiled Baloch leaders to create a narrative that demonstrates India's capacity to act decisively against Pakistan in Balochistan. India can assist Baloch leaders who are living in European nations in their anti-Pakistan agitation. De-escalation of the direct military conflict and nuclear action threat between Islamabad and New Delhi may also be achieved by many forms of material, moral, and financial support to Balochistan. India can further sabotage the Chinese economic corridor project using the Balochistan card. Enhancing intelligence capacities within Balochistan will help counter anti-India terror cells, which is another benefit of a proactive approach for the region.[20]

- **Gilgit-Baltistan.** The unlawful annexation of Gilgit-Baltistan by Pakistan and the massacre of innocent civilians by the Pakistani military establishment in the name of religion including village burning and violent demographic manipulation should be made public by the Indian government. Indian ambassadors ought to denounce China's illegitimate acquisition of Gilgit Baltistan, which was formerly the ancestral territory of the Shigar and Hunza people. The people of Gilgit Baltistan have bravely exposed the wrongdoings of the Pakistani army and its dysfunctional administration, as well as the Chinese incursion and their land grab for the

China-Pakistan Economic Corridor. Therefore, India could take note of their emotions. India should interact with the leaders of Gilgit Baltistan and keep reiterating that it regards their people as citizens.[21] The people will get closer if the Indian government issues a formal declaration and merely acknowledges the efforts of the people living in Gilgit Baltistan. The Indian envoy to the UN has to denounce the meddling and mistreatment of the Gilgit Baltistan people by the Pakistani government on the international stage.

- Finally, India needs to expose the unlawful occupation of Gilgit Baltistan, Mirpur, and Muzaffarabad to let Pakistan taste the medicine of its own making. Discourse and narrative should be used to promote ethnic nationalism in Pakistan to draw attention to the issue of Gilgit and Baltistan's unlawful annexation on a global scale.[22]

Diplomatic Initiatives to Engage with Afghanistan and Mitigate Risks

Enhanced Regional Influence: India can strengthen its regional influence by utilising its historical links and soft power with Afghanistan. Expanding commercial, cultural, and developmental partnerships may improve India's reputation. Permits for Indian enterprises operating as independent organisations should be granted so that they may construct infrastructure in Afghanistan and help the Taliban strengthen their technological and technical capacities. In areas such as technology and logistics, planning and policy, construction, counter-narcotics, information and culture, rehabilitation and development of rural areas, water and energy, telecommunication, agriculture, and livestock, import and export and for the Ministry of Hajj and Religious Affairs, a memorandum of understanding can be signed between private enterprises in India and various ministries of the Taliban.

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Engagement with Non-Taliban Actors: India can forge partnerships with non-Taliban groups in Afghanistan to counterbalance Pakistan's influence. Initiatives like people-to-people dialogues encompassing scholars, women, non-governmental organisations, artisans, and religious leaders can serve as soft power diplomacy. A 'Deoband Dialogue' could involve Indian Islamic leaders engaging with the Taliban's Ministry of Propagation of Virtue and the Prevention of Vice. Establishing online education platforms, mirroring models like Study Webs of Active Learning for Young Aspiring Minds, focusing on Persian and Dari medium courses through Indira Gandhi National Open University or School of Open Learning, and collaborating with Coursera, IITs, and IIMs for specialised courses could benefit Afghan youth.

Infrastructure and Economic Investments*:* Identifying strategic infrastructure projects for mutual benefit and stability is vital. India could negotiate contracts for maintaining existing infrastructure, previously aided by India, such as the Salma Dam, Afghanistan Parliament, and Zaranj-Delaram Highway, restoration of Stor Palace, Indira Gandhi Institute for Child Health, and the 220 KV DC transmission line from Baghlan to Kabul. An annual maintenance contract through the Aga Khan Trust could facilitate this.[23]

Track-II Diplomacy: Navigating the complex dynamics between Pakistan, Taliban, and Afghanistan necessitates delicate diplomacy. India must safeguard its interests, contribute to regional stability, and support Afghanistan's peace and development. Encouraging informal dialogues among intellectuals, policymakers, and civil society across India, Afghanistan, and neighbouring nations promote trust-building. Active participation in forums like the Shanghai Cooperation Organisation and the South Asian Association for Regional Cooperation offers diplomatic avenues for conflict resolution and initiatives towards regional stability.

Conclusion

In conclusion, the resurgence of the Taliban in Afghanistan presents a multifaceted challenge for the already complex relations between Pakistan and India. This development necessitates a re-evaluation of security priorities and demands recalibrated diplomatic strategies. The heightened concerns of cross-border terrorism and the potential disruption of economic activities due to the Taliban's presence necessitate a vigilant stance by Indian policymakers. The interplay of security dynamics, proxy relationships, and financial repercussions underscores the need for nuanced and balanced approaches. Collaborative efforts, regional engagements, and sustained dialogue, free from biases and preconceived notions, are imperative to navigate these intricate geopolitical landscapes. The situation calls for a realistic, assertive approach prioritising stability, security, and sustainable economic ties in the region, thereby, fostering peace and prosperity for the broader South Asian context.

Endnotes

1 Muhammad Faheem, Minhas Majeed Khan (2022), *Recognition of the Taliban Government in Afghanistan and International Community,* The Institute of Strategic Studies Islamabad, Strategic Studies, Volume 42, Issue No 1, 2022: 81-96 https://doi.org/10.53532/ss.042.01.0014

2 Khan, I. A. (2007), *Understanding Pakistan's Pro-Taliban Afghan Policy,* Pakistan Horizon, Vol 60(2), 141–157. http://www.jstor.org/stable/41500068

3 Zahid Hussain (2023), *Forced Expulsion,* Dawn, November 8, 2023, https://www.dawn.com/news/1787440

4 Centre for Research and Security Studies (CRSS), 2023, Quarterly Security Report Q2- 2023, https://crss.pk/security-forces-losses-hit-8-year-high-in-first-9-months-of-2023-q3-records-57-surge-in-violence-crss-security-report/

5 Ahmed, Zahid Shahab, and Stuti Bhatnagar, (2007), *Pakistan-Afghanistan Relations and the Indian Factor*, Pakistan Horizon 60, no. 2 (2007): 159–74. http://www.jstor.org/stable/41500069

6 Nasreen Ghufran (2002), *Repatriation of Afghan refugees: Achievements and obstacles'*, in Moonis Ahmar (ed.), *The Challenge of Rebuilding Afghanistan,* (Karachi: University of Karachi, 2003), p. 121.

7 Manjari Chatterjee Miller (2021), *Pakistan's Support for the Taliban: What to Know,* Council on Foreign Relations, https://www.cfr.org/article/pakistans-support-taliban-what-know

8 Sumit Ganguly (2009), *India Pakistan Rivalry in Afghanistan*, Journal of International Affairs, Vol 63, No.1, pp 127-140, https://www.jstor.org/stable/24384176

9 Rick Rowden (2020), *India's Strategic Interests in Central Asia and Afghanistan Go Through Iran*, New Lines Institute, https://newlinesinstitute.org/geo-economics/indias-strategic-interests-in-central-asia-and-afghanistan-go-through-iran/

10 Australian Government, Al-Qa'ida in the Indian Subcontinent (AQIS), https://www.nationalsecurity.gov.au/Listedterroristorganisations/Pages/Al-qaida-in-the-indian-subcontinent-aqis.aspx

11 IANS, "Here's why IS failed to find ground in Jammu and Kashmir," India TV, October 27, 2019, https://www.indiatvnews.com/news/india/here-why-is-failed-to-find-ground-in-jammu-and-kashmir-559401

12 Prithvi Iyer and Maya Mirchandani, "Can Communal Violence Fuel an ISIS Threat in India? An analysis of 'Voice of Hind'," Observer Research Foundation, September 4, 2020. URL: https://www.orfonline.org/research/can-communal-violence-fuel-an-isisthreat-in-india/

13 Vibha Sharma, (2018), "*CAA has nothing to do with Indian Muslims: Shahi Imam of Jama Masjid",* Times of India, https://timesofindia.indiatimes.com/india/caa-has-nothing-to-do-with-indian-muslims-shahi-imam-of-jama-masjid/articleshow/72868760.cms

14 Dalbir Ahlawat and M. Raymond Izarali, (2022), *Security Implications for India and Pakistan from the Taliban Regime since the US Withdrawal from Afghanistan*, Perspectives on Terrorism, Vol 16, Issue 5, October 2022, https://www.universiteitleiden.nl/binaries/content/assets/customsites/perspectives-on-terrorism/2022/issue-5/ahlawat-izarali.pdf

15 Outlook Web Desk, (2021), *Who are Kashmir Tigers that carried out Srinagar Terror Attack*, Explainer, Outlook India, December 14, 2021, https://www.outlookindia.com/website/story/india-news-explained-who-are-kashmir-tigers-that-carried-out-attack-in-srinagar/405079

16 The Observatory of Economic Complexity, Afghanistan and Pakistan Trade Bilateral Country Profile, https://oec.world/en/profile/bilateral-country/pak/partner/afg

17 Shadi Khan Saif (2021), *India pledges $236 M for building dam in Afghanistan,* Anadolu Agency, February 9, 2021, *https://www.aa.com.tr/en/asia-pacific/india-pledges-236m-for-building-dam-in-afghanistan/2138870*

18 Amu TV, *Pakistani official warns of hostility over Taliban's Kunar River dam decision,* December 17 2023, https://amu.tv/76296/

19 European Foundation for South Asian Studies, *Pakistan Army and Terrorism; an unholy alliance*, Study Papers, https://www.efsas.org/publications/study-papers/pakistan-army-and-terrorism%3B-an-unholy-alliance/

20 Adiraj Roy Chowdhary, (2016), *Balochistan: Everything you need to know about the Pakistan province and its bumpy history*, The Indian Express, August 18, 2016, https://indianexpress.com/article/research/balochistan-everything-you-need-to-know-about-the-province-and-its-bumpy-history/

21 Manoj Joshi, (2017), *India Should get a little more creative with its Gilgit-Baltistan Policy*, Scroll.in, March 20, 2017, https://www.india.com/travel/articles/salma-dam-parliament-india-contribution-in-afghanistan-infrastructure-development-4903191/

22 Senge Hasan Sering, (2016), *A Message for Gilgit-Baltistan*, The Indian Express, August 24, 2016, https://indianexpress.com/article/opinion/columns/pm-modi-balochistan-comment-india-pakistan-gilgit-baltistan-2992814/

23 Nivedita R, (2021), *From Salma Dam to Afghanistan's Parliament, 5 Infrastructure Development in Afghanistan by India*, India.com, August 22, 2021, https://www.india.com/travel/articles/salma-dam-parliament-india-contribution-in-afghanistan-infrastructure-development-4903191/

Section IV

India's Strategic Neighbourhood

Bhutan-China Border Problems and Boundary Talks: Implications for India

Lieutenant General (Dr) KJ Singh, PVSM, AVSM** (Retd)@

Abstract

China as an aggressively rising power has resolved its land borders with 12 out of 14 countries, intentionally keeping India and Bhutan bogged down in unending tortuous negotiations. India has been locked in an unresolved stand-off with China in Ladakh since May 2020. China seems to be fast-tracking the border resolution process. The Sino-Bhutan border has a trilateral dimension in the Doklam plateau. The growing Chinese influence in Bhutan has the potential to unsettle traditional historic ties between India and Bhutan. The former needs to remain vigilant about these ominous developments and build hedging options against growing Chinese threat in the Siliguri Corridor and its immediate strategic neighbourhood.

Introduction

China has an unresolved land border with just two countries, India and Bhutan out of a total of 14 bordering nations. The Sino-Bhutan border in the western (Doklam) and eastern (Sakteng) sectors has strategic significance for India as it not only includes the tri-junction but also has far reaching operational implications. Bilateral talks between Bhutan and China have stalled since the Doklam crisis in 2017, notwithstanding, signing of a Memorandum of Understanding (MoU) incorporating a three-point framework, which was revived after 25 rounds of negotiations on 23 and 24 Oct 2023 at Beijing. In a move that has ominous portents for India, both sides have signed another co-operation agreement. It appears that Bhutan is willing to settle its boundaries, notwithstanding Indian reservations, although it has assured that it will consult India and keep her interests in mind.

Chinese Border Disputes – Major Inferences

China has borders with as many as 24 countries in both the terrestrial and maritime domains. It has land borders with 14 countries and claims to have settled its boundary issues with all her neighbours except India and Bhutan. However, these claims must be viewed realistically, in the context that most disputes have been resolved on terms stipulated by China. There are contentious claims in some sectors in countries like Kazakhstan and even Nepal. The People's Liberation Army (PLA) has a belligerent history, marked by aggression against India in 1962; six-month long border conflict with the erstwhile Union of Socialist Soviet Republics in 1969 and a brief armed conflict with Vietnam in 1979. It is currently engaged in an unresolved stand-off with India in Ladakh since 05 May 2020. This apart, there have been unilateral Chinese attempts at salami-slicing in the eastern sector of Arunachal Pradesh and Sikkim. The recent instances include a 72 days long stand-off in Doklam since Jun 2017 and in Yangtse on 09 Dec 2022.

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In the maritime domain, China is having serious issues with all its neighbouring littoral states. It is engaged in serious skirmishes/standoffs with Philippines, Taiwan, Vietnam, Brunei and Malaysia in the South China Sea and Japan in the East China Sea. Beijing has unilaterally proclaimed its own claims in terms of the ambiguous the 9-Dash and even 11-Dash lines. The layout of these has varied over the years and claim-lines are contested by other affected states. These have been misused to take control of tiny, uninhabited reefs, shoals and convert them into artificial islands for naval facilities. An arbitral tribunal in 2016 declared the Chinese claim as violations of the United Nations Convention on the Laws of the Sea. International strategic experts opine that China uses border disputes to build pressure on smaller neighbours by bullying them. She has mastered the art of filibustering and endless parleys to tire out the other party. It is also described as an application of Mao Zedong's dictum, "*Tan, tan, da, da*"- talking, talking (but) preparing for war.[1] Settlement, if any, must be within the Chinese template, with time being of no consequence. It is also making use of imaginative cartography by articulating multiple claim-lines backed up by the selective use of favourable treaties, in what is increasingly termed as law-fare. These have acquired dangerous overtones with China in 'Wolf-warrior' mode and are being referred to as the Dragon, on the hegemonic overdrive.

Geo-strategic Significance

International strategic experts opine that China uses border disputes to build pressure on smaller neighbours by bullying them. She has mastered the art of filibustering and endless parleys to tire out the other party.

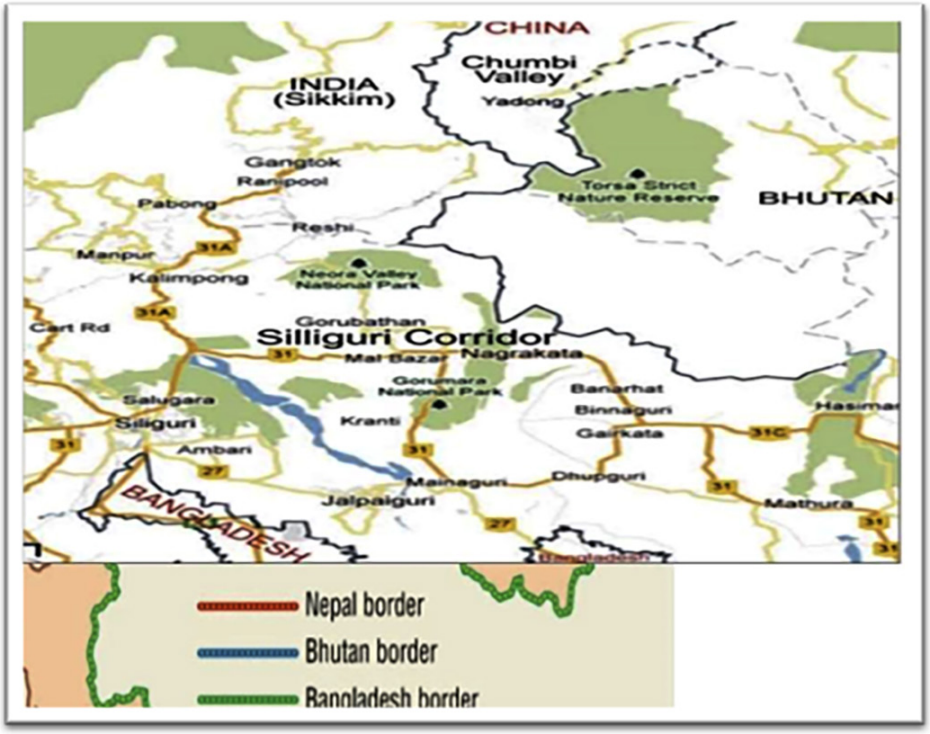
Bhutan and China, as two neighbours are a very apt manifestation of the Biblical analogy of David and Goliath. Bhutan was envisaged as a buffer state between India and Tibet and had no border with China. The region was confronted with a geo-strategic shock when Tibet was annexed and amalgamated with China in 1951. Coupled with this is the unresolved border between India and China, further vitiating the imbroglio. It has acquired a strategic dimension to the 'Thucydides Trap' type of situation, developing between the rising powers, China, and India. With Chinese proclivity to dominate India's immediate neighbourhood, it also affords opportunities to smaller states like Nepal, Maldives, and Bhutan to play the balancing game between two contestants, India, and China. Bhutan with an area of 38,000 sq km is sparsely populated, is hilly and is a land locked state with just 7,50,000 people. For ease of comprehension, it is even smaller than Denmark in area but with one-seventh of its population. Its capacity to police and manage its disputed borders is very limited. Bhutan follows an insular and a gateway approach to preserve its ecology. Even tourism is regulated through numbers under 'Minimum impact with maximum revenue' paradigm. Bhutan shot into prominence by topping the Gross National Happiness rankings.

Bhutan's border with China is bounded by two tri-junctions, both with China and India and extends 477 km or 295 miles. In the east, the border starts from Mount Gipmochi (location of which is contested) and was highlighted during the Doklam crisis in 2017. The border starting from the western sector, extends northwards, over the partially disputed Jomolhari (also known as Chomolhari) range, turning eastward near Mount Masang Gang, including a large unresolved stretch in the northern sector, and turning south-eastward, in proximity of Singye Dzong, provincial capital, finally ending at the tri-junction point. The eastern stretch including Sakteng Wildlife Sanctuary was traditionally considered settled but has now been claimed by China, thereby expanding the scope of the dispute. Access from Bhutan to China is regulated through a road trail at Tremo-La, which connects Tsento Gewog and Phari.

Bhutan-India Border India has a border of 699 kilometres, spanning four Indian states (Sikkim, West Bengal, Assam, and Arunachal Pradesh). Most of Indo-Bhutan border is open and transit is channelised through Phuentsholing/ Jaigaon, Gelephu and Samdrup Jongkhar border towns.

A geo-strategic edge and sensitivity are imparted to the Sino-Bhutan-India border issue due to the relative location of Chumbi Valley in the western sector vis a vis Siliguri Corridor. The corridor, which is just 22 km at its narrowest is also described as 'Chicken's neck' or 'Northeastern Jugular'. It is literally a gateway from the mainland to north-eastern

states, also called as ' Seven sisters and one brother'. It can also act as a springboard for forays in neighbouring Nepal, Bhutan, and Bangladesh (Refer Map-1).



Map -1

Historical Context

Bhutan's border with Tibet has never been officially recognised or demarcated and is largely, a fall-out of the inherited and ambiguous colonial legacy of the British rule. It has a complex construct based on exchanges between Tibet, Sikkim, Nepal, and British India. The Chinese claims date back to the pre-Peoples Republic of China (PRC) regime of the Manchu dynasty in 1910/11, when Zhao Erfeng staked a territorial claim on parts of Bhutan and Tibet. These were reiterated by the Chinese Communist Party (CCP) in 1949, on establishing the PRC. Theoretical construct was outlined in Mao Zedong's diktat expounded in the Communist Party treatise. 'The Chinese Revolution and the Communist Party' in 1939; "The correct boundaries of China would include Burma, Bhutan and Nepal".

Mao also emphasised this in his expansionist 'Five Fingers of Tibet' policy. Citing Tibet as the palm, the fingers include Ladakh, Nepal, Sikkim, Bhutan, and Arunachal (Referred to as South Tibet). In Chinese conception, all these are a part of greater Tibet, annexed under unequal treaties by erstwhile colonial powers. This claim was reinforced with imaginative cartography, including maps forming part of the publication, 'A Brief History of China', published in 1959. Large portions of Bhutan as well as territories of other countries were included within the ambit of Chinese claims. Annexation of Tibet in 1950 and 1951, followed by a 17-Point Agreement, forced on a hapless Tibetan regime, resulted in the withdrawal of Indian and Bhutanese representatives from their missions in Lhasa.[2] This was followed by a rebellion in Tibet in 1959, the flight of the Dalai Lama to India, approximately 6,000 refugees seeking asylum in Bhutan and many more in India. Consequently, Bhutan, fearing being swamped by migrants and refugees closed its borders. The PLA occupied several adjoining Bhutanese exclaves in Western Tibet in Jul 1959. These included Darchen, Gartok and

several other villages near Mount Kailash, which have been under Bhutanese control since the 17th Century. These had been given to Bhutan by Ngawang Namgyal in the 17th Century.

Diplomatic Ties[3] with India

Indo-Bhutanese ties are based on:

- **Treaty of Perpetual Friendship**. This was signed in 1949 and renewed in 2007. Fearing Chinese expansionist forays including repeated incursions and denial of traditional grazing rights, Bhutan established military relations with India. These included the establishment of the Indian Military Training Team, joint check posts for access and joint defence contingencies. In this situation of inequality with China, instead of 'Balance of Power', for Bhutan, it is realistically 'Balance of Terror' due to aggressive salami slicing by the PLA. Bhutan officially still maintains a neutral stance to retain an uneasy balance in a triangular matrix. India represented and negotiated Bhutan's concerns in talks with China in Sino-Indian border conflict resolution parleys until 1970. India has been the largest export market for Bhutan, accounting for 93.0 per cent of its total exports and has also been the largest aid provider. Bhutan also plays a vital, synergistic role in India's 'Neighbourhood First' and 'Act East' policies.

- **Bhutan-External Affairs.** Bhutan has been dealing with the outside world through a reliable ally, India has allowed just three embassies in Thimphu from India, Bangladesh, and Kuwait, despite having diplomatic ties with 53 countries. Bhutan joined the United Nations in 1971. Like India, Bhutan has followed the 'One China Policy'. Beijing is actively pushing for opening a mission in Thimphu while New Delhi has discouraged unregulated diplomatic forays in Bhutan to shield the tiny state in avoiding the great power game and manipulation. China has made huge inroads into the economy of Bhutan replacing India as Bhutan's largest trading partner, albeit in one way traffic with mounting dependencies. Chinese footprints have proliferated in infrastructure projects including connectivity, power generation and communications. All these are building up to tremendous economic coercive leverage.

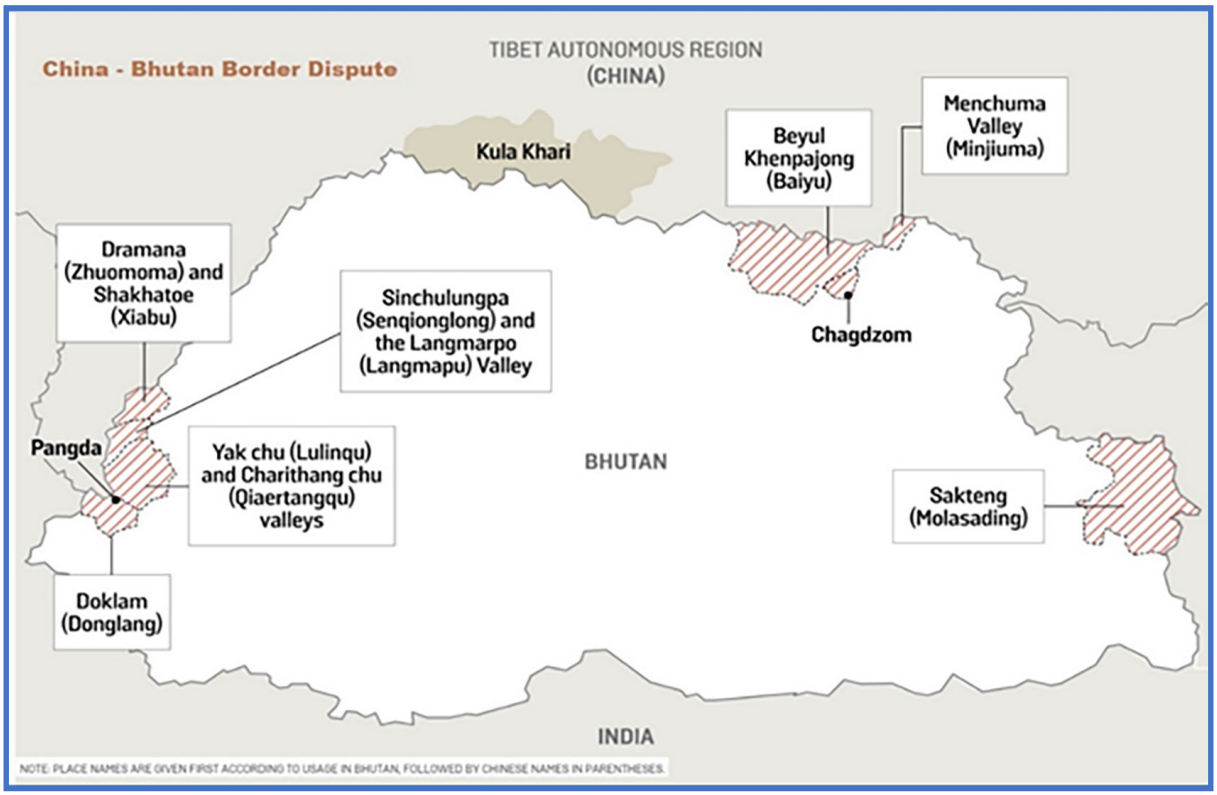
The Chinese quest is to widen the extremely narrow base of the valley. The dispute is indexed to the location of Mt Gipmochi and the correct interpretation of the watershed of rivers like Amo Chu. It is a complex bevy of crest lines and heights, in Gamochen, Batangla and Sinchela.

Disputed Territories

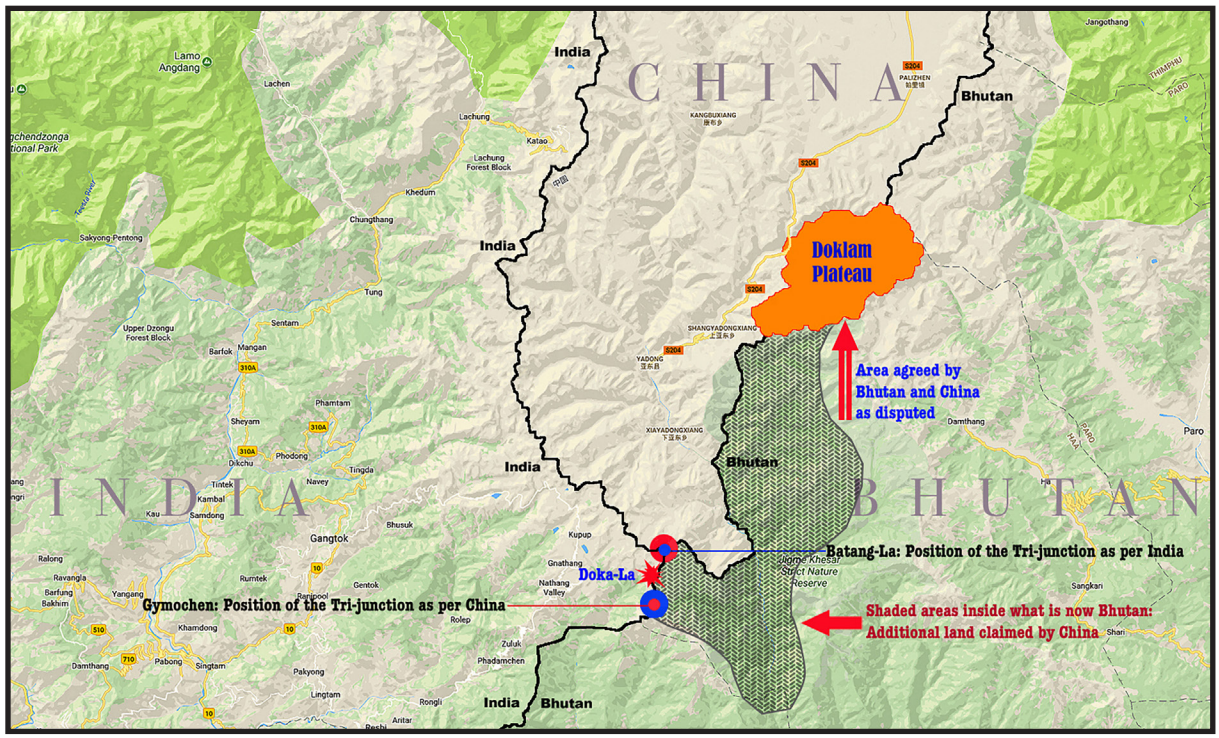
Bhutan's perception of disputed areas was outlined in official statements in the National Assembly. These have listed four disputed areas between Bhutan and China (Refer Maps 2 and 3). In the west, it includes approximately 89 sq km in Dolam (increasingly Referred to as Doklam) Plateau (Refer Map 4). Sinchumlumpa and Giu, (approximately 180 sq km) make it 269 km of unresolved stretch bordering Chumbi Valley in the western sector. The Chumbi Valley is a dagger shaped narrow wedge between India and Bhutan. The southern narrow portion of the valley, and the Dolam plateau with their strategic significance have the potential to pose a threat to the tenuous Siliguri corridor, termed as jugular, connecting northeast with the mainland. The Chinese quest is to widen the extremely narrow base of the valley. The dispute is indexed to the location of Mt Gipmochi and the correct interpretation of the watershed of rivers like Amo Chu. It is a complex bevy of crest lines and heights, in Gamochen, Batangla and Sinchela (Refer Map 5). The most sought after is Zompelri (Jampheri) Ridge, providing a launch pad for reaching the Siliguri Corridor. A balanced view is that, while it is indeed a threat, yet logistics and terrain make it a tortuous and slow exercise requiring extensive logistics build up. However, it remains a very potent threat for the future.

StratNews Global
C H I N A
JAKARLUNG
PASAMLUNG
OLD DISPUTES
THIMPHU
NEW DISPUTE
TAWANG
DOKLAM
B H U T A N
TRASHIGANG
SAKTENG WILDLIFE SANCTUARY
GANGTOK
I N D I A

Map 2


China - Bhutan Border Dispute
TIBET AUTONOMOUS REGION (CHINA)
Kula Khari
Beyul Khenpajong (Baiyu)
Menchuma Valley (Minjiuma)
Dramana (Zhuomoma) and Shakhatoe (Xiabu)
Sinchulungpa (Senqionglong) and the Langmarpo (Langmapu) Valley
Chagdzom
Pangda
Yak chu (Lulinqu) and Charithang chu (Qiaertangqu) valleys
BHUTAN
Sakteng (Molasading)
Doklam (Donglang)
INDIA
NOTE: PLACE NAMES ARE GIVEN FIRST ACCORDING TO USAGE IN BHUTAN, FOLLOWED BY CHINESE NAMES IN PARENTHESES.

Map-3


CHINA
INDIA
BHUTAN
India
Bhutan
Doklam Plateau
Area agreed by Bhutan and China as disputed
Batang-La: Position of the Tri-junction as per India
Doka-La
Gymochen: Position of the Tri-junction as per China
Shaded areas inside what is now Bhutan: Additional land claimed by China

Map-4

MERUG LA
MT GIPMOCHI (TRI JN)
SINCHEL LA
8 km
DOKLAM PLATEAU
7.5 km
DOKA LA
JALDHAKA RIVER
TORSA NALA
AMO CHU
GYEMOCHEN
CHELA
J RIDGE
BP 10
Bounded by
West - Watershed (Tri Jn – Gyemochen)
North - Merug La & Sinche La Ridge
East - Amo Chu River
South - Jampheri Ridge

Map-5

Unresolved areas of the northern region are in two pockets of Jakarlung and Pasamlung, spanning approximately 495 sq km. In Jun 2020, China sprung a surprise by bringing in unspecified areas in the eastern region of Sakteng Wildlife Sanctuary in Tashigang district. This was surprisingly articulated in a virtual meeting of the Global Environment Facility discussing grant for Sakteng, wherein China termed it as a disputed region. It is opined that the claim may be just to increase leverage as a bargaining chip in a swap deal and to preclude the development of joint infrastructure by Bhutan with India.

Border/Boundary Resolution Process

The first outreach to China by Bhutan was an invitation to the Chinese envoy in New Delhi for the coronation of the 5th *Druk Gyalpo* (King), Jigme Khesar Namgyel Wangchuk. The steering role of the reining king's father, the 4th *Druk Gyalpo*, as elder statesman is based on his domain knowledge. He remains the key enabler for Bhutan in boundary dispute resolution. Two foreign ministers, Wu Xueqian and Dawa Tsering held parleys in New York to formulate a mechanism for bilateral ties. Some reports state that these talks happened without taking India into confidence and taking her by surprise. This resulted in annual direct boundary talks starting in 1984. Both countries signed a bilateral agreement for maintaining peace on the border, broadly based on the five principles of the Panchsheel Treaty. Peaceful co-existence is to be based on mutual respect for sovereignty and territorial integrity. After 14 years, both sides signed a memorandum on Guiding Principles on the Settlement of Boundary Issues in 1988.

The first outreach to China by Bhutan was an invitation to the Chinese envoy in New Delhi for the coronation of the 5th *Druk Gyalpo* (King), Jigme Khesar Namgyel Wangchuk. The steering role of the reining king's father, the 4th *Druk Gyalpo*, as elder statesman is based on his domain knowledge.

China proposed a 'Package Proposal', in 1990 in the 7th round of talks. It proposed to concede its northern claims of 495 sq km, in exchange for Bhutan agreeing to China's western claims, including 89 sq km of Doklam. China has already renounced the claim on the 154 sq mi area in Kula Khari in the north explaining it as a cartographic error. This is in line with Chinese quest for strategic reach through the Chumbi Valley. Bhutan in the 10th round (1995) appeared willing to accept the package deal.[4] However, it retracted in 1996, allegedly under Indian influence. China and Bhutan signed an agreement on Maintenance of Peace and Tranquillity along the border areas. However, China's building of roads on Bhutanese territory, allegedly in violation of the informal 1998 Stand-Still Agreement, provoked tensions again. In the 2002 round of parleys, China presented purported 'Evidence', asserting ownership of the disputed tracts of land; after negotiations, an interim agreement was reached. Foreign Minister Damochi Dorji visited Beijing, in Aug 2016 for the 24th round of boundary talks with the Chinese Vice President Li Yuanchao. Both sides indicated a willingness for settling the boundary issues. The entire process hit a major roadblock with the Doklam stand-off in 2017, when India objected to PLA attempting to build a road to Zompelri (Jompheri) ridge passing through contested Bhutanese territory in close proximity to Indian deployment on the unresolved Line of Actual Control. The issue got resolved after a 72 days long stand-off between Indian and Chinese troops.

The Bhutan-China MoU of Oct 2021, signed in a video-conference is based on a three-step road map for a settlement. The stages are likely to be firstly, establishing a framework; secondly, confirming and focusing on identified disputes including the exchange of maps and finally, the resolution stage. Ironically, disputed territory, especially in the western region is already under PLA control, making it a fait-accompli situation.[5]

The Bhutanese Foreign Minister Tandi Dorji held 25th delegation level talks on 23 and 24 Oct 2023 with his Chinese counterpart during a maiden official visit to Beijing. They signed the 'Co-operation Agreement' outlining the responsibilities and functions of the joint technical team on the delimitation and demarcation of the Bhutan-China boundary. These talks came after the first joint delimitation meeting, held earlier in Aug 2023 as part of the 13th Experts Group Meeting. Both sides exuded confidence for early conclusion of talks. The Chinese side also expressed hopes for

setting up a diplomatic mission in Thimphu. While Bhutan has not commented on Chinese optimism, but it has not ruled out this possibility.

Indian Concerns

The Bhutanese side has assured that no agreement would be made 'Against India's Interests' and clarified that any talks about the 'Trijunction' at Doklam would only be held trilaterally between India, Bhutan, and China. Major concessions by China especially in the western sector of Chumbi Valley are unlikely. China, when asked to be considerate to the smaller neighbour, reportedly responded that China has two dozen bordering states and cannot give such concessions. In this context, China with its aim to establish its hegemony by keeping India under check wants to expand its hold on Chumbi Valley to pose a threat to the Siliguri Corridor. Physical salami-slicing combined with economic dependencies is eventually building coercive leverage on Bhutan. It appears that the Chinese strategy is to finally force Bhutan to accept terms set by Beijing.[6]

Soon after the resolution of the Doklam crisis, China intensified efforts to build Xiaokang, a dual-purpose so-called model (moderately prosperous) village on the Mochu River with military and logistics infrastructure including habitation, helipads, ammunition dumps and communications. Robert Barnett and his team of China experts claim that, since 2015, PLA has been building military infrastructure, habitation, and communications in disputed areas of northern Bhutan as well. Satellite imagery experts have mapped Gyalaphug as one of five established village.[7] They have deciphered approximately 105 km (66 miles) of new roads/tracks, small hydropower generating stations, two CCP administrative complexes, a communications centre, a disaster relief storage facility, five military/police outposts, and suspected major installations like a communications tower, a satellite receiving station, a military base, and potentially up to six security sites and satellite outposts. China claims these constructions are in parts of Lhodrak in the Tibet Autonomous Region, but in reality, they are located in northern Bhutan. This infrastructure with a distinct military character can be utilised to build up threats and operations against the Siliguri Corridor and India.

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Way Forward

Bhutan is faced with the challenge of walking a tight rope between increasingly aggressive China in 'Wolf-warrior' diplomacy mode and time-tested ally India. While India would like to safeguard its interest, yet Bhutan may at some stage yield to the Chinese package deal offer. India needs to balance its core interests with a desire of Bhutan's compulsions. It will be appropriate to guide Bhutan to seek the best deal, especially in limiting Chinese ambitions in the Doklam plateau. India should also remain invested in capacity building in Bhutan especially in the security domain to limit the Chinese footprint in the economy and communications. It will be ideal if India is able to maintain joint defence capabilities and joint border check posts, even enlarging their scope. However, scaling them down after the border resolution is a very distinct possibility.

Autonomy and balancing are sensitive issues and can be built on long-term trust and healthy respect for mutual interests, eschewing a 'Big Brother' attitude. In this context, it bears reiteration that an ill-advised embargo on liquid petroleum gas and kerosene in 2013 is still quoted and lamented by the Bhutanese populace. India's stand to cater for a contingency of Bhutan yielding to the Chinese pressure and strengthen the hedging strategy. This would entail reinforcing a security grid and response matrix to safeguard the Siliguri Corridor. It is axiomatic that the Indian endeavour to build alternate connectivity in the northeast and resilience through strategic stocking is given enhanced impetus to cope-up with the growing Chinese threat.

Endnotes

1 Srikant Kondapalli, Bhutan under China's Shadow, https://www.deccanherald.com/opinion/bhutan-under-chinas-shadow-2794475

2 Harpreet-Bhutan-China Boundary Dispute: A Historical Perspective. https://www.cestmoizblog.com

3 Harsh V Pant & Aditya Gowdara Shivamurthy- Himalaya: The Complexity of Bhutan, The Economic Times. https://www.orfonline.org

4 Suhasini Haider, Bhutan, China want deal on boundaries 'soon' https://www.thehindu.com/news/international/bhutan-china-want-deal-on-boundaries-soon/article67455065.ece

5 Jianli Yang- Bhutan China Border Negotiations in Context- The Diplomat- 18 Nov 2021.

6 Manoj Joshi- The China Bhutan Deal Should Worry India. and Hindustan Times and https://www.orfonline.org

7 Arushi Gupta, China-Bhutan Border Talks- Indian Stakes Under Discussion, https://www.vifindia.org/article/2023/november/17/china-bhutan-border-talks-indian-stakes-in-the-discussions

India-China Strategic Competition in Nepal: An Assessment

Dr Pramod Jaiswal[@]

Abstract

The two economic and military powers of Asia, China and India, have been locked in security competition to expand their influence in Nepal. This competition has been more intense and visible after the Sino-Indian War of 1962. While China's economic might have some advantages, it can never compete with the deep historical, cultural and economic ties that India has enjoyed with Nepal since centuries. This article assesses how both countries compete in small landlocked Nepal for connectivity, economic gains and strategic advantages.

Introduction

During the 6th Century, the Lichchhavi King Amshuverma married his daughter Bhrikuti to the Tibetan King Tsrong Tsong Gompo and his sister Bhoga Devi to an Indian king, Shur Sen.[1] King Prithvi Narayan Shah, the eighteenth-century king who unified Nepal, in his *Divyoupadesh* (Divine counsel) said, "Nepal is a yam between two boulders". He wanted Nepal to maintain good relations with both its big neighbours, India and China, for prosperity, peace and security. Balancing one neighbour against the other has traditionally been Nepal's strategy for survival.[2] However, in recent times, with the rise of China and India, both powers are competing for their influence in Nepal due to its geostrategic location.

Geopolitics of Nepal

Nepal is positioned at a strategic location in South Asia as it borders China's sensitive Tibetan Autonomous Region to the north and India to the east, west and south. As an independent country, Nepal's national interest is to defend its territorial integrity, safeguard political independence and strengthen its economic system.[3] It aims to maintain peace and stability on the border by means of mutual trust and friendship with both its neighbours. Thus, it has signed the Treaty of Peace and Friendship with India in 1950 and with China in 1960. Nepal enjoys excellent ties with India that are bound together in a complex web of linkages and contiguities that span across civilisational, historical, sociocultural, economic, geostrategic, and political terrains. But after the Sino-Indian War of 1962, China is working to expand its influence in Nepal leading to strategic competition with India.

India-China Strategic Competition in Nepal

With the rise of India and growing Chinese interest in South Asia, Chinese interests and their policies in Nepal have also changed. In the past, Chinese interests in Nepal were limited to safeguarding their own security from issues emanating from Tibet and bringing some economic gains through bilateral trade with Nepal. However, in recent times, China wants to gradually dilute India's pre-eminent position in South Asia in general and Nepal in particular by increasing

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its influence. It also wants to challenge India's strategic space in Nepal. Hence, China has adopted a proactive and interventionist policy in Nepal in recent times, unlike their 'Pro-establishment' policy of the past.

Competition for Connectivity

There has been intense competition for connectivity in Nepal between India and China to expand their influence in that country. This competition is more visible post India-China War of 1962. The first in this direction was the first cross-border connectivity between Nepal and China, the Arniko Highway from Kathmandu to Kodari, near the Nepal-China border which was completed in 1967. India had serious concerns when the then King Mahendra agreed to the Chinese proposal on the construction of this highway, stating that the highway would prove of strategic importance to China against India. Again, during the massive earthquake of 2015, China opened the second border point with Nepal (which is also the international border point) at Kerung-Rasuwagadhi.[4]

During the construction of the Mahendra Highway, Nepal's longest highway in 1983, China proposed to take up the construction of the segment of the highway between Kohalpur and Banbasa, as India had withdrawn from an earlier commitment to build this segment of the highway. Since this segment lies near the India-Nepal border and had strategic implications for India, Nepal declined China's offer in order to address Indian security sensitivities. Nepal then had to seek a loan from the World Bank and the Arab Fund for the segment. However, later India sanctioned INR 500 mn as grant assistance to Nepal for the project, but Nepal had to pay USD 2 mn as compensation to the Chinese company for breaching the contract.[5]

There have been very strong cultural and people-to-people ties between India and Nepal, which is the strongest aspect of relations that China can never replace. After the realisation of this strength, which is the strong soft power of India, China has also tried to expand people-to-people ties between Nepal and China through its political parties and civil societies.

Interestingly, when China announced its desire to connect Kathmandu, Pokhara and Lumbini of Nepal with its Qinghai Railway, that connects Beijing and Xigaze through Lhasa; India too announced to extend its railway connectivity to six points along the India-Nepal border in Nepal. These are Raxaul in India with Birgunj in Nepal, Jogbani in India with Biratnagar in Nepal, Jayanagar in India with Bardibas in Nepal, Nautanwa in India with Nepalgunj in Nepal, and New Jalpaiguri in India with Kakarbhitta in Nepal. India has announced assistance worth INR 10.88 bn for this railway project.[6] While the feasibility study for extension of Qinghai Railway by China is under process, the first phase of the India funded railway line is complete and functional.[7] In addition, during the state visit of the then Nepalese Prime Minister KP Sharma Oli to Delhi in Apr 2018, India proposed to connect Raxaul of India and Kathmandu through an electrified rail line with Indian assistance.[8]

India and Nepal have a 1,770 km open border with more than two dozen former border crossings, but very few cities of India are connected by air route, namely Delhi, Kolkata, Mumbai and the occasional flights to Varanasi and Bangalore. However, China is aggressively expanding its air connectivity in Nepal. Nepal is now connected to Beijing, Shanghai, Lhasa, Guangzhou, Kunming, Chengdu and Xi'an through the air route.[9] With the inaugural of two new international airports at Pokhara and Lumbini, it is believed that more Chinese cities will be connected to cities of Nepal in the coming days.

Expanding Influence through Political Parties and Civil Societies

There have been very strong cultural and people-to-people ties between India and Nepal, which is the strongest aspect of relations that China can never replace. After the realisation of this strength, which is the strong soft power of India, China has also tried to expand people-to-people ties between Nepal and China through its political parties and civil societies. Media reports state that, recently the Chinese have increased their interaction with media houses, civil societies,

academic institutions, bureaucracies and political parties of Nepal. Traditionally, these kinds of engagements were limited to India and the West. In the last two decades, there has been an increasing number of Chinese-funded Non-Governmental Organisations (NGOs) being formed in Nepal. China and Nepal have been conducting many social and cultural activities along with research in Nepal through their NGOs and study centers. For instance, Confucius Institute at Kathmandu University and Tribhuvan University have been promoting Chinese language and culture by conducting language classes as well as valuable programs for business persons, students and professionals. China Cultural Centre in Nepal, which was opened in Dec 2014, has been conducting concerts, exhibitions, art festivals, and various events on a regular basis. Nepal-China Friendship Forum established in 2014, Nepal-China Mutual Cooperation Society created in Mar 2005, the premier China Study Centre and several others are working to increase people-to-people interactions lately, which were again previously limited to India and the West. Another Chinese NGOs, the China Foundation for Poverty Alleviation, which claims to have supported 4,00,000 Nepalese citizens so far has inked an agreement with the Social Welfare Council. Apart from these, there are hundreds of NGOs registered by Nepalese students and media persons who have studied at Chinese universities.

Similarly, once Nepal became a republic and China lost its most reliable partner, the King in 2008, it started to engage with political forces strongly. A Communist Party of China (CPC) team visited Kathmandu in 2019 to impart 'Training' to senior leaders and cadres of the Nepal Communist Party in a programme titled 'Nepal-China Friendship Symposium'. Over 50 Chinese leaders and cadres, led by Song Tao, head of CPC's International Department visited Kathmandu in Sep 2019.[10] Several media reports state that China played a role in bringing the left forces (Communist Party of Nepal-Unified Marxist Leninist and Communist Party of Nepal-Maoist Centre) together and initiating a merger. The then Chinese Ambassador to Nepal, Hou Yanqi, was quite active in Kathmandu meeting with the important leaders when both the factions were at the verge of a split. Moreover, in Sep 2022, a Memorandum of Understanding on Inter-parliamentary Cooperation between Nepal's House of Representatives of the Federal Parliament and National People's Congress of the People's Republic of China was signed.[11] Recently, after a delegation led by Shi Yugang, Deputy Secretary of the Standing Committee of the CPC Yunnan Provincial Committee visited China in Jan 2024, another delegation led by Vice Minister Sun Haiyan from the International Liaison Department of the CPC visited Nepal.[12]

India ranked as Nepal's third largest bilateral development partner by disbursement in Financial Year 2019-20, after the United States and the United Kingdom; and China occupied the fourth place.

India enjoys excellent relations with all the major political parties of Nepal as they were either formed in India, used Indian soil for their movements, or received support from the India. But in recent times, the ruling Bharatiya Janata Party (BJP) has also given importance to party-to-party relations. Vijay Chauthaiwale, head of the foreign department cell of India's BJP visited Nepal in Dec 2020 and met with number of leaders from different political parties to expand its ties with Nepali political parties.[13] Similarly, the BJP has invited several leaders from different political parties of Nepal to India. For instance, in Jul 2023, a five-member high-level delegation of Nepal's Communist Party of Nepal (Maoist Centre) paid a six-day visit to India at the invitation of the BJP.[14]

Competition through Trade, Transit, Aid and Investment

India is Nepal's largest trading partner while China stands second. New Delhi accounted for 62.0 per cent of Nepal's total trade in Financial Year (FY) 2019-20, while China accounted for mere 14.0 per cent.[15] India ranked as Nepal's third largest bilateral development partner by disbursement in FY 2019-20, after the United States (US) and the United Kingdom (UK); and China occupied the fourth place. There is a sharp decline in trade between China and Nepal for the last two years due to the COVID pandemic. China has not allowed import or export of any items through or from

China. As the cross-border trade has been normalised and the flights to China have been resumed in Jan 2023, it is expected that the bilateral trade will be on rise again.

The volume of Nepal-China trade has grown steadily in recent times due to the increasing interest of China in Nepal. Much of their bilateral trade takes place through Tibet and Hong Kong and both the countries have opened six trade points along the Nepal-China border such as Kodari-Nyalam; Rasuwa-Kerung; Yari (Humla)-Purang; Olangchunggola-Riyo; Kimathanka-Riwo; and Nechung (Mustang)-Legze. During the then Nepalese President, Bidhya Bhandar's visit to China in Apr 2019, Nepal and China signed the protocol on implementing the Agreement on Transit and Transport. As per the signed agreement, Nepal can use four Chinese seaports in Tianjin, Shenzhen, Lianyungang and Zhanjiang, and three land ports in Lanzhou, Lhasa and Xigazê, for third-country imports. This ended Nepal's total reliance on India for trade and transit as Nepal could use the six dedicated transit points.[16]

Similarly, there is competition between China and India in terms of investment as their sectors overlap in Nepal. In recent days, most of the construction contracts in Nepal have gone to the Chinese companies as they are the lowest bidder.

There is intense competition between China and India in providing development assistance to Nepal. In 2010, when India announced the development assistance of INR 100.0 mn for the Mustang district of Nepal, China responded with the financial assistance of INR 10.0 mn for the construction of a library, science laboratory and school building with computers in the same region. In the last five years from FY 2016-17 to FY 2020-21, a total of USD 380.45 mn in aid was disbursed to Nepal by China. The disbursement volume from China was the highest in FY 2018-19, totalling USD 150.37 mn. During the same period, India disbursed USD 58.9 mn but the disbursement volume from India was the highest in FY 2019-20 totalling USD 93.6 mn.[17] As brought out earlier, In the fiscal year 2019/20, India was positioned as Nepal's third most significant bilateral contributor in terms of disbursed funds, following the US and the UK, with China securing the fourth position. During this FY, India disbursed USD 93.57 mn while it was USD 93.02 mn from China. But in the FY 2017-18, China had overtaken India, as China had provided USD 58.7 mn to Nepal while India provided USD 56.7 mn. During the FY 2018-19 the Chinese President Xi Jinping visited Nepal, and had disbursed USD 150.37 mn while India disbursed merely USD 58.9 mn.[18] According to the Economic Survey of FY 2020-21, the Chinese Foreign Direct Investment (FDI) to Nepal is the highest which amount to 46.8 per cent followed by India which is 27.4 per cent.

There is growing rivalry between China and India in terms of investment as their interests overlap in Nepal. Both the countries are mostly interested in major sectors like hydropower, tourism, cement and other infrastructures.

There is growing rivalry between China and India in terms of investment as their interests overlap in Nepal. Both the countries are mostly interested in major sectors like hydropower, tourism, cement and other infrastructures. Chinese are also interested to invest in sectors like restaurants, hotels, electronics, cell phone service, ready-made garments (pashmina), nursing homes, and civil construction; while Indian investors are interested in banks and education, and paint and steel industries.[19] As brought out earlier in FY 2020-21, China stood at the top in terms of FDI, followed by India.

In recent days, most of the construction contracts in Nepal goes to the Chinese companies as they are the lowest bidder. According to Raman Mahato, Executive Director at Raman Construction Pvt. Ltd, Chinese construction companies are about to control almost all the major contracting business of Nepal.[20] Though the Indian and Nepalese economies are quite integrated due to the open border, Indian banks have limited presence in Nepal, except the joint venture of the State Bank of India and Punjab National Bank. Nepal's Rastra Bank has now granted a licence for the payment system operation to Chinese financial services corporation, Union Pay International, to roll out its financial services in Nepal.[21]

Competition in Defence and Security Sector

China and India have intense competition in the security sector as well. Strategic ties and military-to-military relations between Nepal and India have been deep-rooted and historic. Nepalese Gurkhas have participated in all the major operations undertaken by the Indian Army since its independence. The Chief of Army Staff (COAS) of the Nepal Army is honorary COAS of the Indian Army and vice versa. India has been providing weapons to the Nepal Army with 70.0 per cent of the aid in the form of grants, since 1962. Following the conclusion of the Comprehensive Peace Process and with the integration of the former Maoist combatants into the Nepal Army, Nepal sought USD 18.33 mn worth of military supplies from India.[22] India has also supported in the construction of the National Police Academy as well as several other military infrastructure and training systems in Nepal.[23]

Like India, a major portion of Chinese assistance is also in the security sector as it wants Nepal to curb anti-China (pro-Tibetan) activities in Nepal. Nepal houses the second largest number of Tibetan refugees in the world and China looks at them with concern. Since the former Chinese Defence Minister Chi Haotian's visit to Kathmandu in Feb 2001, there has been a sharp increase in Chinese assistance in the security sector of Nepal. There has been a constant flow of security assistance to Nepal since then to strengthen the security sector of the country. However, there was a huge hike in such assistance to Nepal in 2005 to King Gyanendra to quell the Maoist insurgents and in 2008 to suppress the Tibetan Uprising. This includes foreign aid of USD 2.6 mn in 2008, 20.8 mn Yuan in 2009, USD 7.7 mn in 2011 and USD 32.3 mn in 2017. During the visit of the then Deputy Prime Minister and Defense Minister Ishwor Pokhrel to China in Oct 2018, both the countries signed an agreement in which China pledged to increase its military support to Nepal by 50.0 per cent to strengthen the Nepal Army's disaster management capabilities and to better equip Nepal's United Nations peacekeeping missions. Besides financial assistance, the People's Liberation Army (PLA) has also increased the number of war college seats and National Defence Course quotas for the Nepal Army's officers in China.[24] The recent engagement between the two countries goes on to suggest that China is set to overtake Nepal's traditional defence partners like India.[25]

India has been providing weapons to the Nepal Army with 70.0 per cent of the aid in the form of grants, since 1962. Following the conclusion of the Comprehensive Peace Process and with the integration of the former Maoist combatants into the Nepal Army, Nepal sought USD 18.33 mn worth of military supplies from India.

Furthermore, in response to the regular joint military exercise between India and Nepal, China began the first ever joint military drill '*Sagarmatha'* (The Head in the Great Blue Sky) Friendship, which was a major turning point in bilateral defence cooperation. The second such exercise was conducted in Sep 2018.[26] In the past, the Nepal Army had held military exercises with India and the US only. Similarly, China supported the construction of the United Nations Regional Peacekeeping Centre at Panchkhal. In 2018, China doubled its military aid to Nepal, amounting to over USD 22 mn. Besides, China also provides equipment and training to the Nepalese Army time and again.

Conclusion

India-China relations have again worsened since the Doklam Standoff like in the 1962. The series of border standoffs and border incursions by China at Pangong Tso, Sikkim, Eastern Ladakh, Galwan Valley and others parts of India shows no sign of progress in their relations. In this context, there is going to be further intense competition between the two in Nepal. While India would like to hold Nepal, in its sphere of influence, with which it has an open border, to control the strategic damage, China would attempt to dent India through Nepal for its strategic gains.

Endnotes

1 Bhasin, A. S. (1994), *Documents on Nepal's Relations with India and China*, Delhi: Siba Exim Pvt Ltd., p. 641

2 Rose, Leo E (1971), *Nepal Strategy for Survival,* Berkeley: University of California Press.

3 Muni, S D (1968), "Sino-Nepalese Relations: Two troubled years 1957-60", *South Asian Studies*, 3 (I), page 33.

4 *The Kathmandu Post,* (28 December 2022), China reopens Kerung-Rasuwagadhi border to Nepali exports, https://kathmandupost.com/money/2022/12/28/china-reopens-kerung-rasuwagadhi-border-to-nepali-exports.

5 Upreti, BC (2001), *Uneasy Friends: Readings on Indo-Nepal Relations*, New Delhi: Kalyan Publications.

6 Jaiswal, P. (2010), "India-China Power Game in Nepal and the Consequences", *IDSA Comment*, Manohar Parrikar Institute for Defence Studies and Analyses, 16 September 2010. http://www.idsa. in/ node/5970/1703.

7 Giri, A (2022), Chinese arrive for rail feasibility study, *The Kathmandu Post*, 27 December 2022, https://kathmandupost.com/national/2022/12/27/chinese-team-arrives-for-feasibility-study-of-cross-border-rail.

8 Shrestha, PM (2021), Proposed Kathmandu-Raxaul rail project moves a step ahead, *The Kathmandu Post*, 24 March 2021. https://kathmandupost.com/money/2021/03/24/proposed-kathmandu-raxaul-rail-project-moves-a-step-ahead.

9 Prasain, S (2019), In new pact, Nepal and China agree to increase weekly flights to 98, *The Kathmandu Post*, 27 July 2019, https://kathmandupost.com/money/2019/07/27/in-new-pact-nepal-and-china-agree-to-increase-weekly-flights-to-98.

10 Giri, A (2019), Training programme on Xi Jinping Thought raises concern among opposition leaders, *The Kathmandu Post*, 24 September 2019, https://tkpo.st/2kGCmNv.

11 *Nepal Foreign Affairs*, 12 September 2022, MoU on Inter-parliamentary Cooperation signed between Nepal and China, https://nepalforeignaffairs.com/mou-on-inter-parliamentary-cooperation-signed-between-nepal-and-china/

12 Giri, A (2024), Communist unity top on agenda as Chinese flock to Nepal, *The Kathmandu Post*, 12 January 2024, https://kathmandupost.com/politics/2024/01/19/communist-unity-top-on-agenda-as-chinese-flock-to-nepal

13 Giri, A (2020), India's ruling Bharatiya Janata Party looks to expand its ties with Nepal's political parties, *The Kathmandu Post*, 12 December 2020, https://kathmandupost.com/politics/2020/12/12/india-s-ruling-bharatiya-janata-party-looks-to-expand-its-ties-with-nepal-s-political-parties.

14 *The Economic Times*, 23 July 2023, Nepal's CPN-Maoist Centre delegation embarks on India visit 'to strengthen' ties with BJP, https://economictimes.indiatimes.com/news/india/nepals-cpn-maoist-centre-delegation-embarks-on-india-visit-to-strengthen-ties-with-bjp/articleshow/102058704.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

15 *International Trade Administration* (2021), Nepal-Country Commercial Guide, 18 September 2021, https://www.trade.gov/country-commercial-guides/nepal-market-overview.

16 *The Kathmandu Post*, (30 April 2019), "Nepal signs deal with China to access seven Chinese sea and land ports", https://kathmandupost.com/national/2019/04/30/nepal-signs-deal-with-china-to-access-seven-chinese-sea-and-land-ports.

17 Ministry of Finance (2022), Nepal Development Partner Profile Book, *International Economic Cooperation Coordination Division,* https://www.mof.gov.np/uploads/document/file/1667454524_Donor%20Profile.pdf

18 Economic Survey 2017/18, *Ministry of Finance*, Government of Nepal, https://mof.gov.np/uploads/document/file/for%20web_Economic%20Survey%202075%20Full%20Final%20for%20WEB%20_20180914091500.pdf ; Economic Survey 2018/19,

Ministry of Finance, Government of Nepal, https://www.mof.gov.np/uploads/document/file/compiled%20economic%20Survey%20english%207-25_20191111101758.pdf; Economic Survey 2019/20, *Ministry of Finance*, Government of Nepal, https://mof.gov.np/uploads/document/file/Economic%20Survey%202019_20201125024153.pdf

19 *Nepal Rastra Bank* (2018), A Survey Report on Foreign Direct Investment in Nepal, June 2018. https://www. nrb. org.np/contents/uploads/2020/04/Study_Reports-A_Survey_Report_on_Foreign_Dir.

20 *Reporters Nepal* (2019), "Chinese contractors have captured almost all the contracting business of Nepal: Raman Mahato", 22 February 2019. https://en.reportersnepal.com/2019/02/253459.

21 *Republica*, (24 July 2019), "Chinese UnionPay International gets license of payment system operator in Nepal", https://myrepublica.nagariknetwork.com/news/chinese-unionpay-international-gets-license-of-payment-system-operator-in-nepal/?categoryId=blog.

22 Sedhain, Pramod Raj (2014), "India-Nepal Military: Relation and Aid". *The Daily,* http://thedailyjournalist.com/ the-strategist/india-nepal-military-relation-and-aid/.

23 *New Spotlight Online*, (23 September 2022), India To Support The Construction Of National Police Academy, https://www.spotlightnepal.com/2022/09/23/india-support-construction-national-police-academy/.

24 Nayak, NR (2017), China's Growing Military ties with Nepal, *IDSA Comment*, 31 March 2017, https://idsa.in/idsacomments/china-growing-military-ties-with-nepal_nrnayak_310317.

25 *The Annapurna Express*, (19 May 2019) 'A brief history of Nepal-China defense ties', https://theannapurnaexpress.com/news/a-brief-history-of-nepal-china-defense-ties-1560.

26 *Business Standard*, (21 July 2018), "Nepal, China military drill to be held in September", https:// www.business-standard.com/article/news-ians/nepal-china-military-drill-to-be-held-in-september-1180721002 88_1.html.

India-ASEAN Relations: Challenges and Opportunities

Shri Yogendra Kumar, IFS (Retd)[@]

Abstract

Post-Cold War, the 'Look East/Act East Policy' has become a critical part of India's transformed foreign policy. The changed geopolitical circumstances also led to the Association of Southeast Asian Nations (ASEAN) becoming a key player in Southeast Asia and an important partner for India's own strategic interests. Over the last 30 years, the breadth and depth of Indo-ASEAN relations have grown exponentially involving other related organisations as well as covering the entire Indo-Pacific. In recent times, not only India but other countries and organisations, including ASEAN, have developed their respective Indo-Pacific policies due to global uncertainties. The transformed circumstances post-COVID also require policy recalibration for newer challenges.

Setting

As a neighbouring region, India's relations with the Association of Southeast Asian Nations (ASEAN) have been a critical component of its 'Look East/Act East Policy'. This burgeoning relationship has come to emblematise India's own growing role in the post-Cold War world.

ASEAN itself has been transformed by the shifting power equations triggered by the end of the Cold War. From a small group of market-oriented Southeast Asian economies aspiring for a geopolitical role at a particularly uncertain regional situation during the Cold War, it expanded rapidly to fill the power vacuum left by the United States (US) withdrawal from the region at its end. Since then, it has developed into a veritable complex multilateral regime system driving all dimensions of regional security, politics, and economic growth in its own eponymous 'ASEAN Way'. It professes to put itself in the 'Driving Seat' of a commensurate structure for the entire Pacific region whilst aiming as well to shape the Indian Ocean affairs. It is now acknowledged to be an indispensable interlocutor by the extra-regional organisations.

Because of ASEAN's centrality in the power equilibrium in Southeast Asia and the wider circle of its robust relationships, India values its own relationship with ASEAN buttressed by the millennia old civilisational linkages with the peoples of the region. Its bilateral relationships with the ASEAN member countries have been greatly strengthened because of the engagement with the organisation as an institutional community and its other associated bodies covering the entire Indo-Pacific. Providing a wide field for its stepping-out diplomatic approach in a changed era, this relationship also signifies India's post-Cold War global outlook, economic liberalisation, deepening stakes in the existing power equilibrium in the Indo-Pacific, equities in the economic buoyancy of this wider region, and its imperatives for coping with the potentially destabilising regional and global challenges.

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Content of India: The ASEAN Relationship

The breadth and depth of this relationship have been transformed over the last three decades. Officially described[1] as having three goals, namely, enhanced connectivity in the broadest sense of the term (physical, digital, people-to-people, business etc.) strengthening the ASEAN as an organisation, and expanding practical cooperation in the maritime domain. India's engagement with ASEAN is its most wide-ranging of any multilateral organisation. The institutional framework driving this relationship comprises annual summit meetings, foreign ministerial (ASEAN post-ministerial conference with dialogue partners) and senior official level meetings prior to the foreign ministerial/summit meetings. There is a five-year cyclical plan of action from 2021 to 2025 currently, besides work plans through interactions with ASEAN's sectoral bodies. The Indian side has set up a cooperation fund, a green fund, and a science and technology development fund. There are sectoral dialogues covering business and trade, energy, education, Information and Communications Technology and digital connectivity, maritime connectivity, road connectivity, agriculture, security including transnational crime, science and technology and space. There is a free trade agreement for trade in goods (2009) and for trade in services and investment (2014); all these agreements have come into effect after ratification by different countries at different times.

In acknowledgement of its growing strategic role, India is part of an ASEAN-led multilateral framework covering the entire Indo-Pacific. These are the East Asia Summit (EAS), ASEAN Regional Forum, ASEAN Defence Ministers' Meeting Plus (ADMM Plus), and Expanded ASEAN Maritime Forum (EAMF). Emblematic of the sheer breadth of its strategic ambition, the EAS is a leaders-led organisation involving ASEAN and India, US, China, Japan, Russia, South Korea, Australia, and New Zealand; the areas of cooperation identified are environment and energy, education, finance, global health and pandemic, natural disaster management, ASEAN connectivity, economic cooperation and trade, food security, and maritime.

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There is a track 1.5 Delhi Dialogue comprising official as well as non-official participants to deliberate upon the further strengthening of these relations. There is an India-ASEAN Business Council. There is also an 'ASEAN-India Centre' in New Delhi for research support for the official tracks; a Japan-funded and Jakarta-based think tank, Economic Research Institute for ASEAN and East Asia, is another knowledge partner. Networks of universities and think tanks have been set up in addition to regular exchanges between parliamentarians, businesses, youth, artists, musicians et cetera.

At the 2022 summit commemorating the 30th anniversary of the dialogue partnership, a joint statement on 'ASEAN-India Comprehensive Strategic Partnership' affirmed a further qualitative upgradation of this relationship from that of 'Strategic Partnership'. Reaffirming the commitment to ASEAN-centrality in the evolving Indo-Pacific regional architecture, it commits the two sides for exploring potential synergies with 'Sub-regional Frameworks', like Indian Ocean Rim Association, enhanced cooperation between the Indo-Pacific Oceans Initiative (IPOI) and the ASEAN outlook on the Indo-Pacific as well as emerging areas of cooperation in the current milieu.

Current Trends

Current commodity exports from India are at USD 44.0 bn (Financial Year [FY] 2022-23), representing 9.75 per cent of total exports and at USD 22.6 bn (FY 2023-24 between Apr and Oct), representing 9.24 per cent of total exports[2]; some major exports are meat, fish, dairy, cereals, mineral fuels, oils, organic chemicals, pharmaceuticals, pearls and jewellery, iron and steel, aluminium and products, boilers and machinery, electrical machinery, automobiles and parts, and ships and boats. Indian imports are at USD 87.57 bn (FY 2022-23), representing 12.23 per cent of total imports and at USD 45.38

bn (FY 2023-24 between Apr and Oct), representing 11.61 per cent of the total[3]; some major imports are mineral fuels, oils and distillation, electronic equipment, machinery, electrical machinery, organic chemicals, animals and vegetable fats, plastic, rubber, iron and steel, copper and products, optical equipment etc. The trade imbalance being considerably in ASEAN's favour, the two sides agreed to the Indian proposal to review the trade in goods agreement by 2025 to make it more balanced and diversified by addressing different types of trade barriers. The agreements in services and investment have only come into effect in the last few years, whose full effect is still early to assess given India's strengths in the services sector even as the services trade is presently in India's favour[4]; low ambition in the services agreement, discriminatory standards in ASEAN, regulatory and cultural barriers constrain its growth despite India's competitive edge in IT, management, consulting, and professional services.[5] Between 2000 and 2020, cumulative Foreign Direct Investment (FDI) into India was USD 166.16 bn and outward FDI was USD 63.5 bn (2020); overwhelming investments (95.0 per cent inward) are Singaporean although Indian investments are much more spread out in ASEAN than in the reverse direction.[6] India has also offered credit lines to the four less developed countries, namely, Cambodia, Myanmar, Laos, and Vietnam, with moderate results.

The complexity of the trade environment is reflected in the Indian decision in 2019 to opt out of the ASEAN-initiated Regional Comprehensive Economic Partnership because of its concerns about China's imports surge and due to inadequate protection for agriculture and domestic industry, rules of origin, and dispute settlement mechanisms.

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People-to-people links are also growing as evident in sectors like education and tourism. In 2022, 2.38 million Indian tourists visited the region suggesting a post-COVID-19 uptick. There are scholarships and entrepreneurship and English language centres for less developed ASEAN countries. COVID-19 vaccine exports and USD 1.0 mn contribution to ASEAN's response fund are indicative of an emerging potential in the post-COVID relationship. The India-Myanmar-Thailand trilateral highway project and its extension to Lao Peoples Democratic Republic and Cambodia are ongoing connectivity projects aligning with ASEAN's own master plan.[7] Even as these plans have received a serious setback due to conflict in Myanmar, maritime and aviation connectivity continues to be strengthened.

In addition to a robust engagement within the ADMM Plus mechanism, the Indian and ASEAN navies took part in a first joint exercise in May 2023. The Indian and ASEAN defence ministers have been having bilateral dialogue since 2022.

IPOI was an initiative launched by India at East Asia Summit meeting in 2018. Apart from participation in other areas of cooperation within this mechanism, India has put a special focus on maritime security and environment.

Emerging and Potential Areas of Cooperation

In the recovery phase from the devastating effects of the pandemic and in the context of already shifting power equations in the Indo-Pacific, newer areas of cooperation are already being identified by the two sides in the official documents.[8] Critically, these are characterised by the necessity for digitisation on an exponential scale, secure digital connectivity for cross-border transactions especially financial, supply chain risks assessment due to internal and external shocks from Black Swan events, health and food security, extreme weather events compounded by global warming, green/blue economy transition, energy security, freedom of navigation/overflight, sustainable exploitation of natural resources and preservation of biodiversity. Agreement to set up tracking, data reception and processing stations in Indonesia and Vietnam was also announced at the 2023 Summit.

Collaborative work is already going on between their counterpart agencies and future roadmaps are being developed with an annexure being added in 2022 to the already existing plan of action embracing other affiliated/parallel sub-regional organisations.

Challenges in the Realisation of Declared Objectives

The formal acknowledgement of the centrality of the ASEAN in the architecture of the Southeast Asian region by different extra-regional powers reflects a critical geopolitical imperative even if its description of the Indian Ocean and other Indo-Pacific regions as Sub-regions' is to be discounted. The various military and non-military dialogues and exercises, including the ADMM Plus and EAMF, demonstrate a degree of regional and extra-regional commitment to maintain this architecture which also has politico-security, economic and socio-cultural dimensions conducive for regional integration.

Having shaped up over the preceding 30 years, the qualitative degradation of this architecture for any reason whatsoever would have destabilising consequences for the region and, indeed, the world over given its place in the global economy and trade underpinned by the location of critical maritime and aviation routes: the fate of other regions and countries mired in protracted, intractable conflicts has a sobering message for the volatile, troubled times. There are several hotspots within this region and in close proximity which also serve as a reality check due to proactive interests of several, including adversarial, powers aiming to shape the dynamics in those places. Various member countries have varying degrees of institutional fragility; Myanmar is in a state of meltdown emanating destabilising impulses across its borders. Institutional fragility diminishes state capacity to meet internal and external challenges and, in fact, becomes a challenge-multiplier.

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Challenges are within and without, abounding and are growing at an accelerating pace contributed considerably by near universal geopolitical distrust and rivalries. Illegal migrations, drugs and other types of transnational criminal networks, robbery, and piracy at sea as also illegal, unreported, and unregulated fishing affect India directly. The current El Nino phase is expected to leave its direct impact beyond 2024 in the region with aggravated consequences on peoples' lives putting further strain on already strained capacities of governments in the Indo-Pacific; Vietnam, Myanmar, the Philippines, and Ireland are considered amongst the ten countries in the world most affected during the last 20 years.[9] The un-coordinated global response to the COVID pandemic, rooted in geopolitical distrust, set back the regional and global economy, disrupted global and regional supply chains, and increased regional tensions. Already a regional cockpit of great power rivalries sensitive to the slightest shift in power equations, the rapid emergence of new dual-use technologies viz., communications, and artificial intelligence, which is now a new field for this rivalry.

The current geopolitics of the South China Sea (SCS) has become a critical challenge both for ASEAN and for others with a stake in its stability as a global artery for trade and transportation. China's rise, militarily and economically, has reframed an old issue as it has sought to use its claims, both maritime and territorial, to tilt the power equations against ASEAN but also against external powers, especially the US; the situation has been aggravated by its rejection of the 2016 arbitral findings which do not support these claims. Its ability to divide the ASEAN and to diminish the latter's bargaining capacity for a binding code of conduct for peaceful and sustainable use of SCS resources and for navigation and overflight have led to international calls that an eventual agreement should not be to the detriment of other international users and to be in conformity with international law and the United Nations Convention on the Law of the Sea. An upshot has been almost daily stand-offs between the maritime assets of other claimant countries and China, resulting in wider tensions involving other extra-regional and global powers.

The Quad dialogue between India, US, Japan, and Australia is a step in strengthening the existing power equilibrium in Southeast Asia where the 'ASEAN Way's' limitations have become evident in recent times. Although not a security construct, as described by countries opposed to it, it has developed a different vision of a free, open, and inclusive Indo-Pacific; its agenda keeps evolving, embracing issues such as health security, climate change, critical and emerging technologies, infrastructure and debt sustainability, cyber security, humanitarian assistance and disaster relief, and strengthening the Maritime Domain Awareness (MDA) of regional countries.[10] MDA is of strategic importance and requires inter-linkages across the entire Indo-Pacific by plugging-in the gaps in existing capacities. It is equally important to bear in mind that this same set of countries also participate in the Malabar series of naval exercises, alternately between the Bay of Bengal and Western Pacific (excluding the SCS), which aims to achieve sophisticated interoperability capabilities amongst non-alliance partners; this is a significant reaffirmation about their stakes in the preservation of existing regional power equilibrium, including the SCS itself. India also conducts joint foreign office plus defence dialogues separately with Japan, Australia, and Indonesia.

Other extra-regional powers have also declared their Indo-Pacific policies with a similar underlying message as that of the Quadrilateral Security Dialogue. Like India, many extra-regional powers have their own naval collaboration programmes with the Indo-Pacific countries, including ASEAN.

Conclusion

India lacks the heft of countries such as the US, China, and Japan but remains an important actor in ASEAN affairs. Just like India, ASEAN also practices external balancing to retain its foreign policy options in dealing with great powers and welcomes increasing Indian engagement with it. Quite manifestly, the effectiveness of the Indian role would depend on the actual impact on the ground of its own programmes as well as those carried out in collaboration with other partners; a robust external media policy for the region would enhance local perception of India's role. ASEAN remains sensitive about the negative, destabilising fallout of increasing great power contestation in the SCS and India is mindful of that. Its stated objective being strengthened capacities of the organisation and its member states; its primary approach is that deterrence capability against subversive action from any quarter should not result in an escalatory dynamic.

The Quad dialogue between India, US, Japan, and Australia is a step in strengthening the existing power equilibrium in Southeast Asia where the 'ASEAN Way's' limitations have become evident in recent times.

Endnotes

1 MEA website. https://www.mea.gov.in/Portal/ForeignRelation/India-ASEAN-_Relations_2022.pdf. accessed on 18 December 2023

2 Ministry of commerce of India. https://tradestat.commerce.gov.in/eidb/ergn.asp. accessed on 18 December 2023

3 Ministry of commerce of India. https://tradestat.commerce.gov.in/eidb/irgn.asp. accessed on 18 December 2023

4 Pralok Gupta, 'India-ASEAN Trade in Services: Prospects and Challenges', in *30 years of ASEAN-India relations, (ed) Prabir De (KW Publishers, New Delhi, 2023),* p. 139

5 Ibid.

6 Durairaj Kumarasamy, 'Investment Relations between ASEAN and India', in *30 years of ASEAN-India relations.* P. 189

7 ASEAN website. https://asean.org/wp-content/uploads/2023/06/Overview-ASEAN-India-CSP-as-of-June-2023.pdf. accessed on 19 December, 2023

8 Chairman's statement on the 20th ASEAN-India Summit, Jakarta, Indonesia, 7 September 2023. FINAL-Chairmans-Statement-of-the-20th-ASEAN-India-Summit.pdf. accessed on 21 December, 2023

9 Temjenmeren Ao, 'India and ASEAN: Assessing the Economic Partnership in the New Decade', in *30 years of ASEAN-India relations,* p. 63

10 MEA website. https://www.mea.gov.in/Portal/ForeignRelation/Quad_brief_October_2023.pdf. accessed on 19 December, 2023

Strategic Deterrence: Challenges in Maintaining Stability in Sino-India-Pak Triangular Relationship

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Abstract

India is facing a complex regional strategic environment. It carries a historical baggage of unresolved land boundaries which occasionally translates into military challenges. Notwithstanding the defensive character of India's deterrence posture, its adversaries i.e., Pakistan and China are aggressively pursuing wide-ranging nuclear and missile capabilities, as evident from the qualitative as well as quantitative improvements in both their nuclear arsenals. China's incursions into the Indian Ocean, its unilateral unprovoked attempt to change the 'Status-quo' at the Line of Actual Control and increasing collusion with Pakistan have complicated the security matrix. The oft perceived 'Two Front Challenge' is now a reality. Sharing land borders with two nuclear armed adversaries means that India must constantly review the challenges to achieve stability in strategic deterrence. India, Pakistan and China face triangular deterrence relationships, producing complex interactions and complicated calculations for defence planners to maintain strategic stability. The question remains: What are the challenges and possible mitigating initiatives?

Introduction

China, India, and Pakistan have long-standing territorial disputes with a history of violent contestation. They are nuclear armed and are proximate. Unlike the United Sates (US)-Soviet dyad during the Cold War or the current US-China-Russia triangular relationship, the India-Pak-China relationship is more complex. The US and the Soviet Union were separated by vast distances, which provided a cushioning time for decision making. Unlike in the US-China-Russia relationship, where Russia is not a client state of China or vice-versa (as yet), Pakistan is perceived to consult China on all decisions and serves as a low-cost proxy for destabilising India. This only adds to the existing complex imbroglio and leaves the question as to what are the challenges to maintaining deterrence stability with Pakistan and China simultaneously?

The Domains

First: Conventional Domain. The terrorist attack on the Indian Parliament in 2001, the Mumbai attacks on 26 Nov 2008, the attacks on the air base in Pathankot on 02 Jan 2016 are examples of coercive action under the nuclear umbrella. India's hitherto restrained response shifted dramatically in Feb 2019, post the Pulwama attack, when the Indian Armed Forces crossed the Line of Control (LOC) to target a terrorist camp. Last few years have been relatively quiet, but similar terrorist attacks could result in India climbing the escalatory ladder. This remains the foremost challenge, especially if such actions come in tandem with Chinese belligerence at the Line of Actual Control (LAC). People's Liberation Army's (PLA) surreptitious actions, in contravention to the agreements in force, to change the status-quo in Ladakh in 2020 clearly surprised India. The stand-off still continues. Beijing's rigid stand and frequent inflammatory statements

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on Arunachal Pradesh have disturbed the equipoise that prevailed earlier. Disengagement in some areas has taken place but nothing substantial has been achieved. If the PLA has been deterred from further escalation, it is at the cost of a fairly large deployment of troops, deepening of the partnerships with other powers and an edge that the Indian Navy enjoys in the Indian Ocean.

Second: Pak-China-India Nuclear Dyad. China's nuclear deterrence is hinged upon the US' nuclear capabilities, which in turn is dependent on Russia's. Any advancement or change in its nuclear posture within any of these dyads inevitably disturbs the strategic balance in South Asia. The Sino-Indian contestation is fundamentally about power politics. China's core interest being, that India struggles to control South Asia and remains neutral in the 'US-China' face off. Their goal is, India's passivity. China's non-acceptance of India as a legitimate nuclear weapons state (since India is not a signatory to the Nuclear Proliferation Treaty), leads to an ambiguity related to Beijing's policy of 'No First Use' (NFU) towards New Delhi. China dropped the word 'Unconditional' from its nuclear posture in 1995 and added conditionality to its NFU policy, thereby making it applicable only to the Nuclear Proliferation Treaty member states. This ambiguity generates a threat of a crippling pre-emptive strike backed by Multiple Independent Re-entry Vehicles (MIRV) and hypersonic glide vehicles which could create an offence-defence spiral. As India explores countermeasure options, Pakistan would inevitably find itself in a security dilemma, endeavouring to bridge the military gap with India, with active assistance from China. In this way, overlapping of dyads triggers a chain reaction. Further, China's denial of India's nuclear weapons status inhibits conclusion of an arms control agreement between the two.

China's nuclear deterrence is hinged upon the US' nuclear capabilities, which in turn is dependent on Russia's. Any advancement or change in its nuclear posture within any of these dyads inevitably disturbs the strategic balance in South Asia.

Third: The inflammatory Nuclear Posturing by Pakistan in the India-Pak Dyad.

- India's overall conventional superiority unnerves Pakistan. As the Pakistani state continues to face domestic weaknesses with regard to internal politics, poor governance, escalating terror, its fears on this count may only increase. Pakistan's nuclear weapons, accordingly, serve not merely to provide deterrence against Indian attacks, but more ambitiously to provide a license for 'Safe' sub-conventional wars against India. The scars of the 1971 defeat with the loss of East Pakistan is motivating the Pakistani army elite to take risks and channelise resources to improve their arsenal in new directions with an ambition to settle old scores. A recent speech by General Kidwai, former head of the Strategic Plans Division and an adviser to the National Command Authority, signalled that Pakistan may have changed its nuclear doctrine for the worse. In defining the country's 'Full Spectrum Deterrence', the architect of Pakistan's Nuclear Strategy elaborated on the 'Horizontal' and 'Vertical' vectors with ranges of 0 m to 2,750 km.[1] A 'Zero' meter capability could mean nuclear artillery shells/atomic demolition munitions or nuclear mines. Even as the country grapples with an unprecedented economic, political and economic turmoil, the army elite seem to be playing a game of nuclear brinkmanship.[2]

- Pakistan's desire to claim a Sea Based Strategic Deterrence (SBSD) could pose yet another risk. They have taken an important step by the experimental launch of Babur 3 from a fully submerged trial level platform, with an aim to arm the Agousta 90B/Yuan class with a short-range plutonium/tritium nuclear warhead. It is at best a coercive attempt at claiming a SBSD.[3] The opaque underwater medium precludes identification and the Indian Navy would most certainly prosecute a lurking conventional Pakistan submarine or a submersible pontoon, be it nuclear armed or otherwise. If such offensive action is deemed against a nuclear asset, and triggers escalatory actions in the nuclear ladder, it would be most unfortunate.

Fourth: Other Domains that could Mimic Nuclear Devastation.

- India's 'Nuclear Doctrine' was articulated first in a draft form by the National Security Advisory Board in 1999 and later formally by the Cabinet Committee on Security in 2003. The latter, while reaffirming the commitment to NFU qualified that "In the event of a major attack against India, or Indian forces anywhere, by biological or chemical weapons, India will retain the option of retaliating with nuclear weapons", meaning that India might use its nuclear weapons first, in case the effects of an attack had catastrophic consequences.

- Today, there are more such possibilities. The 'Left-of-Launch' defence strategy, where cyber and non-kinetic attacks would be used against missile system computers, their sensors, and other networks to knock out missiles on the ground could change the manner in which nuclear deterrence is perceived. The question is whether the cyber-attack on the 'Command and Control System' should be considered as the first strike or not?

- 'Nuclear Terrorism', is yet another challenge. Terrorists could aspire to steal radioactive materials in the future for the construction of 'Dirty Bombs'. Such a dilemma affects not only Indian national interests, but poses a threat to global security. This is why tactical nuclear weapons need to be actively discouraged and restraint clauses should be created, citing plausible retaliation with nuclear weapons against threats emerging on these counts.

China's premier spy agency, the Ministry of State Security, conducts global cyber-espionage operations and targets political, economic, and personally identifiable information to achieve China's strategic objectives.

Fifth: Cyber Domain. China's premier spy agency, the Ministry of State Security (MSS), conducts global cyber-espionage operations and targets political, economic, and personally identifiable information to achieve China's strategic objectives. The state has control over the internet under the guise of cyber sovereignty. Military-civil fusion enables the Strategic Support Force (SSF) to mobilise civilian information technology resources and technically competent civilians working in the domestic telecommunications industry, cybersecurity firms, and academia. For its cyber-espionage operations, the MSS exploits vulnerabilities submitted to the Chinese government and often employs contractors to carry out state-sponsored cyber operations. China's cybersecurity legislation weaponises the country's cybersecurity industry and research. The SSF has also incorporated psychological warfare units into its structure, enabling it to carry out 'Three Warfares' (psychological, legal, and public opinion) to influence the adversary's perceptions and erode its will to resist. In Jun 2020, during the stand-off at the LAC, China attempted over 40,000 cyber-attacks on the Indian information technology infrastructure and banking sector. In Apr 2022, two attempts were made to target electricity distribution centres near Ladakh. An increasing proficiency and belligerency in exploiting this domain is bound to challenge stability. It may be assumed that these capabilities would be available to Pakistan also.

Sixth: Development of Ballistic Missile Defence Programmes. These could interfere with the ability of nuclear weapons to cause unacceptable damage. Pakistan has displayed no interest in developing missile defences, whereas both China and India are pursuing missile defence programmes; New Delhi has a modest programme while China's is a more comprehensive one aimed at a nationwide defence umbrella that could possibly weaken if not nullify India's retaliatory capabilities. India aims to erect a two-layered defensive system around the national capital and perhaps a handful of other major Indian economic centres.[4] China is, reportedly building large phased-array radars, complemented by high-resolution space-based intelligence, surveillance, and reconnaissance sensors which are intended to detect ballistic missile launches during a missile's boost phase. As China's missile defence capabilities mature, its systems could neutralise even the longest-range offensive missiles of an Indian retaliatory strike. India could be expected to invest in MIRVs or hypersonic glide vehicles for more effective targeting and treat Ballistic Missile Defence (BMD) as secondary insurance.[5]

Seventh: Offence-driven Hard-target Counterforce Kill Capability. All three countries do not possess such capabilities today, although China comes closest because it has some highly accurate ballistic missiles and high-yield warheads. A damage-limiting counterforce strike capability would have a significant impact. India could aim to improve its own ballistic missile accuracies and invest more resolutely in its submarine-based nuclear force, the most survivable leg of India's national deterrent. Notwithstanding India's testing of Agni-5, a canisterised, more sophisticated and accurate nuclear missile, nuclear analysts opine that India currently does not possess counterforce capabilities against Pakistan and Islamabad too has shown little interest in pursuing counterforce capabilities against India. The 'Counterforce' competition within Southern Asia will be driven primarily by China.[6]

Eight: Acquisition of Asymmetric Intelligence Transparency. Significant uncertainty about the location of the others' nuclear reserves mitigates the temptation to attempt any efforts at interdicting them. But various developments in surveillance technology, data aggregation, analysis, cyber intrusion, and exfiltration could help in locating the adversary's nuclear reserves. A Chinese advantage in intelligence transparency vis-à-vis India would have grave consequences because, in time, Beijing is likely to possess sufficient numbers of either large or accurate nuclear weapons to target the entirety of India's nuclear storage sites and the military bases that support nuclear operations.[7]

Ninth: The Maritime Domain. India has been and remains the dominant maritime power in the Indian Ocean. Presence of western navies has only helped India in maintaining this edge. The Pakistani Navy has remained a smaller force with somewhat modest capabilities. This has been changing slowly since 2008 when the PLA Navy (PLAN) ships first entered the Indian Ocean, ostensibly for an anti-piracy patrol. Economic interdependence with the littorals may cause contestation with the extant powers and is translating into a permanent presence in the Indian Ocean. What could destabilise the stable deterrence posture in this domain is the expected collusion of the PLAN with a resurgent Pakistan Navy, which is in the process of adding new frigates and submarines.

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What Bilateral or Trilateral Confidence Building Measures (CBMs) could Enhance Deterrence Stability?

Longstanding disputes have triggered regular crises in the Indo-Pak relationship; some more seriously than others. Some analysts credit the advent of nuclear weapons in the subcontinent with the lack of an all-out war between the two sides since 1998. The crises have remained limited in time, space, and intensity, often through the assistance of third-party intervention. However, if both sides quickly climb non-nuclear rungs, they could put pressure on strategic stability. CBMs are in place but given the inflammatory relationship, their impact in addressing and preventing dangerous crises that challenge deterrence and stability remains limited.

Grappling with the problem of deterrence stability in the Cold War, both the US and Soviet Union stockpiled thousands of nuclear warheads and delivery systems to achieve parity. It was only after both sides had achieved a state of mutually assured destruction and reached the brink of a nuclear war that they entered into substantive discussions and agreements on arms control. Today, that architecture lies in tatters. The breakdown of US-Russia nuclear arms control dampens the urgency of nuclear risk reduction in South Asia. Both India and Pakistan have small nuclear arsenals and would not be as keen on an arms control treaty. An obdurate China with its runaway programme adds to the trilemma. As of now, there appears to be little scope for discussions, leave alone a propensity to ink an understanding to reduce risk reduction in the nuclear domain.

Since bi-lateral and tri-lateral discussions are not likely, nuclear risk reduction could be discussed at a multilateral level. More confidence is likely to result if the big powers are also willing to sit at the table. May be an anti-ballistic missile treaty that binds everyone or a discussion to keep the readiness of nuclear weapons at a lower level.

Time for India-China Maritime Engagement in the Maritime Domain.

The on-going standoff between India and China is currently limited to the Ladakh region. The LAC much like the LOC is live. There is an odd chance of the contestation spilling over to other domains, of which, the maritime space could have a severe impact. PLAN ships, submarines, research and intelligence ships routinely visit the Indian Ocean and could also be shadowed by Indian naval units. A rush of adrenalin during such unplanned encounters could spiral spirited nationalistic displays into avoidable embarrassing situations, which if not de-escalated, can have graver and unforeseen implications for both parties. A Ladakh type escalation at sea would be catastrophic.

There is no formally established forum to discuss how a situation at sea can be de-escalated and what rules of engagement must be laid down. It is difficult to collaborate amidst suspicion and competition. But to enable such a possibility there is a need to start talking. It may be time to work on strict CBMs including setting up hotlines between navies if required. Naysayers opine: what is the surety that China will stick to the written word if it has not done so in the past?

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Conclusion

'Conflict Avoidance' and 'Confidence Building' in South Asia is imperative as China, India and Pakistan are geographically close. Climbing the escalatory ladder, resulting in a nuclear exchange, would affect all three. A drawing down of current forward deployments at the LAC and 'Talks' across all domains, including Nuclear is the way forward.

Endnotes

1 Lt Gen (Retd) Khalid Kidwai, Former DG Strategic Plans Division and Former DG, Strategic Plans Division (SPD) speech delivered on the 25th Anniversary of Pakistan's nuclear tests, 24 May 2023.

2 Manpreet Sethi, Radm Sudarshan Shrikhande, Arun Sahgal, 'Pakistan's New Nuclear Strategy is a crisis in the making published, July 15 2023. National, https://nationalinterest.org/feature/pakistan%E2%80%99s-new-nuclear-strategy-crisis-making-206646 accessed on 8 Jan2024.

3 Pakistan attains second strike capability with test-fired pf submarine-launched cruise missile. Published January 9 2017, https://www.dawn.com/news/1307384, Accessed on 8 Jan 2024

4 Aditya Krishna Menon, 'India Conducts First Test of new ship based BMD System' 25 Apr 2023, https://www.navalnews.com/naval-news/2023/04/india-conducts-first-test-of-new-ship-based-bmd-system/, accessed on 8 Jan 2023.

5 Ashley Tellis 'Striking Asymmetries: Nuclear Transitions in Southern Asia' Pg 247-256.

6 Ibid.

7 Ibid.

Section V

Global Issues

Russia - Ukraine Conflict: Five Strategic Lessons for India

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Abstract

For India, the lessons emerging from the ongoing war in Ukraine are real and relevant. This analysis is restricted to five lessons, highlighting the significance of consolidating, and ensuring the security of frontiers and borders, particularly the historical and inherited boundaries; the merits of maintaining strategic autonomy, choosing options in accordance with national interest, without being unduly influenced by major powers; visualising the likely contours of future battlefields for appropriately directing the nation's own capability development; choosing the most appropriate weapons, equipment and domain for future wars and the weightage to be accorded to asymmetric warfare capabilities; and the lessons for higher politico-military direction and review of relevant organisational aspects.

Introduction

Preliminary lessons emerging from the ongoing Russia-Ukraine war (Russia's Special Military Operation), since 24 Feb 2022, have been a topic of interest and a lot has been written on this already. Reiteration of select strategic lessons through this article is relevant on these accounts: similarity in the 'Tyranny of Geography' between India and Ukraine, in the context of current geopolitics, both being on the geographic frontline facing major global powers; India holding a large inventory of Soviet/Russian origin equipment and having adopted significant Russian doctrine and concepts for its armed forces, which are being validated (or repudiated) on ground in Ukraine; and, China, India's primary adversary, having largely modelled, equipped and trained the People's Liberation Army on the lines of Russian military, being amongst the most ardent observer (and learner) of the ongoing Russian campaign in Ukraine, with lessons learnt likely to be employed in operations against India, for which the latter must prepare itself.

The scope of this analysis is confined to the five lessons relevant to India's defence and security planning, and the evolving strategy and doctrine for future conflicts.

Security of Frontiers and Borders

Understanding of 'Boundaries', 'Borders', and 'Frontiers' are subjective, and managing these is a challenge. These are often, sources of misconception, misunderstanding and conflict between nations. It is said that four out of every five political treaties/conventions deal with frontiers alone.[1] It is particularly so for the 'Historical Boundaries', with no common understanding of how far back in time in history to delve; and for the 'Inherited Boundaries/Frontiers', negotiated by the erstwhile stakeholders, based on the balance of power existing between them, then. Complexities are further compounded in the context of 'Political Frontiers' dividing the two states, but not necessarily under the control of either.[2]

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Current-day geopolitical contestation and boundary disputes are leveraged by stronger neighbours for political, economic, and military objectives; with weaker nations playing for time, for better negotiating opportunities or stronger international support, as expected by Ukraine with aspiration to join North Atlantic Treaty Organisation (NATO).

India and Ukraine have both been amid a boundary–frontier imbroglio. In the case of India, it relates to the disputes with China and Pakistan over the boundary/frontiers inherited from the British, particularly in Ladakh, Jammu and Kashmir (J&K) and Arunachal Pradesh; and for Ukraine, over the inheritance from the Soviet Union, and subsequent ethnic dynamics, primarily in the regions of Donetsk, Luhansk, and Crimea.

A significant lesson is of early settlement or of at least deft management of these 'Disputed' frontiers of varying perceptions, by progressive integration (political, socio-economic, connectivity and through infrastructure development) with the national mainstream. This is the most effective strategy for national security. Inherent in this is guarding against 'Unconventional (Covert) War (Subversion)' often conducted by the stronger power. Russia conducted this effectively, preceding the current Russia-Ukraine conflict.[3] The possibility exists of China doing so in India's Northeastern states, while Pakistan continues its state-sponsored proxy war in J&K and beyond.

Strategic Autonomy

"I am not sitting on the fence just because I don't agree with you. It means I am sitting on my ground..." [4] said India's External Affairs Minister S. Jaishankar at the GLOBSEC (non-governmental organisation based in Bratislava)[5], in Jun 2022. He added that "India does not accept the 'Construct' that it has to side with a power axis and that if it does not side with one camp, it will be considered as belonging to the other camp". This gives a sense of the level of 'Strategic Autonomy' being exercised by India in its foreign policy, though mindful of the limited geopolitical space it has due to the limited economic and military capabilities, and 'Not Being There Yet' in self-reliance. Conscious of the nebulous nature of the very concept, and despite occasional resentment and discomfort of its strategic partners, India has, historically been exercising its chosen options, without being coerced or overly influenced by any of the major powers. Even in the ongoing standoff with China, since mid-2020, India has chosen to chart its own approach, rather than leaning on (or being dictated by) its strategic partners, or Quadrilateral Security Dialogue or compromising its position on Ukraine, and other global issues of concern.

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Ukraine, as a sovereign nation, has, however, chosen to follow a different path. In 1991, beginning its journey as an independent nation, it concluded an agreement with Russia to amicably maintain joint control of the Black Sea Fleet. In 1994, it acceded to the 'Treaty on the Non-Proliferation of Nuclear Weapons' and decided to abandon its nuclear arsenal of about 1000 warheads, under the 'Budapest Memorandum on Security Assurances' with Russia, United States (US) and United Kingdom assuring security.[6] In 2008, Ukraine applied to integrate with the NATO Membership Action Plan; and followed it up with a constitutional amendment in 2014, setting the goal of NATO and European Union membership. Russia's annexation of Crimea in Feb 2014, support to East Ukrainian separatists, and the special military operations in Feb 2022 followed.

No doubt, the US and NATO have stood by Ukraine and continue to do so, with the US having given/committed assistance of USD 46.7 bn (period 2014 to Oct 2023)[7] and the UK about GBP 4.6 bn, amongst assistance from others. Also, extensive security assistance related to training and a wide range of weapons and equipment have been provided to Ukraine, ranging from small arms and night vision devices to heavier weapon systems like High Mobility Artillery Rocket Systems (HIMARS), National Advanced Surface-to-Air Missile Systems.

Despite all this assistance, the US and NATO have been treading cautiously against getting directly involved in the conflict with Russia. Most countries decided against imposing the 'No-fly Zone' over Ukraine. Continued assurances notwithstanding, 'Ukraine Fatigue' does seem to be setting in. Dissenting voices against continued support have already started emerging from some quarters in Europe[8] as well as in the initial remarks of some American Presidential hopefuls.[9]

Nearly two years into the war, having lost over 1,30,000 personnel (Killed/Wounded/Missing); with nearly 11 million persons displaced, 40.0 per cent of power generation infrastructure destroyed and a nearly 30.0 per cent decline in its GDP [10] (as of 28 Nov 2023 and increasing), Ukraine's future still rests on the continuance of assistance from the US and NATO/Europe. It still does not have the freedom to make an independent decision, best suited to the people of Ukraine.

The lessons from this war are of the merit, in the long term, of maintaining strategic autonomy, despite the execution challenges inherent. This needs to be viewed as distinct from maintaining 'Strategic Partnerships' and 'Issue-based Alignments' with like-minded countries, which India values immensely.

The Future Battlefield

Warfare has evolved over the years, from classic attrition battles to the present-day hybrid warfare, weaponising technology, economies, trade, food, and mineral, and is now conducted across multiple domains, extending beyond designated battle spaces. The challenge for the defence planners is to forecast and visualise the 'Unique Construct' of the battle space and 'Character of War', that would be relevant to a country's particular environment. The Ukraine war is contributing towards that visualisation.

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Conventional War

In India, the common belief has been that despite the country facing a two-front external threat, its 'Conventional' wars are likely to be, 'Short, Swift, and Limited (in geographic space and intensity), under a nuclear overhang'. The Joint Doctrine of the Armed Forces 2017 alludes to these wars being 'Ambiguous, Uncertain, Short, Swift, and Lethal'. In the interpretation of 'Short', some analysts pitch it at 10 to 15 days (based on assessed ammunition holdings). The planning, however, is based on a 60-day war, out of which 30 days are assumed to be of 'High Intensity' and 30 days at 'Normal Intensity'. The stipulated stocking levels therefore remain 40 (Intense[I] -planned stocking for 40 days of intense fighting).[11] The acute shortage of ammunition, in particular, artillery ammunition, being experienced in the Ukraine war has also triggered a renewed debate on the stock levels required to be maintained.

The duration of war is a function of the time that it takes to achieve 'Political Goals'. In wars like Ukraine (or Afghanistan, or Iraq, or Syria) where external major powers or alliances are involved, and where the complex geopolitical aims (and interests) continue changing, the wars generally get prolonged. The bilateral conflicts, fought by adversaries on their own land, are unlikely to get so extended.

Based on this hypothesis, the lesson, in the Indian context is that it would be prudent not to plan on 'Short Wars' alone. It, however, also remains a challenge to determine the appropriate duration for which the country should plan, in the absence of the knowledge of the adversaries' politico-military aims. Under such ambiguous circumstances, the current stipulated stocking levels, of 40(I), seem adequate, at least for the basic 'Dumb' munitions. For the missiles, precision, and other advanced munitions, which find greater use in the contemporary non-contact battles and where production constraints exist, higher stocking levels may be considered. The briefly tried concept of lower minimum assured risk level stocking should not be adopted. Also, the levels of initial ammunition expenditure in Ukraine,

encouraged by global back-fill are too unrealistic for any professional military to plan on, and cannot form the basis of policy planning for ammunition stocking, which is a complex cycle of visualised battlefield requirement, shelf life, periodic training requirements, and a function of secure storage space required. Controlling ammunition expenditure on the battlefield is an essential professional requirement for tactical commanders.

Technology Intensive War

Distinct from conventional wars, some analysts now advocate extensive use of technology to bridge conventional asymmetry with China. They also suggest a total organisational and doctrinal transformation of the armed forces to adopt a totally different pattern of operations suited to the changed battlefield that India is likely to encounter. Pravin Sawhney, in his 2022 book, 'The Last War- How Artificial Intelligence will Shape India's Final Showdown with China'[12], presents a scenario of China launching a cyber-attack, robot invasion, swarms of miniature drones etc. and suggests that India is preparing for the 'Wrong War'.

Likely Manifestation

Between the two perspectives, the war that India is likely to face would probably be a blend of the trench warfare of attrition, entailing the use of conventional tanks, artillery, rockets, missiles, mines, and infantry assaults; alongside the use of some high technology. Application of technology in the Ukraine war, has been most pronounced in Intelligence Surveillance and Reconnaissance (ISR), making the battlefield transparent, communications, use of unmanned remotely piloted/autonomous systems, and precision targeting.

Military transformation through technology entails the concurrent development of matching doctrine. The options available before India are, either develop doctrine to implement fast emerging technologies or develop technologies to suit evolving doctrine. In the Indian context, the former seems more pragmatic.

It merits appreciating that the induction of technology on the battlefield will be progressive, a function of technological advancements within the country (or through supportive strategic partners), the ability to imbibe the cutting-edge technology at grass root level, its suitability for application in the prevailing terrain, weather, and altitude along the borders, and importantly, its affordability in adequate numbers. Military transformation through technology entails the concurrent development of matching doctrine. The options available before India are, either develop doctrine to implement fast emerging technologies or develop technologies to suit evolving doctrine. In the Indian context, the former seems more pragmatic.

Choosing Weapons, Equipment and Domain

The Ukraine war has thrown up several questions regarding the type of weapon systems most suited for the future Indian battlefields.

Wars are the best 'Defence Expos' for major global arms manufacturers. To them, the Ukraine war presents an opportunity to showcase their weapons to the world, as well as an opportunity to wean India away from its traditional dependence on Soviet/Russian arms, opening a large potential market. Much has appeared about the suboptimal performance of many Soviet/Russian equipment, in particular, tanks and aircraft; and highly acclaiming the performance of US/western origin weapon systems. Raytheon's Javelin (Anti-tank Guided Missile), Lockheed Martin's M142 HIMARS, Turkish-designed drone Bayraktar TB2.[13] The Patriot Air Defence system, Franco-British Storm Shadow or *Système de Croisière Autonome à Longue Portée* air-to-surface cruise missiles, British Aerospace Engineering System's M2 Bradley fighting vehicles[14], amongst other systems, were credited with changing the course of war, in favour of Ukraine. Likewise, the performance of Russia's Kh-47M2 Kinzhal, air-launched hypersonic missiles, and thermobaric weapons appears to have been devastating for the Ukrainians.

It would be prudent for military professionals to study the pattern of employment and the performance of the weapon systems which are in service with India, or being considered to be acquired or developed. The performance must, however, be evaluated in the context of the terrain, weather and the operating environment. The reason for the heavy Russian personnel and equipment losses, particularly the armoured vehicles, in the initial stages, of the battle for Kyiv, Sumy, and Kharkiv, call for an in-depth, fact-based analysis.

Also, it may be premature to disregard the relevance of tanks on the battlefield, a perception emanating from the effective employment of drones and light anti-tank weapons, primarily in urban environments. Quite like the earlier tactical and technical countermeasures, evolved, viz., explosive reactive armour, active protection systems etc, appropriate countermeasures and necessary design changes, to counter the aerial threat, would evolve progressively. While the primacy of the tank may now get diminished, or 'Shared' with other platforms, the perception of its irrelevance seems premature. The continued employment of armoured vehicles along the attritional positional frontline underscores this reality.

In the case of artillery, primary attention has been on advanced weapon systems like HIMARS, guided multiple launch rocket system, and various types of precision and loitering munitions, for suppression and destruction of enemy air defences, counter artillery, and anti-tank roles. It would, however, be evident that the requirement exists for an optimum mix of guns, rockets, and missiles; precision and conventional `Dumb' munition, a mix of self-propelled, towed and Mounted Gun Systems (MGS) and a better integration of sensors and shooters. Cheaper mass has a value of its own.

The larger issue, beyond reviewing the efficacy of specific platforms, however, is re-evaluating the optimum `Weapon Mix' for the borders along different terrains – deserts, plains with built-up areas, hills, mountains, and different types of high-altitude areas.

The lessons of employment of artillery in Ukraine validate the prudence of ongoing 'Mediumisation' (155mm calibre) of Indian Artillery; induction of a larger proportion of precision and terminally guided munitions; suggests a greater role for MGS (not yet part of Indian inventory), multiple launch rocket systems with precision munition (like improved version of indigenous Pinaka); and also highlights the imprudence of 'Re-orbatting' unmanned aerial vehicles to the Army Aviation.

The larger issue, beyond reviewing the efficacy of specific platforms, however, is re-evaluating the optimum `Weapon Mix' for the borders along different terrains – deserts, plains with built-up areas, hills, mountains, and different types of high-altitude areas. The limitations of employment of drones, quadcopters, precision, loitering munitions and even certain ISR and communication systems along the northern borders are well known and need to be factored in. Likewise, in the deserts, some review of weapon authorisation is necessary, giving greater weightage to armed drones; and artillery – which is now able to deliver heavy volumes of fire, with precision, indirectly (without the target being visible to the firer), at long ranges. Similar thought needs to be given to air superiority and manned-unmanned operations in the air and at sea. Overall, there is a requirement for a mix of expensive platforms and cheaper, smaller, maybe commercially available autonomous systems adaptable to different missions. Signature reduction, mobility and survivability will be critical factors, going forward.

On the efficacy of the cyber domain for operations, a Centre for Strategic and International Studies study, titled, 'Cyber Operations during the Russo-Ukrainian War'[15] is illustrative. It highlights that cyber operations play only a support, than a decisive role in major wars, with combatants relying more on the certainty of lethal precision strikes against high-value targets. These operations are, however, useful in support of information operations and for propaganda. This suggests an emphasis on strengthening cyber defence and the possibility of private partnerships or temporary leasing, than acquiring very large resources. The role played by Microsoft and others in helping Ukraine thwart Russian cyber-attacks[16], also reinforces the need for deeper government-technical industry collaboration.

Preliminary lessons have also emerged regarding the use of space from this war, considered the first 'Two-sided space war' (the 1991 Gulf War being the first one-sided space war).[17] The most common employment of space-based assets is for imagery, navigation, weapon guidance, and communication, significantly enhancing the ISR capability as well as improving long-range precision targeting. Notably, Ukraine, devoid of any space warfare capability, has used private space assets like Space-X, providing satellite imagery and communications through Starlink. While setting a model for future use of leased assets (as also suggested for the cyber domain above), it merits noting that, this makes such private assets legitimate military targets, norms of defending which need to be evolved. Relevance has also emerged of smaller expendable satellites, over a few larger satellites. It is estimated by analysts that China possesses better space warfare capabilities than Russia, in terms of the number of military ISR satellites, and commercial sector support. [18] It would, thus, be desirable to enhance space operations capability.

In the field of Electronic Warfare (EW), lessons emerge from Russia's decentralised employment of EW systems at scale and their concomitant fratricidal risks. This calls for a review of scaling and doctrine of employment by the Indian Armed Forces.

The above lessons would be useful for prioritising force structuring and resource allocation for the future battlefield. As important as force planning, if not more, is the need to develop matching doctrine. This is to ensure that the newer weapons and technologies inducted bring about transformational changes in fighting capability and bridging asymmetry.

A prolonged war of this intensity, with inevitable ups and downs, and very high casualty rates, requires strong, inspirational political and military leadership. The two need to act in concert, synergising their efforts as well as exercising moderating influence over each other.

Higher Direction and Military Organisational Aspects

Leadership.

➢ A prolonged war of this intensity, with inevitable ups and downs, and very high casualty rates, requires strong, inspirational political and military leadership. The two need to act in concert, synergising their efforts as well as exercising moderating influence over each other. They need to identify national political aims and translate these into achievable military objectives, with a defined end-state and exit strategy. Having done that, the political leadership needs to exercise strategic patience and resilience, while the higher military leadership requires strategic coherence and flexibility in implementing operational plans.

➢ In the Ukraine war, Zelensky and Putin, both with contrasting personalities and leadership styles, have displayed commendable leadership. Zelensky, displaying personal traits of courage, caring, competence in handling partners and managing international support through his excellent communication skills, has emerged as an exceptional wartime leader. According to a Gallup poll, results published in Oct 2023, a year and a half after the war with Russia, 81.0 per cent of Ukrainians approve of their leader, Zelensky.[19] This is despite the high level of casualties and displacements, as indicated above.

➢ Putin with his characteristic autocratic style, also stands out as a strong and effective leader in crisis. He is perceived to be standing for Russian pride and has galvanised the nation in adversity. Whether through reverence or fear, he also maintains an approval rating of 80.0 per cent, as of Oct 2023.[20]

➢ Russia has had a well-known and strong military leadership in General Sergei Shoigu, the Defence minister and General Valery Gerasimov, the Chief of the General Staff, credited with evolving the much acclaimed 'Gerasimov Doctrine', an approach entailing fusion of military, diplomacy, culture, information, and technological domains to attain a strategic goal. Despite this, the Russians made serious mistakes in planning and conducting operations at the initial stage. To observers, the failure seems a combination of

Putin's miscalculation, disregarding professional military advice; inability of the armed forces' leadership to give a realistic appraisal of Russia's military capability; absence of congruence between political and military objectives; absence of delegation of authority and consequent lack of initiative, even by senior commanders; and overall lack of integration of forces in the conduct of operations.

➢ A lesson for India is of the need to reinforce politico-military interaction in planning strategies for national defence and an honest appraisal of military capabilities. Strong national leadership will have ideas of 'Demonstrated- Nationalism' to address domestic and external constituencies. The onus of responsibility lies with higher military leadership to visualise the likely outcomes and give an honest assessment of the desirability of certain actions and the ability to achieve them. A distinction needs to be made between perceived 'Nationalism' and 'Professional Integrity' to guard against adverse consequences, a hard task in the face of strong leadership.

➢ Russian leaders' performance also has a lesson in resilience, in the ability of political and military leaders to realise their mistakes, correct them and bounce back. Besides operational setbacks, the leadership also handled Prigozhin's armed rebellion deftly, without getting unbalanced. In addition, Putin has calibrated periodic nuclear messaging and has continued to communicate with his people at critical junctures.

The Indian system of differentiating between the 'Combat' and the 'Supporting' arms seems an antithesis to the much-talked multi-domain operations. Such thought intuitively kills the possibility of exploring the need-based primacy of other domains.

Organisational Aspects.

➢ The Ukraine war has also highlighted lessons related to the performance of much-touted combined armed groupings and in conduct of integrated operations. To be effective, these concepts need to be intensely honed and imbibed. Also, there are aspects like employment of conscripts; the long-term impact of integrating civilians in military operations, as done in Ukraine; militarisation of civilian assets; uncontrolled innovation and implementation of emerging technologies on the battlefield; and the use of private military contractors for combat, like the Wagner group. These require separate detailed deliberation. In addition, the Indian system of differentiating between the 'Combat' and the 'Supporting' arms seems an antithesis to the much-talked multi-domain operations. Such thought intuitively kills the possibility of exploring the need-based primacy of other domains.

➢ Overall, the ongoing war in Ukraine has direct relevance to India's security environment. The higher direction and conduct of operations need to be studied in different dimensions, and lessons need to be drawn to plan future defence strategy and doctrine and reform organisational structures.

Conclusion

This paper highlights the need to study the Ukraine conflict for its considerable relevance to India's operational environment, particularly related to the northern adversary. While there are tactical, operational, strategic and lessons related to the employment of future technologies on the battlefield, the paper has confined itself to addressing five significant strategic lessons.

The foremost lesson is of early settlement or at least deft management of disputed frontiers since the more powerful adversary would endeavour to prolong the dispute as a perpetual tool of coercion. The similarities between Ukraine and India have been explained. Further, the current state of helplessness of Ukraine, despite suffering severe

human, material, and economic losses has been highlighted. Its predicament as a proxy, unable to determine its own future has brought out the significance of maintaining strategic autonomy.

The analysis notes that this war has given a realistic perspective of the future battlefield environment, a blend of conventional operations with a fair degree of use of emerging technologies. This would be useful for evolving future doctrinal concepts and related weapon, equipment, and ammunition planning.

Finally, the paper highlights the need for a strong and inspirational political and military leadership, for a higher direction of war. The two need to act in concert, while also exercising moderating influence over each other. It underscores the imperative of senior military leadership rendering honest professional advice, making a clear distinction between 'Perceived Nationalism' and 'Professional Integrity'.

Endnotes

1 Kalha Ranjit Singh. India China Boundary Issues- Quest for Settlement. Chapter 1, Pg3.Pentagon Press – New Delhi. 2014.

2 Ibid. For detailed understanding refer to Chapter 1 – "Boundaries. Borders, Frontiers, and Imperial Inheritance." Pp 1-9.

3 Jack Watling, Oleksandr V Danylyuk and Nick Reynolds. Preliminary Lessons from Russia's Unconventional Operations During the Russo-Ukrainian War, February 2022–February 2023. RUSI. 29 March 2023. https://rusi.org/explore-our-research/publications/special-resources/preliminary-lessons-russias-unconventional-operations-during-russo-ukrainian-war-february-2022. Accessed 29 November 2023.

4 Ghosh Poulomi. No, India not sitting on fence': Jaishankar says Europe has to change mindset. Hindustan Times. June 03, 2022. https://www.hindustantimes.com/india-news/no-india-not-sitting-on-fence-jaishankar-says-europe-has-to-change-mindset-101654245499431.html

5 A global think-tank with local offices in Bratislava, Brussels, Kyiv, Vienna, and Washington D.C. https://www.globsec.org/who-we-are/about-us

6 United Nations Treaty Collection. Memorandum on Security Assurances. https://treaties.un.org/Pages/showDetails.aspx?objid=0800000280401fbb

7 U.S. Security Assistance to Ukraine. Congressional Research Service. October 05, 2023. https://crsreports.congress.gov/product/pdf/IF/IF12040#:~:text=NATO%20and%20EU%20members%20and,in%20security%20assistance%20to%20Ukraine.&text=Prior%20to%20and%20immediately%20following,for%20existing%20security%20assistance%20authorities.

8 Boldizsar Gyori and Krisztina Than. Hungary PM criticizes Ukraine, says no rush to ratify Sweden's NATO bid. Reuters. September 25, 2023. https://www.reuters.com/world/europe/hungary-pm-criticizes-ukraine-says-no-rush-ratify-swedens-nato-bid-2023-09-25/Vikrant Singh. Hungary declares it will block EU's aid to Ukraine, membership talks. WION. December 01, 2023. https://www.wionews.com/world/hungary-declares-it-will-block-eus-aid-to-ukraine-membership-talks-664890

9 Franco Ordoñez. Where the Republican presidential candidates stand on Israel, Ukraine and China. NPR. November 29, 2023. https://www.npr.org/2023/11/29/1215700614/republican-candidates-israel-gaza-hamas-ukraine-russia-china-taiwan#:~:text=An%20aggressive%20critic%20of%20U.S.,Russia%20to%20end%20the%20war.

10 Belfer Russia-Ukraine War Task Force. In the Thick of It - A blog on the U.S.-Russia relationship. Harvard Kennedy School, Belfar Centre for Science and International Affairs. https://www.russiamatters.org/blog/russia-ukraine-war-report-card-nov-28-2023 . Accessed December 02, 2023.

11 Sudhi Ranjan Sen. Indian Army's ammunition stock will exhaust after 10 days of war: CAG report. India Today. July 21, 2017. Accessed 01 December 2023.

12 Korybko Andrew. Book Review: A Warning for India About China's Unprecedented Military Modernisation. The Wire. October 13, 2022. https://thewire.in/books/book-review-india-china-pravin-sawhney-the-last-war

13 Lendon Brad. Three weapons that changed the course of Ukraine's war with Russia. CNN Business. February 25, 2023. https://edition.cnn.com/2023/02/25/europe/ukraine-war-three-key-weapons-intl-hnk/index.html. Accessed December 04, 2023.

14 Ankel Sophia. The 5 deadliest Western-provided weapons Ukraine is using to fight Russia. Business Insider – India. July 29, 2023. https://www.businessinsider.in/international/news/the-5-deadliest-western-provided-weapons-ukraine-is-using-to-fight-russia/articleshow/102233118.cms. Accessed December 04, 2023.

15 Grace B. Mueller, Benjamin Jensen, Brandon Valeriano, Ryan C. Maness, and Jose M. Macias. Cyber Operations during the Russo-Ukrainian War. Centre for Strategic and International Studies. July 13, 2023. https://www.csis.org/analysis/cyber-operations-during-russo-ukrainian-war. Accessed December 05, 2023.

16 Kagubare Ines. How the Russia-Ukraine war has changed cyberspace. The Hill. February 23, 2023. https://thehill.com/policy/cybersecurity/3870138-how-the-russia-ukraine-war-has-changed-cyberspace/. Accessed December 05, 2023.

17 David T. Burbach. Early lessons from the Russia-Ukraine war as a space conflict. Atlantic Council. August 30, 2022. https://www.atlanticcouncil.org/content-series/airpower-after-ukraine/early-lessons-from-the-russia-ukraine-war-as-a-space-conflict/. Accessed December 05, 2023.

18 Ibid.

19 Isabel van Brugen. How Zelensky's Approval Rating Stands in Ukraine. Newsweek. October 17, 2023. https://www.newsweek.com/zelensky-approval-rating-ukraine-war-1835246. Accessed December 06, 2023.

20 Do you approve of the activities of Vladimir Putin as the president (prime minister) of Russia? Statista Research Department. October 27, 2023. https://www.statista.com/statistics/896181/putin-approval-rating-russia/. Accessed December 06, 2023.

Prospects of West Asia

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Abstract

The eruption of the conflict between Israel and Hamas, centered around Gaza has affected the West Asian region in a profound manner. This article attempts to set out the broad developments in the region in 2023, focusing on the role of major actors against the background of global trends.

Introduction

Oct 07 brought the global focus back once again to West Asia with the eruption of the conflict centered around Gaza. With no solution in sight to the fundamental issue of Palestine and the Palestinian peace process moribund, this is a problem that will not go away and has the ability to escalate from time to time, hold global attention and feed a sense of grievance to the Arab street. The conflict in Gaza will have an adverse effect on the region's complex socio-economic and security challenges, impede progress towards reformation and modernisation of both practice of Islam and Arab societies, and lead to further proliferation of radical extremist groups. In such an environment, accidents can occur, leading to the situation spiralling out of control, with global consequences, especially on the economic front.

The ongoing conflict has negatively impacted other developments in the region as well. It has retarded progress in the normalisation of Israel's relations with Arab States especially Saudi Arabia. The tension between Iran and Israel as well as between Iran and the United States (US), has escalated. Consequently, the Iran nuclear issue will continue to remain unresolved and violence by Iran affiliated groups could increase. The Houthis from Yemen have attacked ships in the Red Sea and in response the US has assembled a maritime shipping protection force. While the Hezbollah in Lebanon has been largely quiescent, and there have been sporadic attacks by Iran affiliated militias on US bases in Iraq which have led to counterstrikes by the US. Iraq will remain unsettled due to a divided polity and the activities of rival militias. The process of bridging the divide between Saudi Arabia and Iran may be affected, and consequently the prospects for peace in Yemen and Syria, which had improved, may suffer a setback.

The West Asian region is critical, not only because of its energy resources but also because it sits on the crossroads of world trade flows, and has an enormous emotional connect worldwide as the cradle of the three Abrahamic religions.

The countries in West Asia are in the process of adapting to the fundamental economic and geopolitical changes, leveraging their strengths based on their resource endowments. Brazil, Russia, India, China, and South Africa (BRICS) Summit in Johannesburg invited Saudi Arabia, Iran, Egypt, and the United Arab Emirates (UAE) to join the organisation

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from 01 Jan 2024. Saudi Arabia and the UAE's interest in balancing their historically strong relationship and dependence for security on the US and the West through a growing relationship with Russia and China, and their desire to reposition themselves perhaps informed their interest in joining BRICS. This development also brings together under one roof, the largest producers and consumers of fossil fuels. The UAE hosting of Conference of the Parties 28 is an indicator of the Gulf oil and gas producers' understanding of the effect of climate change politics on their industry.

This article first examines the role of the most influential non-regional powers, the US and China and then addresses developments in each of the key West Asian countries in turn.

The US and China

The world has moved on from its unipolar moment and is witnessing growing competition between the US with China as well as its tension with Russia. This competition had led the US to shift focus away from its relations with West Asia and Saudi Arabia to other regions in the world such as East Europe and the Indo-Pacific. The increasing presence of China in the region and the conflict in Gaza has once again forced the US to bring its attention back. The US is using its large military presence in the area to re-assert its primacy. The US-China competition has perhaps also given impetus to the Israel, India, US, UAE (I2U2) arrangement coming into being, and the recent signing of a memorandum of understanding on the sidelines of the Group of 20 Summit in Sep 2023 to launch the India-Middle East-Europe Economic Corridor (IMEC). These initiatives are geopolitically significant as they link Israel with the Gulf countries and are expected to counter China's Belt and Road Initiative. However, the support provided by the US to Israel for its aggression in Gaza and the attendant loss of life and destruction of property has not endeared the US to West Asian countries and could affect these initiatives.

The world has moved on from its unipolar moment and is witnessing growing competition between the US with China as well as its tension with Russia. This competition had led the US to shift focus away from its relations with West Asia and Saudi Arabia to other regions in the world such as East Europe and the Indo-Pacific.

China's geopolitical and economic role in the region has continued to expand following President Xi's successful visit to the Kingdom of Saudi Arabia (KSA) in Dec 2022, when he had three summits at the bilateral, Arabian Gulf and Pan-Arab levels. In Mar 2023, China hosted talks between Saudi and Iranian national security advisors in Beijing, when the two countries agreed to resume bilateral diplomatic relations, which had been snapped since 2016. Since then, their foreign ministers have met both in Tehran and Riyadh and the two countries have reopened their embassies. In a significant gesture, President Raisi of Iran attended the Organisation of Islamic Cooperation/Arab League Summit held in Jeddah in Nov 2023 to discuss the Gaza conflict.

The Saudi-Iran *détente* had lead to de-escalation of regional tensions and has gave rise to hope for peace and stability in Yemen, Lebanon and Syria. Progress has been made in resolving the Yemeni conflict, with direct talks between the Saudis and the Houthis leading to the ceasefire being consolidated. This has paved the way for the United Nations Secretary General's Special Envoy, Hans Grundberg, to restart a broader political peace process. However, the reaction of Iran and the activities of the Houthis in response to the Gaza conflict could put stress on this process. The conflict in Syria has been contained but has the potential to reignite at any moment. 2023 also witnessed Syria welcomed back into the Arab fold, with Saudi Arabia, Egypt, UAE and the Arab League re-establishing ties with Syria and promising aid to rebuild the country, perhaps with an eye to countering Iranian influence. Again, however, it remains to be seen, how the conflict in Gaza will affect this process. The same is true of the politics of Lebanon, dominated as it is by the Hezbollah.

The Gaza conflict has provided another opening for China to play a part in the region. In Jun 2023, when the Palestine Authority President, Mahmoud Abbas, visited China and met President Xi Jinping, the Chinese made an offer to facilitate a settlement of the Israel-Palestine dispute. The Chinese in the context of the Gaza conflict have been

emphasising the need for a ceasefire, preventing civilian casualties and the conflict from spreading. China reiterated this at the BRICS virtual summit in Nov 2023, and again when it chaired a meeting of the United Nations Security Council during its Presidency of the Council in that same month.

Iran

Iran seems to be overcoming the economic sanctions imposed on it by the US following the latter's withdrawal in 2018 from the Joint Comprehensive Plan of Action (JCPOA). While Iran has registered some economic growth and increases in oil and gas production, investment and exports, it still has a long way to go.

With the re-imposition of US sanctions in 2018, Iran has no longer kept its nuclear development programme on hold and is increasingly noncompliant with the JCPOA. The International Atomic Energy Agency (IAEA) has reported that Iran is expanding its stock of weapon-grade enriched uranium, installing advanced centrifuges, and has condemned the Iranian decision to bar several of its inspectors.

The Biden administration had expressed its readiness to re-engage with Iran over the JCPOA. The talks, which were being held between the other members of the Permanent Five plus Germany and Iran in Vienna, had stalled since Mar 2022. However, in Jun this year, the US and Iran were reported to have reached a deal following talks in Oman.

The two sides followed through on the deal in Sep 2023, exchanging mutually held prisoners in Doha, and the US permitting the unfreezing of some USD 6 bn of Iranian funds held in South Korea and their transfer to Qatari banks, with the amount to be spent by Iran on mutually agreed humanitarian purposes. However, these funds have again been put on hold following the Gaza conflict.

The US relationship with Israel and with the Gulf monarchies and its own domestic compulsions, limit the scope for a US opening to Iran and in negotiations on the Iranian nuclear issue.

Subsequent steps reportedly envisaged Iran's halt of production of highly enriched uranium and the installation of advanced centrifuges as well as cooperation with the IAEA's inspectors in conjunction with waiver of US sanctions and transfer of Iranian funds frozen abroad. Iran's alleged support for regional militant groups as well as for Russia's action in Ukraine was also under discussion. However, while the conflict in Gaza appears to have frozen forward movement for the time being, Iran has been relatively restrained in its reaction.

Hardliners on both sides have expressed criticism of these efforts, sharpened by US election year politics. The US relationship with Israel and with the Gulf monarchies and its own domestic compulsions, limit the scope for a US opening to Iran and in negotiations on the Iranian nuclear issue. The US, Israel and the Sunni monarchies stand-off with Iran gives rise to regional tensions and threats to shipping in the Persian Gulf, the Gulf of Oman and the Gulf of Aden.

This stand-off has also pushed Iran closer to Russia and China and created a Russia, China, Iran axis in the region. Iran has enhanced its defence cooperation with Russia, which includes the supply of Iranian drones to Russia. A sign of this was that President Putin, immediately after his return from his visit to the Gulf in Dec 2023, hosted President Raisi in Moscow to discuss, in particular, the conflict in Gaza. In Mar 2021, Iran entered into a 25 year economic partnership arrangement with China. This reportedly entails Chinese investment and supply of goods to Iran to the tune of USD 400 mn in exchange for supplies of Iranian oil. China is now Iran's main trade partner as well as the largest market for its oil exports.

Iran, which is beset with internal schisms, has been witnessing protests following the death of Mahsa Amini at the hands of the religious police in Sep 2022, over her refusal to wear a head scarf. These were also fuelled by the economic difficulties faced by the populace and their desire to challenge the restrictions placed on their lives by the clerical regime.

Despite months of public protests on the *hijab* (Headscarf) issue, the Iranian regime has only hardened its position and increased the punishment for wearing an 'Inappropriate Dress'. It naturally did not permit Narges Mohammadi from receiving the Nobel prize awarded to her in Oct 2023 for her fight against the oppression of women in Iran and to promote human rights and freedom for all, or Mahsa Amini's family from receiving the Sakharov prize awarded to her by the European Parliament. But the opposition has not gone away, just become more quiescent.

Israel

The Abraham Accords process which has led to the normalisation of ties between Israel and Arab countries; UAE, Bahrain, Sudan and Morocco is also likely to be impacted by the conflict in Gaza. This normalisation, as well as the positive interactions between Saudi Arabia and Israel were transformative developments, allowing Israel to get more integrated into the region. However, the Palestinian question now looms large over it.

In Israel itself, a disparate coalition, inclusive of extreme rightist parties, led by PM Netanyahu, came into power in Dec 2022, and exacerbated the Palestinian problem. In 2023, several Israeli armed incursions took place in the West Bank especially in Jenin and Nablus, with a consequent loss of lives not witnessed for nearly two decades.

Another objective that the new government was in the process of pursuing, was judicial reform designed to limit the powers of the Israeli judiciary. Driven by a right-wing agenda, this effort divided the Israeli people and led to continuous protests by liberal sections as well as opposition from the President, judiciary, sections of the cabinet, armed forces and the business community, as well as the international community.

The brutal Hamas attack on Israel on 07 Oct and the ruthless Israeli action that followed, has changed the strategic paradigm of the region, and brought the Palestinian problem back to centre-stage. Israelis have been gripped by a feeling of vulnerability and rage, which underlines their response.

The brutal Hamas attack on Israel on 07 Oct and the ruthless Israeli action that followed, has changed the strategic paradigm of the region, and brought the Palestinian problem back to centre-stage. Israelis have been gripped by a feeling of vulnerability and rage, which underlines their response. This raises several questions. Can a divided world address such issues? Is the world ready to accept civilian deaths as a consequence of war, as normal? Does this affect how the world views the US and the West's advocacy for a 'Rules-Based Order' and for the protection of human rights? There is division in Israel itself and in the West on the Israeli response. When will Israeli military action in Gaza come to a close? How will Gaza be governed? Is a greater Israel envisaged? The future of PM Netanyahu and President Mohd. Abbas as well as who will follow them remains uncertain.

The conflict in Gaza has also highlighted the contradictions within the region. The Arab world and the Organisation of Islamic Cooperation remain divided and ineffective. The Palestinians themselves are divided and the relations between Fatah (ruling the West Bank) and Hamas (ruling Gaza), have been inimical. Hamas itself is divided between its moderate and radical wings. Will the conflict spread with attendant costs for the global economy? There are a growing number of moderate voices speaking up from Israel itself, and the region. Does this give rise to hope? Given the tortured history of West Asia, it is difficult to hope, but there are glimmers of possibilities of new beginnings.

Egypt and Turkey

Egypt and Turkey have historically played a large role in West Asia. In recent years however, Egypt has been weakened by internal schisms and economic difficulties, and is now dependent on external financial assistance especially from Saudi Arabia and the UAE. This creates a power vacuum in the Arab world and confines Egypt to dealing with its own internal economic and political problems. Increased Israeli intransigence and Egypt's limited role in the current Gaza conflict testifies to this. After his re-election in Dec, given the conflict in Gaza, President Sisi will need to pay greater

attention to the Palestinian issue, otherwise the Muslim Brotherhood and other opponents could leverage the feelings of the 'street' to rise again. Jordan too, given the large Palestinian presence in the Kingdom, will have to go beyond paying lip-service to the Palestinian cause.

Turkey, which had earned ill-will by supporting the Moslem Brotherhood and its affiliates, has been actively working to mend its relations with countries of the region. President Erdogan visited Saudi Arabia, UAE, and Qatar among others in 2023. Turkey developed additional leverage by becoming a broker between Russia and Ukraine, and holding up the North Atlantic Treaty Organisation memberships of Finland and Sweden. Its outreach to the Turkic states in Central Asia makes it an important player there as well. Following his successful re-election bid, and his party the *Adalet ve Kalkınma Partisi* (Justice and Development Party) winning the parliamentary elections, President Erdogan re-assumed the presidency in Jun 2023. This would now allow him to focus on the economic troubles being faced by his country, which may be his main preoccupation at present. However, he too has to address the issues raised by the conflict in Gaza which has evoked strong anti-Israel sentiments in Turkey and the Islamic world. President Erdogan will leverage this to his own and Turkey's advantage.

The Gulf

The Gulf is the more stable, prosperous and the resource rich part of the West Asian region. In recent years, efforts have been made by its rulers towards modernisation and social reforms. The Abraham Accords and the subsequent opening to Israel, and arrangements such as the I2U2 and IMEC had the promise of creating new synergies, but further progress may be affected by the conflict in Gaza. Given their considerable economic strength, Gulf countries have started playing a more active role in the West Asia and North Africa region, Africa, Central Asia and Afghanistan and also provided assistance to Pakistan. They will also be called upon to provide financial support for the eventual re-construction of Gaza. All this is dependent on wealth derived from their oil and gas exports. While energy prices today have recovered, owing in no small measure to the Ukraine crisis, they remain volatile.

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Despite US re-engagement, the Gulf outreach to China continues to strengthen, especially in terms of greater economic cooperation. While Russia's growing role in the region has been handicapped by its preoccupation with Ukraine, it remains an active partner of the Gulf energy producers as part of the Organisation of the Petroleum Exporting Countries+ arrangement and cooperates with them in fixing production quotas to keep prices buoyant. Russia's actions in Ukraine have not elicited negative reactions from the region. The Gaza conflict has provided a new opening to Russia; President Putin visited Saudi Arabia and the UAE in Dec 23 to discuss this, among other issues. The UAE hosts a large expatriate Russian presence and reportedly facilitates Russian trade.

The UAE is playing a more robust regional role commensurate with its economic strength. It is acquiring marine assets around the region. Its other major initiatives include the Abraham Accord with Israel and the I2U2, also regarded as West Asia Quad arrangement. The UAE successfully hosted the 28th Conference of the Parties to the United Nations Framework Convention on Climate Change from Nov 30 to 12 Dec 2023 at Expo City, Dubai. Anticipating its own role in the conference it developed plans to invest significant amounts in developing green energy.

The Ukraine crisis has made Qatar's gas endowment even more important, especially for Europe. Qatar also has huge long term energy contracts with China. Qatar's mediation role in Afghanistan has created US good will and it is now playing a central role in obtaining the release of hostages from Gaza.

Saudi Arabia

The most important country in the Gulf is the Kingdom of Saudi Arabia (KSA), an economic power, and the only Arab country in the G-20 grouping. KSA has embarked on the modernisation of its society and the implementation of projects inspired by its Crown Prince Mohammed bin Salman (MBS)'s 'Vision 2030' plan. The plan has the objective of fostering rapid development, boosting private sector investment, creating new jobs and weaning the country off oil and gas. The Kingdom has also been taking bold new initiatives such as building a futuristic city Neom in the desert, converting the country into a global sporting centre, promoting tourism, and transforming Riyadh into a transportation hub.

The Ukraine conflict and the need to get the Gulf oil producers to increase production, led President Biden to change his negative stance towards KSA and MBS. He visited the Kingdom in Jul 2022. His visit was followed by a visit in 2023 by the US National Security Advisor in May and again in Jul, and by Secretary of State Antony Blinken in Jun. The US is making efforts to improve its ties with Riyadh, especially after the China brokered reconciliation between Saudi-Arabia and Iran. According to US media reports, US objectives during these interactions also included the normalisation of ties between Saudi Arabia and Israel, while Saudi Arabia had sought a settlement of the Israel-Palestine dispute, US security guarantees, supply of state-of-the-art weaponry and civilian nuclear technology. It remains to be seen how the conflict in Gaza will impact this process. Sullivan visited the Kingdom again in Dec 2023 to discuss the conflict and prospects for peace in Gaza.

For peace and stability to be realised and sustained, concerted efforts that cut across the several fault lines, and include every country with a stake in peace will need to be made.

Conclusion

Regional peace and stability depends on the complex relationships between countries both big and small in the region, as well as the external powers active there. These relations are in constant flux and prone to disruption. For peace and stability to be realised and sustained, concerted efforts that cut across the several fault lines, and include every country with a stake in peace will need to be made. India, which has a strategic interest in peace and stability in the region, will also need to contribute to this effort.

Great Power Contestation and India's Strategic Balancing

Shri Jayant Prasad, IFS (Retd)@

Abstract

The global situation is complex, turbulent, and dangerous. There is growing geostrategic and geopolitical polarisation and geo-economic multi-polarity. The three countries likely to have the biggest economies by the middle of the 21st Century are China, India, and the United States (US). The bipolar division of the world was replaced by the unipolar moment, which has passed. Great power contestation is the order of the day. The inexorable rise of China and its assertive diplomatic and military posture have led to the US pivoting towards Asia, which is in consonance with India's Act East policy. The Indo-Pacific area has become an arena where India's strategic balancing is taking place, without India being part of an anti-China alliance.

Introduction: The State of the World Today

Where is the world's international order today? Great power contestation, growing populism, protectionism, disruption of supply chains, increasing inequality among and within nations, the challenge of meeting the Sustainable Development Goals, the debt overhang, and geopolitical tensions and conflicts mar the turbulent international system. At the end of a masterly historical exploration of efforts to evolve a world order, former United States (US) Secretary of State, Henry Kissinger concluded that the world was in a great state of disorder.[1] The French President, Emmanuel Macron, recognised: "The number and types of crises have multiplied in the world today. There is renewed great power rivalry and crises that are simultaneous, complex, and with a vast geographical spread."[2] States have been turning inwards for problems that are unresolvable internally.

The relatively stable unipolar moment in world history after the collapse of the former Soviet Union lasted about two-decades-and-a-half, beginning in 1991. Then followed the collapse of the Liberal International Order (LIO) and the weakening of the institutions that underpinned it, set up by the US after the Second World War. The capacity of the global institutions such as the United Nations, the World Trade Organisation (the successor of the General Agreement on Tariffs and Trade), the International Monetary Fund (IMF), the World Bank, and the regional development banks to overcome global problems is depleted and new institutional mechanisms and groupings such as the Group of 20 (G-20) or Brazil, Russia, India, China, and South Africa have not been able to step up effectively to address the issues on the international agenda today. The LIO was dealt a blow by the US itself, "The world's most powerful state has begun to sabotage the order it created", wrote an American political scientist: "A hostile revisionist power has indeed arrived at the scene, but it sits in the Oval Office, the beating heart of the free world".[3] The LIO has been further compromised following the ignominious US withdrawal from Afghanistan, the Ukraine War, now entering its third year, and the Israeli-Palestinian confrontation.

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Before the end of the 20th Century, the term 'National Interest' had acquired a pejorative connotation. And political commentators had begun to embrace the idea about the demise of the traditional nation state in the age of interdependence and globalisation. Some even postulated the end of history and others the emergence of 'Sub-National', 'Supranational', and 'A-National', actors. In the international arena Developments in the 21st Century have demonstrated the survival of the traditional nation-state and foreign and security policies anchored in the notion of war, especially among the great powers and the larger states. Irredentism, nationalism, and the pursuit of narrow self-interest are leading, inevitably, to serious contestation amongst them.[4]

Among the great powers, the US remains the pre-eminent one. China aspires to be its co-equal and establish its primacy in Asia. Russia, unlike China, does not seek superpower status, but wants to re-establish itself as a great power, especially in its periphery. The US national security documents describe Russia as a strategic threat and China, as a 'Pacing Challenge'. Recent statements by US policy-makers have signposted their belief that between Russia and China, the latter poses a systemic threat in the long term to the ascendancy of the US internationally. The other great European powers, France, the United Kingdom, and Germany are aligned in different intensities with the US in the trans-Atlantic alliance, formalised as the North Atlantic Treaty Organisation (NATO). In recent years, for multiple reasons, China and Russia have established a 'No-Limits' relationship and NATO, in disarray for some time, is working with greater cohesion. There are signs of increasing contention among the great powers.

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The World's Leading Economies

Ultimately, the economic strength of states impacts their military power, even if there is no one-to-one relationship between the two. The reason for the growing disquiet about China in the US establishment is because of China's extraordinary and inexorable rise. Goldman Sachs predicts (2021) that China will overtake US around 2035 with a real Gross Domestic Product (GDP) of USD 57.0 tn, with India at USD 52.5 tn and the US at USD 51.5 tn. The Euro area will have a GDP of 30.3 tn and Japan of 7.5 tn. "We expect that the weight of global GDP will shift even more towards Asia over the next 30 years", the Goldman Sachs economist reported.[5]

The Pricewaterhouse Coopers projections for GDP at Market Exchange Rate and Purchasing Power Parities (PPP) for 2016, 2030, and 2050 with respect to the three top economies in the world, China, India, and the US are graphically represented on the next page in Figure 1 and 2.[6]

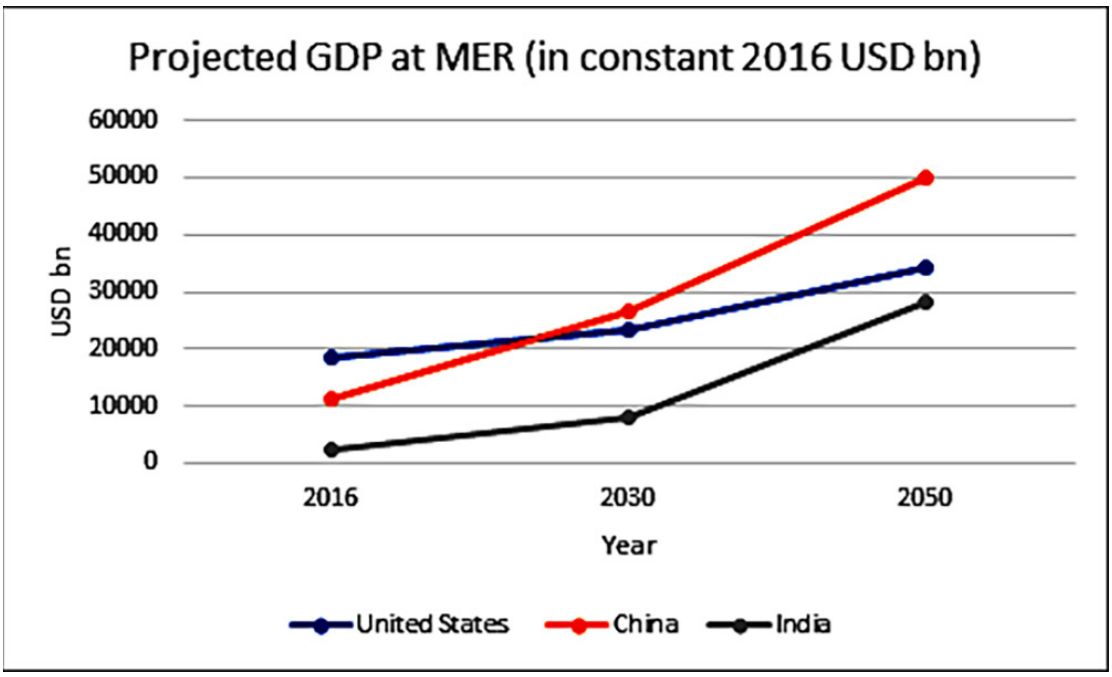

Figure 1

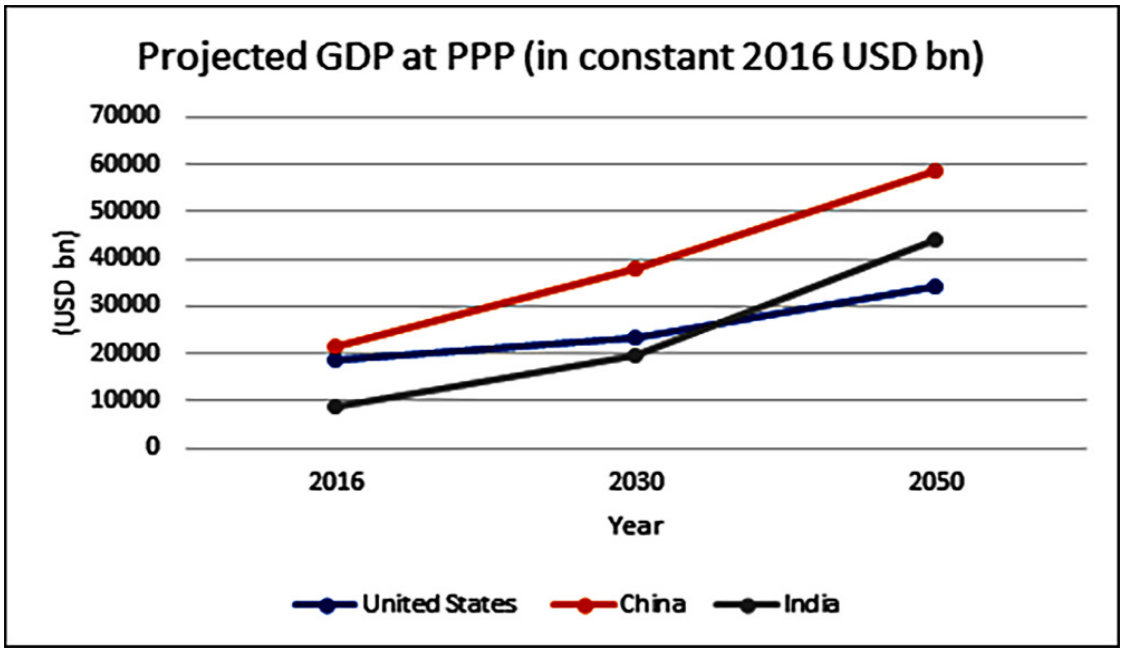

Figure 2

Organisation for Economic Cooperation and Development has long-term baseline projections up to 2060 for China, India, and the US (GDP in US Dollars, at 2015 PPP).[7] Refer Figure 3 on the next page.

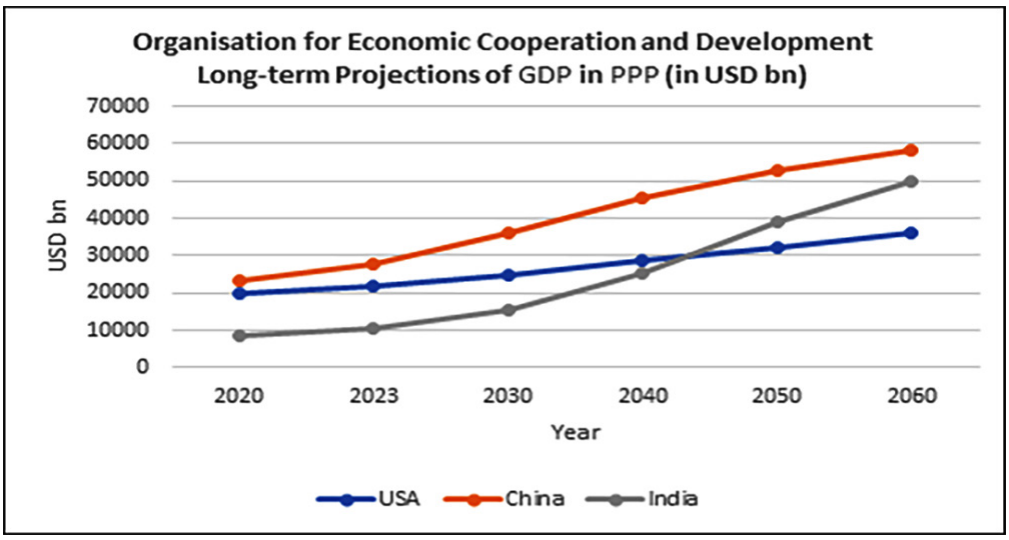

Figure 3

In the early 2000s, conventional wisdom was that while the gap between China and the US was closing, so was it between India and China. Now, China has almost caught up with the US and, even if China's growth is slowing and that of India is increasing, a huge chasm has opened between India and China. There is disequilibrium in the global growth model based on the three leading states. It is like a three-legged stool, with each leg having different lengths, leading to potential instability. It is, nevertheless, the triangular relations among China, India, and the US that will have the most telling impact on the future of global geopolitics.

Although economists predict that India is expected to grow until 2050 at a faster pace than any other G-20 country, China included, the Indian GDP will be less than that of China and the US in MER terms because of the modest size of its current economy. The gap between the Indian and Chinese GDP is illustrated by the following graph (Figure 4):[8]

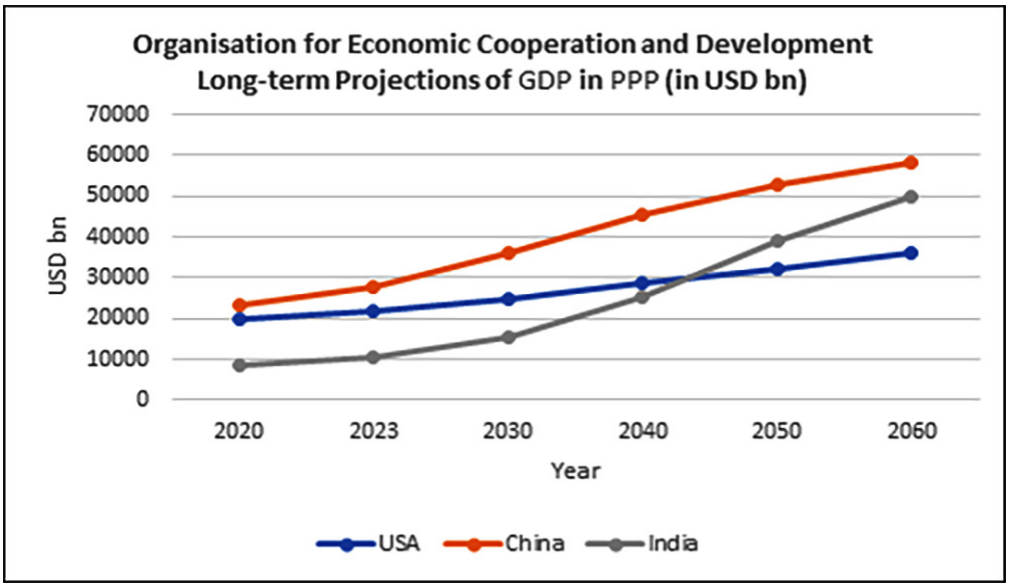

Figure 4

India's GDP as a percentage of China's GDP has been shrinking. In 1990, it was 82.35 per cent and, by 2020, had fallen to 17.98 per cent. The IMF predicts that between 2023 and 2028, the Indian per capita income will rise from USD 2,601 to USD 3,720, and the Chinese per capita income will increase from USD 13,021 to USD 19,622. The gap between India and China's GDP also grows bigger, from USD 15.637 tn to USD 21.917 tn.[9] Measured in PPP terms, India's performance appears better, especially in the long term. A 2018 Organisation for Economic Cooperation and Development estimate of long-term real GDP forecast, in 2060, China would have a GDP of USD 62.140 tn, compared to India's at USD 42.203 tn (the estimate for the US is USD 36.527 tn).[10]

China-US Relations

Since 1972, until the presidency of Donald Trump, the US has wooed China and built it up, first, to weaken the former Soviet Union, and later, to democratise China and make it a stakeholder in solving global problems. Given the consistent US policy focused on cultivating China and China's extraordinary rise, its leaders promoted the idea of a 'new type of great power relations'. It was in May 2010 at the second Sino-US strategic and economic dialogue that China's State Councillor Dai Bingguo suggested that the two countries initiate an era of globalisation with a new type of great power relations of mutual respect and harmonious coexistence. In his public remarks, he pleaded for 'Cultivating and deepening mutual strategic trust' as very important for the development of China-US relations 'In the new era'.[11] Xi Jinping, then vice-president of China, during his February 2012 visit to the US repeated Dai Bingguo's message. Soon thereafter, at the 4th Sino-US Strategic and Economic Dialogue, President Hu Jintao called for developing a new type of great power relations to advance 'Mutually beneficial, win-win cooperation'.[12]

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When President Obama called with the newly appointed Chinese President Xi Jinping in Mar 2013, he committed to 'Increasing practical cooperation' to address Asia's and the world's most pressing economic and security challenges.[13] In the 'Shirt sleeve' summit at the Sunnylands estate in California in Jun 2013, Xi further elaborated to Obama the idea of a new type of great power relations.[14] Following President Obama's visit to Beijing in Nov 2014, the Chinese were hopeful that Obama was committed to this idea. Contrary to the Chinese expectations, however, the US administration, without rejecting it, stepped away.[15]

China's original objective was to create a Group of 2, a duopoly between China and the US in managing global affairs, where both countries became co-equals. The Chinese have since adjusted their strategic goals in terms of the global order. They accept that instead of dividing the world in terms of their responsibilities with China taking over Asian security and the US still responsible for security and the rest of the world (China as the regional hegemon and the US as a global hegemon), there will be strategic competition between the two. China is seeking not an overthrow of US dominance but to improve its relative position by being an 'Order Transformer' and not an order disruptor.[16] Given the growing trend of US isolationism, some analysts in Asia fear that China might revive the G-2 idea under a future US administration.

The abandonment of Deng Xiaoping's dictum 'Hide your strength and bide your time' and an expansive redefinition of its 'Core Interests' have together led China to buttress its military power, creating a contradiction between China's military assertiveness and its quest for rebalancing its economy.[17] China's increased military investments have provoked individual states in its neighbourhood, including India, to undertake countervailing measures to augment their security, by leaning on other great powers to help them with money and materials, or by forging closer ties with them as an insurance, in effect, a policy of 'Balancing'. China's recent behaviour has accomplished the unimaginable, a growing rapprochement between Japan and South Korea, and between Vietnam and the US. Stung by China's inability to effectively address the security threat it faces from the Democratic People's Republic of Korea, South Korea has deployed the US Terminal High Altitude Area Defence missile defence system on its territory, despite Chinese protests.

A stable Asian security order is the need for the day, one that would guarantee the cooperative management of its commons, including its oceans and nurturing mutually unfettered relations, anchored in an Asian Economic Union. An Asian order cannot be exclusivist, and must be open, inclusive, plural, transparent, and flexibly structured, and based on predictable behaviour. This is not an impossible task, but it is difficult to foresee at this juncture. That realisation has led to India's strategic rebalancing.

The Strategic Vision Document agreed to during President Obama's visit to India in Jan 2015[18], is generally regarded as a forthright commitment on the part of India and the US to work together on a range of security issues in the Indo-Pacific theatre, including the management of the rise of China. The Vision Document refers to accelerating infrastructure connectivity between South, Southeast, and Central Asia; ensuring freedom of navigation, especially in the South China Sea; avoiding the use or threat of force in dispute settlement; and strengthening the East Asia Summit dialogue process. Votaries of closer Indo-Chinese ties view the Vision Document as undermining India's relations with China, which believes the US is seeking to enlist India to contain its rise.

The US pivoted or 'Rebalanced' to Asia during the term of President Obama. India extended its Look East policy to Act East about the same time.[19] The US Pacific Command (PACOM) changed to the US Indo-Pacific Command in 2018. Indians were happy to hear the US Secretary of Defence quote Admiral Harris's favourite description of the area of operations of the Command "Between Hollywood and Bollywood", while he announced the renaming of PACOM.[20] The words 'Indo-Pacific' began to appear frequently in US pronouncements after Donald Trump became President, including in the US National Security Strategy that appeared after his assumption of office.[21]

The Indo-Pacific

The geographical span of the Indo-Pacific is depicted below (Figure 5):

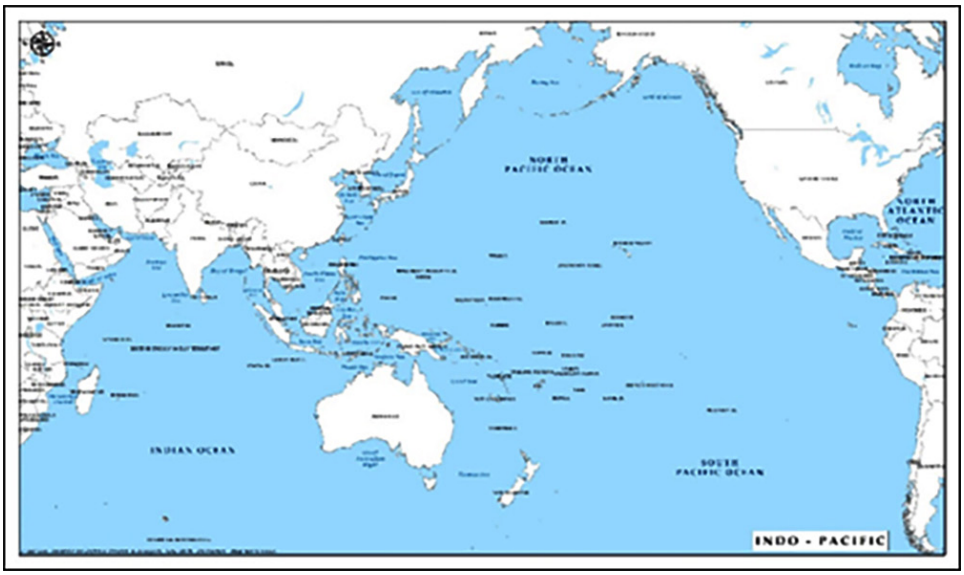

Figure 5

In explaining India's approach to the Indo-Pacific, Prime Minister Modi, at the Shangri-La Dialogue in Singapore in Jun 2018, was especially careful in underlining that the Indo-Pacific was a positive construct and not 'Directed against any country'.[22] When he said that "India does not see the Indo-Pacific region as a strategy or a club of limited members", he was indirectly inviting interested countries, including China and Russia, to be part of the Indo-Pacific. He added, that like India, China is a most populous country and among the fastest growing major economies, that the two countries have expanding trade and cooperation and a multi-layered relationship as they display 'Maturity and wisdom in managing issues and ensuring a peaceful border,' and that 'Strong and stable relations between our two nations are

an important factor for global peace and progress'. [23] Notwithstanding a nuanced articulation on India's part, China considers the Indo-Pacific generally and the Quadrilateral Security Initiative (Quad) [24] specifically as a plan to isolate China and a precursor to an Asian NATO.[25] Russia shares this view.

There is an essential similarity of approach between India and the US in the Indo-Pacific region. They would both like the Asian security architecture to rest on the bedrock of a free, open, and inclusive architecture, based on international law. Like the US, India too is in a permanent state of competition with China, but neither desires confrontation with China. Both are seeking a modus vivendi with China that is practical and workable. The critical difference between the two countries, is that India is an immediate neighbour of China, which has a history of conflict and disputed borders. The US, given its Asian allies, friends, and military deployments, while a de-facto Asian power, is geographically farther away; there is a big and deep ocean that separates China and the US, an advantage that India does not enjoy. The US has, arguably, the luxury of taking a more frontal position vis-à-vis China, but not India. While India, like the US, seeks to avoid conflict with China, such an objective cannot be pursued at any cost. India is hoping that the Chinese leaders recognise the need for cooperative behaviour in their own self-interest but the Chinese obduracy in restoring status-quo-anté in eastern Ladakh to what prevailed in Apr 2020 is coming in the way of restoring trust and normalcy.

Atavistic and primordial instincts seem to have overtaken the notion of common good and interests, both globally and in the Indo-Pacific region, which seem beset with disorder and strife. Yet, the global disarray accompanied by geopolitical and geostrategic polarisation and geo-economic polycentrism also offers an opportunity. The medium to long-term interests of the great powers actually converge, including those of China, Russia, the US, India, Japan, and the European Union. Their common interests on major global and regional issues, including preserving and promoting global and regional public goods, and combating environmental degradation, possible global pandemics, terrorism, narcotics trafficking, and proliferation, necessitate mutual cooperation. The pervading sense of crisis should, ideally, impel creative thinking instead of fear or paralysis. States must work together in an equitable compact. The need is to either reinvent or rebuild an international order based on a multilateral ethic and accepted universal values and norms of behaviour. It calls for states to cultivate the habit of cooperation and take mutually supportive actions.

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Conclusion: Trends and portends

India wishes for continued engagement with China, much as the US does. Economic interdependence should raise the threshold beyond which clashes of political interests and confrontation could become conflicts, but it cannot prevent them altogether. States will increasingly fall back on strategic balancing for their security. India will, therefore, naturally seek assurance in deepening its ties with the US, Japan, Australia, Vietnam, South Korea, and with Association of Southeast Asian Nations states, particularly Vietnam, the Philippines, and Indonesia, who have all similar concerns as India concerning China. India's balancing will not make it part of an anti-China alliance. India's inheritance and instincts militate against this option. India will continue to pursue a policy of seeking strategic autonomy, which does not preclude partnerships and coalitions based on specific objectives.

Unless China back-tracks on establishing its primacy in Asia and the world, and embraces the idea of regional and global multi-polarity instead of accepting it only rhetorically, balancing mechanisms, such as the Quad, without turning into alliances, will inevitably develop sharper coordinated responses. The fluidity that confronts India in the Indo-Pacific region and globally will require resilience, flexibility, and dextrous handling. A rising China, seeking hegemony instead of cooperation based on mutual benefit, will be a challenge for India. The moot questions are – can China continue to rise, and peacefully?

Endnotes

1 Henry Kissinger, *World Order: Reflections on the Character of Nations and the Course of History,* (London: Allen Lane, 2014), pp. 361-77.

2 Speech at the French naval base, Toulon, on board BPC Dixmunde, January 19, 2018, https://www.pscp.tv/EmmanuelMacron/1MnxngpNkyLKO (accessed January 20, 2024).

3 See G. John Ikenberry, "The Plot Against American Foreign Policy: Can the Liberal Order Survive?" *Foreign Affairs*, May/June 2017.

4 Rik Coolaest, "The Transformation of Diplomacy at the Threshold of the New Millennium," *Diplomacy, Vol. III*, ed. Christer Jonsson and Richard Langhorne, London, 2004, pp. 8-9.

5 https://www.goldmansachs.com/intelligence/pages/the-global-economy-in-2075-growth-slows-as-asia-rises.html and https://www.goldmansachs.com/intelligence/pages/how-india-could-rise-to-the-worlds-second-biggest-economy.html (both accessed January 14, 2023).

6 The Long View: How will the global economic order change by 2050? Pricewaterhouse Coopers, February 2017, https://www.pwc.com/gx/en/world-2050/assets/pwc-the-world-in-2050-full-report-feb-2017.pdf (accessed January 14, 2023).

7 OECD Stats, Economic Outlook No 114 - December 2023, https://stats.oecd.org/viewhtml.aspx?datasetcode=EO114_LTB&lang=en (accessed January 14, 2024).

8 International Monetary Fund, *World Economic Outlook Database*, April 2023, https://www.imf.org/en/Publications/WEO/weo-database/2023/April (accessed September 17, 2023).

9 Ibid.

10 https://data.oecd.org/gdp/gdp-long-term-forecast.htm (accessed September 7, 2023). The OECD forecast uses a combination of model-based analyses and expert judgement and is measured in USD at 2010 Purchasing Power Parities. We have to make wide allowance for changes in the economic climate in individual countries and the world economy since the estimates were made.

11 Remarks by State Councilor, Dai Bingguo, at the Joint Press Conference of the Second Round of the China-U.S. Strategic and Economic Dialogues, May 25, 2010, http://tl.china-embassy.gov.cn/eng/xwdt/201006/t20100601_1116817.htm (accessed January 15, 2024).

12 China's Search for a "New Type of Great Power Relationship," by Michael S. Chase, *China Brief*, The Jamestown Foundation, Volume: 12 Issue: 17, September 7, 2012, https://jamestown.org/program/chinas-search-for-a-new-type-of-great-power-relationship/ (accessed January 15, 2024).

13 Readout of the U.S. President's Phone Call with Chinese President Xi Jinping, The White House, https://obamawhitehouse.archives.gov/the-press-office/2013/03/14/readout-president-s-phone-call-chinese-president-xi-jinping (accessed January 15, 2024).

14 Ren Xiao, "Modelling a 'New Type of Great Power Relations': A Chinese Viewpoint", *The Asan Forum*, October 4, 2013, https://theasanforum.org/modeling-a-new-type-of-great-power-relations-a-chinese-viewpoint/ (accessed May 12, 2022).

15 China may have temporarily jumped to the wrong conclusion because of the support China's idea had from influential members of the U. S. Administration such as James Steinberg, U.S. deputy secretary of state. Steinberg had maintained that given China's growing capabilities and influence, the United States had a compelling need to work with China. Some of the common areas on the international agenda identified were cooperation on economic partnership, climate change, North Korean missile and nuclear proliferation, Iran's nuclear programme, Afghanistan, anti-piracy efforts, terrorism, and non-proliferation. Steinbeck had said in a policy speech soon after China had enunciated a new approach toward the United States in 2009 that Washington D.C. and Beijing shared the "vision of a new geopolitics of win-win solutions rather than zero-sum rivalries." See James Steinberg, "Administration's Vision of The U.S.-China Relationship," September 24, 2009, The Center for New American Security, September 24, 2009, https://china.usc.edu/james-steinberg-obama-administrations-vision-us-china-relationship-september-24-2009 (accessed January 15, 2024).

16 Wu Xinbo, "the China challenge: competitor or order transformer", *The Washington Quarterly*, Fall 2020, Volume 43, Number 3, p. 99.

17 Edward N. Luttwak, *The Rise of China versus the Logic of Strategy* (Harvard University Press, Cambridge, MA, 2012), p. 257. See also p. 6, wherein Luttwak suggests that China's "uninterrupted and concurrent rise in economic capacity, military strength, and global influence" will ultimately lead to "the slowing down or even partial reversal of China's rise."

18 For the text of the Joint Strategic Vision, see https://obamawhitehouse.archives.gov/the-press-office/2015/01/25/us-india-joint-strategic-vision-asia-pacific-and-indian-ocean-region (accessed June 16, 2024). The Joint Strategic Vision speaks of Asia-Pacific and not the Indo-Pacific, a term already popular in Australian and American writings. The two terms are not interchangeable. For the Japanese, who have now fully embraced the term, Asia-Pacific, for instance, did not include the Indian subcontinent until the early years of the twenty-first century. The conventional wisdom among senior personnel in the Ministry of External Affairs, Government of India, at the time was that the term Indo-Pacific was more of an un-Indian origin and combined a nation with an ocean. Now there is a greater acceptance of the term. When Prime Minister Shinzo Abe spoke in the Indian Parliament first about 'the confluence of the two seas', during his visit to New Delhi in August 2007, he did not refer to the Indian landmass. Now, the term Indo-Pacific is viewed in India more as speaking of the Indian and the Pacific Oceans. Prime Minister Abe said: "The Pacific and the Indian Oceans are now bringing about a dynamic coupling as seas of freedom and of prosperity. A 'broader Asia' that broke away geographical boundaries is now beginning to take on a distinct form. Our two countries have the ability -- and the responsibility -- to ensure that it broadens yet further and to nurture and enrich these seas to become seas of clearest transparence." See http://www.mofa.go.jp/region/asia-paci/pmv0708/speech-2.html (accessed March 11, 2024).

19 Its unveiling came during the Minister of External Affairs, Sushma Swaraj's visit to Vietnam in August 2014.

20 https://www.defense.gov/News/Transcripts/Transcript-View/Article/1535689/remarks-at-us-indo-pacific-command-change-of-command-ceremony/ (accessed August 17, 2024).

21 https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf (accessed August 20, 2024).

22 Ibid. It is interesting that at least one national Indian newspaper reported a few days later that India planned to talk about the Indo-Pacific with both Russia and China. See *The Hindustan Times,* "India plans Indo-Pacific talks with China, Russia," July 5, 2018, p. 1.

23 http://mea.gov.in/Speeches-Statements.htm?dtl/29943/Prime_Ministers_Keynote_Address_ at_Shangri_La_Dialogue_June_01_2018 (accessed June 7, 2018).

24 The Quad is an official consultative mechanism, first established in 2007 and revived in 2017, constituted by Australia, Japan, India, and the United States. It may be recalled that in 2007, Australia had decided to keep away from Malabar either at an American or Chinese behest, and for Malabar 2018, Australia was not invited by India.

25 Wang Yi commented repeatedly to the Indo-Pacific and Quad during his five-nation tour in southeast Asia in 2000. See https://www.scmp.com/week-asia/politics/article/3105299/indo-pacific-nato-chinas-wang-yi-slams-us-led-quad-underlying (accessed January 20, 2024).

Nuclear Risk and Global Security

Dr Roshan Khanijo [@]

Abstract

The global nuclear risks have multiplied and the current architecture is inadequate to address this challenge. The threat matrix varies from nuclear terrorism, to issues of nuclear safety and security and the emergence of dual use disruptive technologies. Nuclear weapon states are modernising their nuclear forces and inducting lethal autonomous weapon systems. The nuclear thresholds are being lowered by the induction of tactical nuclear weapons or submarine launched low yield nuclear weapons. Cyber weapons can adversely impact the command-and-control systems, especially due to conventional and nuclear entanglements. Thus, it is essential for nations to understand the mutual risks, to agree on formal bilateral and multilateral setups, to negotiate and navigate these threat matrixes.

"The prospect of nuclear conflict, once unthinkable, is now back within the realm of possibility."

–Secretary-General António Guterres

Introduction

The global nuclear security architecture has been frequently challenged in the past, but the risks now are unprecedented, and the possibility of nuclear conflict, is more tangible in the current geo-strategic milieu, than ever before. The drivers for conflict are diverse, comprising of old and new problems and the global institutes may not be able to address these challenges holistically. The concerns have been highlighted by the Nuclear Security Index which states that "for the first time in 2023, finds that nuclear security conditions are regressing in a dozen countries especially, the areas with weapons-usable nuclear materials and nuclear facilities".[1] Further, the Emergence of Disruptive Technologies (EDT) has the potential to challenge the second-strike retaliatory capabilities of states, impacting the nuclear stability, as also nuclear terrorism continues unabated. Also, there are possibilities for countries to move away from predictable escalatory pathways; instead, crisis escalation may follow a 'Wormhole' dynamic, whereby, competing states could jump between sub-conventional and strategic levels of conflict in accelerated, non-linear ways,[2] which may have global consequences. Hence, this article tries to discusses some of the challenges. It gives a global scan, the threat matrix, the nuclear trends, impact of technology and concludes with some recommendations.

Global Environment and Threat Matrix

The global environment is marred with conflicts that have the potential to escalate and challenge the nuclear thresholds. Whether it is the Russia-Ukraine conflict, now in its second year, or the Israel-Hamas fight, or the case of North Korea, which is persistent in its nuclear missile tests, (As between 2012 and 2023, North Korea has conducted more than 214

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missiles and debuted a variety of missiles with increasing ranges)[3] or the lowering of threshold by Pakistan through the development of Tactical Nuclear Weapons (TNWs) and the development of zero range weapons, the possibility of use of nuclear weapons by states and Non-State Actors (NSAs) continues to grow.

If, on one hand, there is a lowering of the nuclear threshold by Russia, as also a threat to nuclear power plants in conflict zones, then on the other hand economic instability increases the vulnerabilities, as risk of sabotage, theft and illicit trafficking of nuclear and radiological material by NSAs increases, resulting in nuclear terrorism becoming a reality. This is further precipitated by the increase in the nuclear fissile stockpile. In spite of having international treaties to control the fissile material, the current global inventory of highly enriched uranium is estimated to be about 1,335 ± 125 tons, with most of it belonging to Russia and the United States (US) and the global stockpile of plutonium for weapons as of 2021 is estimated to be 140 ± 10 tons, with an additional almost 90 tons declared as excess for weapon purposes by the US and Russia.[4] Similarly, as more countries are planning to use nuclear energy to generate power the nuclear power plants have diversified and their numbers have increased, with most of these being located in Asia. Today, there are about 440 nuclear power reactors operating in 32 countries plus Taiwan, and about 60 reactors are under construction across the world, with further 110 being planned.[5] Not to mention the construction of small modular reactors. All this will increase the nuclear safety and security concerns.

Most of the Nuclear Weapon States (NWS) are undergoing a process of modernisation of nuclear assets, which is more pronounced in the nuclear inventories of US, Russia and China where new platforms and upgradation of assets to newer generation, is creating competition. Whether it will be US' B-21 'Raider' the most advanced strike aircraft, with long-range precision strike capabilities,[6] or the Russian nuclear-powered submarines carrying Poseidon nuclear-capable super-torpedoes[7] or the Chinese new intermediate-range ballistic missile equipped with a hypersonic glide vehicle, designated the DF-27.[8] These are all just the tip of the iceberg, and many such transformations will impact nuclear deterrence, thus, pushing countries to spend more on defence upgradation. The collateral damage is also visible in the abandonment/suspension of arms control and disarmament initiative. A Classic example being, the Russians suspending its participation in the New Strategic Arms Reduction Treaty.[9]

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Further, the EDT's impact on the Capabilities, Communications, Credibility (3C's) may also accelerate changes in military doctrines, declaratory policies, and nuclear postures.[10] On one hand, the EDT can be used to enhance peace, but on the other hand, it will have an adverse impact in transforming conflicts. For example, due to disruptive nature of lethal autonomous weapon systems, they have been at the forefront of international discussions. The advancements in Artificial Intelligence (AI) and automation and the unstructured environment in which they are developing is leading to operational, ethical, and legal challenges. The human loop in the development of autonomous weapon system and the accountability for violation are issues which needs multilateral discussions.

Thus, the geopolitical rivalry, with the resurgence of the cold war mentality of splitting the world into power blocks, has weakened the role of international organisations like the United Nations (UN). Further, resource crunch and power politics are adversely impacting the working of institutions like the International Atomic Energy Agency (IAEA), where obtaining funds for nuclear security initiatives has seen a decline since the last Nuclear Security Summit held in 2016. Hence, as the threat matrix has multiplied, so have the global security challenges.

Nuclear Security

Since the Russian-Ukraine war, there have been concerns regarding possible military attack to nuclear power plants. The classic case being Zaporizhzhia nuclear power plant, Europe's largest, with six reactors, which continues to remain vulnerable to attack or military activity. Offsite power cuts may hamper the cooling system leading to radiological

contamination impacting civilian population in Ukraine and beyond its borders. As in 2024, IAEA Director, Rafael Mariano Grossi, has stated that "The extremely vulnerable off-site power situation continues to pose significant safety and security challenges for this major nuclear facility. Even though the main power line remains in operation, the lack of back-up power demonstrates that the nuclear safety and security situation at the plant remains precarious".[11] Thus, the threat of use of nuclear weapons against a non-NWS has re-opened the debate about the legality of the threat or use of nuclear weapons, a debate in the past, that led to somewhat inconclusive results by the International Court of Justice and the Opinion of 1996 on the 'Legality of the threat or use of nuclear weapons'.[12] The inadequacies in the legal framework thus, make humans vulnerable to nuclear catastrophes.

Nuclear Terrorism

According to the 2005, UN International Convention for the Suppression of Acts of Nuclear Terrorism, nuclear terrorism is an offence committed if a person unlawfully and intentionally uses in any way radioactive material, with the intent to cause death or serious bodily injury; or with the intent to cause substantial damage to property or to the environment; or with the intent to compel a natural or legal person, an international organisation or a state to do or refrain from doing an act.[13]The threat is increasing, basically due to two factors, firstly, certain nations like Pakistan, are lowering the thresholds by inducting TNWs and prophesying zero range weapons. Considering this region is the most volatile due to the presence of terrorist organisations residing in the Af-Pak region, the chances of TNWs falling into the hands of NSAs, as well as accidental use, increase. Furthermore, there is an increase in fissile material for both civilian and military use, as mentioned earlier, and the inventory of radiological material has increased due to its enhanced use in the industry, leading to the threat of 'Dirty Bombs'. Secondly, (as mentioned earlier), the number of nuclear power plants, especially in Asia, has increased, leading to concerns about formulating appropriate nuclear safety and security standards. Otherwise, the insider threat, as well as cyber-attacks to acquire access to and damage plant safety, increases. Often in many states, an independent regulatory mechanism to assess the safety and security of the power plants has not been instituted, and as a result, the threat is enhanced.

Pakistan already has TNW of 60 kms range, however, further decreasing the range to zero meters requires new weapon systems resorting to nuclear artillery or nuclear land mines. This will definitely lower the thresholds further, as also enhance the vulnerability to theft, increase accidental use, considering Pakistan has number of terrorist organisations operating inside the country.

Lowering of Nuclear Thresholds

The 'First Use' doctrine of NWS is destabilising. Further, nations are continuing with missile testing, resulting in the development of newer weapon systems, whether it is TNWs or submarine launched low yield nuclear weapons or dual use Autonomous systems. All these are lowering the thresholds and adversely impacting the nuclear stability. The nuclear trajectory is of particular global concern, notably for two nations: North Korea and Pakistan. North Korea has tested a nuclear explosive device six times since 2006 and tested over 80 ballistic missile launches since 2022.[14] The 2017 Defence Intelligence Agency assessment asserted that North Korea had achieved the level of miniaturisation required to fit a nuclear device on weapons ranging from Short-Range Ballistic Missiles to Intercontinental Ballistic Missiles (ICBM).[15] Further, in 2021, Kim Jong-un announced several key strategic goals which also included developing and introducing hypersonic gliding flight warheads and an underwater-launch nuclear strategic weapon.[16] This diversification is creating nuclear instability and increasing the nuclear risks in the Korean Peninsula. On the other hand, Pakistan's Lt Gen Khalid Kidwai (Retd), an advisor to Pakistan's National Command Authority, in his speech, in May 2023 at the Institute of Strategic Studies Islamabad (ISSI) on nuclear posture of Pakistan, stated that "Vertically, the nuclear spectrum encapsulates adequate range coverage from zero m to 2,750 kms, as well as nuclear weapons destructive yields at three tiers: strategic, operational, and tactical".[17] Pakistan already has TNW of 60 kms range, however, further decreasing the range to zero meters requires new weapon systems resorting to nuclear artillery or nuclear land mines. This will

definitely lower the thresholds further, as also enhance the vulnerability to theft, increase accidental use, considering Pakistan has number of terrorist organisations operating inside the country, thus making the nuclear environment in South Asia more unstable.

Proliferation of Missiles

If TNWs are lowering the threshold, then similarly, ballistic and cruise missiles have also seen quantitative and qualitative improvement which has been used as tools of coercion. Between 2002 and 2022, the number of different types of ballistic missiles that are in service across the globe has almost doubled from 42 to 83.[18] A ballistic missile with Multiple Independent Re-entry Vehicles (MIRVs) held open the possibility of a damage-limiting first strike against an adversary's strategic nuclear forces, thereby exacerbating both arms-race and crisis instability.[19] Further, countries have been constantly working to build on diverse parameters suiting their environment, extending from range, speed, precision and survivability to readiness. Intercontinental Ballistic Missile operators have developed missiles with MIRVs, and at the other end of the spectrum, an estimated 27 states and two NSAs, Ansarullah and Hizbullah, operate conventional Close Range Ballistic Missiles, Short Range Ballistic Missile or Medium Range Ballistic Missile, with the number of operators likely to further increase within the next decade, given planned procurements.[20] Efficiency has further improved with missiles using solid fuel instead of liquid. Speed is a fundamental component of military activity, encapsulated by John Boyd's much cited Observe–Orient–Decide–Act loop.[21] Considering the success of missions, depending on the speed of targeting, it has been a major motivator for nations in developing cruise missiles ranging from subsonic to supersonic and now to hypersonic cruise missiles. Globally, more countries are now developing missile technologies and this is eroding global arms control regimes.

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Emerging Technologies

Emerging technologies will revolutionise the nature of warfighting and major powers will exploit technologies like AI and automation, cyber, hypersonic etc to transform the military; as a result, some of the weapons and strategies of the past will become obsolete. The objective will be 'Disruptive', impacting all existing aspects of military planning and organisation, and on the conduct of war itself, basically, 'To compete, deter, and if necessary, fight and win' on future battlefields.[22] The Chief technologies are:

- **AI and Automation.** Broadly defined as 'An artificial system designed to act rationally, including an intelligent software agent or embodied robot that achieves goals using perception, planning, reasoning, learning, communicating, decision-making, and acting'[23] The development of algorithms can help in developing not only new unmanned platforms but also 'Swarm Technology' which will aid in communicating with number of platforms, thus linking them together, for lethal destruction. AI software integrated with combat platforms such as ships, tanks, planes, and others, to autonomously identify, track, and engage enemy targets,[24] as well as to determine operational parameters like geographical space and target types, will transform warfare. The biggest advantage is their financial viability, and their lethality to damage large targets. This is forcing nations to develop a fleet of unmanned vehicles. The American 'Distributed Maritime Operations', strategy is already combining crewed ships with unmanned ships for both offensive and defensive operations. The dangers of these lethal weapons, if used in an unguarded environment, where human decision making is kept 'Out of the loop' and more battlefield decisions are entrusted with these unmanned platforms, may result in legal and moral issues with a high possibility of countries not abiding by international humanitarian law, as spelled out in the Hague Conventions of 1899 and 1907 and the Geneva Convention.

➢ **Hypersonic Technology.** Both hypersonic glide vehicles and hypersonic cruise missiles are game changers in modern warfare, due to their inherent advantages of speed and manoeuvrability over traditional missile systems. All three major powers are developing these, albeit for different goals. The US objective is to use these platforms for non-nuclear conflicts regionally, either in Europe against the Russians or in the South China Sea against the Chinese, whereas Russia and China are developing dual use platforms to negate American missile defence capabilities and for anti-access/area denial systems in its borders with NATO and in South China Sea respectively. Russian President Vladimir Putin stated that the objective of developing the nuclear-armed Avangard HGV is to neutralise the threats posed by the deployment of the US global missile defence system.[25] There is a competition between these three countries to develop and master such technologies which are triggering an endless spiral of 'action-reaction cycle' leading to strategic instability.

➢ **Cyber.** Cyberespionage and offensive cyber operations or cyber weapons intended to disable an enemy's Command, Control, and Communications (C^3) systems, as well as NuclearC^3, (due to conventional and nuclear weapons 'entanglement') will remain a major concern for strategic stability. This is simply because any conflict will have countries using cyber weapons as potent tools to be used either before or during the onset of conflict. Considering that their reliance on computers for performing various critical and not so critical tasks is increasing, so also is the increase in vulnerability of the systems to cyber threat. Considering "Cyber tools are less expensive to acquire and operate, than conventional weapons. They offer huge potential geographic coverage, economies of scale, and force-projection capabilities".[26] Cyber operations are typically highly secretive. This avoids the scrutiny associated with other types of operations and presents options for plausible deniability.[27] Thus, cyber-attacks can escalate tensions and increase the probability of the early use of nuclear weapons, owing to the lack of information regarding the level of threat cyber capabilities can pose.

A Global nuclear risks have multiplied and the current architecture is inadequate to address this challenge. International terrorism was considered as the biggest threat in the last decade, but now the deployment of EDTs raises the chances of incidents, accidental war, miscalculations, and accelerates inadvertent escalation.

Recommendations

Global nuclear risks have multiplied and the current architecture is inadequate to address this challenge. International terrorism was considered as the biggest threat in the last decade, but now the deployment of EDTs raises the chances of incidents, accidental war, miscalculations, and accelerates inadvertent escalation.[28] Thus, a multiprong approach which is more structured, transparent, verifiable and more systemic in understanding especially the ETD domain is required. Treaties on controlling/abolishing TNWs especially zero range weapons as also submarine launched low yield weapons are essential. Countries may adopt less escalatory No-First-Use postures, with declaratory red lines and non-attack on nuclear command and control structures. Keeping the channels of communications open and setting of hot lines will help in mitigating the false alarm.

As far as nuclear terrorism is concerned, it is globally accepted that 'Dirty Bombs' continue to remain a major threat. Though many treaties have been instituted like the Convention for the Suppression of Acts of Nuclear Terrorism, the Convention on the Physical Protection of Nuclear Material, Fissile Material Cut-off Treaty, Nuclear Security Summits, and Global Initiative to combat nuclear terrorism etc, but the problem persists. Further, newer domains like nuclear forensics are supposed to aid in the examination of nuclear and other radioactive materials using analytical techniques to determine the origin and history of this material in the context of law enforcement investigations or the assessment of nuclear security vulnerabilities.[29] Since nations give priority to domestic laws for nuclear safety and security, it is essential for countries to have independent regulatory bodies for unbiased assessment of emergency preparedness and response

mechanisms as also make use of IAEA's Integrated Regulatory Review Service. Self-assessments, continuous training of customs officials, smart border controls, dedicated security details, and lessons from best practices are necessary to create a seamless security envelope that cocoons facilities and materials at every stage.[30] Sharing the data and best practices will go a long way in formulating meaningful confidence building measures between the adversaries.

The Russia-Ukraine war has dented the arms control and disarmament initiatives, but efforts must be made to bring the major players to discuss the issues. Considering that emerging technologies will impact strategic stability, hence 'Strategic Stability Dialogue' which was abandoned by the Americans due to the Russia-Ukraine war needs to be renewed. Campaigns like 'Stop Killer Robots', are the start point for building an awareness campaign for the destructive potential of lethal and autonomous weapons, which is becoming a threat to the 'Humanitarian Law'. Further Track 2 and Track 1.5 Diplomacy between major players especially in cyber domain to understand cyber related escalatory threat can help in determining parameters and bolster each other's confidence. This initial process can then be transformed into official treaties. Unilateral approaches in nuclear domain by detangling nuclear and conventional C^3 can help in strengthening security. Further, to prevent damage by unmanned systems one may integrate 'Automated Escalation Tripwires' into systems that would prevent the automated escalation of conflict in specific scenarios without human intervention.[31] Everything may not be reinvented considering state actors have not yet begun to jointly address the challenges of new technologies for nuclear decision-making. Different expert communities, such as Computer Security and Incident Response Teams or the Forum of Incident Response and Security Teams, already respond and solve day-to-day cybersecurity problems through diverse national, regional, and international networks, and they can be further remodelled to address the current challenges.[32]

Considering that emerging technologies will impact strategic stability, hence 'Strategic Stability Dialogue' which was abandoned by the Americans due to the Russia-Ukraine war needs to be renewed.

Finally, once nations understand the mutual risks posed by disruptive technologies they may agree for more formal bilateral and multilateral setups to negotiate and navigate the threat matrix. But before we have new treaties it is important to first address issues of limited mandate, veto power, non-binding, non-ratification and compliance problems. This can happen only if the treaties are non-discriminatory, so that compliance, implementation and enforcement of safety and security laws can be universally ratified. The challenges are vast, but understanding the threat matrix may force nations to cooperate, as ultimately it is the survival of humanity that is at stake here.

Endnotes

1 NTI Nuclear Security Index, 'Falling Short in a Dangerous World', July2023, at https://www.ntiindex.org/wp-content/uploads/2023/07/2023_NTI-Index_Report.pdf

2 Rebecca Herdsman, 'Wormhole Escalation in the New Nuclear Age', Texas National Security Review, July 2020. https://tnsr.org/2020/07/ wormhole-escalation-in-the-new-nuclear-age/

3 North Korea Missile Test Activity, "Centre for Arms Control and Non-Proliferation , at ttps://armscontrolcenter.org/wp-content/uploads/2023/11/North-Korean-Missile-Test-Activity-Fact-Sheet-Feb-5-Edit.pdf

4 Global Fissile Material Report 2022, at https://fissilematerials.org/library/gfmr22.pdf

5 'Plans For New Reactors Worldwide', World Nuclear Association, at https://world-nuclear.org/information-library/current-and-future-generation/plans-for-new-reactors-worldwide.aspx

6 What you need to know about Northrop Grumman's B-21 Raider at https://www.northropgrumman.com/what-we-do/air/B-21-Need-To-Know

7 Russian News Agency , TASS, 'Submarine force armed with Poseidon torpedoes to come into operation in Kamchatka in 2025', 03 April 2023, at https://tass.com/defense/1598329

8 Zuzanna Gwadera, 'Intelligence leak reveals China's successful test of a new hypersonic missile', Opinion Analysis, IISS, 28 May 2023, at https://www.iiss.org/en/online-analysis/online-analysis/2023/05/intelligence-leak-reveals-chinas-successful-test-of-a-new-hypersonic-missile/

9 Russian News Agency TASS, 'Russia suspends New START to make sure nuclear parity is observed — Kremlin spokesman' , 21 Feb 2023, at https://tass.com/politics/1579973

10 Dr Katarzyna Kubiak, Sylvia Mishra, 'Emerging and disruptive technologies and nuclear weapon decision making, 'Risks, challenges and mitigation strategies', European Leadership Network, 07 December , 2021

11 Update 212 – IAEA Director General Statement on Situation in Ukraine, IAEA, 21 Feb 2024, at

12 See, I, Hilpold Peter

13 "International Convention for the Suppression of Acts of Nuclear Terrorism - Article 1"(PDF), United Nations, 2005.

14 North Korea's nuclear weapons and Missile Programs, In Focus, Congressional Research service, 19 December 2023, at https://sgp.fas.org/crs/nuke/IF10472.pdf

15 Ibid

16 Hans M. Kristensen and Matt Korda, 'North Korean nuclear weapons, 2022', BULLETIN OF THE ATOMIC SCIENTISTS 2022, VOL. 78, NO. 5, 273–294 https://doi.org/10.1080/00963402.2022.2109341

17 Sitara Noor, 'Pakistan's Evolving Nuclear Doctrine', Arms Control Association, October 2023, at https://www.armscontrol.org/act/2023-10/features/pakistans-evolving-nuclear-doctrine

18 Dr John Chipman , 'MDI Missile Technology: Accelerating Challenges', The International Institute for Strategic Studies, December 2022

19 Ibid

20 Ibid

21 Michael T. Klare, 'An "Arms Race in Speed": Hypersonic Weapons and the Changing Calculus of Battle', *Arms Control Today*, vol. 49, no. 5, June 2019,

22 Michael T. Klare , 'Assessing the Dangers: Emerging Military Technologies and Nuclear (In)Stability An Arms Control Association Report , February 2023

23 Public Law 115-232, John S. McCain National Defense Authorization Act for Fiscal Year 2019, Title II, Section 238. For more on AI definitions, see CRS, *Artificial Intelligence and National Security*, Report R45178, updated November 10, 2020, pp. 1–4, https:// crsreports.congress.gov/product/pdf/R/R45178/10.

24 See xx Michael T. Klare , 'Assessing the Dangers

25 Vladimir Putin, "Presidential Address to the Federal Assembly," Kremlin, March 1, 2018, http://en.kremlin.ru/events/president/ news/56957.

26 Ariel E. Levite, Lyu Jinghua, George Perkovich,Lu Chuanying, Xu Manshu, Li Bin, and Yang Fan, 'China-U.S. Cyber-Nuclear C3 Stability', Carnegie Endowment for International Peace, April 2021, at https://carnegieendowment.org/2021/04/08/china-u.s.-cyber-nuclear-c3-stability-pub-84182

27 Ibid

28 Dr Katarzyna Kubiak, Sylvia Mishra, 'Emerging and disruptive technologies and nuclear weapon decision making, 'Risks, challenges and mitigation strategies', European Leadership Network, 07 December , 2021

29 Nuclear Forensics, IAEA, at https://www.iaea.org/topics/nuclear-forensics

30 Shri Rakesh Sood, "Charting the course for nuclear security: An Indian Perspective", Carnegie India, at http://carnegieindia.org/2016/03/23/charting-course-for-nuclear-security-indian-perspective-pub-63100

31 National Security Commission on Artificial Intelligence at https://reports.nscai.gov/final-report/table-of-contents/

32 Dr Katarzyna Kubiak, Sylvia Mishra see xxviii

Security Dynamics in the Taiwan Strait amid Great Power Rivalry

Dr K Mansi [@]

Abstract

This article delves into the intricate security dynamics shaping the Taiwan Strait amidst escalating great power competition. With heightened uncertainty in international conflicts, notably exemplified by the war in Ukraine, the potential for a Chinese invasion of Taiwan looms large. This article analyses the evolving situation in the Taiwan Strait, examining China's strategic approach towards Taiwan and the likelihood of United States (US) intervention. Drawing on existing literature, war games, expert interviews, and recent geopolitical developments, the study provides insights into Taiwan's perspective on the security landscape and the potential ramifications of a Chinese incursion. Despite a shrinking military gap between China and the US, the article suggests that while tensions remain high, the likelihood of immediate large-scale conflict is low. Instead, the focus is on hybrid warfare tactics, diplomatic manoeuvres, and strategic alliances to maintain stability in the region amidst complex geopolitical dynamics.

Introduction

This article outlines the current state of heightened uncertainty, particularly regarding international conflicts, with a nine-fold increase since 2004. In the context of ongoing conflicts such as the war in Ukraine, the potential for a Chinese invasion of Taiwan seems more pronounced. This has led to discussions in security circles about the possibility of direct confrontation between the United States (US) and China, with a focus on preparing for a Taiwan contingency. Key questions include how the situation in the Taiwan Strait will evolve, China's strategy towards Taiwan, and whether the US and its allies will defend Taiwan. It aims to address the perspective from Taiwan, analysing its views on the security situation and the potential for a Chinese invasion. It will do so by outlining Taiwan Strait security based on existing literature, analysing war games and exercises, incorporating interviews with Taiwanese officials and experts in the field, and drawing conclusions based on research findings.

The Taiwan Question: Past, Present, and the Possible Future

In the field of international relations, scholars have highlighted the dangerous dynamics between a rising power and an established hegemon. Abramo Organski, in 1958 proposed the idea that the likelihood of war increases as the capabilities of weaker, dissatisfied states approach those of the established, advantaged states.[1] This theory provides the basis for a natural cycle of the rise and fall of hegemonic powers as unsatisfied and rising challengers defeat them[2] Graham Allison[3] popularised the notion of the 'Thucydides Trap' by referencing the history of the Peloponnesian War in the 5th Century BCE, which chronicled the conflict between Athens and Sparta. Thucydides has become more relevant today than before in the field of political realism and the concern is that this theory applies to the Great Power Competition[4] between China and the US, where a rising China challenges the hegemonic status that the US has enjoyed

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since the end of the Cold War. The view that China is a strategic competitor of the US, previously a subject of debate, has now become prevalent in both Washington and Beijing, with Taiwan Strait as the major flashpoint.

F Scott Fitzgerald[5] made an observation in his 1936 essay 'The Crack-Up', that "the test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time, and still retain the ability to function". The situation in Taiwan Strait can be looked at from this point of view and can be summed up as an interplay between three contradictions in the last seven decades.

Firstly, the People's Republic of China (PRC) adheres to the 'One China' principle, asserting that Taiwan is a renegade province that must reunify with the mainland, even by force if necessary. Secondly, Taiwan, represented by the Republic of China (ROC), maintains its separate identity and rejects reunification with the PRC. Taiwan transitioned from authoritarianism to democracy, emphasising its distinct Taiwanese identity, though formal independence remains unlikely. Thirdly, the US acknowledges One China but also provides security to Taiwan, maintaining a delicate balance that has preserved cross-strait stability. Key agreements[6] like the Three Communiqués, Taiwan Relations Act, and Six Assurances have been pivotal in deterring Chinese aggression towards Taiwan.

This triangular relationship has evolved in the last seven decades to become one of the most contentious issues in the contemporary geopolitical landscape, so much that the economist labelled Taiwan as the 'Most dangerous place on earth'[7] in 2021, the title which was reserved for the Korean peninsula till date. In the same year, the outgoing commander of the US Indo-Pacific Command forces, Adm Phil Davidson, told the Senate Foreign Relations Committee, in Mar 2021 that China is likely to attack Taiwan by 2027.[8] He said China's aggression in the region leads him to believe its goal of seizing Taiwan is a more imminent issue.

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Under Xi, China's assertiveness prompts concerns about forceful reunification via island invasions, akin to Russia's actions in Ukraine. This complicates military planning for a potential Chinese invasion of Taiwan. Chinese military activities in the Taiwan Strait, intensified since Pelosi's visit, echoes the Ukraine situation, with People's Liberation Army Air Force and People's Liberation Army Navy violating the airspace. China's military modernisation, including anti-access/area denial capabilities, strengthens its position, as noted in the US-China Economic and Security Review Commission's report.

Changing Military Balance

The factors deterring China from formally invading Taiwan and upholding peace in the Taiwan Strait, including military, economic, and political aspects, are shifting. As the power gap between China and the US narrows, the Taiwan Strait emerges as a significant flashpoint in the Indo-Pacific region. The conventional military balance in the western Pacific has tipped in China's favour as per the European Parliament, Committee on Foreign Affairs (22 Mar 2023)[9] and although the People's Liberation Army (PLA) is not yet prepared to seize and control Taiwan, Xi Jinping has instructed that it have the capabilities to do just that by 2027.

The Global Firepower Ranking for 2024, ranks the US as No 1 with a PwrIndx[10] score of 0.0699 (a score of 0.0000 is considered 'perfect') and China is ranked No 3 with a PwrIndx* score of 0.0706. The difference between the two being only 0.0007 points, which is decreasing year per year.

Year	US	China	PwrIndx
2024	0.0699	0.0706	0.0007
2023	0.0712	0.0722	0.0010
2022	0.0718	0.084	0.0122

Table 1

(Complied by author using Global Firepower ranking)

Table 1 indicates a shrinking military gap between the US and China, with China trailing the US by only 0.0007 points in 2024, a trend seen over the past few years. According to The Economist, China's naval expansion surpasses America's in the Western Pacific, with 90 major ships and submarines launched in the last five years. China's annual production of over 100 advanced fighter planes, deployment of space weapons, and possession of precision missiles pose significant threats to Taiwan, US Navy vessels, and American bases in Japan, South Korea, and Guam. With the world's largest navy and approximately 20,00,000 active military personnel, China's military capabilities are formidable. The 2024 Global Naval Powers Ranking[11] provided by World Directory of Modern Military Warships (WDMMA) ranks PLA Navy No 2, though it is numerically the No 1 Navy.

Table 2

The Global Air Powers Ranking (2024)[12], provided by WDMMA[13] ranks China at seventh position with 'TrueValueRating' (TvR[14]) 63.8 and the US at first position at TvR 242.9. Though, China has the numerical superiority but it lacks behind the US with the gap having narrowed considerably.

In terms of defence spending, Stockholm International Peace Research Institute reports that, China remained the world's second largest military spender. It allocated an estimated USD 292.00 bn in 2022, which was 4.2 per cent more than what it spent in 2021. Within a decade, Chinese military expenditure has increased by 63.0 per cent. The report further states that China's military expenditure has increased for 28 consecutive years.[15] It has gone from a nascent USD 14.60 bn to USD 229.00 bn in the last twenty years as per another report.[16] The US defence budget for Financial Year 23 is USD 816.00 bn,[17] remains the biggest military spender in the world. In 2022 its spending reached USD 877.00 bn, and it constituting 39.0 per cent of total global military spending. This is three times more than the amount spent by China. The allies in the region, like Japan has implemented a 20.0 per cent increase in their defence budget in 2023 from the previous year. The trend shows growing military rivalry and competition in the region making the region more volatile.

China's military superiority over Taiwan has become increasingly evident, with Taiwan's global firepower ranking dropping to 24th place. This decline reflects a shift that has occurred over the past three decades, driven by the PLA's modernisation efforts. China now holds a significant edge over Taiwan in terms of personnel, weaponry, and defence budget, underscoring the need for Taiwan to bolster its asymmetric warfare capabilities. A comparison between Taiwan's military forces and the PLA's Eastern and Southern Theatre Commands illustrates the conventional military challenges faced by Taiwan.

Capability	**PLA Eastern and Southern Theatre Commands**	**Taiwan**
Ground force personnel	4,16,000	88,000 (active duty)
Tanks	6,300 complete PLAA	800
Artillery pieces	7,000 complete PLAA	1,100
Aircraft carriers	1 (2 total)	0
Major surface combatants	96 (132 total)	26
Landing ships	49 (57 total)	14
Attack submarines	35 (65 total)	2 (diesel attack)
Coastal Patrol Boats (missile)	68 (86 total)	44
Fighter aircraft	700 (1,600 total)	400
Bomber aircraft	250 (450 total)	0
Transport aircraft	20 (400 total)	30
Special mission aircraft	100 (150 total)	30

Table 3

Source: Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2021.[18]

This report further states that PLA Rocket Force operates 100 ground-launched cruise missile launchers, 250 short-range ballistic missile launchers and 250 medium-range ballistic missile launchers with the collective capability of firing at least 1,900 missiles.

Apart from the shift in power differential between China and Taiwan in favour of Beijing, and the reducing gap between the US and China, other variables like the long term political and economic trends are also eroding the stability of the status quo and increasing the potential for military conflict.[19] The report highlights China's evolving policy towards Taiwan, is moving from a focus on forceful 'liberation' to peaceful unification.[20] Despite this shift, Chinese Communist Party (CCP) leaders have not ruled out force to prevent independence. Xi Jinping sees Taiwan's reunification with China as inevitable. The cross-strait security situation hinges on the shifting military balance between China, Taiwan, and the US.

Taiwan Strait Scenario and Wargames

Various organisations, including China National Accreditation Service for Conformity Assessment (CNAS) and Centre for Strategic and International Studies(CSIS)[21] have conducted wargames exploring potential US-China conflicts over Taiwan. CNAS's 'Dangerous Straits' and 'The Poison Frog Strategy' reports analyse political and military aspects of conflict, covering deterrence, alliance management, and escalation. CSIS simulated a Chinese invasion of Taiwan, with most scenarios seeing successful defence but significant losses for the US and its allies. The Department of Defence has also conducted classified wargaming, hinting at substantial casualties. Similar exercises by the Japan Forum for Strategic Studies and Taiwan's Centre for Security Studies foresee heavy casualties and emphasise the importance of maintaining the status quo amid recent elections in Taiwan and the upcoming US presidential elections.

Experts from Taiwan's national defence community believe that China may continue to suppress Taiwan's diplomatic space, just like Nauru and Tuvalu. China's response to Taiwan's recent presidential election has shifted towards political and diplomatic strategies rather than immediate military action.

Possible Scenarios: Short-Medium-Long Term Implications

China-Taiwan ties have already gotten off to a rocky start following Taiwan's election on 13 Jan 2024, before the formal inauguration of Lai's term which is set to begin on 20 May 2024. Following the Democratic Progressive Party's (DPP) victory, Nauru, switched diplomatic recognition to the PRC. China meanwhile carried a nasty editorial in the CCP mouthpiece, the Global Times and ramped up military incursions which was relatively quiet since Nov last year. China was using the quiet diplomacy to support the Kuomintang (KMT), the main opposition and pro-China party, to win the elections.

China appears poised to maintain a tough stance on Taiwan, possibly escalating tensions. President-elect Lai Ching-te, also known as William Lai, holds pro-sovereignty views, considering Taiwan de facto independent, while aiming to preserve the status quo with China. Beijing denounces Lai as a 'Stubborn advocate for Taiwan independence' and frames his election as a choice between 'Peace and war, prosperity and decline'. Like his predecessor Tsai, Lai rejects the 1992 consensus, which Beijing insists upon for cross-strait talks, and has been absent since 2016. With no high-level interaction between China and Taiwan for eight years, it remains uncertain whether this trend will continue for the next four years, raising questions about future security dynamics in the Taiwan Strait.

Experts from Taiwan's national defence community[22] believe that China may continue to suppress Taiwan's diplomatic space, just like Nauru and Tuvalu. China's response to Taiwan's recent presidential election has shifted towards political and diplomatic strategies rather than immediate military action. While the security situation in the Taiwan Strait on 20 May 2024, is considered high-risk, the likelihood of a large-scale military conflict remains low. The election outcome suggests a failure in Xi Jinping's Taiwan policy over the past decade, presenting a significant setback

for him. However, Xi is unlikely to abandon his ambitions for Taiwan entirely, and China may opt for a strategy of appearing tough publicly while seeking private negotiations with Taiwan. Despite the CCP's hardline stance against Taiwan, Xi Jinping hesitates to launch an attack due to uncertainty over the outcome and the inability to guarantee a swift victory.

Another expert from Taiwan's strategic community[23] is broadly in agreement with the previous comment and underlines that Xi must realign his strategy with his own domestic problems. Therefore, the short-term implication for Taiwan is that it will face greater challenges across the Taiwan Strait. The implication for the longer term is that people in China still hold the key to influencing Xi's decision if it is based on the survival of his political regime. Furthermore, from the example of the Russo-Ukraine War, the situation over the Taiwan Strait will very likely be decided by Xi Jinping's personal worldview. The very likely scenario will be continuous pressure via various means. The worst case may eventually be a limited blockade leading towards a hot conflict.

According to experts from Institute for National Defence and Security Research,[24] a Taiwanese think tank, it's inaccurate to expect the DPP to declare independence or alter the ROC to the Republic of Taiwan. Even the more hawkish KMT, perceived as pro-China, supports maintaining the status quo. The PLA is not prepared for a large-scale conventional amphibious landing, and while intimidation tactics persist, there's no immediate security threat. Xi Jinping's disappointment in the PLA's readiness has heightened the securitisation of various issues and the militarisation of available resources.

Professor Yves Tiberghien, from University of British Columbia, a renowned expert of East-Asian affairs, analyses the Taiwan Strait security situation as tense and beset by tit-for-tat dynamics and pressure tactics.

Professor Yves Tiberghien,[25] from University of British Columbia, a renowned expert of East-Asian affairs, analyses the Taiwan Strait security situation as tense and beset by tit-for-tat dynamics and pressure tactics. He points out that there is a fundamental structural equilibrium, a sort of mutual assured destruction, as long as the US is de facto supporting Taiwan. Any conflict would escalate to World War III and that cools down the three key players (Taiwan, China, and the US). However, he opines that China is not planning an attack any time soon. The destruction would be too great. Talk of war is inflated in the US. Now, if Trump wins and decides to not support Taiwan any more (as he is doing with North Atlantic Treaty Organisation), the game will change. But it is not entirely credible. So the impact of the Presidential election is mostly limited. This was a status quo election with a divided government now and only 40.0 per cent support for DPP. Everyone can claim victory. This was not a vote for independence or changing the status quo. But the more nationalist and hawkish elements in Beijing may still take some sporadic actions and the US would respond. Or the US may take actions that Beijing feels it must respond to.

As per Professor Key-young Son,[26] the President-elect, Lai Ching-te, will seek to maintain the status quo. The new president's China policies may resemble those of the previous leader, Tsai Ing-wen. However, with China's assertiveness and the potential election of Donald Trump as US president, there could be a shift in cross-strait dynamics. Drawing parallels between the Taiwan Strait and the Korean Peninsula, China may escalate tensions to gauge DPP government and US defence readiness. How Taiwan, the US, and other regional actors respond will influence China's actions. The expert predicts worsening tensions in the Taiwan Strait, though not necessarily altering the status quo. China's policies towards Taiwan may be affected by domestic challenges and international pressures, but overall, time appears to favour China as it strengthens its global standing and seeks economic growth.

Lucio III Pitlo, a Manila-based foreign policy and security analyst, predicts ongoing tensions following Taiwan's election. He notes the PRC's immediate signals, including military exercises and diplomatic manoeuvres. Beijing may employ military drills, sanctions, and international isolation to pressure Taipei's new leadership. Further escalations are possible before Lai's inauguration in May. Whether Beijing and Taipei can devise a new agreement to replace the 1992 Consensus, which Lai is hesitant about, remains uncertain.

Senior officials from the Ministry of Foreign Affairs,[27] Taiwan, think that leaders across parties understand the need to not provoke China. About 90.0 per cent favour status quo and radical reunification or independence is in minority. Taiwan wants to avoid war. The PRC's attack on Taiwan will depend on the PRC's domestic situation. CCP's aggressive stance has clearly backfired. The internal power struggle in China is going on. Understanding the mindset of CCP leadership is most important.

Experts and analysts from the European Union diplomatic community based in Taiwan also believe that it is important to understand the ideology and interests of the CCP, and the international community ignores the CCP thinking. A War is considered unlikely.

However, Taiwan is already facing every day attack in the form of silent incursions like cyber-attack, grey zone/ psychological ops. Armed conflict is part of Xi's dream and it may be sooner or later. If the matter escalates and leads towards a kinetic war, it will be in phases. Dr Tsun-yen Wang, Associate Research Fellow at Institute for National Defense and Security Research breaks it down in steps:

- **Step I**. PLA initiates a silent invasion by disrupting Taiwanese society, creating gaps between government, political, and military leadership.
- **Step II**. Military leadership is targeted, with a focus on disrupting command, control, communications, computers, intelligence, surveillance, and reconnaissance. Cyber-attacks target critical military infrastructure such as radar stations and airports to spread disinformation and demoralise society.
- **Step III**. Missile attacks are launched on key targets like airports, harbours, and anti-missile defence systems.
- **Step IV**. A traditional attack ensues, involving the air force, navy, and potentially amphibious forces. However, the PLA's capability for amphibious landings is limited, hindering reinforcement.
- **Step V**: The final step involves a full-scale amphibious assault, indicating a critical stage of the conflict. Blockades are implemented in all scenarios except the first.

Experts and analysts from the European Union diplomatic community based in Taiwan also believe that it is important to understand the ideology and interests of the CCP, and the international community ignores the CCP thinking. War is considered unlikely.

The duration of all these steps will depend on how much Taiwan can resist to the first scenario by PLA. If the critical infrastructure is destroyed by 60.0 per cent, PLA may launch an amphibious attack. Air superiority is the way out. Deterrence is needed right at the first step.

Conclusion

The security situation in the Taiwan Strait is tense, but the likelihood of a kinetic war in the near future is low. Instead, a quarantine of the island akin to the Cuban crisis is plausible. The control of offshore islands is deemed unwise by the PRC as it may alienate the Taiwanese population, whom Xi Jinping seeks to win over. Hybrid warfare and grey zone operations, including regular violations of Taiwan's air defence zone, have become normalised. Espionage, psychological warfare, and infiltration attempts are ongoing, but the decapitation of Taiwan seems improbable. Taiwan is focusing on bolstering its political and military capabilities, enhancing civil resilience, and fortifying critical infrastructure. Collaboration with the US and allies to raise the cost of war for the PRC is seen as crucial. The difference between the PRC and the ROC will remain as long as the US is No 1 and maintaining the fragile peace in the Taiwan Strait depends a lot on the interplay of the three contradictions explained earlier.

Endnotes

1 A.F.K. Organski, World Politics, 1st ed. (New York: Alfred A. Knopf, 1958)

2 George Modelski, Long Cycles in World Politics (London: Palgrave Macmillan, 1987).

3 Allison, Graham. "Destined for War". *Can America and China Escape Thus]cydides's Trap (2018)*

4 Secretary of Defense Ashton Carter observed a "return to great power competition" in Asia (2016)

5 F. Scott Fitzgerald, Essay: The Crack-Up, https://www.pbs.org/wnet/americanmasters/f-scott-fitzgerald-essay-the-crack-up/1028/

6 Bush, Richard C. "A One-China policy primer" *East Asia Policy Paper* 10 (2017): 1-30.

7 The most dangerous place on Earth https://www.economist.com/leaders/2021/05/01/the-most-dangerous-place-on-earth

8 Mallory Shelbourne, Davidson: China Could Try to Take Control of Taiwan In 'Next Six Years', https://news.usni.org/2021/03/09/davidson-china-could-try-to-take-control-of-taiwan-in-next-six-years

9 Bonnie S. Glaser, Transcript: Situation in the Taiwan Strait, https://www.gmfus.org/news/transcript-situation-taiwan-strait

10 The GFP ranking is based on each nation's potential war-making capability across land, sea, and air fought by conventional means.

11 The WDMMW annual ranking utilizes a formula which takes into account values related to total fighting strength of the various naval services of the world. The formula produces the 'TrueValueRating' (TvR) helping to definitively separate each power based on - not only overall strength - but modernization, logistical support, attack and defense capabilities and so on. In this way, a power is not simply assessed on its total quantity of warships and submarines but rather its quality and general mix of inventory. Beyond this is a focus on local shipyard capabilities, inventory balance (general mix of unit types), and force experience.

12 Global Air Powers Ranking (2024), https://www.wdmma.org/ranking.php

13 World Directory of Modern Military Aircraft

14 The WDMMA annual ranking utilizes a formula which takes into account values related to total fighting strength of the various air services of the world. The formula produces the *'TrueValueRating'* (TvR) helping to definitively separate each power based on - not only overall strength - but modernization, logistical support, attack and defense capabilities an so on. In this way, a power is not simply assessed on its *total quantity* of aircraft but rather its quality and general mix of inventory.

15 Stockholm International Peace Research Institute (2023), World military expenditure reaches new record high as European spending surges. Accessible at

https://www.sipri.org/news/2023/world-military-expenditure-reaches-new-record-high-european-spending-surges-0 (28 April 2023)

16 Global Firepower 2023 Military Strength Ranking: A Global Comparison, https://thegeopolitics.com/global-firepower-2023-military-strength-ranking-a-global-comparison/

17 Jim Garamone**,** Biden Signs National Defense Authorization Act Into Law, https://www.defense.gov/News/News-Stories/Article/Article/3252968/biden-signs-national-defense-authorization-act-into-law/#:~:text=President per cent20Joe per cent20Biden per cent20has per cent20signed,billion per cent20to per cent20the per cent20Defense per cent20Department

18 Washington, DC: office of the Secretary of Défense, 2021) 161-162

19 Dreyer, June Teufel. "Crossing the Strait: China's Military Prepares for War with Taiwan Joel Wuthnow, Derek Grossman, Philip C. Saunders, Andrew Scobell and Andrew ND Yang (eds.). Washington, DC: National Defense University Press, 2022. 368 pp. $29.69 (pbk, Open Access). ISBN 9780996824989." *The China Quarterly* 256 (2023): 1102-1104.

20 Ibid

21 Jopp, Heinz Dieter. "Mark F. Cancian/Matthew Cancian/Eric Heginbotham: The First Battle of the Next War. Wargaming a Chinese Invasion of Taiwan. Washington, DC: Center for Strategic and International Studies (CSIS), Januar 2023." (2023): 427-428.

22 Personal interview conducted by the author with the sources on condition of anonymity.

23 Personal interviews conducted by the author with the sources on condition of anonymity.

24 Institute of National Defense and Security Research

25 Personal interview conducted by the author with the sources on condition of anonymity.

26 Vice-director and professor at the Asiatic Research Institute, Korea University and an expert on the subject matter spoke to the author.

27 Personal interview conducted by the author with the sources on condition of anonymity.

Section VI

National Security Capacity Building

Transformation Imperatives for the Indian Military: Talks by the Chief of the Naval Staff and the Chief of the Air Staff at the USI of India in 2023

USI Editorial Team@

Abstract

In the months of Mar and Aug respectively 2023, the Chief of Naval Staff (CNS) and the Chief of the Air Staff (CAS) addressed the serving and retired members of the USI fraternity and distinguished strategic, defence and security experts on the subject of transformation in their respective services. The CNS delivered the lecture on the subject 'Transformation Imperatives for a Future Ready Indian Navy while the CAS spoke on 'Indian Air Force at 100: Strengths, Weaknesses, Opportunities and Threats'. The article below is an amalgamated and edited compilation of the two addresses.

Talk by Admiral R Hari Kumar, PVSM, AVSM, VSM, ADC Chief of the Naval Staff

The Navy views 'Transformation' as an ongoing process aimed at deliberately crafting its identity rather than merely selecting from available alternatives. This perspective is detailed in the 'Strategic Guidance for Transformation' a publication, which outlines the Navy's philosophy and provides broad guidelines for coherent change. The Navy's transformation strategy revolves around five key pillars:

- Strategies to address new challenges and responsibilities.
- Capabilities required for a futuristic force.
- Fostering broad-based partnerships with both domestic and foreign stakeholders.
- Enhancing organisational efficiency and flexibility.
- And prioritising human resource development.

Based on these principles, the Navy has devised a transformation plan that addresses eleven key priority areas encompassing physical, conceptual, and human elements. The outcomes are evident in various aspects, including the Navy's multidimensional capabilities, its niche strengths, robust partnerships with international counterparts, and the establishment of forward-thinking organisations like the Directorate of Strategy, Concepts and Transformation, and the Naval Indigenisation and Innovation Organisation (NIIO). Additionally, initiatives such as the inclusion of women in the ranks underscore the ongoing transformation efforts. Transformation is perceived not as a final state but as an ongoing process subject to changes in objectives. A thorough understanding of the environment remains crucial in this iterative process.

@ This article is an edited and concise version based on the talks delivered by the CAS and the CNS to the distinguished members of the USI of India at the USI during 2023.

It is evident that the global and regional strategic landscapes are swiftly evolving due to various factors, impacting the security paradigm. This necessitates a continual reassessment of transformation goals. The Navy's imperatives in the coming decade spans three 'Must-Do' aspects – first, 'Expectations that must be met', second, 'Challenges that must be overcome', and third, 'Opportunities that must be harnessed'.

Meeting the expectations of our ambitious nation encompasses three core principles, articulated in Sanskrit as *Samruddha* Bharat (Prosperous Bharat), *Saksham Bharat* (Capable Bharat), and *Sachetan Bharat* (Self-Aware Bharat). These principles drive key imperatives for the Navy's transformation plan.

- *Samruddha Bharat* signifies India's endeavour to become economically prosperous, aiming for a five trillion-dollar economy and beyond. With a focus on being 'Vocal for Local' and expanding globally, India's burgeoning merchandise exports highlight the importance of secure sea lanes for economic growth. The Navy recognises the crucial role of secure seas in facilitating India's economic expansion across regions, emphasising the need to ensure security over a broader maritime domain.

- *Saksham Bharat* reflects India's increasing engagement with the world on its own terms, leveraging its favourable maritime geography for external outreach. Initiatives like Security and Growth for All in the Region (SAGAR) and policies such as Neighbourhood First and Act East underscore India's commitment to inclusive growth and mutual prosperity, underpinned by security. Maritime power plays a pivotal role in enhancing India's credibility and influence on the global stage.

The evolving international order, marked by declining multilateralism and contested global commons, presents significant challenges. The Indo-Pacific region has emerged as a focal point, with various states advocating for a free, open, and inclusive environment.

- *Sachetan Bharat* portrays India as a confident and self-assured nation, actively shaping the global discourse on various issues. India's response to security challenges demonstrates an unwavering resolve, with a focus on maintaining a strong and robust security umbrella. Conceptually, India seeks to balance security imperatives at home and abroad, while physically, it aims to develop force structures and capabilities to safeguard national interests. A secure national security infrastructure, including maritime security, is imperative for India to uphold its rightful ambitions and stature in the global arena. The Navy and Armed Forces are tasked with protecting India's core national interests to ensure her continued relevance on the global stage.

While the first imperative towards transformations lays down the expectations that India, as a nation, must address. The second, the 'Challenges We Must Overcome' lays down the hurdles to India's prosperity which must be crossed so that the nation can fulfil its nascent potential. For such, again, there are the 3 'Ss' which need to be overcome to meet the expectations. This trinity of 'Ss' encompasses Strategic Drivers, Security Factors, and Silent Paradigms.

- **Strategic Drivers**. The evolving international order, marked by declining multilateralism and contested global commons, presents significant challenges. The Indo-Pacific region has emerged as a focal point, with various states advocating for a free, open, and inclusive environment. However, competition for resources and influence in the region poses a potential threat of conflict. Additionally, climate change exacerbates uncertainties, emphasising the need for India to navigate its strategic space effectively amid converging interests and complex relationships.

- **Security Factors**. India faces security challenges, particularly in the maritime domain, with increasing competition and potential adversaries like China and Pakistan modernising their naval capabilities. China's expanded presence in the Indian Ocean Region and Pakistan's maritime developments pose security threats that require careful management. Terrorism also remains a persistent threat, evolving in tactics and methods, necessitating proactive measures to stay ahead.

- **Silent Paradigms**. Rapid technological advancements, particularly in Artificial Intelligence (AI), cyber, and cognitive domains, present silent yet pervasive challenges. These paradigms offer new capabilities with disproportionate effects and provide adversaries with unprecedented means to disrupt. The blurring lines between peace and war, coupled with hybrid warfare tactics, further complicate the identification of adversaries and escalation management. Navigating these challenges requires a comprehensive understanding of evolving paradigms and a proactive approach to address them effectively. Success in this endeavour entails reimagining strategies and recalibrating resources to capitalise on emerging opportunities for transformation.

Opportunities

Taking advantage of opportunities is crucial for a nation striving to fulfil its expectations and overcome challenges. One notable opportunity lies in India's growing maritime consciousness, exemplified by initiatives like SAGAR and the Indo-Pacific Oceans Initiative, demonstrating the government's recognition of the seas' importance to national security. Leveraging this perspective, the Navy can enhance its maritime power, aligning with the country's self-reliance goals through initiatives like Make in India and promoting indigenous capabilities.

Furthermore, technological advancements offer significant opportunities, from harnessing AI and cyber capabilities to integrating technology into military operations. Embracing a 'Pole-Vaulting' approach, India can lead in developing innovative solutions tailored to its needs. This aligns with the Prime Minister's vision of equipping warriors with cutting-edge indigenous weapons, as emphasised at a seminar by the NIIO.

Rapid technological advancements, particularly in AI, cyber, and cognitive domains, present silent yet pervasive challenges. These paradigms offer new capabilities with disproportionate effects and provide adversaries with unprecedented means to disrupt.

Organisational transformation is another opportunity, with ongoing changes to the higher defence organisation presenting a chance to create agile structures capable of meeting future challenges. This includes broader integration of national security efforts, extending beyond the military to encompass societal and national interests. Human resource development is also vital, with India's youthful demographic presenting an opportunity to cultivate a more dynamic and effective force, including the induction of women across roles.

Additionally, there are opportunities to challenge traditional practices, such as updating naval symbols and simplifying uniforms, while actively participating in nation-building initiatives like *Aatmanirbhar Bharat* (Self-reliant India) and social outreach programs. Adapting to these changing times, the Navy will evolve its transformation plan to remain a combat-ready, credible, cohesive, and future-proof force, dedicated to serving India and its people.

Talk by Air Chief Marshal VR Chaudhari, PVSM, AVSM, VM, ADC Chief of the Air Staff

In 2013, 10 years ago, technological advancements such as the 2-G network and beyond visual range missiles were not as prevalent in the Indian Air Force (IAF) as they are today. The organisation's capabilities were comparatively lower, relying on traditional warfighting concepts gleaned from global experiences. However, rapid transformations in technology are anticipated in the next decade, making it challenging to predict future developments.

It is of utmost importance to take a view of the world and see how it impacts India and the IAF. The global landscape has shifted from a unipolar world following the Soviet Union's collapse to a multipolar one, marked by volatility and uncertainty. Conflicting nations often engage in partnerships in other areas, complicating India's strategic outlook. Despite this ambiguity, India's growing economic stature positions it as a key player in global affairs, with projections indicating its development as a major global player by 2047.

It's widely believed that all facets of national power, including the military, diplomatic efforts, and economic strength, must advance together. Observing the Russian conflict underscores a shift in perceptions of warfare and future IAF procurement. The conflict highlights that a nation's security takes precedence over international agreements, indicating a diminishing adherence to global rules. There's a growing debate on the origin and necessity of the existing rules-based order.

Nuclear deterrence proved effective in a recent conflict. During the peak of the Russian offensive in eastern Ukraine last year, the pace slowed notably before winter. This change occurred following announcements by Putin suggesting the potential use of nuclear weapons and the deployment of nuclear arms by Belarus, significantly altering the conflict's dynamics.

Self-reliance in arms manufacturing is crucial. Russia, a major arms exporter, faced shortages during a recent conflict, requesting allies for ammunition. India must prioritise domestic production for future conflicts. Private companies, like Elon Musk's SpaceX or Amazon, will align with national interests, emphasising the importance of self-sufficiency in defence.

Strong narratives globally influence, but soft power alone is not enough; a robust military is essential. The Ukraine conflict demonstrates the weaponisation of various platforms, from financial protocols like Society for Worldwide Interbank Financial Telecommunications to social media, highlighting the need for comprehensive defence strategies.

Nuclear deterrence proved effective in a recent conflict. During the peak of the Russian offensive in eastern Ukraine last year, the pace slowed notably before winter.

Regarding the conflict specifics, while some lessons are apparent, it is premature to conclusively determine them from the war in Ukraine. Much is still being learned from various sources, with particular emphasis on how the conflict was initiated.

Both Russian and Ukrainian forces struggled to establish control over the air due to inadequate efforts in neutralising air defences. This led to a prolonged state of air denial rather than achieving air superiority. The conflict highlights deficiencies when analysing it through the lens of the ten basic principles of war, particularly in defining and consistently pursuing clear objectives. Has there been a clear aim? Has that aim been pursued throughout? These are questions that need to be asked.

Drone warfare emerged prominently before the Azerbaijan-Armenia conflict, serving as a critical tool in compensating for military shortcomings. However, after about one and a half years of analysis, the survivability of drones in contested airspace remains uncertain. Standard quadcopters survived an average of two missions, while fixed-wing drones lasted approximately 5 to 5.5 missions. Despite their effectiveness, particularly in surprise attacks, integrating drones with manned platforms is deemed essential for future operations.

In the conflict, over 6,000 drones were lost from both sides, highlighting the significant cost associated with their use. The Russians initially expended more than 50.0 per cent of their precision guided munitions, conserving them thereafter for selective targeting. Conventional weapons face challenges in today's contested airspace due to long-range air defence systems, resulting in higher inaccuracies. Standoff weapons, such as the Neptune and Kinzhal missiles, have demonstrated dramatic effectiveness, indicating a shift towards hypersonic weapons in future warfare.

The effectiveness of ballistic weapons remains uncertain, with limited information available on the number of missiles fired. Attacks on major population centres like Kyiv, Kherson, and Kharkiv suggest significant damage, although the effectiveness of ballistic missiles appears less than that of cruise missiles.

The situation with Pakistan remains unchanged, with a continued state of no war, no peace despite economic challenges. Pakistan is focused on acquiring new-generation weapons systems, including five JF-17 squadrons, operationalised J-10s squadron , 13 AN/TPS-77 long range radars, and potential hypersonic missile technology from China. This shift towards aggressive posturing raises concerns, especially given the country's economic and political instability, potentially exploitable in the future. Today, the People's Liberation Armed Forces boasts of around 1,800 fighter aircraft out of which about 1,300 or 1,350 will be considered high-tech. The rocket force, probably, has around 2,300 to 2,400 ballistic missiles. China's robust Research and Development (R&D) spending, extensive space capabilities, and strong defence industry contribute to its assertiveness in the region, creating an asymmetry in the sub-continent. Hence, there is a need to optimise India's resources. The gap needs to be bridged at the earliest.

Over the past 90 years, the IAF has demonstrated its prowess in various conflicts and missions, both within and beyond national borders. From its involvement in World War II to the recent COVID-19 pandemic, the IAF has played a crucial role in safeguarding the nation and providing assistance in times of crisis. Highlights include its participation in the Battle of Britain, and the airlift operations during the independence movement. In 1965, the famous battles of Khem Karan and Cham and also in the battle of Longewala and all the others which were covered in the opening address have proven that the IAF was capable of delivering effects as desired. The IAF's capabilities were further showcased during the Kargil conflict. Operation Devi Shakti in Afghanistan, where a little over 600 personnel of the Indian origin were pulled out from Kabul. Most of the missions were undertaken in an uncontrolled airspace, unlit runways and with complete absence of any kind of ground security. During emergencies like the Turkey earthquake and Sudan evacuation, the IAF swiftly responded, deploying aircraft within six hours of the earthquake and executing a covert night landing in Sardinia for evacuation. Notably, they successfully repatriated Indian students from Ukraine last year, highlighting the IAF's dedication to humanitarian missions and crisis management.

Over the past 90 years, the IAF has demonstrated its prowess in various conflicts and missions, both within and beyond national borders. From its involvement in World War II to the recent COVID-19 pandemic, the IAF has played a crucial role in safeguarding the nation and providing assistance in times of crisis.

The IAF's primary role is to protect the skies and provide continuous air defence cover, often unseen by the public. This involves operating radars and weapon systems around the clock, with fighters on alert for rapid response. Integration of networks ensures real-time air situation awareness through systems like Recognised Air Situation Picture via Air Force Net (AFNET). The focus on indigenous development is clear, with orders placed for 83 Light Combat Aircraft (LCA) Mark 1, additional Dorniers, HTT-40 trainers, radars, and weapon systems. Initiatives like the Light Combat Helicopter induction and the C-295 contract underscore this commitment, with significant involvement of domestic manufacturing and substantial employment generation. 56 aircraft were brought in through a contract, out of which 40 aircraft will be manufactured by Tata in India. What does this involve? The figures will speak for themselves. It involves manufacturing of 13,400 detailed parts, about 4,600 sub-assemblies and all seven major component assemblies. 125 Ministry of Micro, Small and Medium Enterprises in the seven states will be involved and this will generate almost 42 and a half lakh man hours. The Air Force hopes to follow a similar pattern in the future.

Over its history since 1932, the IAF has undergone significant evolution in terms of technology and infrastructure. While equipment and insignias have changed, the core commitment to national service and protecting the skies remains steadfast. Advancements include the transition from slower aircraft to fourth and 4.5 generation jets, along with the development of more capable radar systems like electronically scanned arrays. Weapon systems have evolved from short-range to long-range capabilities, and communication systems have advanced from rudimentary setups to sophisticated point-to-point networks like AFNET. Infrastructure has also improved, with modern airfields and shelters replacing rudimentary bases, and the IAF now provides numerous airfields for joint civilian-military use. The operational range

of fighter and transport aircraft has significantly expanded, allowing for missions reaching as far as Australia and Japan with ease.

The IAF recognises the importance of developing multi-domain warfare capabilities, particularly in the non-traditional domains of cyber and space, which will intersect with traditional air, maritime, and land warfare. The hybrid nature of modern conflicts, as evidenced by ongoing events in Europe, underscores the need for readiness in these areas.

In modern warfare, the effects of the initial strike may not be immediately apparent, especially in non-kinetic warfare. Advances in sensor technology, communication systems, and AI have shortened the observe, orient, decide, and act loop, enhancing decision-making capabilities. Future conflicts will require leveraging all aspects of Comprehensive National Power and will be heavily influenced by technology, particularly AI-driven manned-unmanned teaming. The duration of future conflicts remains uncertain, necessitating preparation for both short and protracted wars, emphasising *Atmanirbharta* (Self-reliance). The battle space transparency through the present intelligence, surveillance and reconnaissance and the space-based systems is such that there is nothing that can be hidden from the adversary. In the same manner, there is ample information to know what the adversary is up to, what his deployments and strengths are. The only thing that is not known is the intent of the commanders. And that is something that needs to be guarded closely. Having seen where the Air Force is, question arises, where do we need to go?

Superior tactics, developed by organisations like the Tactics and Combat Development Establishment, help overcome technological imbalances. The IAF's network-centric capability, facilitated by AFNET and IACC, needs further enhancement with AI-based decision-making tools and resilient, redundant systems.

There is a need to carry out a strengths, weaknesses, opportunities and threats analysis of the IAF.

Firstly, the strengths. The operational exposure and mindset of every single human being in the IAF today is being continuously sharpened through training, exercises, indoctrination and by every other means possible. Its extensive experience in collaboration with foreign air forces ensures readiness for any conflict scenario. Superior tactics, developed by organisations like the Tactics and Combat Development Establishment, help overcome technological imbalances. The IAF's network-centric capability, facilitated by AFNET and Integrated Air Command and Control System (IACC), needs further enhancement with AI-based decision-making tools and resilient, redundant systems. Effective human resource management maintains a motivated force. A large number of airfields in the first tier at lower elevation gives us a big advantage over our adversaries. Today, the Air Force operates almost 44 different types of aeroplanes, sourced from four or five different nations. But if we look at the flip side, the way the global alliances are, the way sanctions can happen, it makes good sense to have a good mix of platforms and equipment from different sources. Of course, the final aim will be to make them all in India.

Addressing weaknesses is crucial for enhancing the IAF's capabilities. Despite challenges, acknowledging shortcomings is essential for improvement. Fighter squadron depletion is a concern, but efforts to mitigate it include ordering more LCA, Multi-Role Fighter Aircraft, and future acquisitions like LCA Mark-2 and Advanced Multi-Role Aircraft. Combat enablers, such as Airborne Warning and Control Systems and tankers, are in limited supply, but plans for enhancements, including Airborne Early Warning and Control Mark-2 and additional tankers, are underway. Infrastructure efficiency needs improvement, with steps being taken to bolster protection and address deficiencies. Limited space assets and logistics capabilities pose challenges, with efforts aimed at expanding capabilities and addressing border infrastructure constraints. Defence budget constraints remain an ongoing challenge, but increased indigenisation and R&D efforts are expected to alleviate costs over time. Obsolescence issues persist, particularly with ageing aircraft fleets like Chetak, Avro, and Mig 21, but upgrade initiatives are ongoing. Long gestation periods for procurement are being

addressed through streamlined processes and leveraging defence acquisition procedures to expedite operationalisation of inducted systems.

The IAF has numerous opportunities for growth and advancement. Transitioning into an air and space force is crucial, acknowledging the seamless connection between air and space domains. Strengthening international cooperation through exercises and collaborations presents avenues for enhancing capabilities. Embracing niche technologies, boosting indigenous defence production, and exploring alternative energy sources are key areas for development. Enhanced jointness in planning and execution, along with strategic realignment, is imperative.

Addressing collusive threats from China and Pakistan requires effective deployment strategies and continuous training for two-front scenarios. Mitigating non-kinetic domain threats and ensuring cyber resilience are essential aspects of modern warfare readiness. Maintenance and spares management for equipment sourced from Russia or Ukraine necessitate close coordination and alternative solutions. Additionally, fostering air-mindedness and evolving doctrine towards capability-driven force requirements are critical for future preparedness. Leveraging technology-based operations, logistics, and administration, along with robust in-house R&D, are vital for sustained growth. Prioritising professional military education and civil-military interactions underscores the importance of human capital in achieving strategic objectives. Ultimately, the IAF aims to be an agile and adaptable force, providing decisive airpower to safeguard national interests.

Process Reforms for a Viksit Bharat

Shri Sanjeev Sanyal and Ms Aakanksha Arora@

Abstract

Economic reforms are crucial for the development of an economy. Structural reforms are more widely acknowledged. However, an equally vital category of reforms, known as 'Process Reforms' or nuts and bolts reforms, is crucial for enhancing overall economic efficiency. These are targeted, often microeconomic in character, which concentrate on specific issues and, despite their seemingly small scale, possess the potential for significant impact. In this article, the focus is on how to do process re-engineering in the government. Further, the various types in which process reforms can be carried out with examples of each type are illustrated.

Introduction

Economic reforms are a continuous feature of any economy. Much of the discussions about economic reforms tend to focus entirely on large-scale structural reforms aimed at reshaping the fundamental framework of an economy. Structural reforms are those reforms that alter the overall architecture of the economy. Structural reforms in India began with economic liberalisation in 1991. Over the years, various other structural reforms were undertaken, including opening of sectors to private investment, establishment of regulators, introduction of the Goods and Services Tax (GST), setting up of an inflation-targeting framework, and the implementation of the Insolvency and Bankruptcy Code (IBC), among others.

However, there is another category of reforms that mostly goes unnoticed called 'Process Reforms'. Process reforms refer to the nuts-and-bolts reforms that are carried out to simplify regulations or processes related to a particular activity or sector. These changes are targeted, often microeconomic in nature, with an emphasis on a specific issue. They often require no more than a series of small tweaks, which can have a significant overall impact. These are different from the overarching structural reforms mentioned earlier in that they do not attempt to alter the overall architecture of the economy. Process reforms simply aim at making the existing system more efficient. This is not to suggest that these small changes, often improved with feedback loops, do not have a high impact. In this article, process reforms are illustrated which can lead to significant improvements in economic performance.

Indeed, in several instances, this type of process re-engineering proves indispensable for the effective implementation of structural reforms. Numerous examples underscore this point. For instance, the seamless functioning of the GST is attributed to ongoing enhancements facilitated by a feedback-based system.[1] Another case in point is the IBC, where legislative interventions and regulatory framework amendments have been continually implemented since its enactment

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to address evolving market realities. This highlights the significance of feedback loops and iterative approaches in policymaking.

In recent times, India has received widespread appreciation for its improved economic performance. It has been credited globally for having displayed resilience. While various factors contribute to this success, including structural reforms such as the GST and IBC, infrastructure focus, and favourable geopolitical conditions, the role of process reforms has not received commensurate acknowledgment.

While individual reforms are touted to have been instrumental in successfully bringing about key changes, they often are not understood as a class of reforms. In fact, there is little academic literature available on process reforms as a standalone separate class of reforms, not only in India but across the world. Surprisingly, there is a lot more literature available on business process re-engineering for corporates. Whatever literature is available on public sector, it is either related to public sector enterprises, which are essentially analogous to private sector or if it is regarding public administration, it focusses on a one-off event or activity, rather than treating this as a distinct class of reform.

This lack of attention in the literature does not imply that governments have not employed process reforms in public administration. Governments worldwide have utilised this approach at different junctures to address diverse administrative and policy issues. Some countries have adopted a more systematic approach to this. For example, the United States (US) Government Accountability Office has issued a guide to aid federal agencies in their business process re-engineering endeavours. Hong Kong boasts an Efficiency Office, which assists government agencies, be they individual departments or multiple departments under one or more policy bureaus, in undertaking business process re-engineering.

Business process re-engineering is a business management strategy originally pioneered in the early 1990s. It involves the analysis and design of workflows and business processes within an organisation.

This article seeks to delve into the understanding of process re-engineering in public policy as a distinct class of reforms, termed as process reforms.

What does the literature on Business Process Re-Engineering Say?

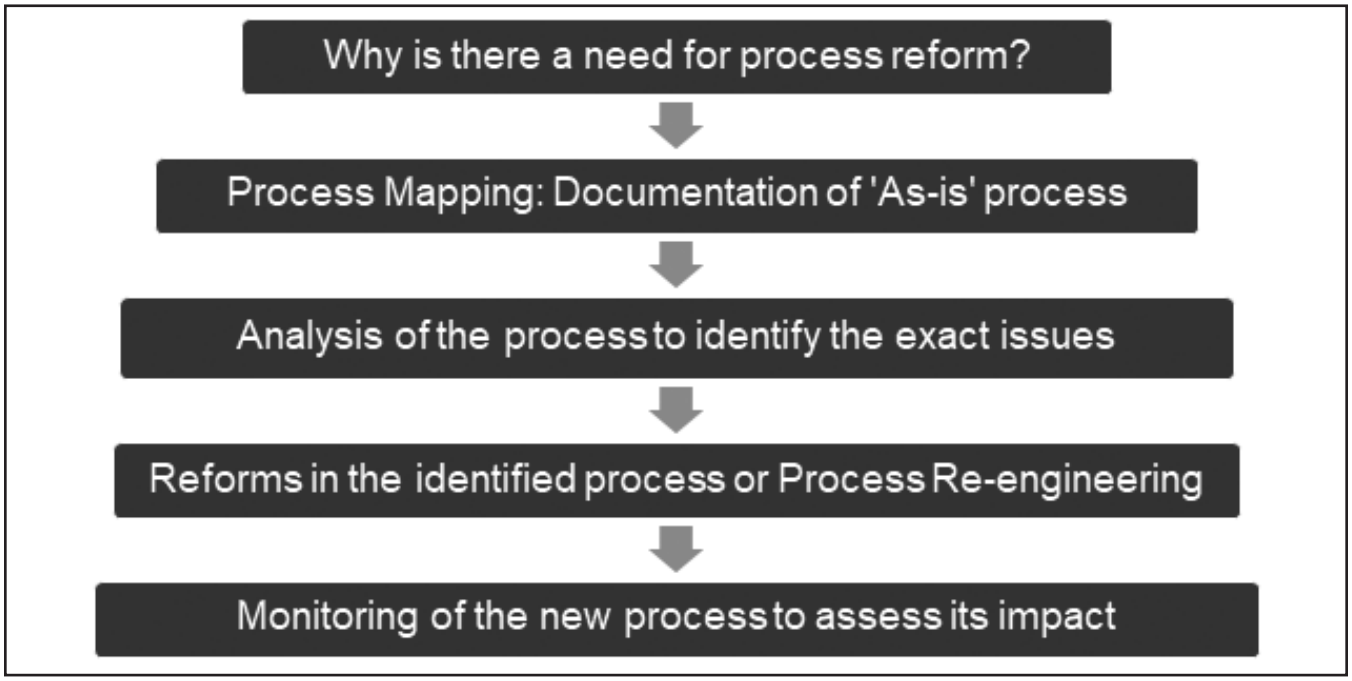
Business process re-engineering is a business management strategy originally pioneered in the early 1990s. It involves the analysis and design of workflows and business processes within an organisation. This began as a technique to help organisations rethink how they do their work to improve customer service, cut operational costs etc. In 1990, Michael Hammer, published the article 'Re-engineering Work: Don't Automate, Obliterate' in the Harvard Business Review[2], in which he argued that the major challenge for managers is to obliterate forms of work that do not add value, rather than using technology for automating it. This essentially meant that the businesses need to go into detail of the processes and remove the inefficiencies at each step.

A commonly used definition of Business Process Re-engineering is the fundamental rethinking and redesign of business processes to achieve improvements in critical, contemporary measures of performance, such as cost, quality, service and speed.[3] Business process re-engineering is also sometimes termed as business process redesign, business transformation, or business process management. It is important to note here that this is different from project or programme management, where the focus is on individual projects.

While different people have put together a list of steps to be undertaken in slightly different ways, typically, businesses looking for process re-engineering have to do these five steps: Map out the existing processes; analyse the processes (for time taken and cost); identify the process re-engineering opportunities; develop and implement re-engineered processes and monitor and evaluate the progress of the process after re-engineering.

Implementation of Process Re-engineering in Public Policy

Even though the public policy has objectives which are very different from the goals of a business or private enterprise, the principles of business process re-engineering can be and in fact are routinely applied by the government. In fact, there are wide applications of re-engineering of processes in public administration. The basic steps involved in the government process reforms are very similar to that of business process re-engineering. The key steps that need to be followed are depicted and explained in the figure below:



Figure

- **Step 1:** The first step for process re-engineering in the government is to understand the actual goal of the law/regulation which is under study to understand the actual result that this re-engineering is aiming to achieve.

- **Step 2:** The second step is to do process mapping, i.e., documenting the 'As-is' process. It involves documenting the process as it exists today with the intention of developing a correct understanding of how things happen 'actually' and not how they are supposed to happen as per the regulations or the legislation. This should include the clear start and endpoints of each step. This is the most crucial step, as the processes may differ from what is envisaged due to various reasons. These reasons include certain processes being carried out as a matter of procedure but not mandated by the law; parts of the process being unnecessary or non-value adding, and some parts of the process being overly complex. This mapping should be done in as much detail as possible. For this, there may be a need to speak to the citizens, businesses, and practitioners etc.

- **Step 3:** The next step involves detailed analysis of the mapped-out process to identify the chokepoints or bottlenecks in the system. This is also to identify the non-value adding activities, duplications in the process, and steps making the regulation complex and onerous. Some part of the regulations or policies may have been relevant at the time it was implemented, but may have lost their significance now due to a variety of reasons viz. changes in technology, more availability of digital resources, changes in economic structure etc. So, it is crucial to identify those.

➢ **Step 4:** After identifying the issues, the next step is the re-engineering of the identified parts of process. This may be a small part of the process or may involve entire overhauling of the process. There can be various ways of addressing the identified problems. This may involve removing some parts of the sub-processes in some cases or maybe replacing or redesigning them in others. It can also involve outsourcing some parts of the process or automating them using Information Technology (IT).

➢ **Step 5:** The last step is to monitor the impact of the re-engineered processes. The feedback loops are crucial, as some of the changes may not be fully successful and have the desired impact.

Types of Process Reforms

The processes for any sector or area are usually derived from underlying regulations or legislations. Hence, making changes to the process may require changes in the appropriate rules or maybe legislation in some cases, whereas in some other cases it may just need administrative changes. The process reforms can take various forms, tailored to the specific context.[4] Some types of process reforms can be as follows:

➢ **Type 1: Streamlining of the Existing Administrative Processes.**

❖ The first type of process reform is the simplest which merely requires streamlining of administrative processes. It does not require any change in the legislation or addition of any resources or capacity by the government. In some cases, the administrative restructuring can involve the use of IT or digital infrastructure.

The processes for any sector or area are usually derived from underlying regulations or legislations. Hence, making changes to the process may require changes in the appropriate rules or maybe legislation in some cases, whereas in some other cases it may just need administrative changes.

❖ Direct Benefit Transfer launched by the Government of India on 01 Jan 2013 to re-engineer the existing cumbersome delivery processes using modern Information and Communication Technology is an important case of the administrative streamlining. Under this, the money is directly transferred into the bank/postal accounts of accurately targeted beneficiaries who are identified through the unique identification, Aadhar. Previously, the transfer of money used to happen through multiple intermediaries leading to ill-targeting and leakages. Since there are various schemes, for which separate identification had to be done even for the same beneficiaries, it led to duplication of efforts and inefficiencies. It covered few schemes initially but now it covers more than 300 schemes. This has completely changed the outcome of the process in terms of timely transfers, less leakage of funds etc. It is estimated that close to INR 2.7 lakh cr were saved up to Mar 2022 on account of direct debit transfer.[5]

❖ Even without the implementation of digitisation, administrative re-engineering can be done to solve the identified issues in the processes. This kind of process reform uses the case of voluntary liquidation of corporates.

➢ **Type 2: Changes in Regulations.** The second type of process reforms pertains to changes in rules and regulations without the necessity of amending existing laws, showing how regulations for the IT Business Process Outsourcing sector suffered from numerous outdated regulations with burdensome compliance requirements until recently. Recognising these issues, the government undertook a reform of liberalising the telecom regulations for other service providers. This has had a far-reaching impact on the ease-of-doing-business in the sector.

- **Type 3: Changes in the Legislation.**

❖ Certain parts of the process may be mandated by the law of the land. Any changes to that may require changes in the underlying laws. For instance, the Legal Metrology Act, 2009 an Indian legislation that regulates weights and measures and establishes standards for measurement accuracy in trade and commerce in goods which are sold by weight, measure or number has long been subjected to criticism for the provision of imprisonment as a punishment for offences under it. Sections 25 to 47 in Chapter V of the 2009 Act enumerate various offenses related to weights and measures. They include the use and manufacture of non-standard weighing and measuring instruments, undertaking commercial transactions in violation of prescribed standards, and transacting in pre-packaged commodities without requisite declarations on the package.

❖ As per this act, the first violation of any of the offences under Chapter V by an enterprise entails a monetary penalty. However, upon a second/subsequent offence committed under the same provision, the act provides for imprisonment along with a possible fine.[6] Given the hardship imposed by the criminalisation of second and subsequent offences under this act, the balance between empowering the legal metrology inspector and protection of legitimate entrepreneurs had got distorted.

❖ Process reforms in this case required legislative changes. To address this issue, the government has decriminalised several provisions of the 2009 Act under the *Jan Vishwas* Bill 2022 which was recently passed by the parliament. However, many provisions accounting for a very large share of cases are still criminalised. Hence, more needs to be done.

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- **Type 4: Adding capacity in some level of government.**

❖ This type of reform relates to cases where a capacity constraint in important government capacity becomes a bottleneck. Such areas may require increase in the capacity of the government at various levels to increase efficiency or resolve the issues in the area/sector. One example of this is the intellectual property rights ecosystem, specifically patents.

❖ India significantly lags behind its global peers in terms of the number of patents applied for and granted. The figures in India remain a fraction of those in countries such as China, the United States (US), Japan, and Korea. Apart from this, the time taken for processing a patent application in India is much higher as compared to its global peers.[7] In this article the authors mention that 'The global best practice is disposal within two to three years, whereas in India, average time taken is just under five years and is up to nine years in some categories like biotechnology, which will cross 10 years soon, if the shortage of manpower issue is not addressed'. They elaborate that the major cause of this delay in processing the patent applications is the shortage of manpower in the patent office in India. Manpower employed in Indian patent office is only around 900, as compared to 13,704 of China and 8,132 of US.

❖ It is evident that to address this constraint, there is a need to increase the capacity in the patent office, especially at senior levels (no other reform will have that effect that this will). Recognising the need for this, the process of increasing the manpower in the Office of Controller General of Patents and Trademarks has started.

- **Type 5: Removing a state-mandated activity or requirement.**

  ❖ Another type of process reform relates to getting rid of a requirement or non-value adding mandatory activity. One such example is that of mandatory mediation required before going for commercial litigation.

  ❖ As per the current status, pre-litigation mediation in India for commercial disputes (as mandated under Section 12A of the Commercial Courts Act, 2015) is still compulsory.[8] This shows that mediation has not worked for 99.0 per cent of cases but has added time and cost for everyone. Hence, there is a need to make mediation voluntary under Section 12A of the Commercial Courts Act 2015 as well as has been done in civil cases to simplify the process of grievance redressal in the country.

  ❖ Further, certain autonomous bodies or organisations are set up by the government with a particular goal. Over time, the economic structure of the sector may have changed or simply the body may not have been able to do what it envisaged to do. In such cases, there is a need to have a relook at the value that autonomous bodies are adding and then, either merge, restructure or close it based on the context. In last few years, an exercise to rationalise autonomous government bodies was undertaken. Under this, some bodies were closed down, such as Central Organisation for Modernisation of Workshops[9], Tariff Commission[10], All India Handloom Board, and All India Handicraft Board etc.

Further, certain autonomous bodies or organisations are set up by the government with a particular goal. Over time, the economic structure of the sector may have changed or simply the body may not have been able to do what it envisaged to do.

Conclusion

As one can see from the discussion in this article, process reforms are an important part of the policy and governance toolkit. There is some scattered literature about individual changes but virtually no literature on process reforms as a class. In this article the authors argue that there is a need to systematically analyse these reforms as a distinct class, thereby making them a routine subject of both public and academic discourse.

It further provides a basic framework for carrying out process re-engineering in the government and then gives the possible ways to do those reforms using examples from India. Governments should do a periodic assessment of its regulations/legislations and even institutions. This should be a common ongoing feature for the country. In most of the cases, making these small changes can have significant impact.

The authors hope that greater attention on process reforms will lead to the constant use of small, targeted iterative changes that improve economic efficiency.

Endnotes

1 Fixing the GST Process: Five Years of Iterative Problem Solving, Sanjeev Sanyal and Pankaj Dixit (EAC-PM Working Paper Series EAC-PM/WP/16/2023)

2 https://hbr.org/1990/07/reengineering-work-dont-automate-obliterate

3 Reengineering the Corporation: A Manifesto for Business Revolution' by Hammer and Champy (1993)

4 Sanyal, Sanjeev and Arora, Aakanksha (2023). Process Reforms: Fixing the Nuts-and-Bolts. Policy Paper No.8 http://dsppg.du.ac.in/our-publications/

5 https://dbtbharat.gov.in/static-page-content/spagecont?id=18

6 Reforming the Legal Metrology Regime, Sanjeev Sanyal and Apurv Kumar Mishra (EAC-PM Working Paper Series EAC-PM/WP/23/2023)

7 Why India Needs to Urgently Invest in its Patent Ecosystem, Sanjeev Sanyal and Aakanksha Arora (EAC-PM Working Paper Series EAC-PM/WP/2/2022)

8 The Case for Making Pre-Litigation Commercial Mediation Voluntary, Sanjeev Sanyal and Apurv Kumar Mishra (EAC-PM Working Paper Series EAC-PM/WP/24/2023)

9 https://indianrailways.gov.in/railwayboard/uploads/directorate/secretary_branches/Office_Order_2022/Rationalisation%20of%20Government%20%20Bodies%20under%20MoR-Clsoure%20of%20COFMOW.pdf

10 https://www.teamleaseregtech.com/fileviewer/?f=https://avantiscdnprodstorage.blob.core.windows.net/legalupdatedocs/17543/Jun62022_MoCI_MoCI%20notifies%20regarding%20the%20windup%20of%20Tariff%20Commission.pdf

Reforms in National Security Architecture and Strategic Decision Making

Major General Sanjeev Chowdhry (Retd)@

Abstract

This article explores the imperative need for reforms in India's national security architecture and strategic thinking. The challenges faced by the current security framework, including coordination issues, outdated procurement processes, and the absence of a comprehensive National Security Strategy (NSS), are examined. The arguments emphasise the focal position of strategic decision-making in policy construction and highlights for a cultural shift towards long-term planning and flexibility. The paper recommends the establishment of a documented NSS, improved intelligence coordination, Public-Private Partnership, and investments in transforming the armed forces and enhancing cybersecurity infrastructure. The potential benefits of a documented NSS are outlined. Likewise, the paper also recommends, the formation of a Ministry of National Security and a national-level think tank to conduct in-depth research and encourage cooperation between academia, policymakers, and the security agencies.

Introduction

In the ever-evolving stage of global security, nations regularly reassess and adapt their security strategies to preserve their territorial integrity and interests. India today stands at the crossroads of contemporary global challenges with a complex geopolitical environment; necessitating an urgent need for reforms in the national security architecture and strategic thinking. In recent years, the country has realised this and has now decided to undertake a transformative journey to achieve the same. This aspect is fraught with challenges and the path to transformation is not going to be simple. This article outlines the necessity of such a transformation, the challenges in the way, and recommends the way ahead for a country such as India. Since the Kargil War, there have been many attempts to define the requisite reforms, but the challenges have held firm decision-making back.

National Security

National security, for India, includes a multifaceted process to guard the independence and territorial integrity of the nation, and ensure the well-being of its citizens. It embraces protection of the country from external threats, including military options, terrorism, and geopolitical challenges and further address the internal challenges like insurgency, rebellion, terrorism and disasters. In addition to military aspects it also includes political, diplomatic, economic, energy, cyber security, and environmental sustainability. The objective of such security is to create a protected environment that permits the socio-economic development of the nation and ensures the safety and success of its people.

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Strategic Decision Making

Strategic thinking is a process that defines the way people think about, assess, view, and take decisions for the future of the nation. It is an extremely effective and valuable tool which can be applied to arrive at long term decisions that can be related to governance, administration, and military planning.

Strategic decision making provides a capability to analyse intricate circumstances, predict future conditions, and strategically decide on an effective well-defined plan to achieve long-term objectives. It implies a methodical and forward-looking methodology to decision-making. In the framework of national security, strategic thinking is crucial for developing thorough and pre-emptive strategies to uphold a nation's interests. It requires a complete consideration of geopolitical issues, likely threats, and the capabilities of the opponents. Strategic decision making involves the compilation of political, economic, diplomatic, and military aspects, to develop clear and sustainable plans for the future of the nation.

Present Structure/Resources

India's present national security architecture includes key decision-making components vital for the nation. At the top the National Security Council (NSC) looks after national security matters and it also coordinates the activities of various agencies. The National Security Advisor (NSA) is the prime advisor to the Prime Minister (PM), accountable for managing and framing policies related to national security. The Defence Intelligence Agency (DIA) was tasked to manage the intelligence in the military domain post the Kargil War in 1999. In addition, a Nuclear Command Authority was set up to manage India's nuclear weapons.

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India's national security structure is a three-tiered structure and comprises of a National Security Coordination Secretariat which further has a: Strategic Policy Group (SPG), National Security Advisory Board (NSAB) and a Joint Intelligence Committee (JIC). The SPG is the first tier and it is the core decision-making apparatus of the National Security Council Secretariat (NSCS). It assists the NSC, and also performs long-term strategic review of the security affairs of the country. It is the chief mechanism for coordination among the different ministries and for the integration of inputs for the formulation of security policies. The NSAB comprises a number of retired civil and military officials, and has a direct access to the PM. The prime function of NSAB is to undertake long-term analysis and to provide perspectives on the national security issues to the NSC and recommend measures/solutions and policy options on the issues referred to it by the NSC.[1] The last tier is the JIC of the government of India which analyses intelligence data from the Intelligence Bureau (IB) and the Research and Analysis Wing (R&AW), Directorate of Military, Naval, and Air Intelligence and the DIA. JIC has its own secretariat that falls under the Cabinet Secretariat.[2]

The Defence Planning Committee (DPC), formed in 2018, serves as a vital decision-making body and it covers national defence and security priorities, foreign policy imperatives, strategic doctrines, defence acquisition, infrastructure development plans, and technological advancements.

The Ministry of Defence assumes a central role in defending the country through the management of the Indian Army, Navy, Air Force, and Coast Guard.

The Ministry of Home Affairs (MHA) places emphasis on internal security and law enforcement. The Intelligence Bureau (IB) functions as an internal intelligence agency, responsible for intelligence and counter-intelligence within the country. Meanwhile, the Research and Analysis Wing (R&AW) focuses on gathering intelligence beyond the nation's

borders. The Strategic Forces Command ensures the readiness of India's strategic nuclear forces. Additionally, the Central Armed Police Forces, IB, Sashastra Seema Bal, National Security Guard (NSG), and Assam Rifles operate under the MHA, deployed for internal security, border guarding, and other duties. Refer to Figures 1, 2 and 3 for detailed organisation of the Security Architecture.

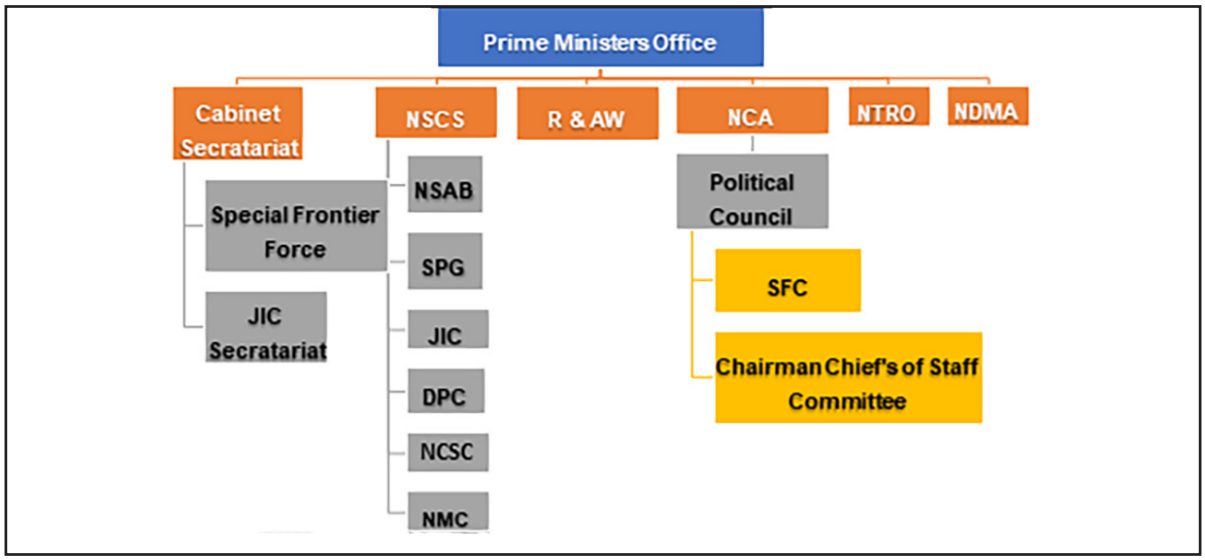

Figure 1

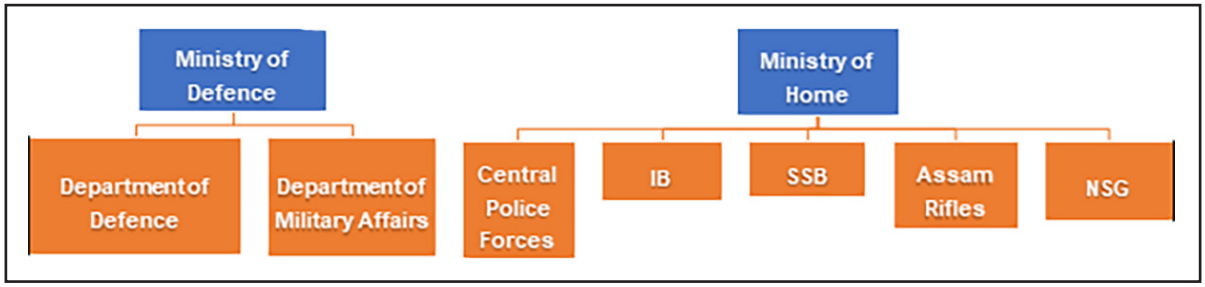

Figure 2

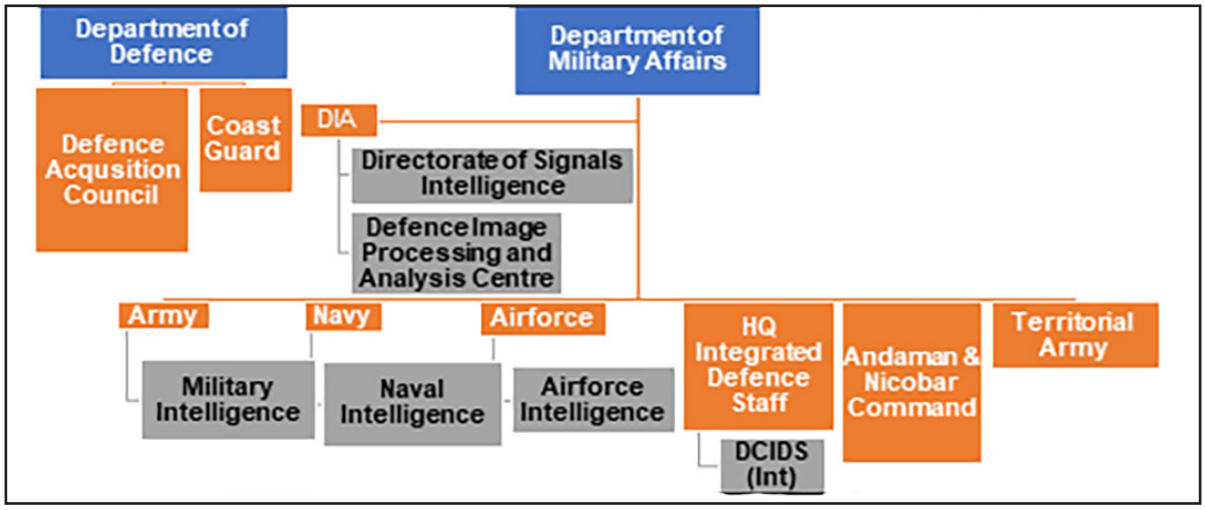

Figure 3

Challenges

The ongoing reviews and restructuring processes have brought a semblance of order to India's national security apparatus, with incremental expansion. However, effective integration of the expanded NSCS, DPC, cyber and space agencies, and reconstituted SPG into a cohesive strategy is a critical challenge.

India faces challenges in national security due to the existence of several agencies with overlapping roles. This can lead to coordination issues, inefficiencies, and potential gaps in addressing security threats. Insufficient coordination among different agencies can result in information silos and hinder a comprehensive understanding of potential threats. Such functioning with competing mandates and resource challenges will lead to reduced effectiveness in responding to security challenges due to a fragmented approach. Internal conflicts or competition among security agencies for control or dominance can also undermine collaborative efforts. This will divert resources and attention from actual security threats, leading to inefficiencies.

The absence of a written and documented National Security Strategy (NSS) can impact the alignment of resources, policies, and actions towards a consistent and long-term strategy.

Weaknesses in the nation's cybersecurity organisation pose a significant risk, especially in an era of rising cyber threats. Such threats have the potential for cyber-attacks that could compromise critical infrastructure and sensitive information. The fluid nature of cyber threats, including the rise of new attack vectors and techniques, requires constant adaptation. Insufficiently skilled personnel in various security domains, limits the ability of the nation to address evolving security challenges with the required expertise.

The absence of a written and documented National Security Strategy can impact the alignment of resources, policies, and actions towards a consistent and long-term strategy.

National security structures within governments across the world are largely hierarchical, conservative, only modestly accountable to the people and resistant to change and transformation. India is no exception. Such structures across the world are scrambling to reform and transform in the face of challenges that were not anticipated. This has resulted in insufficient collaboration between the government and private sector in addressing security challenges, which could result in a lack of timely and comprehensive information sharing between government intelligence agencies and private sector entities. Such a lack may result in gaps in the intelligence picture, limiting the government's ability to assess and address potential national security threats.

The absence of a dedicated national security think tank also limits the generation of informed policy recommendations and strategic foresight. There is also a lack of a centralised hub for policy analysis and innovation in the national security domain. In the context of national security in India, cross-domain expertise is crucial for addressing multifaceted challenges and it is hence imperative to collaborate with experts across diverse domains.

Inefficiencies or delays in the procurement process for defence and security equipment affect the military's operational capabilities. A variety of challenges for procurement have been identified over time and these can be broadly categorised into three types of risks, technological, contractual, and organisational. Technological risks refer to the rapid rate of innovation and technological change in the face of relatively low technical capabilities and the inability to precisely anticipate or comprehend futuristic requirements, engineering, and design issues and inefficiencies resulting from renegotiation of contracts. Organisational risks refer to organisational structure and management that affect procurement performance.[3]

A lack of a comprehensive and ingrained strategic culture within the security apparatus adds to the difficulty in adapting to evolving geopolitical scenarios and a potential lack of foresight in national security planning. Ongoing internal security challenges, crisis management inefficiencies, and geopolitical tensions compound the complex security

scenario. Addressing these weaknesses requires a comprehensive and coordinated effort, involving reforms in policies, organisational structures, the documenting of the NSS and the development of a strategic culture that values foresight and adaptability.

The Way Ahead

To chart a comprehensive and effective course forward for India's national security, several key initiatives must be undertaken. First and foremost, the formulation of a written NSS is imperative, providing a strategic roadmap to navigate the intricate global security landscape. A national strategy is imperative for a country to plan its future course and chalk out its priorities as a function of its aspirations, security challenges and available resources. Such a strategy is important for planning its economic trajectory, shaping the country's foreign relations, planning its defence modernisation, improving its science and technology capabilities, resource planning, internal security, and other such critical areas. Across the globe, countries-small and large-regularly release Defence White Papers or NSSs.[4] In an era of evolving threats and challenges, a nuanced understanding of niche domains is crucial. India must consider issuing white papers on such sectors, i.e., cybersecurity, space security, economic resilience, emerging technologies, and international collaborations, as focal points for enhancing India's overall security architecture.

The aim of the NSS must be to enable conditions for India to meet its primary aim, which is to ensure a peaceful periphery and internal stability.[5] In Nov 2023, media reports revealed that India has commenced the process of formulating the NSS after extensive deliberations by the military and strategic community. The NSCS is currently compiling inputs from various central ministries and departments to create the draft, awaiting final cabinet approval. The specific timeline for the strategy's completion remains uncertain, though multiple ministries have already submitted their inputs to the NSCS.[6]

In Nov 2023, media reports revealed that India had commenced the process of formulating the National Security Strategy after extensive deliberations by the military and strategic community.

The NSS is a comprehensive framework crucial for safeguarding a sovereign country's core interests amid evolving challenges. Serving as a guiding plan for security, defence, and foreign policy, it outlines objectives and methodologies for policymakers to achieve national goals. Regular updates are vital to address traditional and non-traditional threats, ensuring accountability. Stemming from a doctrine, the NSS would transform into an executable policy, guiding defence reforms and offering a comprehensive perspective on handling threats. Benefits encompass fostering a comprehensive approach, enhancing deterrence, guiding decision-making, enabling crisis management, promoting public awareness, ensuring international engagement, and adapting to changing threats.[7] To mitigate the confidentiality issues, there could be two versions of the document, one for public consumption and as a signal to external stakeholders/adversaries of our intentions and methodologies. The other would be a classified version for the various security agencies to act upon. Hence, striking a balance between transparency and safeguarding classified details thus stands out as most crucial and having the two volumes would take care of all such concerns.[8] The NSS should contain:

- National security objectives.
- Appreciation of the emerging security environment related to the geopolitical changes in the world.
- Strategic guidelines for geopolitical, military, economic, and technological dimensions.
- Assessment of the national strengths, weaknesses, and gaps of the country in dealing with the challenges. (classified)
- Documentation of the military, economic, and diplomatic methodologies needed to meet the challenges. (classified)

The publicised NSS will not be a detailed plan of action. It will only indicate broadly the likely trends and a nation's focus on issues affecting national security. Hence, it must contain an accurate assessment of the existing security environment to spell out challenges and opportunities.[9] In addition, it must include broad strategic guidance to promote Indian national interests and strategic decision making. The NSS would create an objective outlook toward addressing the security concerns of the country; the decision-makers must take into account the aspirations, experiences and viewpoints of not just the political class but also the people who have been active practitioners in the field of defence and strategy. This would include the intellectuals and analysts as well as the veterans of the Indian Armed Forces.[10]

Additionally, a centralised coordination mechanism should be implemented, fostering regular information-sharing and joint planning among intelligence agencies, military branches, and law enforcement.

Creating a fully integrated higher defence organisation is crucial to promoting inter-service coordination and joint planning. Clearly defining roles and responsibilities within this organisation enhances efficiency and effectiveness. Protocols must be established for sharing information based on the specific responsibilities of each agency. Joint training programmes to familiarise personnel from different agencies with each other's methodologies, practices, and operational requirements can be conducted to build trust and understanding. Technology solutions would also facilitate interoperability among different agencies' technological systems. This may involve adopting common platforms and data standards.

Additionally, a centralised coordination mechanism should be implemented, fostering regular information-sharing and joint planning among intelligence agencies, military branches, and law enforcement.

Modernising the armed forces, including technology upgrades, and training, is crucial. Streamlining procurement through transparent bidding ensures efficiency. Cybersecurity must be upgraded with infrastructure enhancement, personnel training, and a dedicated task force. Establishing training centres for cybersecurity professionals and conducting public awareness programmes are vital.

In procurement, regular assessments of technological advancements and market trends are vital to anticipate changes and stay innovative. Collaborating with technology partners provides insights for smoother adaptation to new technologies. Contracts should be flexible, comprehensive, explicitly outlining roles, responsibilities, and deliverables. They must include clauses addressing potential technological, design, technology transfer, and engineering issues, with clear benchmarks for performance and consequences for non-compliance.

Formalising government-private sector partnerships through Public-Private Partnership is essential. Joint training and research and development between government research institutions and private sector companies will lead to collaborative projects to develop innovative technologies and solutions. Including private sector representatives in national security policy development ensures different perspectives.

Introducing strategic thinking courses in military and civilian education will foster a culture of continuous learning. Regular assessment of technological advancements will aid in anticipating changes. Improving strategic decision-making in India requires a cultural shift towards long-term planning, vulnerability analysis, and flexibility. Specialised components within government should focus on long-term policy development, scenario building, and risk assessment. Partnerships and information-sharing among experts from diverse disciplines are crucial for varied perspectives. Collaboration with independent think tanks and leveraging advanced technologies enhances analysis. Cultivating an environment encouraging calculated risk-taking, innovation, and learning from failures is imperative. Tools such as environmental scanning, net assessment, and scenario building contribute to effective strategic decision-making.

To build a skilled workforce, specialised educational programs in areas like cybersecurity, intelligence analysis, and defence studies are important. Improved collaborations among government agencies, defence organisations, and academic institutions are crucial for research and expertise development. Adequate funding for research addressing national security challenges, coupled with accountability, is necessary. Encouraging participation in joint training exercises with allied nations fosters interoperability and knowledge exchange.

An assessment and update of legal and policy structures to address emerging security challenges are essential. Developing and improving the capability for immediate and effective emergency reaction in the event of natural disasters or security threats is critical.

Establishing a dedicated government-funded strategic think tank, ensuring its independence and empowerment, is also vital for providing long-term, holistic views on security, economic, and foreign policies. Governments worldwide predominantly focus on day-to-day operations, underscoring the need for an internal 'think tank' to provide a comprehensive, long-term view across diverse areas. To establish a national level think tank for India's security framework, restructuring the SPG is essential. The body would concentrate on conducting thorough research, analysis, and delivering strategic recommendations to enhance national security. Currently, the NSCS and Niti Aayog contribute to national security policies, conducting research and net assessments. However, the NSCS's classified ventures limit the interaction with civilian academia. Niti Aayog, with a broader focus on economic and social development, cannot entirely assume the mantle of national security. Therefore, establishing a dedicated think tank focused on complete, long-term national security strategies is necessary.

Establishing a dedicated national think tank in India brings forth a myriad of benefits in grappling with issues such as border disputes, terrorism, cybersecurity threats, and geopolitical dynamics, where a think tank can prove invaluable.

- Establishing a dedicated national think tank in India brings forth a myriad of benefits in grappling with issues such as border disputes, terrorism, cybersecurity threats, and geopolitical dynamics, where a think tank can prove invaluable. Serving as a bridge between academia, policymakers, and the security apparatus, such an institution has the capacity to underwrite effective security policies through in-depth research and analysis. The think tank could aggressively contribute in international partnerships contributing to a collective effort in addressing and mitigating security risks on the global stage.

- The structure of the national-level think tank needs to be designed for comprehensive analysis and strategic insights into various facets of national security. It should comprise a research division that will focus on critical areas such as geopolitical analysis, providing insights into global and regional trends impacting India's security; a net assessment division, which will evaluate military, economic, technological, and diplomatic capabilities relative to potential adversaries; a counterterrorism and an intelligence division, which will offer recommendations on counterterrorism and counter insurgency strategies; and a cybersecurity and technology division, to address emerging threats in cyberspace and proposing measures to enhance cybersecurity while integrating new technologies. The think tank's strength will lie in its diverse team of experts who will establish liaisons with universities and to ensure access to a broad spectrum of academic expertise. Furthermore, the think tank will actively disseminate knowledge through policy papers, reports, and articles, reaching the public, policymakers, and academia. Collaboration with government agencies is a crucial aspect, ensuring that the think tank's research aligns with national security priorities. To enhance public awareness, the think tank would organise conferences, seminars, and public-lectures, fostering engagement and dialogue on security matters.

The NSA and the NSCS should expand their core support structure to function effectively, drawing upon and assimilating knowledge from multiple sources into a cogent national strategy. The Chief of Defence Staff will play a pivotal role in fostering inter-service coordination, ensuring faster decision-making during crises, and providing a platform for joint planning. These initiatives collectively form a strategic framework for India's national security, promoting adaptability, collaboration, and preparedness.

The way ahead involves progressing from a 'Whole-of-Government Approach' to a 'Whole-of-Nation Approach'. The compilation of the NSS, National Defence Strategy, Nuclear Preparedness Review, and Joint Military Campaign Strategy will shape a robust security framework. This would form the basis for a whole-of-nation approach which would include the active involvement of citizens, communities, and organisations in the national security discourse and initiatives ensuring that national security is a shared responsibility that extends beyond the government to include all segments of society. Such an approach would also include regular training and maintenance of the readiness of reserves to ensure their quick mobilisation during emergencies. The National Cadet Corps, Home Guards, and Scouts would have a role in civil defence and the involvement of these organisations in community engagement activities would raise awareness and preparedness levels at the grassroots. Conducting strategic scenario gaming exercises to simulate various security threats and challenges, would allow better preparedness and response planning.

Finally, the creation of a Ministry of National Security could have sizable benefits. Such a decision would involve various considerations and potential challenges. There will need to be a centralised focus, interagency coordination, a comprehensive NSS, resource allocation, and policy development. However, certain challenges are bureaucratic hurdles, inter-ministerial cooperation, resource competition, risk of silo formation and political implications exist.

The Chief of Defence Staff will play a pivotal role in fostering inter-service coordination, ensuring faster decision-making during crises, and providing a platform for joint planning. These initiatives collectively form a strategic framework for India's national security, promoting adaptability, collaboration, and preparedness.

Conclusion

India's journey in national security architecture and strategic decision making involves crucial reforms and challenges. Offsetting the challenges, encompasses comprehensive strategies, enhanced collaboration, modernisation, augmenting strategic decision making, enhancing strategic communication and addressing human capital shortages. The proposed NSS, and the national-level think tank signifies positive strides in India's commitment to improving its security landscape.

It is crucial to widely share the nation's perspectives on national security with both think tanks and the public. This broader dissemination aims to garner increased public support for the country's documented NSS.

Endnotes

1 GOVERNMENT OF INDIA MINISTRY OF HOME AFFAIRS LOK SABHA UNSTARRED QUESTION NO.2624, https://www.mha.gov.in/MHA1/Par2017/pdfs/par2016-pdfs/ls-020816/2624%20E.pdf

2 Joint Intelligence Committee (JIC), https://irp.fas.org/world/india/jic.htm#:~:text=The%20Joint%20Intelligence%20Committee%20(JIC,Intelligence%2C%20Directorate%20of%20Air%20Intelligence.

3 Defence and Peace Economics Risks in defence procurement: India in the 21st century, https://pure.manchester.ac.uk/ws/portalfiles/portal/117821253/manuscript.pdf

4 Arun Vishwanathan, Revamping India's National Security Structure: Agenda for the Indian Government, https://www.academia.edu/8114533/Revamping_Indias_National_Security_Structure

5 Manoj Joshi, National Security Strategy: For India's Internal Stability & Peaceful Periphery, https://www.thequint.com/opinion/national-security-strategy-for-india-peaceful-periphery-internal-stability#read-more

6 India to bring in a National Security Strategy: what is it, why is it important, https://indianexpress.com/article/explained/india-to-bring-in-a-national-security-strategy-what-is-it-why-is-it-important-9014489/

7 Maj Gen Saneev Chowdhry (Retd), Documented National Security Strategy – A Need of the Hour, https://www.usiofindia.org/strategic-perspective/Documented_National_Security_Strategy_A_Need_of_the_Hour.html

8 aj Gen Sanjeev Chowdhry (Retd), Documented National Security Strategy – A Need of the Hour, op cit.

9 A national security strategy for India: Documenting strategic vision prudently, https://timesofindia.indiatimes.com/blogs/ChanakyaCode/a-national-security-strategy-for-india-documenting-strategic-vision-prudently/

10 Edited by N Vohra, India's National Security Challenges, https://www.globalorder.live/post/10-points-on-the-challenges-facing-india-s-national-security-strategy

Strengthening National Security: A Defence Economics Perspective for India

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Abstract

Budgetary constraints are invariably cited as a major constraint for Indian defence spending. However, it ought to be feasible for India to strengthen national security and significantly enhance combat capabilities within the realistic resources available. A defence economics perspective helps identify the strategic choices that can make this possible. There are opportunities that can be seized and realised within the budgets available, provided we are ready to think differently. From the historical service-specific and turf-conscious thinking, a whole-of-nation approach needs to be adopted in support of India's national security goals. Optimal trade-offs need to be looked at taking into account the lessons of recent experience.

Introduction: Why a Defence Economics Perspective

The backbone of any country's national security is its defence forces. Maintaining a strong and effective defence is essential. Doing so inevitably costs a lot of money. However, there appears to be a lack of interest and awareness among the political class regarding budgetary and economic defence matters. For example, in India, sometimes the defence budget is passed in Parliament without debate on its content.

At the same time, to meet professionally defined strategic objectives, it is always possible for the national resources at the disposal of the military to be more optimally used. If not, the nation will end up having less combat capability than it could have had. An economically efficient solution to military problems does not imply a cheap force or a small military budget. It simply implies that whatever the budget,or other limitation, for example, on personnel, the greatest military capabilities are developed.

Debates on defence policy usually focus on the number of aircraft, warships, tanks, personnel etc. These are not the objectives or outputs. They are the inputs towards realising the objective. The real questions are: what is the contribution of each of these inputs of equipment and manpower to the desired output of enhancing defence capability and strengthening the nation's security for the future? What would be the impact of changes in these inputs on the desired output? And what are the trade-offs?[1] Some of these questions are touched in the succeeding paragraphs.

Planning for the Future

Planning is not just an economic concept. It is essential for defence. National security must have a very long strategic view, and having a well-articulated plan enables a country to achieve long-term strategic aims. It becomes easier to find the funds for priority needs and weigh the trade-offs once the end objective is clearly defined.

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In India, there has traditionally been a political reluctance to define the country's vital long-term security interests and/or threat perceptions in any formal way. This is unlike the practice in most major countries that periodically set out in the public domain their defence objectives and the means to be employed to achieve these objectives. For example, the United Kingdom's (UK) Defence White Paper 2023, France's Law on Military Planning 2019 to 25, China's Defence White Papers 2019.

In India, there is no clarity on what is expected of the armed forces. For example, are the armed forces expected to have the offensive capability and manpower to capture territory currently held by China and Pakistan? Or are they expected to focus on defensive capability to hold the line and push back against aggression? Does India seek to build a blue water navy to dominate the world's oceans, or does it seek to protect the coastline and exclusive economic zones, and deter aggression? Does India want to use air and space effectively to defend the country and be able to destroy enemy capabilities if attacked, or does it want to build an offensive aerospace capability?

How does one get to where they want to go if it is not clear where they are going?

Working with Budgetary Constraints

In India, there has traditionally been a political reluctance to define the country's vital long-term security interests and/or threat perceptions in any formal way. This is unlike the practice in most major countries

The approach historically has been for the services to present wish lists, and hope that the funds to fulfil these wishes will somehow be found. Often, token provisions for the items on the list are made in the budget. Without prioritised funding, it takes many years for these wishes to be fulfilled, if at all. By then quite a few items on the wish lists may be technologically outdated.

The budget represents a hard constraint on a nation's ambitions. The services need to recognise this, and plan accordingly. The trend for the last ten years has been that the budget for defence has remained in the range of 9.0 per cent to 12.0 per cent of the total budget.[2] There has not been any dramatic change in this ratio and it is not likely to be in the future. That is the reality. There are always competing developmental requirements and a balance must be struck somewhere.

Many other professional armed forces are looking ahead by addressing trade-offs. For example, Force Design 2030 conceptualised by the United Sates (US) Marine Corps itself sets out a blueprint for a total revamp of the Marine Corps. Its self-described professional mandate is that "We will not receive additional resources; we must divest certain existing capabilities and capacities to free resources for essential new capabilities".[3] Such clarity in thinking is a good practical basis for determining what is realistically needed to enhance capabilities.

Unlocking Geo-Economic Potential

Recent history and the presence of hostile neighbours in the north east and north west of the country have led to Indian combat capabilities and force deployment being geographically north-centric and land force dominant. This will remain to a degree as that is where the threat perception remains the greatest. Boots on the ground will always be needed there.

At the same time, it is arguable that the maritime domain needs significantly greater attention today. Indonesia is a mere 90 nautical miles from the southernmost tip of the Andaman and Nicobar Islands. In between are the Straits of Malacca and the Six Degree Channel, amongst the world's most strategic waterways. For example, two-thirds of the world's oil trade passes through the Indian Ocean. About 70.0 per cent of the oil bound for China passes through this area.[4] The US, UK and France have island bases and a major presence in the Indian Ocean.[5] Under the circumstances, for India's economic and national security, should it not enhance military capabilities in the maritime region to have an option for deterring hostile Chinese actions in the north?

Geography presents opportunities. A strong armed presence in the Andaman and Nicobar Island chain can be a game changer, and enable India to exert deterrent capability and project force far beyond the mainland. In the establishing and equipping of such a base, lessons can be drawn from China's Anti-Access/Area Denial (A2/AD) strategy,[6] designed and operationalised to limit the deterrence and intervention capabilities of the US and allies in the South China Sea. A2/AD rests on air and maritime missile based defensive systems for neutralising the advantages of superior enemy forces and challenging the enemy's freedom of movement in the area covered.

Intent already seems to be there. There is a plan for 'Holistic Development' of the Great Nicobar Islands,[7] and a transhipment port is being planned in India, with the plan including the development of combat capability in the form of a strong tri-service base, not just a token presence. Will such an initiative not cost a lot of money? Sure, there would be a cost, but arguably less than the cost of some prestige projects such as an aircraft carrier whose survivability in this age of hypersonic missiles like the Russian Kinzal is questionable.

Strong island bases on both sides of India would be a good investment, preventing the need for more costly defensive action in the future. A well-equipped tri-service based on these islands with A2/AD like capabilities would be a force multiplier. The very existence of such bases, which are unsinkable aircraft carriers, can, create the possibility of being able to disrupt Chinese and/or Pakistani maritime trade if needed to counter hostile action on the northern borders and make good geo-economic sense.

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Increasing Industrial Productivity

A substantial defence production capability has been developed in the public sector in India. However, this capability has historically not been able to meet the needs of the services. Government enterprises tend to be less productive (often due to inherent rigidities in decision-making, inflexibility in personnel costs, work culture etc.) than private sector companies making the same products.

Unfortunately, till recently there was reluctance on the part of the Defence Ministry to allow the private sector to participate in defence production.

The ability of a country to supply domestically the needs of the forces is going to be increasingly important in the emerging multi-polar world where allegiances are in flux. Projected combat capabilities may remain on paper if there are unforeseen geopolitical bottlenecks in supply. For example, Ukraine reportedly needs 2,50,000 artillery rounds a month from the European Union to sustain its war effort in its conflict with Russia,[8] creating a critical dependence.

It is sobering to appreciate that India is the world's largest arms importer.[9] Fortunately, things are changing now, and *Atmanirbharta* (Self-reliance) is the stated policy. But they are changing slowly and hesitantly. Four decades back, an estimated 40.0 per cent of weapons and equipment requirements were met by outright imports (a matter of concern even then).[10] Today, this figure of defence procurement from foreign sources is not very different, at about 36.7 per cent.[11]

There is a need to think more radically. Privatising under performing ordnance factories is one possibility. Perhaps the time has come to think of setting a timeframe wherein management control of non-performing ordnance factories is handed over to the best suited private sector players?

Indigenous combat capability can only be developed with a Whole-of-the Nation's Approach, wherein the traditional hesitation in trusting the domestic private sector would need to be shed. Security concerns and perceived

technological limitations are the overt reasons for this hesitation. Both of these concerns need a rethink. Is it not strange that, as the world's largest arms importer, India trusts foreign governments and the foreign private sector to provide needed arms for the forces but has reservations about trusting domestic players?

Technological competence is surely not an issue. Space rocket missions demand the most exacting of technological standards, and the laws of physics permit a zero margin of error in space. The Indian Space Research Organisation already sources components for its rockets from the private sector.[12] Is there any reason to doubt that the much less technologically exacting defence needs can be fulfilled by domestic industry? Iran is already producing hypersonic missiles, while Turkey brings out the Bayraktar series of drones. India can surely do better.

Research and development spending in India needs to focus on futuristic weapons and defence related technologies. There are sectors such as Artificial Intelligence (AI) and the use of Information Technology (IT) for logistics where it should be having a competitive advantage. If India has the skill set to build the IT stack, and is already developing products like drones and 3-D printed engines for satellite launch vehicles why cannot it use these skills in defence technology and logistics?

In fact, commercial service providers and private industry are essential force enablers for enhancing long-term combat capacities.

Most public debate on defence matters centres around high-end big-ticket acquisitions, such as the Rafael fourth-generation fighter jet, a third aircraft carrier, the main battle tank.

Making Capital Investment and Technology Choices

Most public debate on defence matters centres around high-end big-ticket acquisitions, such as the Rafael fourth-generation fighter jet, a third aircraft carrier, the main battle tank. These acquisitions acquire glamour, visibility and sometimes become an end in themselves. They also tend to become a prestige issue for the service concerned. It becomes difficult to take a step back and honestly assess all the options on the table and see whether the country is getting the required 'bang for the buck'. What really needs to be asked is for a given investment, which of the possible options will best strengthen national security and combat capabilities?

Especially when recent conflicts challenge existing thinking about the conduct of modern warfare. They have demonstrated how smaller and cheaper weapon systems can deny dominance to expensive, modern systems.

Should the services, for example, seriously consider a third aircraft carrier that on present estimates with its full complement of aircraft may cost the equivalent of the Ministry of Defence entire capital budget for 2023-24?[13] Something that can be sunk by an anti-ship ballistic missile costing a few crores in an actual war? As China has shown in its South China Sea strategy, the mere threat that this could happen is enough to deter even highly advanced American aircraft carriers. Or would it be better to spend the same money to achieve the desired objectives by beefing up naval capabilities through island bases, shipborne and shore-based missile capabilities, submarines, Unmanned Aerial Vehicles (UAVs) and underwater vehicles etc?

Is it a good idea to plan on growing the fleet of expensive[14] top-end fourth generation fighter jets with long delivery timetables, at a time when no one knows how long the conventional concept of air superiority will hold in a rapidly changing battlefield? The Ukraine war has already demonstrated how effective Ukrainian anti-aircraft defence was in denying air dominance to the sophisticated fighter jets available with the Russian Air Force as also by the sophisticated Russian air defence system which can shoot down dozens of advanced Western missiles like the Storm Shadow and drones fired at it by Ukraine. Is it not possible for increasingly versatile unmanned AI guided UAVs to perform the tasks that are needed? For example, AI enabled radar evading loitering Lancet drones deployed by Russia appear to have been

more useful in attacking enemy equipment on the ground than conventional air power.[15] Why not think of options that may achieve the battle objectives better with the same expenditure and perhaps lower human cost?

Is it wise to expand armour capabilities, when recent experience again in Ukraine has brought out their vulnerabilities in modern war? Options like relying more on land, air and sea missile capability, mobile precision fire artillery systems, helicopters, unmanned systems, electromagnetic warfare capabilities and drones come to mind, particularly in view of recent experience from combat zones, notably Ukraine. Building combat capability around the newer, cheaper, rapidly evolving technologies is going to be crucial in future warfare.

This is not to suggest that fighter jets or tanks should be done away with but rather to propose to apply a result oriented economic analysis to the issue to develop rational numbers based on available resources and projected trends in warfare.

Improving Human Resources Management

In India, the structure of human resources in the military has changed little since British times. Reliance continues on a large, conventional force with over 1.45 mn men in uniform in the armed forces[16] and another nearly 1.06 mn paramilitary personnel[17] with many of these organisations directly performing a defence role.

There is probably a case for looking at overall numbers in the context of modernisation. Notably, even the Chinese People's Liberation Army has made drastic manpower reductions of about 25.0 per cent in recent times.[18]

Of course, expenditures on both human resources and capital are equally important for enhancing combat capabilities, but it is arguable that the current 'teeth to tail' ratio could be improved.

Within the available defence budget, it is noteworthy that more than 70.0 per cent is typically being absorbed by the revenue component. This component is essentially manpower costs, and in turn one third share of this goes to pension payments. Less than 30.0 per cent is left for capital expenditures, which finances equipment.[19] This gives very limited room for manoeuvre. Of course, expenditures on both human resources and capital are equally important for enhancing combat capabilities, but it is arguable that the current 'teeth to tail' ratio could be improved.

So, can anything be done to enhance combat capabilities with these limited resources and rigid expenditure structures?

Yes, it can, if the leadership is ready to think very differently.

The government needs to look at national security as a whole, rising above turf battles. One initiative is already in place. With the Agniveer system, personnel below officer rank are now recruited initially for a four-year tour of duty. It is an important step towards building a youthful profile of operational personnel, and stemming the unsustainable growth of pensions, thereby creating space for alternative uses of funds.

Two more steps deserve to be thought of seriously, to rationalise manpower and make better use of the available resources. These are the lateral movement of armed forces personnel to paramilitary forces and outsourcing of logistic and support functions.

The idea of the lateral movement of army personnel to paramilitary forces is not new. Rather, it has been strongly recommended by expert bodies right from the Kargil Review Committee to the Seventh Pay Commission.[20] Strangely,

this is the one recommendation of these august bodies that is somehow always one of the very few not taken up for implementation by the government of the day.

The case for doing so is simple. Many paramilitary forces like the Border Security Force, Indo Tibetan Border Police, Special Services Bureau, Coast Guard, and Assam Rifles perform similar border security functions and work closely with army and navy formations. Would they not benefit from an infusion of competitively selected highly trained and disciplined officers and personnel who would be theirs till their (much higher) retirement age instead of fresh recruits? The share of defence pensions would decline over time, improving the teeth to tail ratio. Systemically, national security would be strengthened, while reducing the overall share of salary and pension expenditure.

So why hasn't it happened yet? There has been fierce resistance from the Ministry of Home Affairs (MHA). At the decision-making level, the MHA view has tended to prevail. There is speculation that the unstated thinking in top political and bureaucratic circles is that the paramilitary forces need to be kept in a separate space from the military. This thinking needs to change to a whole of nation approach.

The other major human resources initiative to be considered is to contract or outsource to the maximum extent possible logistic, support and housekeeping functions. For example, the tasks of maintenance of properties, workshops, supply of food and personnel equipment could easily be outsourced. The Indian private sector is very capable of delivering the goods and services required. Operational efficiencies are likely to improve, and the overall costs will be reduced. The costs of retaining the associated permanent manpower to perform these services will go down.

The latest estimates indicate that about 26.0 per cent of the defence budget was spent on pensions in 2022-23. It is estimated that out of the total number of defence pensioners, nearly 20.0 per cent are defence civilians.

The role of defence civilians also merits a rethink. The latest estimates indicate that about 26.0 per cent of the defence budget was spent on pensions in 2022-23.[21] It is estimated that out of the total number of defence pensioners, nearly 20.0 per cent are defence civilians.[22] The rationale for the retaining of a large permanent, pensionable civilian manpower borne on the defence budget needs review. Cannot, functions like maintenance of defence estates, manning of headquarters with administrative personnel, routine accounting be performed equally efficiently by professional contractual personnel, without necessarily having to retain permanent civil service cadres for the purpose, as is the case in the US and other Western armies? This too would help control human resource costs significantly without affecting operational imperatives.

Security concerns are sometimes cited against such outsourcing and contractual arrangements. However, such contractual systems are already an existing practice in the armed forces o)f major Western countries. In some countries, for example in Russia, even the fighting forces are partially outsourced.[23] The question really has to be not why it should be done but why not?

Conclusion

Aiming to strengthen national security and defence capabilities cannot be done by merely presenting wish-lists and hoping that funds will be somehow available. It can only be achieved if India plans ahead realising that defence spending can be made more effective, even within national economic constraints. Other major countries are restructuring their armed forces with this realisation, and there is no reason why India cannot do so too. There are huge opportunities all around us that can be seized and realised within the budgets available.

A defence economics perspective helps in asking the right questions. These are questions that should be at the top of the minds of senior political and military leadership. Yes, the discourse in India is already rife with much talk of out of the box thinking, Make in India, *Atmanirbharta*, adopting new-age technologies etc. The proof of the pudding is

however, in the eating. The new thinking, such as it is, has yet to be reflected in the structure of investment decisions and budgetary allocations.

Changes in the long-prevailing mindsets are the need of the hour. From the historical service-specific and turf-conscious thinking whole-of-nation approach nee)))ds to be adopted in support of India's national security goals and look at optimal trade-offs within that approach.

To transcend turf loyalties, to look only at the big picture, it is tough. But it has to be done. Cold rationality and absorbing the lessons of experience must guide the process of making policy decisions and taking strategic professional calls for the future. As set out above, it is possible and doable.

The hope is that it happens, and the sooner, the better.

Endnotes

1 Rajan Katoch, "Defence Economics: Core Issues," Strategic Analysis, vol. 30, No. 2, Institute of Defence Studies and Analyses, Apr-Jun 2006, p.282. Based on the original quote by Keith Hartley.

2 S Samuel C. Rajiv and Abhay Kumar Singh, "Defence Budget 2023-24: Trend Analysis," MP-IDSA Issue Brief, February 17, 2023, https://www.idsa.in/system/files/issuebrief/ib-smuelcrajiv-abhayksingh_170223.pdf, accessed on December 3, 2023

3 Gen David H. Berger, Commandant, US Marine Corps, quoted in Force Design 2030, Marine Corps Association, 2022, https://mca-marines.org/blog/2022/04/20/force-design-2030-2/, accessed on December 4, 2023

4 Pawel Paszak, "China and the Malacca Dilemma," The Warsaw Institute, 2021, https://warsawinstitute.org/china-malacca-dilemma/, accessed on December 3, 2021

5 The US/UK in Diego Garcia Island of the Chagos Archipelago, and France in La Reunion and Mayotte Islands

6 Fabian Lucas Romero Meraner, "China's Anti-Access Area-Denial Strategy," The Defence Horizon Journal, February 9, 2023, https://www.thedefencehorizon.org/post/china-a2ad-strategy, accessed on December 3, 2023

7 Esha Roy, "Development of Great Nicobar: Strategic Imperative and Ecological Concerns," in the Indian Express, November 22, 2022, https://indianexpress.com/article/explained/great-nicobar-development-project-proposal-concerns-8281844/, accessed on December 8, 2023

8 Financial Times, London, March 4, 2023 https://www.ft.com/content/75ee9701-aa93-4c5d-a1bc-7a51422280fd, accessed on December 4, 2023

9 SIPRI Yearbook 2023, Summary, https://www.sipri.org/sites/default/files/2023-06/yb23_summary_en_1.pdf, accessed on December 4, 2023

10 G.C. Katoch, *Defence and Economic Development*, Combat Journal, College of Combat, Mhow, August 1985

11 Reply to Parliament Question given in Rajya Sabha by Minister of State for Defence on March 13, 2023

12 Indian Space Research Organisation (ISRO) document "Opening up the Space Sector, November 25, 2022, https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/nov/doc20221125136001.pdf, accessed on December 4, 2022

13 The third aircraft carrier with its complement of aircraft is expected to cost about Rs. 1,60,000 crores, while the capital budget of Ministry of Defence for 2023-24 is about Rs. 1,62,000 crores

14 36 Rafale fighter jets have reportedly cost India Rs. 60,000 crores, NewsOnAIR, May 15, 2023, https://newsonair.com/2022/12/15/india-receives-all- 36-rafale-aircraft-from-france-with-last-one-landing-in-country-on-december-15/#:~:text=India%20and%20 France%20had%20 signed,60%2C000% 20crore%20rupees%20to%20India., accessed on December 4, 2023

15 Reuters, June 29, 2023, https://www.reuters.com/world/europe/cheap-russian-drone-menace-ukrainian-troops-equipment-2023-06-28/, accessed on December 4, 2023

16 Statista, https://www.statista.com/statistics/264443/the-worlds-largest-armies-based-on-active-force-level/, accessed on December 4, 2023

17 Statement by Shri Nityananda Rai, MoS Home in Parliament, cited in NDTV News, March 15, 2023 https://www.ndtv.com/india-news/84-866-posts-vacant-in-central-armed-police-forces-centre-in-rajya-sabha-3862954, accessed on December 4, 2023

18 *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms*, Chapter 10, National Defence University Press, 2019 https://ndupress.ndu.edu/Media/News/News-Article-View/Article/1748401/the-biggest-loser-in-chinese-military-reforms-the-pla-army/#:~:text=Army%20Order%20of%20Battle&text=The%20PLA%20Army%20was%20assessed,200%2C000%2Dman)%20force%20reductions, accessed on December 4, 2023

19 PRS Legislative Research, Demand for Grants 2023-24, https://prsindia.org/files/budget/budget_parliament/2023/DfG_2023-24_Analysis-Defence.pdf, accessed on December 3, 2023

20 Government of India, Ministry of Finance, Report of the Seventh Central Pay Commission, 2015, p. 131

21 PRS Legislative Research, Demand for Grants 2023-24, https://prsindia.org/files/budget/budget_parliament/2023/DfG_2023-24_Analysis-Defence.pdf , accessed on December 5, 2023

22 Laxman Kumar Behera and Gp Capt Vinay Kaushal, *Estimating India's Defence Manpower*, IDSA Issue Brief, Institute of Defence Studies and Analysis, 2020

23 The Russian private military company Wagner Group has been fighting alongside the regular army in support of Russia's special military operation in Ukraine

Military Leadership in the 21st Century

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Abstract

The article delves into the evolving role of the armed forces in the 21st Century, emphasising the need for adaptability and preparedness in the face of new challenges. It outlines the dual responsibilities of the armed forces, protecting the nation from external threats and assisting civil authorities in times of need. It underscores the growing importance of the armed forces as 'First Responders' due to the perceived shortcomings of other agencies. It is required that military leadership must possess a nuanced politico-military understanding to navigate complex situations effectively. The sections explore the challenges faced by military leadership, including the hybrid nature of combat, the integration of technology and human resources, and the complexities of decision-making in a rapidly changing environment. The article concludes with a forward-looking perspective on reinforcing core values, civil-military relationships, and ethical responsibilities to ensure the armed forces remain a robust and adaptive institution.

Introduction

Military Leadership in the 21st Century, is vital to the nation, for the Indian Armed Forces are the ultimate guarantors of the nation's security and well-being. How this instrument of Last Resort performs will be largely determined by the leadership that steers this organisation in peace and leads it in war.

It goes without any doubt and can be stated very candidly and forcefully that the Indian Armed Forces are the most professional, capable, credible, and well led organisation, in fact, the 'Pride of the Nation'**.** Being so important to the nation's well being, there is no scope for any complacency. Others may have this luxury, the armed forces do not. They need to constantly look within to remain dynamic and relevant, always one step ahead of the challenges and threats. And in this organisation, leadership plays the most crucial role and hence, the criticality of the subject.

Role of the Armed Forces: Remaining Relevant

The armed forces have a primary role to protect and secure the nation from external threats and a secondary role to aid the civil authority when called upon to do so. Whilst the primary role is their raison d'etre, the secondary role is gaining prominence with a variety of requests/tasks which clearly lie in the civil domain. Moreover, the armed forces are steadily being dragged in as 'First Responders' because of the non-performance of other agencies and the lack of confidence of the people in them. We have also seen the severe consequences of delayed call up of the armed forces as witnessed in Uttarakhand in 2013 and Jammu and Kashmir floods in 2014. So, what do the armed forces do? Await a formal call up and see the problem magnify or take the initiative when they see things going beyond a point. The answer is not easy: in law and order situations, it may be prudent to await a call, whereas, in a disaster situation, local/operational commanders[1] must step in at the earliest. The bottom line is that the armed forces need to remain relevant

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whenever the nation calls and therefore, the senior military leadership need a good politico–military understanding and rapport in difficult situations.[1]

Challenges for Military Leadership in the 21st Century

Hybrid Nature of Combat. The nature of combat has changed steadily over the years, but the most dramatic change occurred in the nineties at the end of the Cold War. To the hitherto fore mix of 2nd and 3rd generation warfare, added a new dimension of the 4th generation and now the 5th generation, aptly being termed as 'Hybrid Warfare'. This has been brought to fore in recent conflicts in the Middle East, Afghanistan and Ukraine. Whilst the Indian Army has seen both conventional combat, as well being engaged in long periods of counter-insurgency, it is yet to experience the full dimensions of hybrid warfare in a full-scale conflict. The question that arises is - What type of military leaders are needed to combat hybrid warfare? and more importantly, is the training and grooming of leaders, especially at the higher levels appropriate. This in itself is a separate subject of study, but some qualities that have become most essential are, wider education base as distinct from training, innovation and adaptability, boldness and risk-taking abilities. More important is the ability and willingness to look over the horizon, thus, being prepared for newer threats and challenges before they hit.[2]

Harmonising Technology and Human Resource. The armed forces have largely been overwhelmed by the PowerPoint. With slick presentations prepared by smart staff officers, everyone seems to be on top of the situation, whereas in reality there are considerable issues. Yes, technology needs to be harnessed to operational advantage, but optimum value will only be achieved when this is harmonised with human resource, certainly not at the cost of it. Star Wars is slick, but the reality has recently been witnessed in Afghanistan. Robust military leadership can be optimised through technology, not substituted by it**.** Recent bias towards science and technology at the cost of art and humanities needs a rebalance**.** The art of warfare, especially at the operational level cannot as yet, be substituted by the science of it**.**[3]

The bottom line is that the armed forces need to remain relevant whenever the nation calls and therefore, the senior military leadership need a good politico–military understanding and rapport in difficult situations.

Decision Making in a Complex Environment. A complex matrix of factors is making, 'Decision Making' a very challenging task in the 21st Century. The information overload is clouding minds and it requires true leadership qualities to distinguish the wheat from the chaff. Good communications are tempting commanders to reach down many levels, thus local conditions are having a disproportionate influence on higher level decision making**.** Consequences of decision making are turning more and more military leaders, especially at the senior level 'Risk Averse'. If a leader is to pursue an ethos of 'Risk Avoidance', he will seldom be able to exploit opportunities that come his way, and this ethos is infectious, leading to an army of conformists, with a tendency to look over their shoulders.[4]

Mediocrity to the Fore. Meritocracy in the armed forces is still sufficiently valued, but mediocrity is creeping up. Among many factors, reservation introduced at the colonel to brigadier level in the general cadre stream is now beginning to push up mediocrity in larger proportions than is desirable in senior ranks. Mediocrity/mediocre performance cannot be allowed to prosper in the armed forces, where lives are at stake; where decisions by military commanders can mean the difference between life and death.

Transparency: Power of the Social Media. This is a hard truth of the 21st Century that has to be recognised by all leaders, especially those in high places. Incidents even of a trivial nature become viral over social media and tend to be blown out of proportion. The electronic media also tends to favour negative portrayal. Therefore, recognising this reality, military leaders need to be not only ethical and correct, but also transparent. In-house mechanisms should be vibrant enough to offer redressal of grievances, even against the hierarchy.

Trend towards Egalitarianism. The 21st Century trend is towards a classless society in the socio-economic and political domains. There is increasing discomfort towards authority, especially perks that go with such authority. Recent debates in the country on many issues are reflective of this trend. Our men and young leaders come from the same stock, therefore, what are silent whispers today are bound to grow. There is a need to take cognisance and corrective action, before this issue spreads in the armed forces also. 'Share and Care' may be a good way to look at welfare issues.[5]

Ethics and Morals: The Difficulty of being good. In the midst of the 21st Century society, standards of ethics and morals have reached a low point. Whilst the society may learn to cope and live with this, those in the armed forces cannot afford any such dilution. On the other hand, maintaining the high levels of ethics has itself become very challenging. When soldiers talk of integrity, it covers not only personal but also professional integrity. The Chetwode Motto has guided the officers for long, but is it adequate, or is there a need for a more detailed code to guide the leaders on this vital issue.

Politico–Military Interface. The armed forces do not function in a vacuum and have to be alive to politico–strategic considerations. As military leaders rise in the hierarchy, they are often confronted with considerations other than operational, for which a large number are not prepared. This shortcoming needs to be corrected through requisite exposure and training/interaction of military leaders, before they step into the operational level of command. A similar exposure for the civil hierarchy would be most desirable to achieve the optimum level of civil-military synergy.[6]

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Jointness and Integration. This has become a huge challenge, and to state bluntly, the army is nowhere near the desired levels, despite lip service by all stakeholders.

Notion of victory. This itself is getting redefined in the 21st Century as one has seen in Iraq, Afghanistan, and Syria. Victory at any cost may no longer be acceptable. The nation will expect its military leaders to achieve success at least cost, especially in terms of human lives. Wars fought away from society will be fought through them and it will be challenging to distinguish the foe from the innocent. Collateral damage will weigh on the minds of planners and executors.

The Way Forward

With that as a backdrop, there is a need to look at ways and means to set right, invigorate, and move forward. In the military leadership, lie the nation's expectations, confidence, and assurance, that guarantees security and well-being of the country and all its citizens. This necessitates exceptional and extraordinary standards of military leadership at all levels, especially at the senior level.

Regimental System. The regimental system is the bedrock on which the armed forces, especially the Indian Army functions. Regimentation has been used by many armies as a most effective tool to exercise control over the soldiers, to enhance their battle worthiness and fighting spirit. Post-independence, the Indian Army adopted the existing regimental system based on class/regions and later brought in the mixed class composition in keeping with the constitution. In conflict situations, apart from the national spirit, it is this regimental spirit that reflects the '*Izzat*' (honour) of the unit/ regiment that motivates the soldiers, to achieve the seemingly impossible. The exceptional acts of bravery shown by 2Lt Arun Khetrapal in 1971 and Capt Vikram Batra during the Kargil conflict stand testimony to this. A grateful nation bestowed its highest honour, posthumously, on both these gallant warriors. So, there is a need to remain sensitive and reinforce this unique system that is so intrinsically linked to the well-being and battle worthiness of the army. The navy and air force too, though to a lesser extent, follow in spirit and derive great motivation from their affiliation with the

ships and squadrons. In the same vein, it is important to highlight the dangers of misplaced regimentation, in what may be termed tribal loyalty, causing serious damage to the fabric of the army.

Civil-Military Relationship.

➢ The wars of the last few decades have demonstrated the complexity of concepts such as the notion of victory, conflict termination objectives, the difficulties of achieving strategic victory and the post-war complexities etc. The complexities and lack of an exit strategy came out loud and clear in the United States (US) withdrawal from Afghanistan, as experienced in Sri Lanka. Post the terrorist attack on the parliament, the Indian military mobilised for 'Op Parakram' without being given clear politico-strategic objectives. The military, thus, was left to navigate the complexity without a lighthouse.

➢ Modern conflict is more likely to manifest in the form of political/foreign policy contests interspersed with military episodes. Force is more likely to facilitate political settlements, rather than fashion an outright military victory**.** So, what is needed today, more than ever, is for strategic organs of the state to harmonise; only then can 'Incredible India' become 'Invincible India'.

➢ The politico-bureaucratic leadership needs to be sensitised to the nuances of 'Matters Military'. On their part, the higher military leadership needs to comprehend the dynamics and challenges of national governance. They need to develop the tact and the skills to deal with the government, to meet national security objectives in a tight fiscal and democratic environment.[7]

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Reinforcing Value-Based Leadership. Both the houses of the parliament have an ethics committee to monitor and enforce ethical conduct by the lawmakers. Similarly, there is a code of ethics for civil services. Military values clearly lay down the guidelines for ethical conduct, yet the demonstrated ethical standards, in some cases, fall short of expectations. It is therefore imperative that value-based leadership is reinforced at every level, both in words and deed.

"Character is the key to all ethical issues: take care of character, the rest will take care of itself".

At Ease in a Volatile, Uncertain, Complex, and Ambiguous ('VUCA') Environment.

➢ At the lower tactical level, one deals with black and white, but as one rise up the ladder, especially at the operational and strategic level, shades of grey creep in. If one has not prepared himself/herself to be at ease in a VUCA environment, one will get stumped. There has to be high tolerance for ambiguity with an ability to take decisions with 60.0 to 70.0 per cent of desired inputs. This comes with the development of 'Military Intuition', a combination of professional military education and experience. Unfortunately, the ethos prepares one to be at ease in a black and white environment, most ill-suited for tackling the challenges of the 21st Century. This has to change.

➢ A senior leader should have a high quotient for risk taking and optimising the opportunities that arise. He should be able to discern wheat from chaff and put his finger on the '*Schwerpunkt*' (Point of Main Effort), from amongst the vast information and propositions that are available to him.

Creating an Enabling Environment.

➢ Creation of an enabling environment where subordinates can hope to achieve their genius is the hallmark of a strategic leader. Harmonising and aligning individual aspirations to the organisational goals should be the desired result. That is the only way to leave a lasting legacy and secure the future of the organisation.

➢ Genuine and constructive professional dissent needs to be encouraged in the armed forces, specially at the senior level, since its exclusion would only encourage mediocrity and predictability. Let's also be clear that, 'Blind conformation is not loyalty, nor independent thinking dissent'. There is also a larger context in which to understand strategic military leadership; it is harmonising of external influences on the internal thinking and strategies, especially the politico and economic considerations. Therefore, a strategic and visionary military leader doesn't operate only from within, he stands at the margins of the internal and external environment, and without compromising on the core values, optimises the best outcomes for his organisation.

Authority- Responsibility- Accountability.

➢ Authority-Responsibility-Accountability is a key essence of military leadership, specially at the senior levels, in fact, this is what distinguishes the armed forces from various organisations on the civil side, where this linkage is rarely, if ever, established.

➢ The Indian Armed Forces are good at establishing personal accountability but fall short as far as professional accountability is concerned; Kargil is a good example. One is also not aware if any accountability has been established post Uri, Pulwama and even the recent Chinese intrusions in Ladakh, including the loss of precious lives at Galwan (Ladakh).

Genuine and constructive professional dissent needs to be encouraged in the armed forces, specially at the senior level, since its exclusion would only encourage mediocrity and predictability.

➢ The US Army lost its moorings after World War II, when they stopped establishing operational accountability, leading to Vietnam. Thomas Rick covers it in great detail in his book, 'The Generals', which should be a recommended reading for all operational and strategic military leaders. Sharing credit and taking the blame is a linked attribute desirable in operational and strategic military leaders.

➢ Apart from ensuring this linkage among subordinates, a great responsibility also rests with the apex level military leadership, to ensure that the armed forces are prepared and provided with the minimum, if not optimum wherewithal, to be able to carry out their role and operational responsibilities effectively. It reflects poorly, that every time there is a crisis, there is urgent activity for emergent purchases of arms and munitions.[8]

Reinforcing the Core Values

➢ The core values, which define the essence of the Indian Armed forces, which also provide the foundation on which the armed forces function, may be under stretch in the 21st Century. Of the core values the one causing maximum concern is the 'Apolitical Nature' of the armed forces. This needs to be examined in some detail.

➢ The armed forces as an institution do not have any political preference, they serve the constitution of the country and take legitimate orders from the government of the day. In the past there have been some incidents which cast a shadow on particular senior officers crossing the line, but these have been few and far between. Of late, the political climate has raised concerns that India may be entering a grey zone, either unknowingly or with the acceptance of a few in key positions.

➢ Above notwithstanding, the armed forces remain true to their core values, though they have to be mindful of the challenges they may face in the future. In this, the strategic military leadership has to play a crucial role in ensuring that the apolitical nature of the armed forces is zealously guarded and reinforced.

➢ The veterans also have an onerous duty to ensure that their conduct in politics remains in harmony with the dignity of the uniform they once wore. A responsibility also rests with the political class to not transgress on the apolitical nature of the armed forces.[9]

Speaking Truth to Power.

➢ At the level of strategic military leaders, they need to virtually discard the word 'Yes Sir' from their lexicon. In the interest of national security, they must stand up and convey the harsh truth to not only the military hierarchy, but also to the political authority, however unpalatable it may be; for any dilution in the facts may cause the nation dear. Yes, there will be pressure to conform, but this is where leaders of mettle need to stand up to their convictions.

➢ The example of then Chief, General Manekshaw illustrates this best, when he advised the prime minister to defer operations against East Pakistan from pre to post monsoon and in winter months. It is to the credit of both, that this advice was accepted, leading to a resounding victory in Dec 1971.[10]

Being the last resort of the nation and dealing with life and death issues, the whole edifice of the armed forces is based on trust and ownership.

Ethical Responsibilities.

➢ Being the last resort of the nation and dealing with life and death issues, the whole edifice of the armed forces is based on trust and ownership. Therefore, military leaders have to constantly uphold ethics and probity and reinforce trust and ownership. It has to be a 'Top Down, Top First' approach, there is no other way.

➢ The author having tenanted key operational and strategic appointments, summarises this by stating: "What some leaders did, that shouldn't have been done; and what some didn't do, that they should have done".

Climate of Growth and Optimism.

"Commander's first objective is to be continually prepared for war. Second to create an environment in which every man finds personal meaning and fulfilment. It is only the attainment of the second that will ensure the first".

–Anonymous

➢ **Transparency and Fairness**. It is important that the organisation is, and also perceived to be transparent and fair. Those who make it, perceive it to be fair, those left behind fuel the perception of unfairness. The truth lies somewhere in between, with biases coming into play in select cases. While the selection system may be called fair and acceptable, it is the grading and performance appraisal system where biases and aberrations creep in, leading to disillusionment and negativity.

➢ **An environment of Trust and Ownership.** The organisation must reinforce an environment of trust and ownership and have a trustworthy mechanism where subordinates can express their grievances. When men stop bringing their problems to the leader because they either believe that he/she is incapable of solving them or he/she does not care, is termed as the lowest point of the leadership climate.

- **Professional Dissent**. Genuine and constructive professional dissent needs to be encouraged in the armed forces since its exclusion would only encourage mediocrity and predictability. It is clear that blind conformation is not loyalty, nor independent thinking dissent.

- **Work from 'Hope of Success' rather than 'Fear of Failure':** There are grounds for thinking that incompetent commanders tend to be those in whom the need to avoid failure exceeds the urge to succeed. The armed forces need to reinforce an environment where leaders focus on success rather than failure avoidance.[11]

Conclusion

"Whether a man is burdened by power or enjoys it; whether he is trapped by responsibility or made free by it; whether he is moved by other people and outer forces or moves them – this is the essence of leadership".

–Theodore H White

The armed forces 'Have Been, Are, and Will' remain crucial to the nation's security and well-being. How they deliver will depend mostly on the calibre of military leaders that lead and steer the organisation.

The army, therefore, needs leaders who are steadfast, visionary and who measure up to the highest standards of military skills, who have a comprehensive understanding of challenges of modern warfare and who possess the endurance, strength of character and mental resilience and flexibility to carry the burdens that modern warfare conditions impose.

How to measure good leadership is a natural question to ask, as also what distinguishes a great General from the good ones.

Genuine and constructive professional dissent needs to be encouraged in the armed forces since its exclusion would only encourage mediocrity and predictability.

The yardstick to measure great leadership should be the culture of enduring excellence which a leader leaves behind after he is long gone from the scene. The recipe for such a military leader of the 21st Century thus is:

"Humility in his persona and arrogance in his uniform"

– based on his integrity, competence and commitment.

Endnotes

1 Chapter 17 of the book, page-325: 'Military Strategy for India in the 21st Century', KW Publishers, New Delhi 2019 (co-edited by Lt Gen AK Singh and LT Gen Balraj Nagal).

2 Ibid, Page 327.

3 Ibid, Page 328.

4 Ibid, Page 328-329.

5 Ibid, Page 330.

6 Ibid, Page 331.

7 Chapter 15, Page171-172 of the book ; 'Men of Steel # Military Leadership for India', KW Publishers, New DELHI, 2022 (co-edited by Lt Gen AK Singh and Maj Gen Yash Mor).

8 Ibid, Chapter 1, Page 7-8.

9 Ibid, Chapter 1, Page 8-9.

10 Ibid, Chapter 1, Page 9-10.

Future Warfare: Trend Lines for Modernisation of the Indian Army

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Abstract

Modernisation of the armed forces is a continuous process. To address changing internal and external security threats the India Army has been carrying out periodical review of its capabilities, equipping its profile, structures, strategies and tactics, to retain the fighting edge for both conventional conflicts against the adversary and in combatting counter insurgency/counter terrorist operations. However, since the Kargil conflict, in 1999, there have been disruptive changes in geostrategic realities, technology and security landscape, bringing an end to an era of incremental changes. Modernisation today warrants a 360 degree relook at not only warfighting, but also military structures and the approach towards addressing the future security landscape. The army's modernisation drive will have to be conscious of India's growing stature and aspirations and be ready to support the vision of this resurgent India. Also, it will have to develop effective deterrence because the current security strategy has failed to stop Pakistan from steering a 'Proxy War' in the Union Territory of Jammu and Kashmir and deter China from periodically nibbling away at Indian Territory. Therefore, it is important that India's security strategy and modernisation of the Indian Army should incorporate the contours of this 'New Age Warfare' and changed strategic realities? The article is going to address these issues and identify the contours of the Indian Army's modernisation drive. The goal is to try and see what lies beyond the horizon and be prepared for most options.

Introduction

Modernisation of the armed forces, to address changing mandates and security environment, is an ongoing process. In the case of India, there have been major reviews of the Indian Army's capabilities, equipping profile, structures and tactics and to a limited extent the doctrinal and strategic nuances, due to three major conflicts, since 1962. Required modulations continued as an outcome of the 'Proxy War' in the State of Jammu and Kashmir (J&K)in the mid-1980s, the Kargil conflict in 1999 and a near-miss confrontation during Op Parakram, in 2001-02, against Pakistan. The Galwan flare up in 2020, has changed the status at the borders in Ladakh, against China. There is increased deployment astride the Line of Actual Control (LAC), in a manner similar to that at the Line of Control (LoC) with Pakistan. It is also a fact that the current security strategy has proved to be partially effective, as it has not been able to completely stop the Pakistan State from conducting a proxy war in the Union Territory of J&K and to deter China from periodically nibbling away at Indian territory.

So it will be the endeavour in this article, to identify the changing trend lines of India's security landscape, future mandates for the army, evaluate lessons from the recent/ongoing global conflicts, examine the existing shortcomings and, thereafter, recommend the contours of the Indian Army's modernisation drive. The aim is to try and see what lies beyond the horizon and recommend measures that will ensure that the nation is prepared to suitably address future challenges.

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What has Changed?

The dynamics of the post COVID world, with changing geopolitical alignments and geo-economic compulsions, have created turbulence in the existing global order. The geostrategic landscape has changed due to the shifting of the 'Balance of Global Economic and Military Power', from the Euro Atlantic to the Asia Pacific and China's increased aggressiveness and belligerence. The United States (US) Indo-Pacific strategy is steering global realignments and forging new groupings with likeminded countries. India's geographical primacy in the Indo-Pacific and increasing economic cum political stature, have made it a natural partner for these groupings. This has propelled India to centre stage-much to China's dislike**.** Thus, fuelling existing conflict lines and creating new ones.

China's competition with the US and quest for global dominance have seen a rapid increase in its military arsenal both in quantity and quality. The modernisation of its combat resources and capabilities has further exacerbated the security challenges for India, as it is already inducting high technology and disruptive platforms, in its arsenal. And lastly there is a change in the 'Character f War', due to innovative and disruptive technological developments, emergence of non-state actors, militarisation of cyber and space and the impact of influence operations.

Disruptive technological developments have led to longer ranges, greater lethality and pin point accuracy in weapon platforms. Cutting edge technologies of Artificial Intelligence (AI), Machine Learning (ML), internet of things, augmented and virtual reality and nano technology, is revolutionising the next generation of military hardware. It has led to new age lethal platforms like swarm drones, loiter munitions, armed Unmanned Aerial Vehicles/Remotely Piloted Aircraft, robotic and autonomous weapon platforms. Advanced data processing and sensors, have revolutionised Intelligence, Surveillance, and Reconnaissance (ISR). 5G/6G communication with advanced computing capabilities is facilitating 'Network Centric' warfare. Advanced space based military assets and cognitive systems with quantum communication, are likely to be the next big disruptors. Big data analytics and generative AI is steering algorithmic warfare.

Disruptive technological developments have led to longer ranges, greater lethality and pin point accuracy in weapon platforms. Cutting edge technologies of Artificial Intelligence, Machine Learning, Internet of Things, augmented and virtual reality and nano technology, is revolutionising the next generation of military hardware.

The presence of non-state actors, like Taliban, Islamic State of Iraq and Syria and Islamic State–Khorasan Province and Al-Qaeda in Indian Subcontinent, in collusion with or without state support, has exacerbated global security concerns. Whereas in India, the persistence of Pakistan to promote its ideological agenda, will continue to see waxing and waning of this threat, within the country, for the foreseeable future.

The militarisation of cyber and space in an interconnected world, has created new vulnerabilities for the nation and the armed forces. The proliferation of interconnected devices and seamless communication has resulted in facilitating 'Non-contact Warfare', as it is possible to effectively neutralise critical cyber infrastructure with deniability and non-attributability. Concurrently, space is witnessing increased deployment of space based assets for surveillance and seamless communications. The induction of Low Earth Orbit (LEO)/Medium Earth Orbit (MEO) satellite constellations, has been path breaking for ISR, communications and military decision-making. It is a fact and of concern for India, that China is a leading player in cyber warfare and militarisation of space, for ISR, quantum communications or inducting advanced weapon platforms like 'Hypersonic Glide Vehicles'.

A quick word about influence operations and their potency. Technological advancements in AI (generative AI) and ML, permit manipulation and tampering of media reports and the creation of fake news and videos. Digital penetration and multiple social networking platforms, are ideal for aggressive and targeted propaganda. While the seamless outreach of cyber space with anonymity, deniability, non-attributability and relative impunity, lends itself to wide circulation of this manipulated information and news, by inimical elements. These new tools of information warfare, have weaponised

influence operations, as it is now possible to covertly influence the cognitive faculties of the adversarial target population. There is, therefore, a need for an organisational mechanism to monitor and delete unsubstantiated videos/news from social platforms, while creating and executing suitable counter narratives, in a subtle and timely manner.

The Indian Armed Forces, will, therefore, have to empower themselves in both these domains, with defensive and offensive cyber warfare capabilities, while militarily exploiting the exponential advantage of space based assets.

The Threat

India's main adversaries, due to contested borders, continue to be China and Pakistan. China has outstripped India economically and technologically, with an asymmetrical conventional advantage, in both the quantity and quality of its combat resources, with a distinct edge in waging 'Non-contact' and standoff strikes. Its technological advancements in cyber and space based assets, give it a disproportionate advantage to execute influence operations that adversely impact India's ISR and communication networks. It has innovatively penetrated the public mind space in India, which it can exploit, at an opportune time.

The threat from Pakistan will continue to diminish, in view of the divergent and widening growth vectors of India. The imbroglio on the Af Pak border, its internal economic contradictions and political challenges, have temporarily diminished the probability of conflict. However, the overt or covert threat of collusivity, between Pakistan and China, will continue. Therefore, India needs to be prepared for a 'Two Front Threat'. However, the manner and manifestation is a separate subject in itself.

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The current state of. An alternative solution will have to be found, to deal with this near continuous 'Face-off', astride the LAC in Ladakh with China and along the LoC, with Pakistan.

Internally, India is still in the midst of addressing the existing social inequalities, that can be exploited for radicalisation and supporting terrorism-extremism. It is for this reason that India continues to grapple with internal security challenges in the Northeast, J&K and Left Wing Extremism in central India. Most of the Indian insurgent groups are in contact with China that continues to be their primary source of illegal weapons. This does give it a leverage to influence them, as desired. Another threat vector that will fuel discords/conflicts in the near future, will be attributable to climate change; its devastation, migration and resource scarcity. Related to this is the threat of 'Water Wars'. Wherein, China once again has the advantage, being an upper riparian state, for the major rivers of South Asia. These are new areas of security concern and will require the armed forces, to be prepared for such eventualities. It would be a fair assessment that for India, conventional, sub conventional and internal security threats will remain for the foreseeable future.

Before expounding on the contours for modernisation of the Indian Army, there is a need to undertake an analytical review of the recent/ongoing global conflicts, to understand the disruptions caused in the battlespace.

Lessons-Recent Conflicts

The Azerbaijan Armenia conflict, Russia's ongoing 'Special Military Operation' against Ukraine and the Israel offensive in Gaza against Hamas, have provided a live demonstration of the changing 'Character of War'. They have showcased the impact of new age platforms, technology and the power of cyber and space, in future warfare. Some key lessons are are discussed in the succeeding paragraphs.

Politico–military.

- **Collaborative Security**. It deals with the importance of collective effort and multilateral cooperative security structures and the relevance of partnerships with developed nations for critical support, like the 'Five Eyes' for real time intelligence inputs.

- **Deterrence and Strategic Communication**. This was demonstrated in Russia's effective use of nuclear deterrence, to deter, North Atlantic Treaty Organisation physical involvement in the Ukraine conflict. Also, there has been failure by both, US and Russia, to decipher adversary's strategic signalling. Russia kept signalling its 'Red Lines' with respect to Ukraine that US underplayed and there was failure by Russia to appreciate the resolve of US. India needs to seriously deliberate on how to develop tangible leverages in its security matrix, to deter Sino–Pak collusivity, in future conflicts.

- **Leveraging Economic Sanctions**. The economic sanctions and denial of technologically important resources to Russia, in an interdependent global environment, have renewed the importance for India to make *'Atmanirbhar Bharat'* (Self-reliant India), a success for critical sectors and 'Supply Chain Resilience'.

- **Conventional Conflict**. There is a strong probability of conventional conflict, between nations with territorial disputes. India, therefore, needs to be prepared for this eventuality. Hyper emotional situations require balanced reactions, for overreaction can be counterproductive, as in the case of Israel. Also, mindsets and pre conceived notions are detrimental for rational information analysis and generating effective intelligence.

The importance of realistic and updated doctrines is reflected in the success of the Russian hybrid 'Gerasimov Doctrine', which harnessed the potential of cyber operations, irregulars and mercenaries like the Wagner Group, for achieving political objectives.

- **Doctrinal Review**. The importance of realistic and updated doctrines is reflected in the success of the Russian hybrid 'Gerasimov Doctrine', which harnessed the potential of cyber operations, irregulars and mercenaries like the Wagner Group, for achieving political objectives. It was dynamic enough to incorporate key pointers, from the events of 'Arab Spring'. The same was successfully employed for wresting Crimea and Donbass partially, before the start of the current conflict. However, the conflict in Ukraine has raised questions on tampering with classical military groupings. Russian agile, 'All Arms' grouping of battalion tactical groups, has been potent in executing 'Shock And Awe' attacks, but their effectiveness in the prolonged conflict, is suspect. This highlights the need for India to relook at the efficacy of Chinese combat operational groups, which may have been formed on a similar logic.

- **Influence Operations**. The conflict in Europe is witness to a systematic and relentless bombardment of media narratives to boost Ukrainian morale and create anti-Russia feelings, for harsher economic reprisals, by the West. The conflict is witness to exaggerated reports, fake news, malicious videos and the use of 'Toolkits' to steer digital campaigns, on WhatsApp and Twitter. This highlights that India needs to develop a synergistic and an 'All-of-Nation Approach' to deal with this form of warfare, with dynamic counter strategies to deter-defeat the negative impact.

Operational

- **Impact of technology**. The potency of drone warfare has been amply displayed in these conflicts for ISR, dynamic targeting and precision strikes with Loiter Munitions. The Ukraine conflict has highlighted the importance of counter drone systems and technologically relevant/upgraded Air Defence weapon platforms, to deny 'Uncontested Skies' to drones and aircraft. The effectiveness of long range, lethal and precision fires, from

modern platforms and smart weapons, has brought to fore, the efficacy of standoff, non-contact engagements. It has also emphasised the need for battlefield survivability and mobility. The West Asia conflict has shown the pitfalls of over reliance on technology for intelligence.

- **Weaponisation of Cyber and Space**. The recent conflicts have demonstrated the transition to a multi domain operational environment, with the effectiveness of influence operations and media manipulation. The abundance of LEOs-MEOs satellites has exponentially increased the transparency of battlespace and provided seamless and reliable communications. It has highlighted the need for cyber resilience.

- **Unpredictability of Duration of Conflict**. The Ukraine conflict has bought out that a conflict between asymmetrical adversaries, can be prolonged to cripple the weaker party. This reinforces the importance for economic resilience and logistic sustainability.

- **Threat from Non-State Actors**. The need for nations to have constant vigilance and avoid complacency, during periods of fragile peace. Especially, when there is an ongoing proxy war, or there is a possibility of manipulating pre-existing internal fissures in society.

Apropos, future conventional conflicts will be high-intensity, technologically enabled, against adversaries with similar or asymmetrical capacities. So what should be the approach towards India's modernisation?

The challenge for the current army leadership is whether to adopt a capability centric or a threat based, methodology for modernisation. Though the ongoing impetus for *Atmanirbharta*, in critical areas of defence manufacturing, is a step in the right direction, there is still a long way to go.

The Approach

The challenge for the current army leadership is whether to adopt a capability centric or a threat based, methodology for modernisation. Though the ongoing impetus for '*Atmanirbharta'*, in critical areas of defence manufacturing, is a step in the right direction, there is still a long way to go. Therefore, the approach will have to be hybrid, wherein, arms imports of major weapon platforms, need to be diversified, with indigenous manufacturing of 'New age weapon platforms'. The Army's modernisation plans should be for the complete spectrum of conflict, from conventional to sub conventional, in a multi-domain operational environment, with capacity to contest a hybrid/irregular battlefield. In this era of standoff weapons and long range precision fire power, the army needs to ensure battlefield survivability. Therefore, the future modernisation of the Indian Army should be looked at under six verticals- force structuring, capability and capacities, doctrines, strategies and tactics, Professional Military Education (PME), Human Resource (HR), policies and military diplomacy. These changes will have to be concurrent.

Recommended Modernisation

Force Structuring. The Army of tomorrow will have to be prepared to address multiple domains in a fast paced operational environment, with a compressed 'Tactical and Strategic Continuum', and ever shortening Observe, Orient, Decide, and Act (OODA) loop, preceded by sustained and prolonged Influence operations and non-contact engagements. Thus, requiring convergence and integration of capabilities across air, land, sea, space, cyber, and electro-magnetic spectrum. Demanding centralised planning and execution, and 'Unity of Command'. This would, therefore, require Integrated Theatre Commands, which will harness the unique quotient of each service as a synergistic whole, designed through a systems approach. In addition, there will be a need to empower existing integrated structures for future employment and tasking, with suitable resources and mandate. It is imperative that future force structures be agile, with precise capabilities to defend strategic and national interests.

Integrated Theatre Commands. While formulating these structures there is a need to address a few essentials :

- The future organisational structure should suitably assimilate 'Service Specific' organisational cultures, functioning methodologies and manning requirements. This implies that it needs to harmonise differing frameworks, cultures and mind sets.

- The Army and Navy adopt a decentralised model, wherein the combat resources are allocated to different hierarchical levels of command, based on their tasking and span of control. Additional combat resources are released at inflection points to either the subordinate commander or there is a change in the level of command. In the case of the Air Force, the speed of application of combat power and the vastness of the battlespace, results in centralised control of resources. The Air Force due to its unique capabilities can concurrently shape the battlespace on different fronts, with limited resources, based on operational priorities. To summarise, the Army and Navy are delegated commands and the Air Force is a functional command, demanding separate command and control set up and methodology for the allocation of combat resources.

- To address the staff functions for the 'Command and Control' aspects of the Integrated Theatre, for the planning, conduct and execution of joint plans by the Chief of Defence Staff and the Joint Theatre Commander, there is a need to create two structures at the military strategic and operational strategic levels. These new departments will be integrated and staffed with officers from the three services and will also be responsible for information, cyber and space operations. These new structures will provide the linear linkages with the other national structures dealing with the same. The current system of service specific operational planning by the respective Army Commanders would continue for operational and tactical battle, as hitherto fore.

The Army and Navy adopt a decentralised model, wherein the combat resources are allocated to different hierarchical levels of command, based on their tasking and span of control.

- In a rapid paced multi domain operational environment, to ensure timely and effective action, it is necessary to integrate intelligence operatives and receiving stations for inputs from air, drones and space based ISR assets.

Unity of Command. There is an urgent need to address the existing anomaly of separate command and control structures that exist in the border management of contested external borders. There is a need for unity of command along our contested borders. The theatre commander should have operational control of the Para Military Forces, deployed at these borders. Currently, this can only be done in a hot war situation, on the announcement of national emergency, by evoking the provisions of the red book. The mandate needs to be suitably modified.

Integrating Logistics and Training Facilities. This aspect should be the first step, prior to the raising of Theatre commands. A 'Logistic Service' will be created, by merging the Army Service Corps and the Army Ordnance Corps and their equivalent in the other two services, with officers commissioned directly into the Logistic Corps, from the Academy. The functions of the Corps of Electronics and Mechanical Engineers for the three services are extremely diverse and should be excluded for now. However, integrating this function at a later date could be an option. This will set the grounds to harmonise the different mindsets of the services and lay the foundation for evolving a joint culture**.** Similarly, service specific training facilities can be selectively and gradually converted into integrated establishments, with common syllabi and instructors from the three services.

Expeditionary Capability. India's growing stature and interests, requires the military in the near future, to have the capability to project power beyond the frontiers. This requires capacities in the form of suitably equipped army formations, with agile combat elements and adequate air/naval lift. The mandate, command and control aspects for these 'Out of Area Operations' and related aspects, need to be formalised as 'Operating Procedures'.

Special Operations Forces (SOF). The current vision statement of SOF states "To create strategic asymmetric advantages for the nation in integrated deterrence, crisis and conflict", looks at strategic tasking and employment. This role and the employment of SOF need to be empowered with the necessary mandate, suitable resources and training.

Information Dominance Operations. There is a need to have a dedicated organisation that looks at adversarial and inimical elements activities, targeted at the cognitive faculties of military personnel. This force will have to function in unison with other national bodies to monitor and counter fake news and videos, while promoting and protecting favourable perception management on print, social and electronic media/social networking and media sites. They should proactively create positive narratives and also be the instrument for strategic signalling at the national level.

Civil Military Fusion. There is a need to systematically promote deeper understanding and mutual respect between the military and civilian counterparts. Ongoing initiatives like the 'Army Management Study Board', 'Army Technology Board' and periodic outreach to Public Sector Undertakings (PSUs), Defence Research and Development Organisation (DRDO) and private industry and academia, needs to be further strengthened. The setting up of bridge organisations like the Army Design Bureau, Army funded incubators for start-ups in niche and emerging technologies, User 'Project Management Teams' with the Defence PSUs and Ordnance Factory Board (OFB), are all steps in the right direction, to bolster Indian initiatives for 'Make in India-Defence'. To harness the exponential advantage of private industry there is a need for better understanding and necessary regulations. They will subsequently be the driving force for technologically advanced platforms.

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Capacity and Capability Development

To meet emerging challenges of new age warfare, there is a need for developing capabilities for executing a full spectrum war, in multiple domains. We need to focus on developing/enhancing capabilities/capacities for:

- **Multi-domain Operations**. There is a need for network centricity, cyber resilience and exploitation of space based assets.

- **Information Dominance Operations**. Necessary tools and expertise to execute the defensive an offensive aspects of the mandate.

- **Asymmetric Warfighting Capabilities**. Induction of technologically advanced and disruptive platforms like swarm drones, Loiter Munitions, Unmanned Aerial Vehicles (UAVs), robots and autonomous weapon systems and directed-energy weapons, as force multipliers. Suitably tailored assets should be available at different levels of field formations.

- **Smart and Integrated Border Management**. Enhanced integrated surveillance with high tech sensors, suitably unified with advanced computational assets and integrated AI-ML algorithms, for predictive analysis. Suitably deployed rapid deployment forces for timely reaction.

- **Situational Awareness**. Assets to be available down to the individual soldier on the tactical battlefield.

- **Seamless and Resilient Communications**. Deployment of 5G/6G links with Satcom for secure communications, till the forces transit to quantum communication links.

- **Legacy Weapon Platforms**. Upgradation of 'In-service' platforms with niche technologies and smart munitions, for greater lethality, range and accuracy. Optimise the effectiveness of military hardware through modulation of emerging technologies of AI, ML, virtual and augmented reality. Modern hi-technology weapons to be suitably inducted to augment capabilities.

- **Battlefield Survivability**. To counter the devastating firepower of adversary, along the northern borders, priority should be given for protection of their deployed assets and forces. There is a need for intrinsic mobility assets with the frontline troops for rapid deployment/redeployment. Need to deploy robotic and autonomous systems, astride the barren Ladakh borders.

It is strongly recommended, that for greater effectiveness of weapon systems in diverse terrain conditions, there is a need for sector specific equipment/military arsenal. This will simplify the procurement and trial process and bring down the cost of new age weapon platforms and systems. For example, drones/UAVs for high altitude areas, are better served with fixed wing systems, whereas the rotary quad/hexacopter, are better for plains and hilly terrain. The complexity and cost of an equipment increases, when the same system has to perform across a range of temperatures and adverse climatic conditions, i.e., in extreme cold conditions prevalent in high altitude areas, to the extreme heat of the deserts. This methodology of procurement will speed up the induction process, as also increase the life and effectiveness of the systems.

To facilitate indigenisation, there is an urgent need for a change in mind-sets. Once the equipment/platform meets the basic technical specifications, i.e., has the 'Must Do' criteria's, it should be accepted into service as Mark 1.

To facilitate indigenisation, there is an urgent need for a change in mind-sets. Once the equipment/platform meets the basic technical specifications, i.e., has the 'Must Do' criteria's, it should be accepted into service as Mark 1. The subsequent procurements of Mark 2 of the same equipment, should be with the best specifications feasible. This will give a boost to the private industry that remains under pressure for 'Return on Investments'. The need for repeated trials needs to be reviewed**,** especially where the cost is exorbitant, e.g, for Loiter Munitions with different loads and ranges. An alternate methodology of 'On-site' technical evaluation of the company can be adopted, especially when a similar equipment, with variations in specifications, has already been manufactured by that private company/is 'In-service' within the country/has been trial evaluated by either of the three services**.** In either of these situations, the trials can be scheduled at the first of production model stage. The corporatisation of OFB and the review underway of the DRDO, are steps in the right direction.

Concepts and Doctrines

For undertaking operations in a multi domain, asymmetric and hybrid environment, there is a need for a review of the current doctrines and strategies, at the operational and tactical levels. There is a need to analyse the impact of militarisation of the space and cyber domain and weave it into future strategies for the army.

A joint doctrine for multi-domain operations with joint forces strategy and service specific strategies need to be formulated, on priority. There has to be greater focus on intelligence operations and cyber warfare. Information dominance operations, intelligence ops and cyber warfare, needs to be addressed comprehensively in future doctrines. It should maintain military advantage in specific operational environments, be agile, with precise capabilities to defend strategic and national interests**.** In the foreseeable future, it should have the inherent resilience to project power in the

extended neighbourhood, when required and have the capability to render humanitarian assistance, disaster response, and conduct rescue missions.

Professional Military Education

The 21st Century has witnessed an accelerated 'Velocity of Change' both in the 'Character of War' and 'Societal Transformation'. It has therefore made it incumbent for militaries across the world, to review their training and recruitment policies and institute processes for continuous upgradation of knowledge and skill sets, not only of the 'Rank and File', but across different levels of military leadership. Top leadership is facing increasing headwinds, for successful outcomes, due to disruptive technology developments, new processes, increased domains of warfare and shortening of the OODA cycle. It is for this reason that there is greater emphasis on PME.

In spite of the various army courses and just in time short capsules, to hone specific skills, there is a need to develop a technological mindset and increased domain specialisation for effective 'Decision Making'. Future senior leadership needs to develop a measured 'Risk Taking' capability, to mitigate the increasing tendency to play safe and be risk averse. This not only requires well thought out programmes under PME, but also dynamic HR policies, that ensures that the personal aspirations of military men are in harmony with the organisational goals. The acme for successful military leaders in this rapidly evolving world is to be prepared through continuous learning.

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Man Management

There are multiple aspects of HR management, which require to be addressed for the 21st Century paradigm.

- The need for reviewing and harmonising the HR Policies, for integrated joint structures.
- The increasing impact of technology has refuelled the old debate of specialists vs generalists. To increase efficiency, there is a need for longer and repeated tenures for domain experts, of the three services. These skill sets are necessary for cyber, space, quantum communication, electronic warfare, Information Operations (IO)/influence operations, strategic signalling and defence procurements, etc.
- Towards increasing effectiveness of appointments, aptitude based posting should be adopted.
- Need for longer tenures for apex leadership handling critical functions like-capability development, procurements, IO and intelligence functions. This entails that officers promotion policies be tailored for longer tenures. Officers need to spend a minimum of 30.0 to 35.0 per cent of their service, in directional appointments, similar to that of civil services. Bureaucrats are empanelled as Joint Secretary at around 17/18 yrs of service and thereafter spend at least 40.0 per cent of their service at critical appointments. Therefore, officers should become Major Generals at 25 yrs of service, instead of the current 33 to 34 yrs. This is a gradual process and would require suitable amendments in the current policies and staff tables.

The recent changes of induction of soldiers as *'Agniveers'*, would require a dispassionate and experiential review, after the first batch completes its mandated service. The new format of military service has major challenges, especially when there is a high probability of conflict/skirmish astride India's active borders. Also, there is a high probability of counter terrorist operations, against non-state fundamental organisations, due to increased radicalisation, extremism and fundamentalism. Though there is a perceptible diminishing of counter insurgency operations.

Military Diplomacy

The importance of 'Military Diplomacy' to further national aims and interests, cannot be understated. World War II is replete with examples of the role and success of military diplomacy, when other means fell woefully short of expectations. India needs to exploit the close bonds of camaraderie that exists with the South Asian Armed Forces, less Pakistan and innovatively use the army for diplomatic roles/engagements. The deputation of selected officers, with 15 to 20 yrs, of service to the Ministry of External Affairs (MEA), will empower them with diplomatic skills, while mitigating the existing shortages, within the MEA.

Conclusion

Victory in future conflicts/wars, will be contingent on updated doctrines and stratagems that seamlessly weave the various nuances of future wars in a multi-domain environment, in tune with the changing 'Character of War'. Be responsive to the new age battlefield, that has transformed from few and exquisite platforms to small, smart and many, with an effective and innovative strategy for influence operations. The leadership will have to maintain higher levels of readiness and mental dexterity to meet unforeseen challenges. In a polycentric world with cross economic linkages and dependencies, there is a low tolerance for conventional conflict, as adverse events in any part of the globe, have a negative global impact. Therefore, territorial conflicts between nations, will invite international pressures for early closure and resolution. Implying the necessity for detailed planning and flawless execution of military operations, for early achievement of desired objectives.

In the end the author states that the armed forces need to be deliberate in the formulation of their 'Action Plan' to carry out restructuring and redesign of the force, in tune with the future realities of war fighting. But thereafter, change management needs to be done with an open mind, dexterity and promptly, while retaining the fighting edge.

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Risk Mitigation in Artificial Intelligence-Enabled Weapon Systems and the Need for an Indian Strategy

Lieutenant General (Dr) RS Panwar, AVSM, SM, VSM (Retd)@

Abstract

Artificial Intelligence (AI) based military systems pose significant risks, arising mainly as a result of the unique characteristics of machine learning technology. AI-enabled weapon systems are of special concern because of the threat they pose to human lives. This raises a host of legal, ethical, and moral conundrums. At the same time huge benefits could accrue, both on and off the battlefield, if the power of AI is leveraged in a responsible manner. AI-triggered risks posed by different types of military systems may vary widely, and applying a common set of risk mitigation measures across all systems will likely be suboptimal. A risk-based approach has the potential of overcoming this disadvantage. This article attempts to sketch the contours of such an approach in the form of a qualitative model termed the 'Risk Hierarchy'. It also highlights the imperative for India to evolve its own strategy on responsible use of AI in the military domain and play a proactive role at the international level to influence strategic thought and policy outcomes in this vital facet of warfare.

Introduction

There has been an exponential advancement in Artificial Intelligence (AI) technologies over the past few decades, with its latest manifestation in the form of foundation models and generative AI having sent tremors across the world. While its applications in the civilian domain have already had significant impact at the societal level, AI is gradually being leveraged for waging war as well. The first glimpses of the effects of AI on the battlefield have been witnessed in the Ukraine and Israel-Hamas conflicts. So far, AI for war waging has mostly been used for intelligence operations, and only minimally in weapon systems such as the Iron Dome.[1] There is a growing likelihood, however, that AI-enabled Lethal Autonomous Weapon Systems (LAWS), often sensationalised as 'Killer Robots', will transition from the realm of fantasy, as depicted in movies like Terminator, to the 21st Century warfighting arena.[2]

The deployment of AI-based applications and systems presents significant risks, primarily due to the highly intelligent behaviour exhibited by these systems, leading to substantial delegation of human cognitive functions to machines. The risks are particularly pronounced in the case of AI-enabled weapon systems, because of their potential for causing death and destruction. The high pace of technological advancement in intelligent weapon systems has brought forth a multitude of legal and ethical dilemmas that demand careful consideration and resolution. On the other hand, if harnessed responsibly, the power of AI could bring substantial benefits to humanity, both within and beyond the confines of the battlefield. This dual nature of AI technologies underscores the necessity for a well-thought-out strategy for developing AI-powered military systems, which includes an effective regulatory mechanism to govern their development.

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This article begins by describing the special characteristics of AI technologies and the nature of risks that they pose. It then dwells on the expected impact of AI on the modern battlespace, highlights AI risks which are unique to the military domain, and touches upon the legal and ethical concerns which emerge therefrom. It then presents a qualitative model for risk evaluation and mitigation in AI-enabled military applications, with focus on weapon systems. The article discusses the current discourse in international fora on harnessing the power of AI on the battlefield in a responsible manner. Finally, it stresses the need for India, particularly its armed forces, to evolve a strategic thought on this important facet of warfare, an area which so far does not appear to have garnered the attention it deserves.

AI: Definition, Characteristics and Risks

AI Eludes Precise Definition. Defining AI precisely can be challenging. Nevertheless, a notable attempt to do so can be found in the European Union (EU) AI Act which is in the final stages of enactment by the European Parliament.[3] Despite the wide ambit of this definition, most noteworthy outcomes and potential risks associated with AI-enabled systems predominantly originate from certain special characteristics inherent in neural network-based Machine-Learning (ML) techniques.

AI Related Risks. The unique features of AI/ML systems, which contribute to both their capabilities as well as risks, stem primarily from their capacity to learn directly from data. This learning process can persist even after their deployment, a phenomenon often termed as online learning.[4] This ability to learn directly from data also imparts a black-box quality to these systems, where even the developers may not fully understand how inputs translate into outputs, leading to a lack of transparency or explainability. Notably, the exponential increase in intelligence which neural networks have displayed in recent years, while imbuing AI systems with great power, also raises unique concerns.

It is widely believed that the combination of AI and robotics technologies will trigger the next Revolution in Military Affairs, which is expected to unfold over the next two decades.

Manifestation of Risks. The data-centric nature of AI systems introduces risks related to unrepresentative, biased, or intentionally manipulated data, resulting in unintended system behaviour. The potential for a system to continue learning post-deployment, metamorphosing into something different from its initial configuration, combined with its opaque nature, introduces an element of unpredictability into its functioning. The combination of data-driven learning and the non-transparent feature of AI systems is a significant factor in their vulnerability to catastrophic failure, especially when faced with edge cases, a characteristic referred to as brittleness.[5] As AI systems gain higher intelligence and increased autonomy, undesirable effects such as automation bias and a lack of accountability become prominent issues.[6,7] With the recent advent of foundation models and generative AI, there are now real fears that AI technologies might pose an existential threat to humanity in the not-too-distant future, unless their development is suitably regulated.[8]

AI-Enabled Autonomy in Weapon Systems

AI and the Changing Character of Warfare. It is widely believed that the combination of AI and robotics technologies will trigger the next Revolution in Military Affairs (RMA), which is expected to unfold over the next two decades. AI technologies, being ubiquitous, are expected to intelligise every stage of Observe-Orient-Decide-Act (OODA) loop which, in the context of weapon systems, translates to the sensor-decision-maker-shooter loop. (Figure 1)

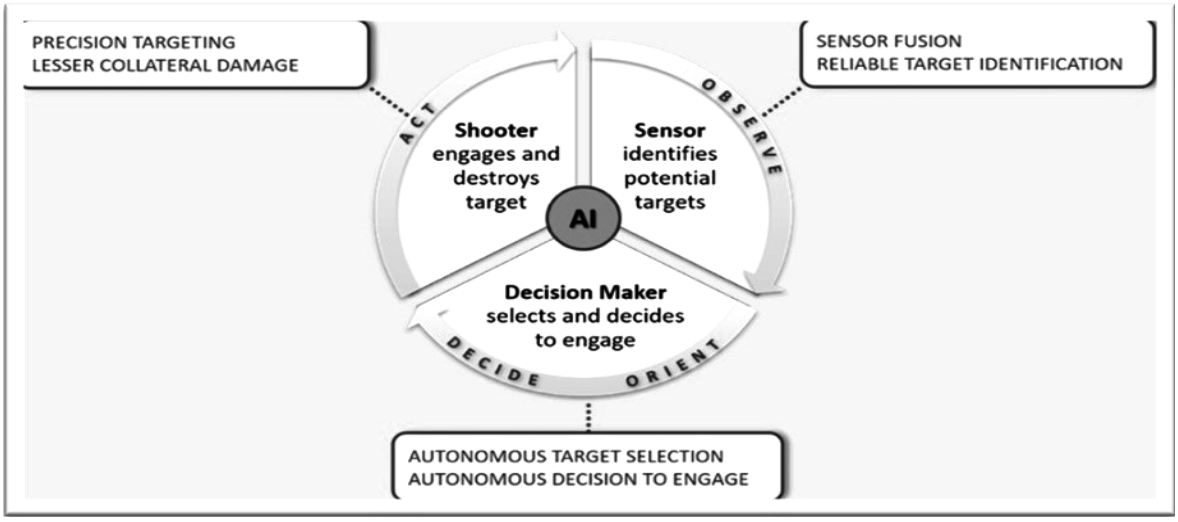

Figure 1

The primary concerns related to weapons powered by AI revolve around the critical functions of target selection and engagement. The identification of targets heavily relies on AI-enabled sensors, which play a crucial role in the selection process. In the next step, AI-driven decision-making comes into play to prioritise targets, leading to the decision to engage. The engagement itself, using shooters such as fire-and-forget homing missiles, may also be AI-enabled, significantly enhancing the precision of weapon systems. Consequently, in the physical domain, AI-powered autonomous weapon systems are expected to accelerate as well as enhance the quality of the OODA loop. Simultaneously, harnessing AI capabilities for cyber, electronic, and psychological operations is poised to bring transformative changes to the information and cognitive realms.

Autonomy is a Spectrum. There exists a multi-faceted relationship between autonomy and human control in the kill cycle of weapon systems, encompassing various functions such as take-off and landing, navigation, target identification, selection, tracking, the decision to engage, and the actual engagement, each potentially having different levels of autonomy. A widely adopted classification for different autonomy levels in critical functions utilises the 'Human-in-the-Loop,' 'Human-on-the-Loop,' and 'Human-out-of-the-Loop' clauses, with the last of these indicating full autonomy.[9] Here, in the context of weapons, it is beneficial to view the 'Loop' as the OODA loop referred to above. (Figure 2)

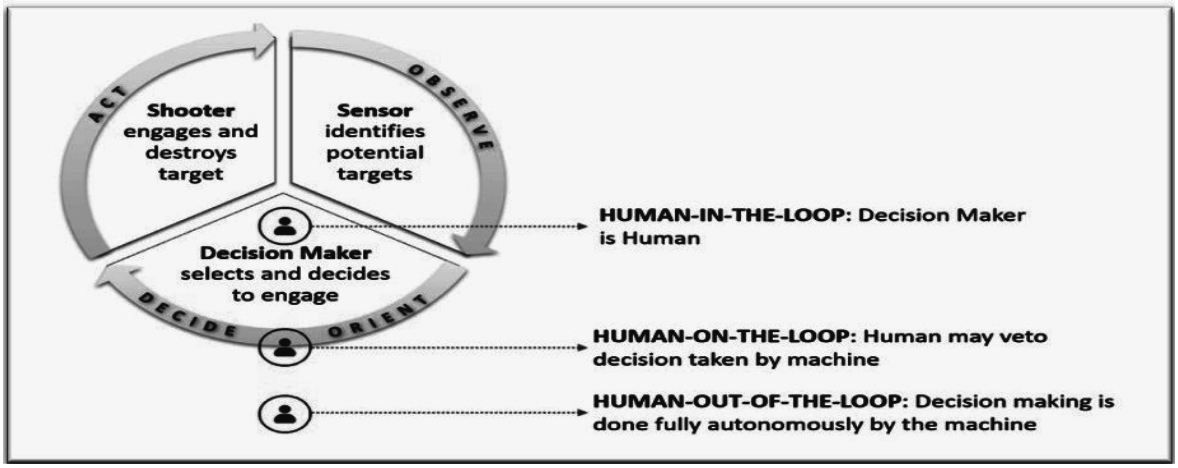

Figure 2

Another useful classification is given out in the United States (US) Directive 3000.09 on Autonomy in Weapon Systems, which categorises weapon systems as 'Semi-Autonomous', weapons with 'Supervised Autonomy', and 'Fully Autonomous' systems.[10] Several other classifications defining different levels and facets of autonomy exist in the literature, some at a more granular level.[11] A careful analysis of existing literature shows that autonomy in weapon systems is a continuum spanning several sub-functions, and any lines drawn to separate weapon systems into sub-classes based on this parameter are at best blurred.

Meaningful Human Control (MHC). Deliberations at the United Nations (UN) and other international fora have thrown up two alternative frameworks for addressing the contentious issue of specifying the desired degree of human control in LAWS. According to Human Rights Watch, the term MHC signifies control over the critical functions of selection and engagement of targets. An alternate viewpoint proposed by the US stresses that it is more practical to talk about 'Appropriate Levels of Human Judgement' rather than MHC.[12] After nearly eight years of deliberations at the UN, a consensus remains elusive on what level of control should be exercised over LAWS.

AI Risks Unique to the Military Domain

There are several characteristics of a military environment which lend a unique flavour to the risks and corresponding mitigation measures in AI enabled military systems.

Wars are infrequent, data collection in conflict scenarios is challenging, and data of primary interest mostly pertains to adversary systems. Thus, the desired quality and quantum of data, the primary fuel for AI/ML powered systems, is rarely available. Therefore, adoption of data efficient AI technologies, as also simulation techniques for generating datasets as well as test environments, becomes imperative.

Military operations might dictate frequent redeployment of systems across different environments. Thus, there may be a need to frequently retrain and evaluate system performance before redeploying it.

Over the past nearly nine years, there has been a global discourse on the ethical and legal dilemmas arising from the anticipated deployment of AI-powered LAWS in armed conflicts. The campaign to stop killer robots was launched in Apr 2013 by Human Rights Watch, seeking to proactively prohibit LAWS.

Military systems, in particular, weapon systems, inherently present a high risk, as human lives are at stake, and their employment must necessarily be carried out within constraints imposed by International Humanitarian Law (IHL). The accountability problem which characterises all AI-enabled systems can have more pronounced consequences in weapon systems. In conflict scenarios, the brittleness characteristic of AI/ML systems could have disastrous effects.

With the advent of autonomous weapon systems and AI-enabled decision making, it can be safely presumed that OODA loops, especially at the tactical level, will execute much faster. As a result, there is a real risk that the pace of operations may spin out of human control. In such scenarios, the prevalence of automation bias is likely to be much higher.

It has been explained above that online learning, if permitted, may lead to unintended and unpredictable effects. In a battlefield environment, this can result in violations of IHL and other military setbacks.

AI-Enabled Military Systems: Legal and Ethical Concerns

Over the past nearly nine years, there has been a global discourse on the ethical and legal dilemmas arising from the anticipated deployment of AI-powered LAWS in armed conflicts. The campaign to stop killer robots was launched in Apr 2013 by Human Rights Watch, seeking to proactively prohibit LAWS. In response to this campaign, the UN Office of Disarmament Affairs began discussing the issue in 2014, initially through informal expert meetings and subsequently,

since 2017, by a Group of Government Experts (GGE) set up for this purpose. The most recent GGE meeting on LAWS was convened in Geneva in May 2023.[13] Advocates for a ban argue that autonomy in critical select-and-engage functions would violate the IHL principles of distinction and proportionality, and the Martens Clause.[14]

In 2019, the UN GGE made limited progress by establishing 11 guiding principles for the development of LAWS.[15] The US Department of Defense (DOD) adopted 'Ethical Principles for AI' in Feb 2020.[16] Major state players like China, the EU, and Russia have introduced principles/norms for developing AI technologies, although these may not explicitly address military systems. The EU, notably, has embraced a risk-based approach to regulate AI, although for commercial applications.[17]

A Risk-based Approach for AI-enabled Military Systems

Benefits of a Risk-based Approach. As stated above, risks associated with AI technologies are significant and need to be suitably addressed and mitigated. A risk-based approach, such as the one adopted by the EU AI Act for mitigating AI risks in civilian applications, seems to be an optimal strategy, since the mitigation measures instituted would be commensurate with the risks presented by various types of applications.

AI Risks in Military Systems: Driving Concerns. AI-related risks in non-military applications are underpinned by concerns viewed primarily from a human rights perspective, such as racial and gender bias, right to privacy, etc. For AI-enabled military applications, on the other hand, evaluation of risk is driven by the twin considerations of adherence to IHL and reliable performance on the battlefield. Thus, a risk-based approach for AI-powered military systems would differ quite significantly from an approach evolved for civilian applications. The following paragraphs introduce a qualitative model for risk evaluation of AI-enabled military applications, termed as the 'Risk Hierarchy', perhaps the first of its kind. Development of the model involved the following steps: defining a hierarchy of risk levels, categorising the wide range of military systems into a small number of weapon classes, and then mapping these classes onto the risk levels. The final step involves a differentiated risk mitigation mechanism, which is also briefly discussed in this work. (Figure 3)

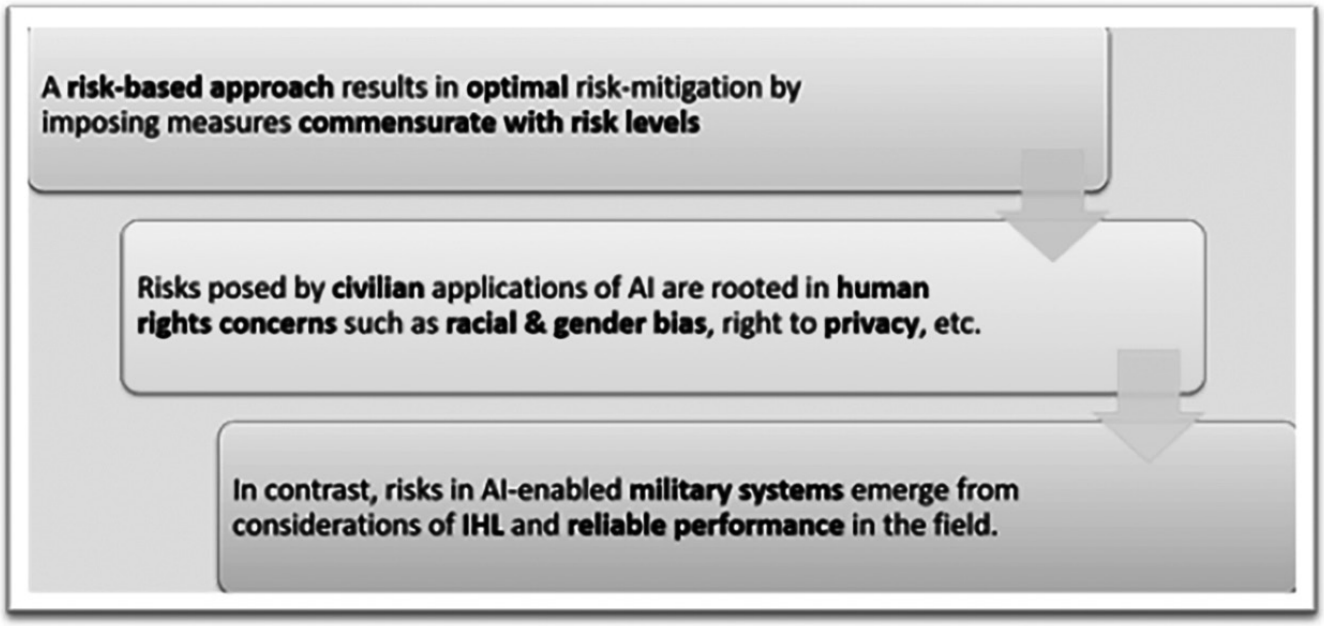

Figure 3

Defining Risk Levels. Central to the model is a five-level risk hierarchy, as depicted. The top three levels pertain to weapon systems, comprising of all sensor, decision and shooter elements of the weapons OODA loop. The bottom two levels relate to all military systems which do not directly lead to release of weapons, collectively referred to here as decision support systems. (Figure 4)

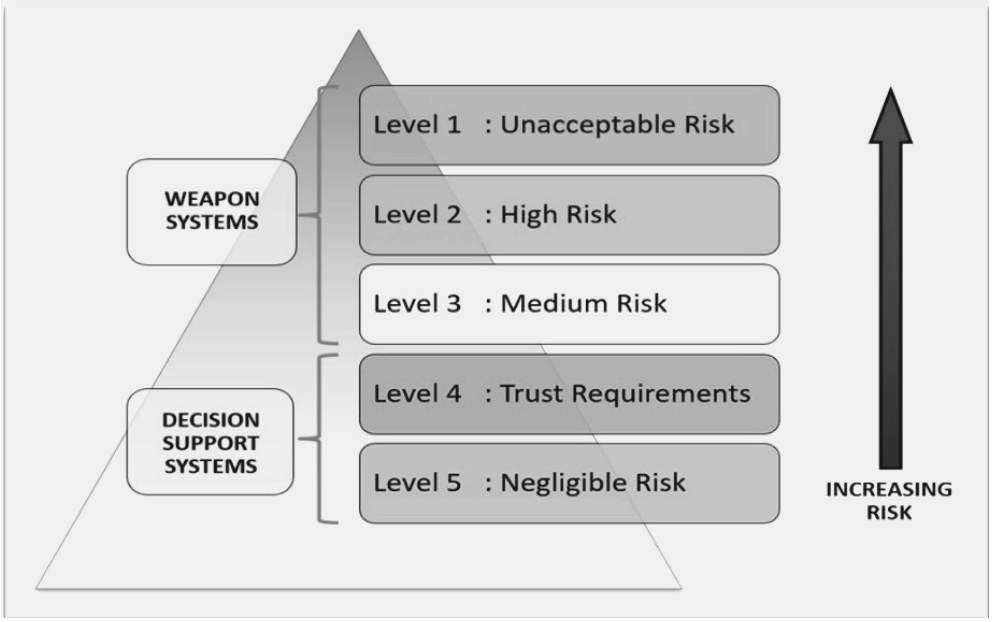

Figure 4

An intuitively appealing rationale, given out in the Figure 5 below, has been used to arrive at these five levels, aimed at setting up a risk structure which is simple yet effective for achieving the objective of risk mitigation. (Figure 5)

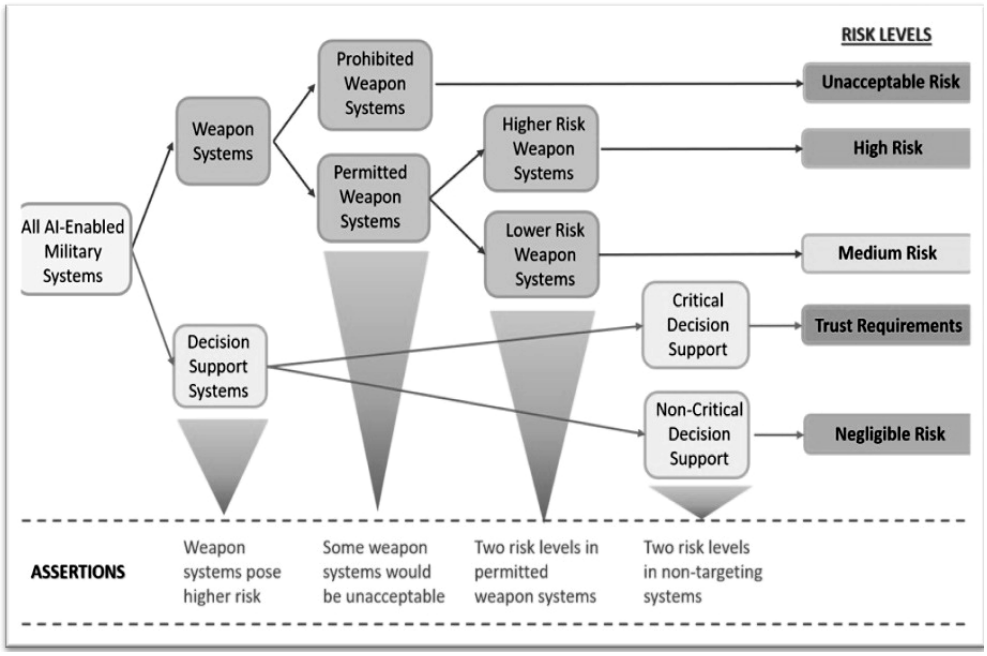

Figure 5

Assigning Weapons to Risk Levels. The risk hierarchy evaluates risks based on several parameters, which reflect the twin concerns of adherence to IHL and reliable performance in the battlespace, as follows: level of autonomy, OODA loop complexity, whether the weapon is lethal or anti-material, its destructive potential, and its operational role. These parameters and the values which they may take on are depicted in the Table1 below.

Parameters	Values		
OODA Loop Complexity	Platform-Centric	Network-Centric	Swarm
Autonomy	Semi-Autonomous	Fully-Autonomous	Online Learning
Type of Target	Non-Lethal	Lethal	Human Targeting
Operational Deployment	Offensive	Defensive	-
Destructive Potential	Nuclear	Non-Nuclear	-

Note: Total possible classes are 108

Table 1

It would be easier to explain some of these parameters and how they contribute towards risk evaluation with the help of examples, starting with fully autonomous lethal weapon systems, which the risk hierarchy places at the high risk level. The Israeli Harop is a good example of such a system.[18] It is a loitering kamikaze drone which hovers above the designated battlespace, and on detecting an adversary radar signal, dives down and destroys the radar. The combined effect of its two features of full autonomy and lethality puts all systems of this type in the High Risk category. (Figure 6)

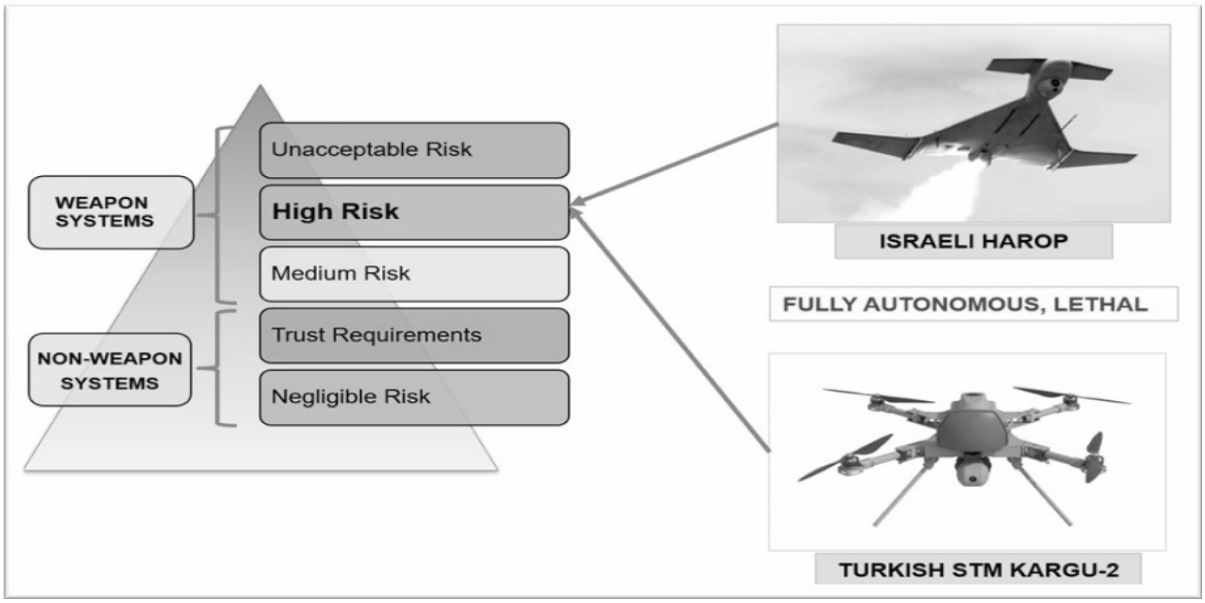

Figure 6

A fully autonomous nuclear weapon system would seem to be an obvious candidate for the Unacceptable Risk level, because of its extreme destructive potential. Implied in such a categorisation is that development of such systems should be banned. Another class of systems at this level are weapon systems which can learn while in operation (online learning), and as a result display unpredictable and unreliable behaviour. (Figure 7)

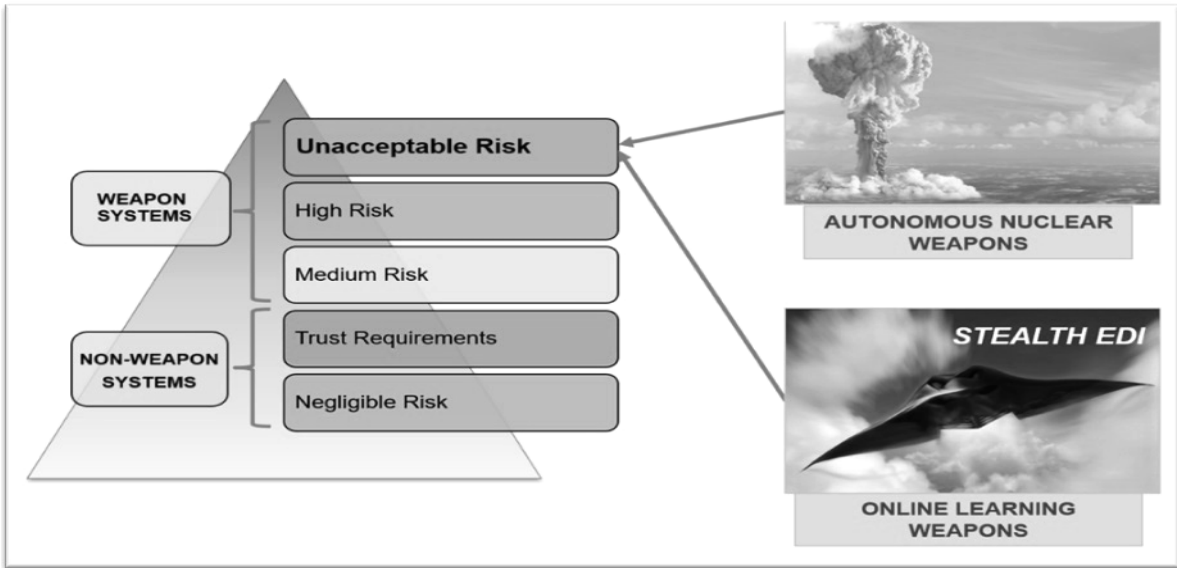

Figure 7

At the lower end of the spectrum of weapon systems in the risk hierarchy (Medium Risk Level), we have defensive anti-material weapon systems even though these may be fully autonomous, such as for instance the US close in weapon system Phalanx[19] or the Israeli Iron Dome, which are designed to destroy incoming rockets and missiles. From an IHL perspective, such weapons are unlikely to cause unintended harm to human lives. All semi-autonomous weapon systems would also fall in this category since their critical functions are under human control. (Figure 8)

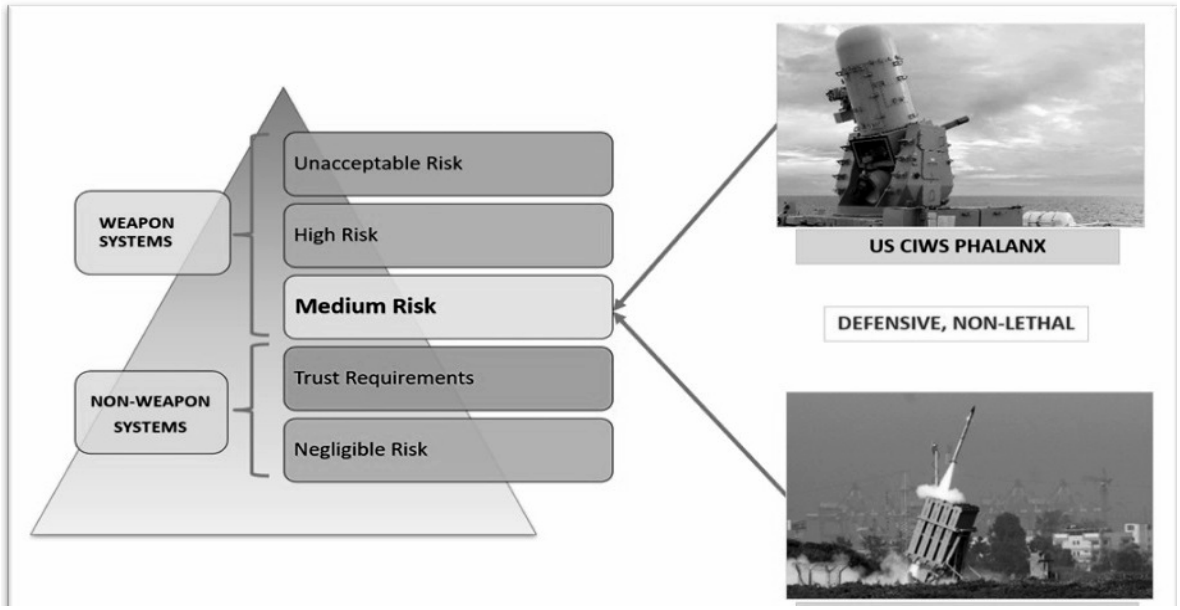

Figure 8

In this manner, by analysing the interplay of the five selected parameters, the full spectrum of weapons has been categorised into ten classes, which in turn have been mapped to the three risk levels pertaining to weapon systems. As regards decision support systems, all critical decision support systems map to the Trust Requirements Level, while noncritical ones correspond to the Negligible Risk Level. (Figure 9)

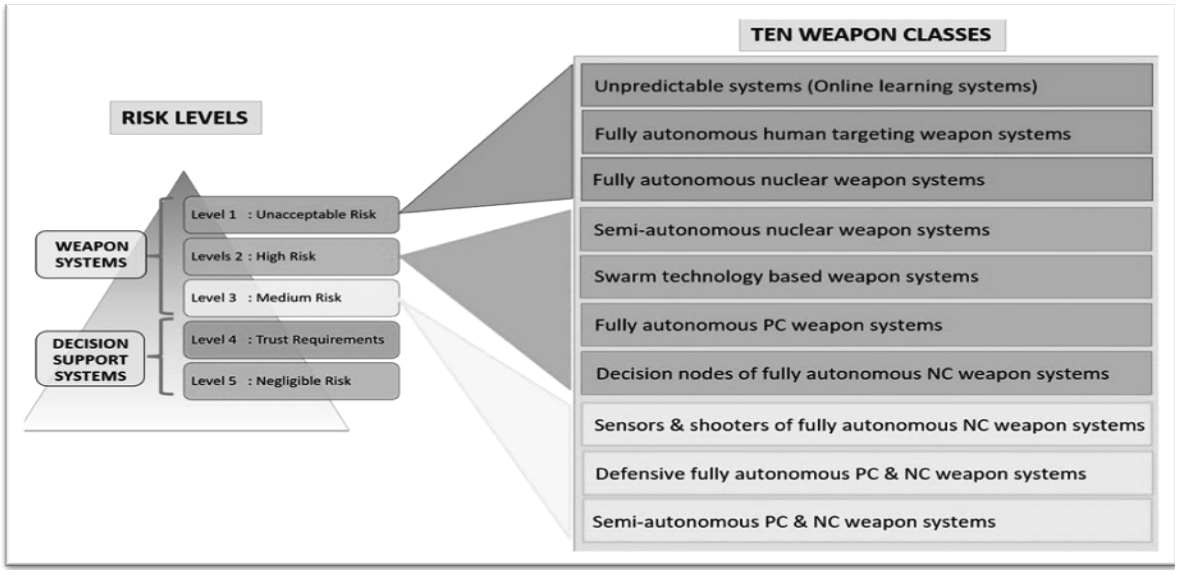

Figure 9

Risk Mitigation Measures. Mapping AI-enabled military systems into a hierarchy of risk classes would be beneficial only if differentiated risk mitigation measures are linked to each risk level. Such a mechanism could include a complete ban at one end of the spectrum, through different levels of approval and scrutiny, review including legal review, test and evaluation procedures, mandatory use of explainable AI, and control and oversight during the deployment phase. Needless to say, low risk systems which are subject to less stringent measures are likely to be developed faster. The process of deployment of such measures including Test, Evaluation, Verification and Validation (TEV&V) and given in Figure 10.

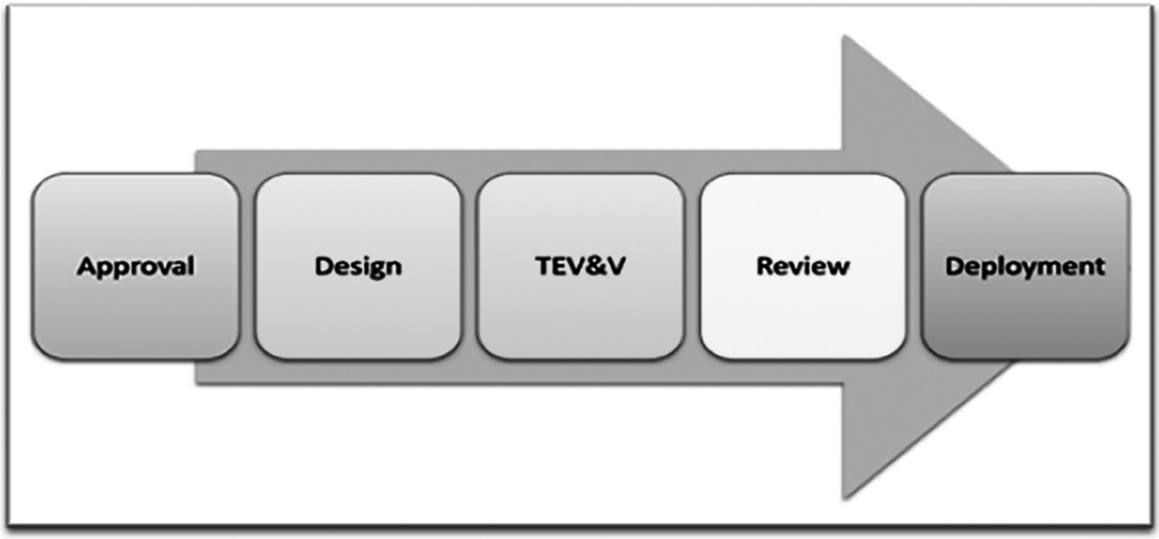

Figure 10

Promoting International Consensus. The risk-based approach presented here could contribute usefully towards consensus building at the international level, as explained below:

- **Granular Discussions**. A key reason for the lack of progress in achieving international consensus on regulation of LAWS is that discussions at various fora are very general in nature, making it very difficult to identify specific areas of disagreement which might be taken up for resolution. The risk hierarchy, by splitting weapon systems into different risk levels, would facilitate focused discussions at a more granular level, thus enabling consensus building.

- **Self-Regulation by Responsible Militaries**. Responsible militaries would not wish to act in disregard of IHL or employ weapon systems which may have negative fallouts for own forces. For instance, no military commander would like to employ unpredictable weapon systems over which he lacks full control. Moreover, violation of IHL is likely to be counter-productive towards achieving politico-military objectives. The risk hierarchy, by providing a viable approach for developing reliable AI-powered weapons, would encourage responsible militaries to adopt self-regulatory mechanisms which, if made public, could act as confidence building measures, which in turn would facilitate international consensus on AI regulation. The US Department of Defence Directive 3000.09 on Autonomy in Weapon Systems of 2012, which has been recently updated in Jan 2023, is a good example of such self-regulation.

The UN Secretary-General António Guterres, in his 2023 New Agenda for Peace, called upon states to conclude by 2026 a legally binding instrument to prohibit LAWS that function without adequate human control and cannot adhere to IHL, and regulate all other types of autonomous weapon systems.

Evolving Strategy Thought on Military AI: The Indian Context

International Initiatives on Responsible Military AI. Triggered by the huge impact of AI on civilian applications in recent years across all sectors, efforts are being intensified at international fora for suitable addressing AI risks in the military domain. Some of the recent highlights are as under:

- **UN GGE on LAWS**. The UN Secretary-General António Guterres, in his 2023 New Agenda for Peace, called upon states to conclude by 2026 a legally binding instrument to prohibit LAWS that function without adequate human control and cannot adhere to IHL, and regulate all other types of autonomous weapon systems.[20] This view is also reflected in the 2023 report by the GGE on LAWS.

- **UN General Assembly**. In Dec 2023, a resolution calling for the conduct of a comprehensive study of LAWS was debated at the UN General Assembly, and adopted by an overwhelming majority, with 152 in favour to 4 against (Belarus, Mali, the Russian Federation, and notably, India). At the same time, China, North Korea, Israel and eight other nations abstained.[21]

- **The Responsible AI in the Military Domain (REAIM) Summit**. The summit on REAIM, which the Netherlands co-organised with South Korea at The Hague in Feb 2023, was the first global summit of its kind. It gathered approximately 2,000 representatives across government, industry, academia, and civil society from 57 States, including all permanent members of the UN Security Council except Russia. The summit agreed on a joint Call to Action.[22]

AI Initiatives by Indian Government. Initiatives taken by the Indian Government towards spurring development in the field of AI include the following: a report submitted in Jan 2018 by a 'Task Force on AI for India's Economic Transformation' constituted by the Ministry of Commerce; another task force at the behest of the Ministry of Defence (MoD), which submitted its report in Feb 2019 on the country's future AI roadmap for development of warfare capabilities; the institution a High Level Defence AI Council as well as a Defence AI Project Agency under the

chairmanships of the Raksha Mantri and Secretary (Defence Production);[23] and an approach document by the National Institute of Transformig India (NITI) Aayog on Responsible AI for All in two parts in 2021,[24,25] focusing purely on the civilian sectors and not military applications.

Strategic Direction within the Indian Armed Forces. As of now there does not appear to be any doctrine available in the open domain, at either tri-services or individual service levels, on the planned exploitation of AI and robotics technologies in military systems in the Indian context. That stated, the subject has been under discussion at various seminars and conferences, and concept papers likely exist within the services, though with focus on applications and not on the responsible use of AI.

Need for a Strategy. Presently, India's national stance at the UN on this issue is apparently being articulated by the Ministry of External Affairs (MEA), with the MoD and armed forces playing a limited role, if at all. There is no indication of deliberations of any significance on this subject within the armed forces, which is ironic since they are the primary stakeholders in the matter. Therefore, it is imperative that a tri-services strategy and policy directive be evolved by the armed forces on responsible use of AI-enabled military systems which, in turn, should guide the positions adopted by the MoD and MEA at various international fora.

Influencing International Policy. A scrutiny of participants in international fora such as those discussed above shows that the speakers and panelists possess expertise mostly in disciplines such as international relations, international law, philosophy, and human rights issues, with limited participation from experts in computer science disciplines and AI, and an even lesser contribution from military experts. Suitably groomed warfighters from the more powerful militaries, including India, are uniquely positioned to contribute in a substantive way towards policy making in the field of military AI, both domestically and at the international level.

AI technologies are expected to be the harbinger of the next RMA. Major military powers are working at a frenetic pace to harness their power on the battlefield. At the same time, there is a growing realisation that development of AI-powered military systems must be done in a controlled manner.

Conclusion

This article has endeavoured to highlight the significant risks posed by AI technologies and how these risks would have an accentuated impact when they manifest on the modern battlespace through the deployment of autonomous weapon systems and other military applications. For addressing these risks, a qualitative model for risk evaluation and mitigation in the military domain called the risk hierarchy, perhaps the first of its kind, has been briefly presented.

AI technologies are expected to be the harbinger of the next RMA. Major military powers are working at a frenetic pace to harness their power on the battlefield. At the same time, there is a growing realisation that development of AI-powered military systems must be done in a controlled manner. It is imperative, therefore, that the Indian Government, and particularly its armed forces, evolve as well as implement its own strategy for responsibly harnessing the power of AI in the military domain, and play a proactive role at the international level to influence strategic thought and policy outcomes in this vital facet of warfare.

Endnotes

1 Joanna van der Merwe, *Iron Dome Shows AI's Risks and Rewards*, Centre for European Peace Analysis, 01 Jun 2021, Accessed 30 Dec 2023, https://cepa.org/article/iron-dome-shows-ais-risks-and-rewards/.

2 Zador, A., LeCun, Y., *Don't Fear the Terminator*, *Scientific American Blog*, 26 Sepr 2019, Accessed 30 Dec 2023, https://blogs.scientificamerican.com/observations/dont-fear-the-terminator/.

3 European Commission, *Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act)*, 21 Apr 2021, Accessed 30 Dec 2023, https://eur-lex.europa.eu/resource.html?uri=cellar:e0649735-a372-11eb-9585-01aa75ed71a1.0001.02/DOC_1&format=PDF.

4 Hoi, S., Sahoo, D., Lu, J. & Zhao, P., *Online Learning: A Comprehensive Survey*, *Neurocomputing*, 02 August 2018, p.459, Accessed 30 Dec 2023, https://doi.org/10.1016/j.neucom.2021.04.112.

5 Lohn, A.J., *Estimating the Brittleness of AI: Safety Integrity Levels and the Need for Testing Out-Of-Distribution Performance*, 02 Sep 2020, Accessed 30 Dec 2023, https://arxiv.org/abs/2009.00802.

6 ICRC, *Artificial Intelligence and Machine Learning in Armed Conflict: A Human-Centred Approach*, *International Review of the Red Cross*, 102 (913), 2020, pp. 463-479, Accessed 30 Dec 2023, https://international-review.icrc.org/sites/default/files/reviews-pdf/2021-03/ai-and-machine-learning-in-armed-conflict-a-human-centred-approach-913.pdf.

7 Panwar, R. S., *AI and the Rise of Autonomous Weapons*, in R.P Rajagopalan (Ed), *Future Warfare and Technology: Issues and Strategies,* Observer Research Foundation and Global Policy Journal. Wiley, *2020, pp. 68-78*, Accessed 30 Dec 2023, https://www.orfonline.org/wp-content/uploads/2022/11/GP-ORF-Future-Warfare-and-Technology-01.pdf.

8 Roose, Kevin, *A.I. Poses 'Risk of Extinction,' Industry Leaders Warn*, 30 May 2023, The New York Times, Accessed 30 Dec 2023, https://www.nytimes.com/2023/05/30/technology/ai-threat-warning.html.

9 Ibid.

10 US DOD, *Directive 3000.09: Autonomy in Weapon Systems*, USD (Policy) 25 Jan 2023, pp. 14-17, Accessed 30 Dec 2023, https://www.esd.whs.mil/portals/54/documents/dd/issuances/dodd/300009p.pdf.

11 William C Marra & Sonia K McNeil, *Understanding the Loop: Regulating the Next Generation of War Machines*, Harvard Journal of Law and Public Policy, Vol. 36, No 3, 2013, pp. 22-23, Accessed 30 Dec 2023, https://journals.law.harvard.edu/jlpp/wp-content/uploads/sites/90/2013/05/36_3_1139_Marra_McNeil.pdf.

12 Human Rights Watch, *Review of the 2023 US Policy on Autonomy in Weapons Systems*, 14 Feb 2023, Accessed 30 Dec 2023, https://www.hrw.org/news/2023/02/14/review-2023-us-policy-autonomy-weapons-systems.

13 United Nations, *Report of the 2023 session of the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems*, Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons System Geneva, 24 May 2023, Accessed 30 Dec 2023, https://docs-library.unoda.org/Convention_on_Certain_Conventional_Weapons_-Group_of_Governmental_ Experts_on_Lethal_Autonomous_ Weapons_Systems_(2023)/CCW_GGE1_2023_2_Advance_version.pdf.

14 International Human Rights Clinic, *Losing Humanity - The Case Against Killer Robots*, Human Rights Watch, Harvard Law School, Nov 2012, ISBN: 1-56432-964-X, pp. 30-36, Accessed 30 Dec 2023, https://www3.nd.edu/~dhoward1/Losing%20Humanity-The%20Case%20against%20Killer%20Robots-Human%20Rights%20Watch.pdf.

15 UNODA, *Guiding Principles affirmed by the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons System*, Final Report: Annexure III, UN CCW GGE on LAWS, 13 Dec 2019, pp. 10, Accessed 30 Dec 2023. https://undocs.org/CCW/MSP/2019/9.

16 US DOD, *DOD Adopts Ethical Principles for Artificial Intelligence*, 24 Feb 2020, Accessed 30 Dec 2023, https://www.defense.gov/News/Releases/Release/Article/2091996/dod-adopts-ethical-principles-for-artificial-intelligence/.

17 European Commission, *Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act)*, 21 Apr 2021, Accessed 30 Dec 2023, https://eur-lex.europa.eu/resource.html?uri=cellar:e0649735-a372-11eb-9585-01aa75ed71a1.0001.02/DOC_1&format=PDF.

18 *Harop Loitering Munition System*, Israel Aerospace Industries, Accessed 31 Dec 2023, https://www.iai.co.il/p/harop.

19 Robert H Stoner, *R2D2 with Attitude: The Story of the Phalanx Close-In Weapons*, NavWeaps, October 30, 2009, http://www.navweaps.com/index_tech/tech-103.php.

20 Jones, Isabelle, *UN Secretary-General calls for new international law to regulate and prohibit killer robots by 2026*, Stop Killer Robots, 20 Jul 2023, Accessed 31 Dec 2023, https://www.stopkillerrobots.org/ news/un-secretary-general-calls-for-new-international-law-to-regulate-and-prohibit-killer-robots-by-2026/.

21 Digital Watch Observatory, *UN General Assembly adopted resolution on Lethal Autonomous Weapons Systems or LAWS*, 25 Dec 2023, Accessed 31 Dec 2023, https://dig.watch/updates/un-general-assembly-addopted-resolution-on-lethal-autonomous-weapons-systems-or-laws.

22 *REAIM 2023*, Government of the Netherlands Website, Accessed 30 Dec 2023, https://www.government.nl/ministries/ministry-of-foreign-affairs/activiteiten/reaim.

23 Sarangi, Subhasish, *National Initiatives on Artificial Intelligence in Defence*, USI of India, 25 Apr 2019, Accessed 30 Dec 2023, https://www.usiofindia.org/strategic-perspective/national-initiatives-on-artificial-intelligence-in-defence.html.

24 NITI Aayog, *Approach Document for India Part 1 – Principles for Responsible AI*, 21 Feb 2021, Accessed 31 Dec 2023, https://www.niti.gov.in/sites/default/files/2021-02/Responsible-AI-22022021.pdf.

25 NITI Aayog, *Approach Document for India: Part 2 - Operationalizing Principles for Responsible AI*, Aug 2021, Accessed 31 Dec 2023, https://www.niti.gov.in/sites/default/files/2021-08/Part2-Responsible-AI-12082021.pdf.

India's Maritime Power in a Theatreised Environment

Vice Admiral AK Chawla, PVSM, AVSM, NM, VSM (Retd)[@]

Abstract

The concept of theatreisation in the Indian Armed Forces, spurred by events like the Kargil War and recommendations from the Shekhatkar Committee, has faced setbacks despite recent momentum following the establishment of the Chief of Defence Staff. This article delves into the potential impact of theatreisation on India's maritime domain, particularly through the proposed Maritime Theatre Command (MTC). It argues that consolidating maritime forces under the MTC would enhance India's maritime military power and bolster its Comprehensive Maritime Power, benefiting national security and strategic positioning in the Indo-Pacific. Emphasising the need for clear separation between staff and operational functions, the article advocates for jointness and integration among military and civilian agencies involved in maritime operations, highlighting the imperative of synergy and adaptability in the face of evolving hybrid warfare dynamics. Additionally, it calls for empowering the MTC Commander-in-Chief to effectively coordinate and integrate maritime assets across the three services and other government agencies, overcoming institutional inertia and bureaucratic barriers to realise India's maritime potential and safeguard national interests in a complex geopolitical landscape.

Introduction

Deliberations on theatreisation of the Indian Armed Forces have been ongoing ever since the Group of Ministers Report of 2002, in the wake of the Kargil War, and more recently since theatreisation was recommended by the Shekhatkar Committee in 2017. The issue received a boost after the institution of the Chief of Defence Staff (CDS) on 01 Jan 2020, when study groups were created to finalise the structure and span of the proposed theatre commands. However, the constitution of theatre commands seems to have gone on the back-burner after the unfortunate demise of the first CDS, General Bipin Rawat, who was an ardent champion of theatreisation.

While theatreisation of the Indian Armed Forces, whenever it happens, would impact every aspect of the armed forces, the change would be most significant at sea. The proposed Maritime Theatre Command (MTC) the final name could differ, would bring a range of national agencies under its ambit, both in war and peace, which would transform the application of maritime power in the Indian context. This article posits that the synergy of effort that would accrue as a result of the creation of the MTC will not only synergise India's maritime power and transform its usage, but also strengthen India's Comprehensive Maritime Power (CMP). This, in, turn, would substantially benefit India's economy and strengthen India's march towards the goal of becoming a developed country by 2047.

[@] *Vice Admiral AK Chawla, PVSM, AVSM, NM, VSM,* superannuated from the Indian Navy on 30 Nov 2021 as the Flag Officer Commanding-in-Chief of the Navy's Southern Command. Over the course of his career, he has commanded five warships, including the aircraft carrier, INS Viraat and the Indian Navy's Western Fleet. He is an accomplished maritime thinker and author, and has completed his PhD on 'The Role of Maritime Power in China's Grand Strategy'. An active contributor to various defence journals, he is currently an Eminent Resource Faculty- Adjunct Professor for the Rashtriya Raksha University and a Council Member of the United Services Institute, as also several other think tanks, besides being involved in various social and environmental initiatives.

Benefits of a Theatreised Environment

The concept of a 'Theatre of War' originated during the Napoleonic wars of the late 18th and early 19th Centuries, which were until then the largest conflicts in recorded history, in terms of both space and force. The concept was given formal shape by General Baron Jomini, a cerebral Swiss soldier who served under Napoleon. In his celebrated work, 'Summary of the Art of War', written after the war posited that in order to synchronise and synergise operations across the wide geographical area that modern wars encompassed, it was necessary to reorganise the command and control structures so that the mass and energy of one's own forces could be brought to bear on the decisive points of a theatre of war. Jomini's theory was essentially concerned with the employment of mass in time and space in a theatre of war. He defined a theatre of war as "All the territory upon which parties may assail each other, whether it belongs to themselves, their allies, or weaker states who may be drawn into war through fear or interest".[1] In modern times, a theatre of war is defined as "That area of land, sea and air which is, or may become, directly involved in the operations of war".[2] This concept led to the emergence of 'Theatre Commands' with all forces inside the theatre being led by a theatre commander. A theatre of war could be further divided into several theatres of operations, which are defined as "The area designated by the theatre commander for the conduct or support of specific military operations".[3]

Theatres of war were established by all major powers in every large-scale war after the 19th century, commencing with the American Civil War (186-65), the Russo-Japanese War (1901-05), World War I and World War II. Since the end of the Second World War, the United States (US) has maintained geographical combatant commands to facilitate preparation and transition to war at short notice as also to handle the crises that erupt across the globe from time-to-time. China has become the latest major power to establish theatre commands in 2015, thereby, underlining their utility during war or crises. Hence, before we specifically look at maritime power in a theatreised environment, it would be advisable to review the salient advantages of the concept of theatre commands itself.

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The first and foremost advantage that theatreisation would bring is a clear-cut division between 'Staff' and 'Operations' functions in the Indian Armed Forces, a concept that is not clearly delineated in the current command and control organisation of the Indian Armed Forces. In the existing set-up, the Chiefs of Staff of the three services and the Commanders-in-Chief (C-in-Cs) of various individual service and joint commands are charged with both staff and command functions. However, as their titles suggest, the Chiefs of Staff are actually to be responsible for 'Staff' functions, which mainly deal with acquisition, funding, manpower and maintenance issues. On the other hand, the C-in-Cs are to be principally responsible for 'Command' functions, which basically involves the conduct of operations. However, currently, both the Chiefs of Staff and the C-in-Cs are dual-tasked with both staff and operations responsibilities. With staff functions such as capital and revenue acquisition, technology induction, manpower recruitment and training, maintenance, logistics support, etc. being the predominant factors in peacetime, it is not surprising that the importance, and hence, the time and attention required to be given to the planning and conduct of operations and operational training, is diluted. This imbalance would be restored by the creation of theatre commands, under which the Chiefs of Staff would be responsible for 'Raising, Training and Sustaining' functions, while the MTC would be responsible for operations.

The second and obvious advantage of theatreisation is the fact that theatre commands would not just ensure inherent 'Jointness' in the planning and conduct of operations between the three services, but also enable the 'Integration' of all maritime armed, paramilitary and police forces of the union, as also other government agencies involved in maritime activities. Since the instinct of any bureaucratic organisation anywhere in the world is to operate in silos, synergy between different agencies is available fitfully in the present set-up, with personalities being the principal drivers or blockers of

such collaboration. A theatre command with the mandate and authority for integration of all agencies connected with maritime operations would help break down the silos that currently exist; and replace the current arrangement where enablers to jointness and integration are set-up based on various contingency plans in peacetime, crises and wartime.

The third advantage theatreisation will bring is better synergy in use of forces not only within, but also between theatres of operations. This is important because it is virtually impossible for any modern war to be limited to a single theatre of operations. The fast tempo of modern warfare and the increasing ranges of weapons imply that military engagements could occur simultaneously or sequentially/ episodically across the entire geographical area of operations. This is most clearly demonstrated during the ongoing Russia-Ukraine War, where engagements shift on a daily basis across sectors and domains of warfare, requiring nimble deployment of troops, artillery and armoured assets, air defence assets, unmanned aerial vehicle regiments, etc. At present, positioning of forces within an individual service command and the sharing of resources with other service commands is a pedantic process, which needs to become speedier and operations oriented. The experience of other countries who have adopted theatreisation suggests that this synergy is better facilitated by joint commanders of individual theatres.

This synergy will also extend to the seamless sharing of other national resources, such as intelligence, transport and communication facilities, human expertise, etc., between theatres during a particular operation or during peacetime contingencies, such as natural disasters, aid to civil power, etc. A particular benefit would be the facilitation and realisation of civil-military fusion under which scarce national resources, especially infrastructure, could be 'Fused' where feasible, to ensure economy of effort and wider availability.

While warfare has transformed constantly over the ages, driven by advances in technology, the pace of transformation has quickened in the 21st Century. The current nature of warfare has correctly been defined as 'Hybrid', as it is fought 24x7 over different domains, including the cognitive domain.

Changes in Use of Maritime Power in the Current Environment

While warfare has transformed constantly over the ages, driven by advances in technology, the pace of transformation has quickened in the 21st Century. The current nature of warfare has correctly been defined as 'Hybrid', as it is fought 24x7 over different domains, including the cognitive domain. Hybrid warfare has been described as, "A theory of military strategy, which employs political warfare and blends conventional warfare, irregular warfare, and cyber warfare with other influencing methods, such as fake news, diplomacy, lawfare and foreign electoral intervention".[4] These methods are used simultaneously across the spectrum of conflict with a unified strategy, using a combination of state and non-state actors. Hybrid warfare encompasses three distinct battlefields – the conventional battlefield, the population of the conflict zone, and the international community.

The concept of grey-zone warfare is intimately linked to hybrid warfare, as today states most often apply unconventional tools and hybrid techniques in the grey-zone, such as propaganda campaigns, cyber warfare, economic pressure, and non-state entities, which do not cross the threshold into formalised state-level aggression, thereby, neutralising the deterrence provided by conventional military force of even the strongest military powers. To add to the complexity, conventional maritime warfare itself today encompasses eight dimensions – the traditional land, sea, undersea and air dimensions which have been augmented by the dimensions of electromagnetic spectrum, cyber, space and cognition. Traditional militaries find it hard to respond to hybrid warfare since they are not structured to fight such conflicts, and need greater flexibility and multiple resources to constantly shift tactics, priorities and objectives, which can only be provided through jointness and inter-agency coordination.

India has been facing tremendous security challenges since independence, with two adversarial, nuclear armed neighbours, who have shown repeated intent to disrupt peace and stability in the region. Over the past three decades, India has also been confronting a hybrid war against both Pakistan and China. This requires India's security infrastructure

to adopt an integrated approach, by sharing of resources, expertise and information between the three services and other government agencies, to be able to protect our national interests in a dynamic and challenging strategic environment.

Changes in Command and Control, Force Structure and Composition

Changes in command and control would inevitably follow due to the enhanced Area of Responsibility (AoR) of the proposed MTC, which should ideally encompass the combined AoRs of the existing Western and Eastern Naval commands, and the Andaman and Nicobar Command. The AoR could be expanded subsequently if the force levels available with the MTC are suitably enhanced. The MTC would be responsible to integrate and interact with all concerned government departments and agencies, within its AoR, as also at the national level, as required to support its operational plans and actual operations. The C-in-C of the proposed MTC would need to be empowered accordingly.

All operational units in these commands, as also the Army and Indian Armed Forces units are allocated for maritime roles, would come under the ambit of the MTC. These would include, inter alia, the amphibious forces of the Indian Army and air assets of the Indian Armed Forces designed to operate over the sea. In addition, specific blue water ships of the Coast Guard (CG) would also need to be placed under the MTC to enable synergistic handling of maritime threats in peace and war under a unified command. This would only require the re-allocation of existing forces, not their re-positioning. In consonance with the division between staff and operational roles, Service Headquarters would be responsible for allocating operational units to the MTC after ensuring the requisite maintenance, manning and basic training of these units. The MTC would thereafter be responsible for operational deployment and operational training of these units in a joint manner.

The Indian Navy (IN) has already inducted unmanned platforms, above, on and under the sea for search, reconnaissance and attack, which needs to be substantially enhanced in the years ahead, along with the incorporation of artificial intelligence.

As far as changes in force composition are concerned, these would be dictated both by advances in technology, as also the evolving geopolitical landscape in the Indo-Pacific. The Indian Navy (IN) has already inducted unmanned platforms, above, on and under the sea for search, reconnaissance and attack, which needs to be substantially enhanced in the years ahead, along with the incorporation of artificial intelligence. The Indian Armed Forces also need to raise at least two dedicated marine brigades, which should be placed under the MTC. This is a long-awaited offensive capability, essentially for expeditionary warfare, and the defence of our island territories. Considerable operational synergy can also be achieved between the Fleet Air Arm and the air assets of the Indian Armed Forces allocated to the MTC, once they are placed under a single commander. Such synergy would extend to the field of maintenance, especially where there is commonality in platforms.

As far as apex control of the C-in-C MTC is concerned, there are two options available. The first is to place him directly under the Raksha Mantri (RM), with the Chiefs of Staff Committee (COSC) chaired by the Chief of Defence Staff advising the RM on all operational matters and a proposed Vice CDS providing the necessary staff support through a dedicated joint operations organisation at Headquarters Integrated Defence Staff. This is akin to the model in the US military. The second is to place him directly under the COSC. Both options have their pros and cons, but the first option is considered more suitable, as it reinforces the importance required to be accorded to 'Operations', while ensuring that the requisite professional military advice is available to the RM.

The Impact of Theatreisation on India's Maritime Power

As is evident from the aforesaid, the creation of a MTC will have a salutary impact, not just on India's maritime military power, but also on India's CMP. CMP can best be defined as 'The sum total of the maritime power of a country, encompassing its political, economic, commercial, military, constabulary, technological, scientific, legal and soft power

dimensions'.[5] As evident from the definition, CMP can be broadly divided between 'Maritime Hard Power', which includes the dimensions of political, economic, commercial, military, constabulary, technological, scientific and legal power; and 'Maritime Soft Power', which encompasses the benign dimensions of search and rescue, hydrography, climate change mitigation activities, humanitarian assistance and disaster relief, medical assistance and research, tourism and maritime sports, maritime history and archaeology, salvage, international maritime scientific and academic research, international conservation efforts, etc.[6]

The strengthening of India's maritime military power would be an outcome of the synergy that would arise from the unified operation of all sea-going maritime agencies – the IN, CG, Indian flagged merchantmen, fishing boats, ocean research vessels, other vessels of government maritime agencies, etc. Put together, this is a very considerable national maritime resource, which could be knit together for effective maritime defence of the country, besides extending India's reach into the Indo-Pacific. This synergy would inevitably extend to all non-military maritime endeavours as well, which would be 'Joined at the hip'. As an example, work on deep sea technology by the National Institute of Ocean Technology and undersea vehicles under development by the Defence Research and Development Organisation, as also extensive work being undertaken by private agencies in India could be synergised to obtain results larger than their individual parts. There are myriad such issues that would benefit from the single-point focus on maritime operations which will be provided by the MTC.

The strengthening of India's maritime military power would be an outcome of the synergy that would arise from the unified operation of all sea-going maritime agencies – the IN, CG, Indian flagged merchantmen, fishing boats, ocean research vessels, other vessels of government maritime agencies, etc.

This synergy is now not just desirable, but imperative due to China's growing maritime presence in the Indian Ocean Region and its use of non-military maritime assets for grey zone warfare, as clearly witnessed in the South China Sea. The growth of China's investments in maritime infrastructure, especially in Pakistan, Myanmar, Sri Lanka and Maldives is another issue of concern, as it is inherently designed for dual-use. Wartime collusion between our adversaries will also require a joint and integrated counter, which is best achieved through the medium of the MTC.

The positive impact of the maritime synergy generated would also extend to the development of India's marine economy, which is 'The sum of the economic activities of ocean-based industries, together with assets, goods and services provided by marine ecosystems'.[7] Freeing up Naval Headquarters from its operational role would allow unimpeded attention to the key issues of manpower recruitment, training and retention, force generation and technology induction, as also maintenance and logistics, which are the foundations of an effective maritime force. Two specific sectors, indigenous shipbuilding and repair and Indian flagged shipping would be key beneficiaries of this synergy. While 95.0 percent of India's trade by volume and 68.0 per cent by value moves through ocean routes, the share of Indian ships in the carriage of India's Export-Import trade has declined from 40.7 percent in 1987 to 1988 to about 7.8 per cent in 2018-19. India's merchant shipping fleet comprised 1491 vessels in 2021 (1,027 coastal and 464 overseas)[8] and was ranked 19th in the world in terms of capacity of dead weight tonnage (1.3 per cent of total global tonnage).[9] India is ranked 15th in global shipbuilding with only 0.12 per cent of global ships having been built in India in 2021.[10] The global ship repair and maintenance market is expected to reach a value of USD 40.0 bn by 2028. India's share in this business is less than 1.0 per cent though there is substantial scope for it to expand substantially due to the benefits of a cheap and skilled workforce.[11]

India's positive experience in defence shipbuilding, where India has successfully built an aircraft carrier and strategic and conventional submarines clearly indicates that it has the requisite technical and human expertise to expand indigenous shipbuilding in the non-military sector as well. Indian shipyards are also well placed geographically and in terms of expertise to attract warship repair business from other countries at a competitive cost. Finally, the availability of national flag shipping is a key factor for India's maritime defence in war and its development and dual use capability would be better realised by dedicated attention to this issue.

Conclusion

While discussions on the establishment of theatre commands in the Indian Armed Forces have been ongoing for over two decades, the new structures have not come into being for a variety of reasons. Some of these reasons are typical to any existing organisation, hubris, inertia, fear of change and losing power or control over resources, which can only be overcome through political will. The other major reason is the general lack of awareness of the advantages that would accrue to national security through theatreisation, which can be overcome through widespread awareness of the advantages that theatreisation will usher, as attempted by this article.

The danger is that a status quo approach could lull India into a false sense of security. With the nation's principal adversary already well down the road to theatreisation, this could disadvantage India severely in the years ahead. It is, therefore, imperative that the process of theatreisation be kick-started again and concluded in a time-bound manner. The national security can brook little further delay.

Endnotes

1 Antoine-Henri Jomini, "*Summary of the Art of War*", ed. By J.D. Hittle, Vol.2, "Roots of Strategy", (Harrisburg: Stackpole Books, 1987), 461.

2 "JCS Publication 1, Dictionary of Military and Associated Terms", Defence Technical Information Center, US Department of Defence, https://irp.fas.org/doddir/dod/dictionary.pdf

3 Ibid

4 Hoffman, Frank. G, "Conflict in the 21st Century: The Rise of Hybrid Wars", *Potomac Institute for Policy Studies, Arlington, Virginia*, December 2007, https://www.potomacinstitute.org/ images/stories/publications/potomac_hybridwar_0108.pdf.

5 Definition by author

6 Ibid

7 "The Ocean", *OECD*, https://www.oecd.org/ocean/topics/ocean-economy

8 "Indian Shipping Statistics 2021", 04 July 2022, *Ministry of Ports, Shipping and Waterways*, https://shipmin.gov.in/sites/default/files/ISS_2021_FINAL.pdf

9 "India's Share of International Shipping", *Ministry of Ports, Shipping and Waterways*, 03 December 2021, https://pib.gov.in/PressReleaseselframePage.aspx?PRID=1777771

10 "UNCTAD Handbook of Statistics 2021 – Maritime Transport", *UNCTAD*, https://uncad.org/system/files/official-document/tdstat46_FS14_en.pdf

11 Annual Report 2020-21, *Government of India, Ministry of Ports, Shipping and Waterways*, 13 August 2021, https://shipmin.gov.in/sites/default/files/AnnualReport2021_0.pdf

Strategic Leadership in the Era of Social Media Proliferation

Major General RS Yadav, VSM (Retd) and Colonel Dheeraj Kumar @

"*Social media is the new Smoking Gun ….with multi-domain usage and choice of an array of munitions with high and immediate impact on the crucial Centres of Gravity – The Human Mind, Society, Politics and Governance*".

Abstract

In the realm of revolutionised technological landscape, social media penetration poses multitude of challenges for the contemporary strategic leadership. The current leadership needs to develop nuanced competencies to maintain an edge amidst the complexities of the geopolitical arena. This article endeavours to explore the contours of the evolving geopolitical scene and threat dynamics, ascertain the challenges presented by expanding footprints of social media and recommend ways to leverage social media for enhanced effectiveness of strategic leadership.

Introduction

Amidst the volatile prevailing geopolitical environment, the current generation of strategic leadership has a mammoth task of carving a righteous and pragmatic path for the growth of organisations and nation states. It involves taking calibrated risks, shaping the strategic culture of nations and organisations and realising national objectives while upholding the organisational and national values. The stakes are even higher, especially in the relatively important domains of nation building viz statecraft, diplomacy, economy and military. The strategic leadership needs to align with the rapidly changing nature of global competition, carefully selecting and maintaining the aim, leveraging an array of instruments of power to enhance the sphere of influence and retain a competitive edge. So the political leaders, diplomats, economists and military leadership need to adopt and adapt to new leadership mindsets, models, and organisational capabilities to operate effectively under the 'New Normal'.[1]

In the backdrop of emerging geopolitical dynamics, geoeconomic competitions and military conflicts, the Indian leadership can no longer afford to remain isolated from the environmental realities. The emerging patterns of contests between the nation-states have revealed rise of neo-nationalism, radicalism and terrorism. The Nation states are exploiting trade, geoeconomic influence, coercive diplomacy and non-kinetic means to exert pressure. While the Russia-Ukraine conflict has emerged as an inflexion point in geopolitics, there are multiple hotspots in the Global South

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@ *Colonel Dheeraj Kumar,* an Infantry Officer, was commissioned into MAHAR Regiment in 1999. Passed out from Indian Military Academy, Dehradun, he is an alumni of Defence Services Staff College, Wellington and CDM, Secunderabad. He has had varied experience of serving in diverse operational environment. He commanded his Unit in Obstacle Ridden Terrain in peace and in counterinsurgency/counterterrorism environment in High Altitude Area in J & K. The officer is pursuing research fellowship in 'Relevance of Social Media in Hybrid Operations' at the USI.

which continue to simmer and threaten world peace and stability. The Indo-Pacific region appears to be the next flash point. Amidst all this hullabaloo, to remain relevant in the global affairs and maintain an edge in the emerging multi-polar world, the Indian leadership has a complex task of a balancing act to safeguard national interests and democratic values, forge alliances for economic growth and deal with a wide range of challenges. In military conflicts too, grey zone strategies and hybrid warfare have exposed the propensity of increasing the intensity and escalation of conflicts, thereby, compelling the military strategic leadership to shun the traditional military approach of campaign planning. In the hybrid threat scenario, social media has emerged as a potent tool for manipulating, coercing and dominating the cognitive space of the target audience and impairing the informed decision making of the leadership.

The ongoing Russia-Ukraine and Israel-Hamas conflicts are explicit indicators of the obliteration of the distinction between the state of peace and war, and the potential of localised conflicts flaring up to a global catastrophe with the involvement of state and non-state actors. Thus, the strategic leadership needs to maintain an upper hand over the competitors and expand their horizon to discern the impact of conflicts across geopolitical and geoeconomic spectrums. The leadership needs to strategise to gear up for an uncertain and fiercely competitive future and leverage all instruments of national power to deny critical space to the competitors.

The responsibilities of a strategic leader would cover a wide canvas in time and space, intersect the functions and domains and encompass multiple organisations with diverse roles and competing responsibilities.[2] They would have to assume greater responsibilities for shaping the internal and external environments. The strategic leadership would have to provide vision, direction, alignment, and commitment necessary to maintain the enduring performance of the nation states and the organisations.[3] Rather than focusing on short term effects, the strategic leadership would be required to anticipate and brace for 2nd and 3rd order effects in multiple domains.

Impact of Social Media

In the realm of technology transformation, social media has emerged as a potent force multiplier and a catalyst for a revolutionised information space. Thriving on global reach of the internet and exponential increase in smartphone footprints, social media has ushered an era of global connectedness, greater awareness, transparency and real time sharing of information and ideas beyond the confines of the geographical boundaries of nation states. As per the report published by Statista (refer Figure 1), as of Oct 2023, there were 5.3 bn internet users worldwide which accounts for 65.7 per cent of the global population.

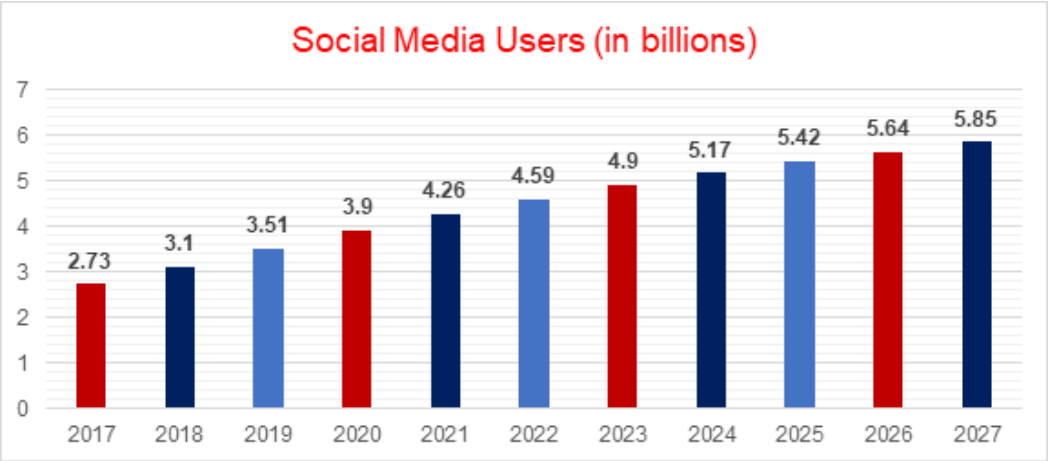

Figure 1: Expanding footprints of social media over the years

Source-Statista Oct 23

Out of these internet users, 4.95 bn or 61.4 per cent of the world's population were social media users.[4] By the end of 2024, the global social media users are expected to reach 5.17 bn.[5] In the Indian context, the current 1.2 bn strong internet users' network is projected to touch 1.6 bn by 2050. The statistical trends of social media penetration can be observed from Figures 2 and 3 given below:[6]

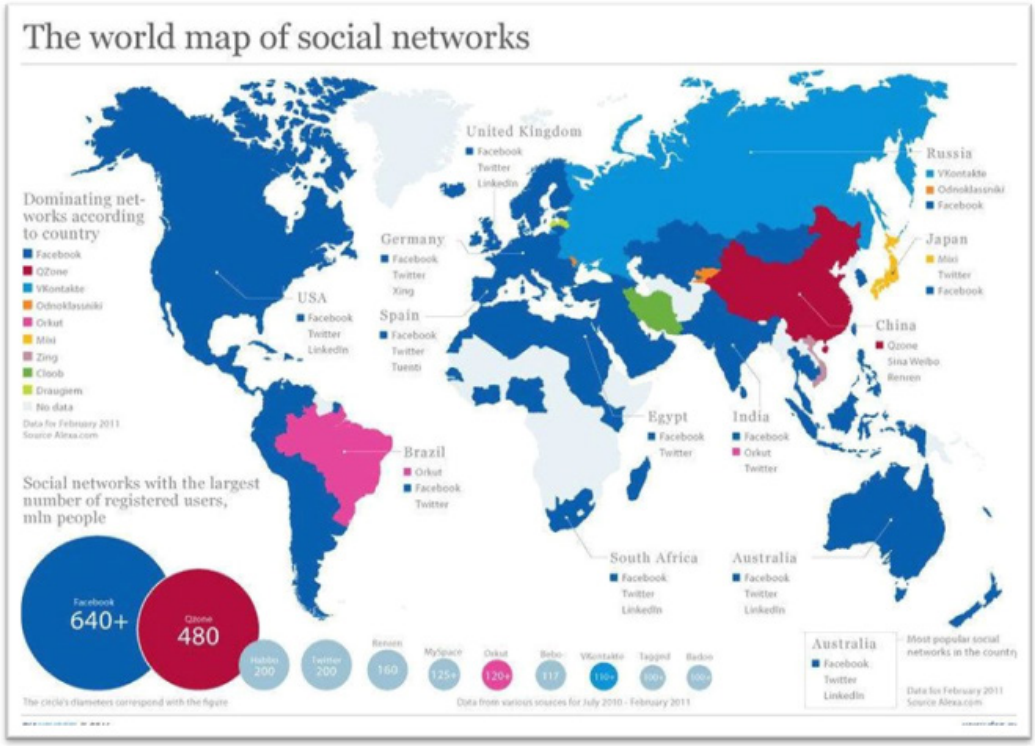

Figure 2: World Map of Social Media Networks

Source - https://i.pinimg.com/564x/1f/89/51/1f89519482fa72f1d7aba5fa6ba90b26.jpg

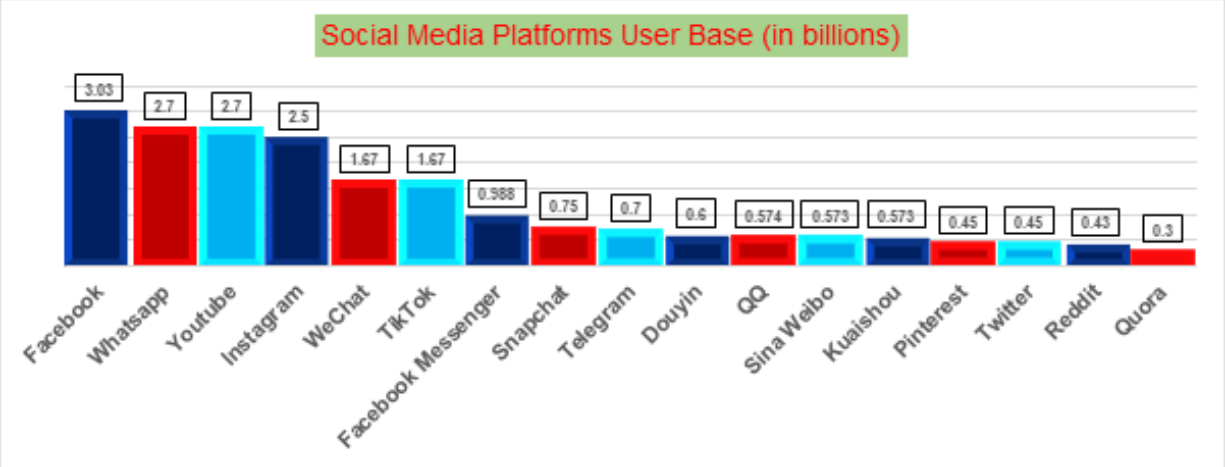

Figure 3: Social Media Platforms User Base (in Millions),

Source - Social Media Users and Statistics For 2024 (Latest Data), By Rohit Shewale[7]

The influence of social media has increased manifold over physical, information and cognitive spaces. Multiple think tanks view the increasing trends of propaganda, weaponisation of information, disinformation/misinformation campaigns, fake news, narrative building and social engineering as manifestations of strategies of social media warfare. According to the Global Risk Report 2023, 'Misinformation and Disinformation' is the severest global risk, and Artificial Intelligence (AI) generated disinformation and misinformation' is rank ordered at 2nd place in the Global Risks' Matrix. The societal and political polarisation and cyber-attacks are 3rd and 5th most serious threats, and India is most exposed to threats posed by false information.

The hybrid warfare and grey zone threats have surpassed the boundaries of tactical, operational, and strategic domains, overlapping the involvement of state and non-state actors, and blurring the lines between peace and war. Amidst the prevailing threat dynamics, the consequences of social media warfare are obscure and ambiguous, transcending not only the geographical borders but also that of time, space and purpose continuums. The challenges would be further deepened by social media contents created using generative AI, Large Language Model (LLM) and deep fakes. The growing influence of social media has become so impactful that it is difficult to ignore this potent tool of coercion and manipulation. Thus, the situation demands that social media be dovetailed within overall campaign planning and strategies. The impact of social media over issues related to national security encompassing military, politics and economy are discussed under:

The hybrid warfare and grey zone threats have eclipsed the boundaries of tactical, operational and strategic planes, overlapped the involvement of state and non-state actors and blurred the boundaries of peace and war.

- **Military Operations.** The effects of the social media penetration have been witnessed in information operations, intelligence generation and perception management. In the contemporary operating environment, advent of 'Generative AI' and 'Deep Fakes' in cognitive warfare have increased the challenges of military operations and national security manifold. Social media has opened a de-novo frontier wherein even a civilian has turned into a warrior. For example, Russia orchestrated 'Distributed Denial of Service' attacks and deployed Trojan Horse Wiper malware prior to physical invasion of Ukraine. In response, Ukraine launched secure chat system eVorog (eEnemy) in Mar 2022, which turned civilians with a smartphone into digital resistance fighters to share military intelligence.[8] In the Indian context, the social media space has been used by the terrorists outfits and separatist organisations in Jammu and Kashmir to advance their inimical designs, recruit local youth and spread religious fanaticism. As per a study, the slain terrorist Burhan Wani posted numerous videos on YouTube and Facebook to discredit the Indian security forces, warn local police personnel to desist from participating in operations and urge population to provide intelligence about operations of the armed forces.[9]

- **Political Decisions and Discourses.** Many commentators suggest that social media platforms play a key role in amplifying economic, political and cultural grievances across the globe. The apparent role of social media in coordinating protests and giving a voice to the opposition in autocratic regimes created high hopes for the internet and social media as a 'Liberation Technology'.[10] Social media has also come under serious criticism for giving rise to populism, spread of xenophobic ideas, and the proliferation of fake news in democracies. The 'Arab Spring Revolution (2010-11)' was a seminal political event, wherein the public driven activism on social media platform led to toppling of authoritarian and autocratic regimes, ushered political transformations and compelled policy changes in the Middle East and North Africa region. Back at home, the social media was used for creating 'Echo Chamber and Confirmation Bias' and mobilisation for wide spread protest against the 'Citizenship Amendment Act'. The digital sphere was alive with significant discussions and campaigns during the farmer's protest, Shaheen Bagh protest, and the Manipur crisis.

➢ **Economic Matters.** The social media news are playing a major role in determining the market trends and financial decisions. In financial markets, the social media influencers with their limited knowledge are shaping the opinions of the investors. A study suggests that owing to contagion and spillover effect, misleading information is an emerging cyber risk and can cause enormous damage especially to the financial sector and financial markets. As per economic analysis conducted by University of Baltimore in 2019 (refer Figure 4), economic cost of fake news was USD 78.0 bn, out of which USD 39.0 bn attributed to financial market volatility resulting from the emergence of false information[11].In 2013, a fake news of two explosions at the White House caused the S&P500 Index to lose more than USD 130.0 bn in market capitalisation in a day.[12] According to a report, fake news temporarily impacts stock price returns of small cap firms, however, financial markets, Information Technology (IT), infrastructure and pharma sectors are relatively more affected.[13] Another example of the impact of disclosure of financial audits on social media is the Hindenburg Report on Adani Group; disclosed on 24 Jan 23, the report triggered share market collapse and wiped out USD 120.0 bn of shareholders' wealth by late Feb 23.

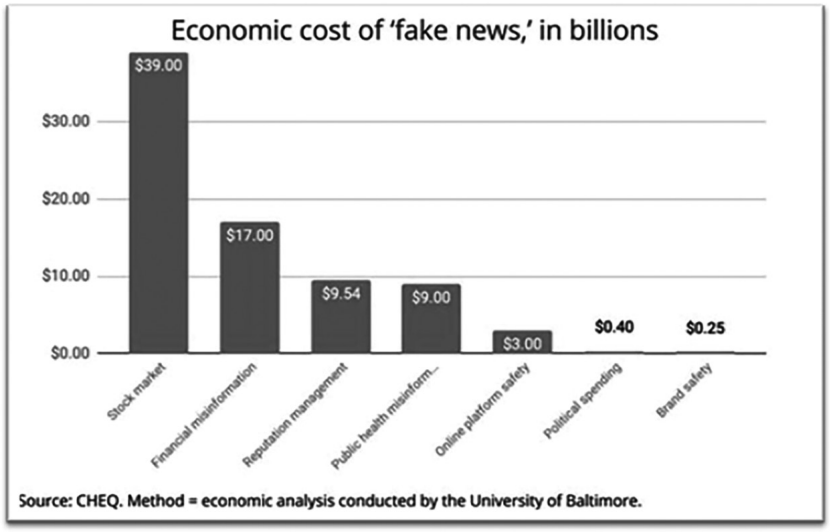

Figure 4: Economic Cost of Fake News in Billions

Emerging Global Conflict Dynamics

It is imperative to assess the changing character of global and regional competitions to establish the need for a paradigm shift in the approach and vision of strategic leadership. Geopolitically the world is witnessing a volatile phase; the unipolar dominance of the United States is waning, and revisionist/emerging powers such as Russia, China, India, Indonesia and Brazil are racing for greater influence and stronghold over the critical space. The nation states are increasingly leveraging coercive diplomacy to influence the behaviour of adversaries, competitors and collaborators. The world is still grappling with the fallout of COVID on the economy. With globalisation having already peaked, countries driven by growing neo-nationalistic tendencies may opt to establish partnerships with regional blocs to promote their economic objectives and offset their rivals. The practices of trade protectionism, resource nationalism and control/ disruption of trade routes (such as sabotage of the Nord Stream pipelines and the Houthis attacks on cargo ships and undersea internet cables in Red Sea) are likely to have a significant impact on global trade, supply and value chain.

As per Standard & Poor's Global Report 2024, energy security, cyber-attacks, climate change, possible future pandemics and conflicting national interests are considered to be the most polarising issues in the geopolitics.[14] The coming two years i.e. 2024 and 2025 are likely to be the most uncertain and volatile due to elections in major democracies of the world.[15] As per the Global Risk Report[16] and Conflict Watchlist 2024,[17] underlying geopolitical

tensions, eruption of active hostilities in multiple regions and political competition, would contribute to an unstable global order characterised by polarising narratives, eroding trust and insecurity. The report suggests that India falls into the category of high conflict zone.

In the immediate scenario, the Indian socio-political scape may be exposed to increasing risks of polarisation orchestrated by the inimical forces through customised online social media campaign. The hostile actors may attempt to give a negative spin to debate on various internal matters and drive a wedge within the society. The adversarial forces may also attempt to tarnish India's global image by casting aspersions on governance, strategic outlook on various ongoing global issues and internal affairs as well.

Challenges of the Strategic Leadership amidst Social Media Overhang

Amidst rising uncertainty and conflicts, the growing patterns of false news, propaganda, echo chamber, polarisation and information fatigue would pose a phenomenal challenge to strategic leadership in all domains. The political leadership and diplomats may have to continuously battle with confusion, opaqueness and ambiguity created by narrative building. It would be difficult to discern the truth and counter the negative perception. The adversary may be able to influence the target population to orchestrate mounting pressure on the decisions makers and incite public outrage and discontent. Resultantly, the decision makers would have to wade through troubled waters to make informed and pragmatic decisions in the national interests rather than be compelled to decide in the favour of appeasement politics and welfare state.

Earlier, technological advancements and other trends were primarily felt locally or regionally. However, owing to social media proliferation, local events now have the ability to go global in minutes or seconds. Contrary to existing hierarchical bureaucratic processes, the national leadership and diplomats cannot afford to wait for a prolonged period to respond to situation/crises.[18] They would be required to remain abreast with the evolving grand picture 24x7, anticipate the next manoeuvre and pre-empt by their own actions to stay ahead in closely contested battle space.

In the military domain, strategic leadership faces certain challenges on account of absence of direct connect with the ground troops, legacy of operational and tactical experience (vintage and relevance), longer Observe, Orient, Decide and Act (OODA) loop, no firsthand account of incidents and biases due to the filtration of information by the intermediate commanders. With the advent of IT, the rate of change and the interaction of local, regional, and global forces are inducing increased uncertainty at all levels. Refer Figure 5.

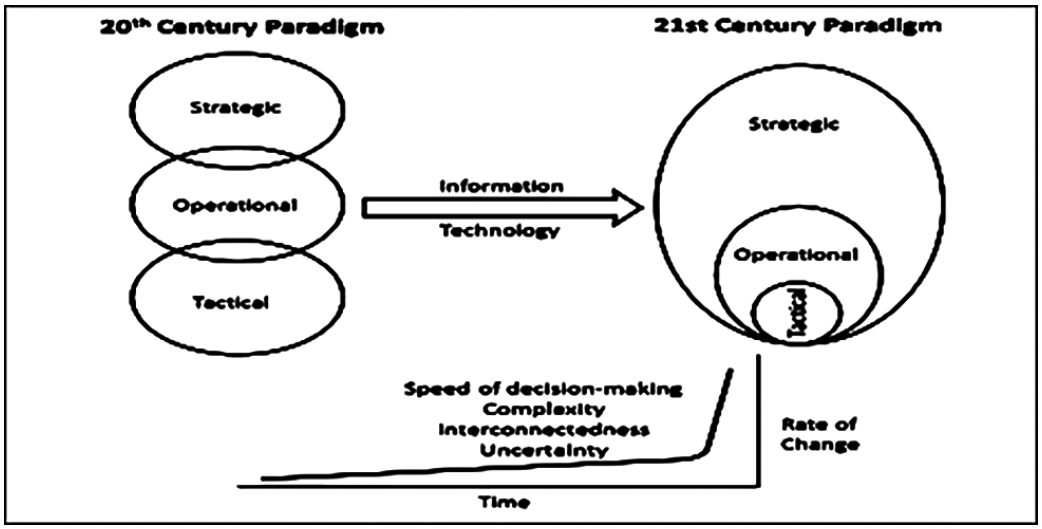

Figure 5: Advent of IT has increased the complexity of Decision Making
Source - The 20th and 21st Centuries: a comparative perspective" by John C. Maxwell

It is becoming increasingly difficult to isolate events into neat, compartmentalised bins associated with the tactical, operational, and strategic levels of war. The overhang of social media over the operations and its exploitation by non-state actors and citizen journalism has presented more challenges for the security forces. During the recent Manipur and Rajouri incidents the adversarial elements populated social media with fabricated narrative to fuel public anger and impact the image of security forces. Thus, owing to unforeseen turbulence of a volatile, uncertain, complex, and ambiguous world, the strategic leadership is mandated to strategise based on multi-vectoral approach. The decision-making must occur at the speed of the environment, the organisations and processes must account for interconnectedness and have the agility and ability to respond appropriately.

Leveraging Social Media to Develop Competencies of Strategic Leadership

Stephen Covey states that strategic leaders have three basic functions: pathfinding (values, mission and vision), aligning (structure, systems and processes) and empowering (talent, ingenuity and creativity).[19] Considering the responsibilities, functions and challenges of the strategic leadership, the social media can be used in innovative and imaginative ways to turn these challenges into opportunities. Certain ways are discussed in the succeeding paragraphs.

Securing Cognitive Space.

Stephen Covey states that strategic leaders have three basic functions: pathfinding (Values, Mission and Vision), aligning (structure, systems and processes) and empowering (talent, ingenuity and creativity).

- **Defeating False News and Social Engineering**. This can be done by synergised multi agency operations to identify the accounts and actors involved in spreading rumours, false news and social engineering. To defeat nefarious designs, the social media teams need to forecast potential future events and narrow down on actors who may resort to hashtag hijacking and rage farming and creating 'Echo Chambers and Confirmation Biases'. To turn the tables, there is a need to pick up such trends, launch counter campaigns and bolster the capability to engage the population in target region/country through deploying various tactics such as 'Amplification' through multiple accounts and bots and 'Astroturfing'.

- **Effective Social Listening and Anti Propaganda Strategy.** Teams can be formed for 'Social Media Listening' and orchestrating 'Troll Campaigns' to discern the behavioural patterns of and the attempts being made to sow discord in society by adversarial elements. Proactive measures would defeat the propaganda and false news and avert any potential crises in the country.

Inclusive Governance.

- **Generating Grassroot Support for Social Reforms.** Central and state government machinery should reach out to people to address a host of societal issues, crimes and boost nation building. The bottoms up approach through customised messaging would garner grassroot support, usher positive changes, ensure greater acceptability and facilitate successful implementation of policies and initiatives.

- **Proactive Engagement of Citizens**. To transform political and public relations landscape, the direct connect between the leadership and the masses would facilitate dissemination of information about welfare projects, seek feedback and opinions and strengthen grievance redressal mechanisms. Tailored messages, audio and video contents in vernacular languages can be hosted on multiple platforms depending upon their penetration.

➢ **Project Implementation and Monitoring**. Project implementation and monitoring has been a grey area in the governance system. Social media can be made a medium to respond to the complaints, improve service delivery, transparency and accountability and ascertain actual impact of the projects. It would facilitate in enhancing credibility of the government data and last mile connect between project delivery and photo operations.

➢ **E-Participation.** Social media platforms can be used for online consultations, polls and voting, allowing citizens to directly participate in decision-making processes on important matters such as the bills, welfare schemes, judicial and police reforms and development projects specific to the regions etc.

➢ **Digital *Jan Sampark* (Public Outreach) *and Jan Sunvai* (Public Hearing)**. Innovative utilisation of social media can help in greater connect of parliamentarians with their constituents. The parliamentarians can reach out to obtain ground level feedback about demands and aspirations of the people, gaps and shortcomings in project implementation, quality of development projects, track actual progress of the projects and redressal of grievances. AI tools can be employed to pick up key words to discern negative, positive and neutral feedback for sentiment analysis.

➢ **Crisis Management**. In the event of natural calamities, unrest and law and order situations, the social media can be effectively used to sensitise the public about trouble spots, traffic diversion/ blockage and location of relief camps and information about disaster response teams.

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Diplomacy

Social media is leveraged to reach out to diasporas, connect with foreign audiences, promote understanding and share country's culture and values. It may also be used to shape the perception of the population of other countries being assisted in humanitarian crises and generate groundswell for positive opinion shaping. Similarly, social media can be very effectively used to build 'Populace Support Capital' amongst the neighbouring countries and in the extended neighbourhood to not only nurture long-term bonds, but also negate the recurrent waxing and waning relationship edged by the political leadership. To reinvigorate and strengthen the relationship with neighbouring and extended neighbourhood, India can resume medical and education visas for weaker sections and conduct skill development training under 'Skill India Mission' in the fields of sustainable agriculture, masonry, carpentry, electrician, nursing, primary education hospitality and services sectors. These humanitarian efforts can be projected in the social media space to create a positive image of the Indian government and generate a positive opinion amongst the populace and decision-makers. Simultaneously, the media handles can be used to expose Pakistan's designs against Afghanistan and brutalities against Afghan migrants.

Military Strategic Leadership. The military leadership dealing at operational and strategic planes should acquire desired competencies in leveraging social media as a tool to dominate cognitive and information space.[20] It would be a force multiplier for the strategic leaders in discharging their roles and responsibilities effectively and making informed decisions. The appreciated spin-offs of integrating social media in overall strategy would be as follows:

➢ **Shortened OODA Loop for Decision Making.** Leverage social media platforms as a force multiplier to enhance the influence and efficacy of strategic leaders, establish direct and alternate channel of communication and have greater situational awareness. Dedicated social media cells/teams may be tasked to gather social media intelligence through various digital platforms, monitoring of events, conversations and communications to collate information critical for target profiling, ascertain under currents and anticipate future actions/options of the target audience in the conflict prone regions. It would facilitate faster flow of

intelligence and horizontal sharing of information for synchronised 'All of Organisation Efforts' to respond to any evolving/upcoming situation.

- **Social Listening, Data Analysis and Targeting.** Use the Centre of Gravity (COG) analysis and a dedicated monitoring mechanism to discern the stereotypes and identify influential actors and their pattern of operations to formulate social media targeting strategies.

- **Strategy for Content Design and Targeting.** Region specific themes, social media content and narrative(s) could be designed in concert with demography, ideology, societal fissures and vulnerabilities. Carefully carved out messages to target the CsOG/vulnerability of the target audience and discredit the ideology binding the target population could act as the driving force. Strategic leadership would need to constantly review the impact of strategy as per the evolving grand picture.

- **Develop Niche Capabilities.** The services need to invest in niche IT technology to leverage its features to gain and maintain a competitive advantage over the adversary. It is recommended that customised LLM be procured/developed for carrying out 'Sentiment Analysis' of the social media contents/patterns. The creation of 'Social media analysis board and World Cloud' using various applications could also assist in a big way.

Conclusion

In an age of disruptions, the strategic leadership needs to have a greater situational awareness, tools for effective and informed decision-making and adaptive capabilities for change management. The leadership needs to leverage the technology, especially social media, to enhance the organisational effectiveness and efficiency. Social media with its accessibility, global penetration, affordability and omnipresence has emerged as a potent tool for influencing operations. Owing to lack of monitoring, content regulations, ambiguity and non-attributability, it has been exploited by non-state and state actors alike to dominate the cognitive space and cloud the opinion of the target population, thus, posing a serious challenge to national security and international peace. Therefore, it is an imperative to strategise to dovetail social media in the overall national strategy architecture to counter the negative narrative building, enhance the sphere of influence and safeguard national interests.

In an age of disruptions, the strategic leadership needs to have a greater situational awareness, tools for effective and informed decision-making and adaptive capabilities for change management.

Endnotes

1 Henry Adobor, William Phanuel Kofi Darbi and Obi Berko O. Damoah, Jul 21, Strategy in the era of "swans": the role of strategic leadership under uncertainty and unpredictability, https://www.researchgate.net/profile/Henry-Adobor/publication/365872749_Strategy_in_the_era_of_swans_the_role_of_strategic_leadership_under_uncertainty_and_unpredictability/links/639888b9095a6a777428d37b/Strategy-in-the-era-of-swans-the-role-of-strategic-leadership-under-uncertainty-and-unpredictability.pdf

2 Daniel H. McCauley, Sadi Sadiyev, and Col Rashad Tahirov, 11 Jan 2020, More Than A "Given:" Professionalizing Military Strategic Leadership, More Than A "Given:" Professionalizing Military Strategic Leadership | Small Wars Journal

3 Maj Gen YS Mor (Retd), Leadership Challenges for the Armed Forces Leadership Challenges for the Armed Forces – Center For Land Warfare Studies (CLAWS)

4 Worldwide digital population 23, Published by Ani Petrosyan, Oct 23, https://www.statista.com/statistics/617136/digital-population-worldwide/#:~:text=Worldwide per cent20digital per cent20population per cent202023andtext=As per cent20of per cent20October per cent202023 per cent2C per cent20there,population per cent2C per cent20were per cent20social per cent20media per cent20users.

5 Social Media Users And Statistics For 2024 (Latest Data), By Rohit Shewale / January 1, 2024, https://www.demandsage.com/social-media-users/

6 Social Media Users And Statistics For 2024 (Latest Data), By Rohit Shewale / January 1, 2024, https://www.demandsage.com/social-media-users/

7 January 1, 2024, https://www.demandsage.com/social-media-users/

8 Jason McGee-Abe, Feb 23, One year on: 10 technologies used in the war in Ukraine, Tech Informed Journal, https://techinformed.com/one-year-on-10-technologies-used-in-the-war-in-ukraine/#:~:text=Artificial per cent20intelligence per cent20(AI) per cent3Aandtext=Ukraine per cent20has per cent20also per cent20used per cent20advanced,their per cent20bodies per cent20to per cent20the per cent20families.

9 Discussing conflict in social media: The use of Twitter in the Jammu and Kashmir conflict, Dec 2020, https://journals.sagepub.com/doi/10.1177/1750635220970997

10 Ekaterina Zhuravskaya, Maria Petrova and Ruben Enikolopov, Political Effects of the Internet and Social Media, Annual Review of Economics, Aug 2020, Political Effects of the Internet and Social Media | Annual Review of Economics (annualreviews.org)

11 Impact of fake news on the economy: how to prevent it ?, https://www.buster.ai/post/impact-of-fake-news-on-the-economy-how-to-prevent-it#:~:text=The%20study%20found%20that%20the,the%20emergence%20of%20false%20information.

12 Maria Cristina Arcuri, Gino Gandolfi, and Ivan Russo, Does fake news impact stock returns? Evidence from US and EU stock markets, Journal of Economics and Business, Jun 23, https://www.sciencedirect.com/science/article/pii/S0148619523000231#:~:text=However per cent2C per cent20the per cent20representative per cent20agent per cent20model,based per cent20on per cent20this per cent20misleading per cent20information.

13 Jonathan Clarke, Hailiang Chen , Ding Du and Yu Jeffrey Hu, 23 Jul 2020, Fake News, Investor Attention, and Market Reaction, https://pubsonline.informs.org/doi/10.1287/isre.2019.0910

14 Top Geo-Political Risks of 2024, S and P Global, https://www.spglobal.com/en/enterprise/geopolitical-risk/#:~:text=The per cent20world per cent20is per cent20rapidly per cent20changing,and per cent20COVID per cent2D19 per cent20pandemic per cent20fallout.

15 https://www.lazard.com/research-insights/top-geopolitical-trends-in-2024/#:~:text=2024 per cent20is per cent20set per cent20to per cent20be,businesses per cent20in per cent20the per cent20year per cent20ahead.

16 Saadia Zahidi, 10 Jan 2024, World Economic Forum, Global Risk Report 2024, https://www.weforum.org/publications/global-risks-report-2024/in-full/?utm_source=googleandutm_medium=ppcandutm_campaign=globalrisksandgad_source=1andgclid=CjwKCAiA8YyuBhBSEiwA5R3-E89Oaa0G4U5sCcZLSUXmbaOzv89jQ65B02nML0FWU7N3S4jiZPXDuBoCAsYQAvD_BwE

17 ACLED Conflict Index, Conflict Watchlist 2024, 17 Jan 2024, https://acleddata.com/conflict-watchlist-2024/

18 Daniel H. McCauley, Sadi Sadiyev, and Col Rashad Tahirov, 11 Jan 2020, More Than A "Given:" Professionalizing Military Strategic Leadership, More Than A "Given:" Professionalizing Military Strategic Leadership | Small Wars Journal

19 Stephen R. Covey, "Three Roles of the Leader in the New Paradigm," in Frances Hesselbein, Marshall Goldsmith, and Richard Beckhard, eds., The Leader of the Future: New Visions, Strategies, and Practices for the Next Era, San Francisco: Jossey-Bass, 1996, pp. 149–159

20 Donald C. Hambrick, "Guest Editor's Introduction: Putting Top Managers Back in the Strategy Picture," Strategic Management Journal, Vol. 10, 1999, pp. 5-16; , Leonard Wong, Stephen Gerras, William Kidd, Robert Pricone and Richard Swengros, Sep 2003, Strategic Leadership Competencies https://webharvest.gov/peth04/20041025173527/http://www.carlisle.army.mil/ssi/pdffiles/PUB382.pdf

Convergence of Air and Military Strategy: Theatres and Beyond

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Abstract

The overarching criticality of vertical envelopment using the aerial dimension to the traction constrained surface domains makes the inclusion of air power a warfighting imperative. The urgent need for a multi-domain approach is a foregone conclusion. Therefore, air strategy must converge with land and sea strategies not only in India's theatre construct, but also in the larger national interests and security. India's military also needs some key paradigm shifts to become a more flexible, agile, effective and future ready instrument of comprehensive national power. This article posits the convergence of paradigm shifts with future air and military strategies.

Introduction

India's somewhat historical air blindness in its national security approach is no longer merely a long-held assumption of the Indian Air Force (IAF), but an unfortunate reality. The challenge is exacerbated when the senior most military leadership and Service chiefs choose to make public statements which openly denigrate the role of an independent service publicly as a support provider,[1] and claim ownership of weapon platforms/systems based on the inherently misplaced premises of domain ownership rather than service core competencies.[2] While these statements reflect legacy mindsets and leadership biases, more disconcertingly, they have shown the world the evident gaps in India's military establishment on the dynamics of contemporary and future warfare from a joint perspective. And coming from the apex leadership of one of the world's largest militaries, it reflects the limits of the professional knowledge base and the understanding of its practitioners and policy makers. India's contemporary and future continental threat from its two hostile adversaries, its long-term strategic interests in the maritime domain, and the criticality of the aerial dimension for vertical envelopment of the traction constrained surface domains, make it imperative for a joint military strategy which synergises the strengths and core competencies of each individual service. There is little doubt that in the continental domain any future conflict will be primarily an Army-Air Force dominant conflict, whereas in the maritime domain India's strategic concerns will need land-based air power of the IAF, to bolster the Navy's capabilities. Air strategy must therefore converge with land and sea strategies not only in India's theatre construct, but also in the larger national interests and security. But for India's military to become a more flexible, agile, effective and future ready instrument of comprehensive national power, some paradigm shifts are necessary. This article, thus, highlights the necessity of embracing four critical paradigm shifts in India's military strategy and its convergence with air strategy, in the larger construct.

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Air Power and Military Strategy: Four Critical Paradigm Shifts

Beyond Domains. The reality today is that no single service or single instrument of comprehensive national power can lay claim to the sole ownership of national security. The need for a joint approach to matters military and a comprehensive 'Whole-of-Nation Approach' to matters of national security is driving India's long overdue military re-organisation. Air power, aerospace power, or air and space power, has long become an increasingly inescapable imperative in national security and interests of a nation. Despite the long journey of acceptance as the ubiquitous vertical domain which impacts the outcomes of both surface domains, there is a growing realisation amongst the security establishment and the strategic community, of its salience, independently and jointly. Thus, the first critical paradigm shift necessary is to adopt a multi-surface-multi-domain approach towards India's national security rather than independent continental and maritime security approaches. The senior leadership must be convinced of the need to evolve from the primacy perceptions of individual services and domain ownership, towards a future relevant multi-surface-multi-domain joint approach aligned to larger national objectives and goals. This is no longer an option but a national security compulsion, a change, that has to be top driven with senior serving leadership setting an example, not only by inclusively accepting the salience of other services, but also by articulating the same in public fora. Veterans active in the strategic community must come to terms with the limits of their past approach, accept the reality that no single service has all the answers, and recognise that the changed nature of contemporary and future conflicts can no longer be addressed with legacy strategies and operational concepts. Greater inclusivity and maturity in their articulation will not only go a long way in overcoming past prejudices, but more importantly, encourage coalescing service strengths into a robust and resolute military instrument of national power. Jointness has to be nurtured, and everybody has a part to play.

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Offensive Shift. India's post-independence military strategy and war history have been shaped by an overarching defensive approach to national security. This is the security approach that India's founder fathers chose to adopt in the difficult post-colonial period of an ideologically divided Cold War era. Having built India's international credentials on the underpinnings of Gandhian non-violence, and as a peace-loving nation on the premise of the Panchsheel principles[3], India's security construct has been defence oriented. This has led to a structural dichotomy. India's past wars may have been driven and fought based on the core military premise of capturing territory, but in the final political outcomes hard fought military gains were not leveraged, and territories captured were returned in keeping with international norms of the United Nations charter, and failed to resolve the core border problem. Whether altruism or international pressure, despite the military victories of the past, there has been an obvious synapse between military strategy and national goals. Consequently, the possibility of a proactive offensive military strategy has been the unwitting victim of this dichotomy in the past. Thus, the next critical concern is while India's legacy defensive security approach may have served its purpose in the past, will it continue to do so in the future? Does not a primarily defensive and reactive strategy run the danger of being inherently disadvantaged by proactive and offensive military strategies of her adversaries? Consequently, the next critical paradigm shift is to review our present 'National Thinking' and foster a more proactive and offensive military approach. The recent shift of India being perceived as a growing power with an independent foreign policy, from the past image of a soft state, underscores the necessity of a proactive and offensive military strategy. Interestingly, both Russia and China follow the military strategy of 'Active Defence'[4] [5] which is based on a primarily defensive strategy of their mainland. The shortcomings of Russia's active defence strategy are already visible, where despite its military strength and theatre centric military organisation, its ground and air offensive operations have neither been joint nor produced decisive outcomes. Unlike Russia, China has already integrated its' offensive air power into its military strategy- 'In line with the strategic requirement of building air-space capabilities and conducting offensive and defensive operations, the People's Liberation Army Air Force (PLAAF)

will endeavour to shift its focus from territorial Air Defence (AD) to both defence and offense, and build an air-space defence force structure that can meet the requirements of informationised operations'.[6] China's growing emphasis on offensive operations is clear. Considering that the military threat from both India's adversaries, individual or collusive, remain a reality well into the future, it is time for the Indian military to shift towards a more proactive and offensive strategy, and embrace it as a realpolitik necessity of the nation's future growth and power status.

Agile Strategies.

➢ The third critical paradigm which needs a review is whether the traditional large-scale capture of territory continues to be a realistic military premise today? The comfort zone rhetoric of those who have not smelled the coffee continue with a dogmatic conviction that, victory is still only measured by foot and that boots on the ground decide the final outcome are beliefs which puts the nation at risk by limiting its threat mitigation choices. Yes, there is no doubt, whatsoever, that the India's border imbroglio is about territory, and that the Army plays an immense role in ensuring continental security. But can it ensure a robust defence of not 'Ceding an inch of territory', let alone capture large tracts on its own? While capture of territory remains an underlying military strategy, it is an increasingly difficult proposition to do so in the Indian context, both in the west, the north and the northeast, for a variety of reasons. Terrain challenges in the mountains and jungles, the asymmetric density of adversarial infrastructure build up across our borders, the vastly increased terrain friction due to obstacle and civilian infrastructure increase in the developed sector, and the increasingly robust build-up of enemy order of battle and logistics infrastructure across the contested spaces, have brought into the question the viability of capture of territory, and challenges of reliance primarily on such a strategy.[7] There are concerns that, 'The traditional Indian theory of victory, a punitive cost-imposition strategy whereby land is seized to be later traded for political concessions, is based on an outmoded character of war in South Asia'.[8]

The third paradigm shift needed for the future are alternative joint military strategies, which are agile, adaptable and aggressive need to replace past premises of capture and barter of territories.

➢ While 'The threats emanating now have been identified, definitely war-gamed at the strategic and operational levels for some years now and the rebalancing of forces is but the culmination of processes',[9] are they truly joint in their analyses, planning and perception? An assessment of India's military lays bare the concern, 'The danger is that the present situation on the Northern border be seen as an Army specific problem. The absence of the IAF Chief during the Prime Minister's visit to Ladakh in Jul was revealing'.[10] Ironically, the concern is actually the outcome of a persistent single-service domain ownership approach actively pursued over the years, which consistently failed to come to terms with the limits of such an approach against two adversaries with a near-peer (Pakistan) and a stronger air force (China). There is no doubt that the significant place and role of these two adversarial air forces in their respective military strategies, will directly impact surface operations and shape conflict outcomes. Future joint strategies must leverage the advantages of pre-emption and surprise, bypass and circumvent the enemy's strengths, and literally 'Take the fight to the enemy camp' in selected strategic spaces, by aggressively exploiting manoeuvre, mobility and precision targeting jointly to surprise the enemy. Since it is the enemy and the terrain which will dictate the surface operations, active inclusion of air power will provide the ground forces with the advantage of an asymmetric offensive capability, and pre-emption. The third paradigm shift needed for the future are alternative joint military strategies, which are agile, adaptable and aggressive need to replace past premises of capture and barter of territories. The Ukraine and Gaza wars, which aptly represent two extremities of scale and spatial dispersion of conflict, are both examples of the limits of past premises.

Leverage Air Power. Not surprisingly, it is our adversaries who have been quick to appreciate the vital asymmetric deterrence that Indian air power currently provides. Having realised the criticality of air power with India, China has since focussed on countering the gap with a collusive application of air power with Pakistan in the near term, through a series of bilateral air exercises and training initiatives. In the long term, it is rapidly expanding its air power capability and capacity in the region. The regular use of air power by China as an instrument of military coercion or foreign policy is already amply evident in the Taiwan Strait, the East and South China Seas. There should not be any doubt that –'With the growing capabilities, PLAAF's effective inclusion in the China's border strategy is not far off'.[11] Borders are not just on the ground, but extend vertically upwards to delineate sovereign air spaces. Inherently implicit in every illegal occupation or claim of territory by an adversary is the fact that it is an illegal claim on our sovereign airspace as well. If and when the PLAAF manages to neutralise the IAF's air power advantage in the region, it will be used more coercively in China's border strategy against India. Allowing this to happen will be possibly make India's continental security irretrievably vulnerable and defensive. Thus, the final shift from past paradigms is that the current asymmetric air power advantage that is presently in favour of the IAF must be bolstered, and integrated, into a truly joint continental and maritime strategies. India's national security strategy needs to accept that in all continental conflict scenarios, 'The only depth offensive into the layered PLA defences will be possible by the IAF, which will have to carry out extensive parallel targeting, in the frontages to assist the Army in its defensive operations by keeping the PLAAF of its back, and targeting PLA's offensive elements; in the intermediate depths to cut off the logistic and communication lifelines; and in the depths to target the PLAAF's air power on ground by striking its key air bases in Western Theatre Commands,[12] its fixed Air Defence (AD) radars and missile sites, its aircraft and Unmanned Aerial Vehicle's in the air, and identified long range vector deployments.[13] Similarly, in the Indian Ocean Region, air power brings to the table a variety of hard and soft power options, from long range offensive air power missions, strategic signalling, leveraging offensive AD, building air bridges of friendship with friendly regional air forces, humanitarian assistance and disaster relief, military training and air exercises, etc., the range of convergences for the future are many.

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Future Air Strategy: Theatres and Beyond

The Indian military is at a critical inflection point, where the need for change is loud and clear, but the way ahead to coalesce one of the largest militaries in the world is still a work in progress. The appointment of the Chief of Defence Staff and formation of the Department of Military Affairs were embraced as winds of change, and theatreisation was presumed to be the panacea of security challenges. In the tsunami of the associated discourse over the concept, the Air Force was painted as the 'Hurdle' to 'Jointness'. A view which either is unaware of contrary facts about the IAF's demonstrated and recorded operational performance and jointness in India's history of wars, or deliberately chooses to overlook the same for obvious reasons. The IAF has been and remains a faithful and true keeper of jointness of India's military since independence. It has been made amply clear by the current Chief of Air Staff that "It was wrong to think the (Air) force was opposed to theatreisation, any process of integration, but had certain reservations about the structures, which should be future ready and not limited to traditional wars".[14] The reservations on the future structure are critical so as not to put national security at risk by imposing organisational and structural limits on the key core competencies of service.

Theatres are essentially surface centric military constructs, where a geographical space over land, water, or both is demarcated, forces are apportioned, and operational area responsibility is assigned. This is necessary because the metrics of enemy disposition, obstacle ridden geography and terrain friction imperatives make it necessary for surface forces to be assigned and located in a specific theatre. Air power on the other hand is no longer tied down in reach and range

to a specific air base, and today its aerial assets operate from a resource cloud which takes on missions from any base to any place. Today, the inventory profile of almost all its combat platforms are multi-role-multi-mission capable, which provides air power enormous flexibility and cost effectiveness. Air forces fight against the enemy Air Force, Army and Navy, and in all the three domains of air, land and sea. Unlike the surface forces whose service norms necessitate all its assets, inventory and manpower to be physically 'Under Command', the air force is fundamentally structured and organised to operate in a decentralised manner. And most importantly, the inherently defensive construct of ground strategy of a theatre cannot restrain or constrain the offensive character of an air strategy. The enemy air must be engaged deep inside enemy territory so that their presence over the contested battlespaces and combat zones are minimised. Offensive AD not only support deep strikes and interdictions, they are also vital for AD of the tactical battle areas. Another important aspect is that air operations by the IAF, are neither limited, nor exclusive to specific theatre boundaries, simply because enemy air operations have a trans-battlespace application - both inter and intra theatre. Large scale air operations are enormously complex and dynamic, which are governed by mission requirements, target and target area specifics, air and ground threat in the mission area and route, own and enemy AD environment, airspace management dynamics, own fire-plans, etc. All this decides the mission packaging and the tactical routing, which exploits the ubiquity and continuum of airspace across theatres. This means that enemy air power is seen and fought as a comprehensive whole, rather than fighting them in theatre specific constructs of surface forces. Thus, both offensive and defensive air operations, taking the example of the northern sector, will also be undertaken by air assets from the Northeastern or South Western sectors, based on the larger military strategy, and theatre-specific warfighting requirements. Unlike the army, where depending on the tempo and flow of the conflict, all its forces of a theatre may not be committed to battle at the same time, the vital flexibility of air power enables maximum exploitation of its assets, across and beyond theatres. These defining aspects of air power are not only common the world over, they are well integrated in their organisational structures and warfighting precepts of most leading military powers. Embracing these inherent air power basics will only strengthen military strategy and expand its employment options. Service and joint doctrines must be therefore be flexible to allow for convergences, and enable the plug and play of all future joint concepts of operations and strategies.

The IAF's latest doctrine is structured on the necessity for a future focused holistic approach to India's security, and what aerospace power can do to bolster it. Its joint credentials are evident in the vertical structural connect of the air strategy with the joint military strategy, and the lateral connects with land and sea strategies.

The IAF's latest doctrine is structured on the necessity for a future focused holistic approach to India's security, and what aerospace power can do to bolster it. Its joint credentials are evident in the vertical structural connect of the air strategy with the joint military strategy, and the lateral connects with land and sea strategies. 'The doctrine has the potential to accommodate major changes in wartime strategy that allow for the use of future precepts in the employment of aerospace power in the Indian security context'.[15] The document allows for extensive space and place for convergence of current and future air strategies with other services and agencies, within and outside the theatre construct. Any future joint strategy for theatres must therefore be developed taking two key considerations for air power employment in the future. First is that the primary role of air power is offensive and therefore it has a strategic role for targeting of critical centres of gravity, military and civil, deep inside the enemy territory, beyond the operational reach of the other services. This serves a larger national strategy by targeting the enemy's civil industrial and communication infrastructure in depth spaces to impact the will and wherewithal to fight. Even with the induction of a rocket force in the future, its budget constrained capacity will entail in the IAF remaining the major depth offensive arm of the nation. This offensive arm needs to be kept strong, and be made a part of the larger national and military strategies. The second is that, there is a clear distinction in the offensive role of the Air Force, one that undertakes strategic targeting for national outcomes; and the offensive role that air power prosecutes in close integration with surface forces to produce joint military outcomes. This offensive arm needs to be closely integrated with joint concepts of operations. The evolving theatre structure and future military strategies must allow for this duality of offensive air power and embrace it in its military strategy. Taking

into consideration the IAF's point of view will only foster greater jointness, allow for a more robust and future ready theatre construct, and development of jointly planned, trained and executed bespoke military strategies.

Conclusion

The urgent need for a multi-domain-multi-service approach to be adopted in India's military strategy is a foregone conclusion. While the theatreisation has been proclaimed as the panacea for India's security challenges, it is fortuitous that the military leadership has finally abandoned the pre-emptive haste in seeking a quick-fix solution. The military cannot afford to drop the ball in finding a consensual way ahead, which retains core competencies and adopts best practices, rather than a common minimum of compromises. The most important aspect remains the fact, that just remoulding structures and making apex organisational changes alone cannot win us wars in the future. The critical area of attention for the military needing urgent and much more serious consideration, is revamping our joint warfighting concepts and preparing a joint military warfighting strategy. Service specific core competencies cannot be marginalised, subsumed or subordinated. Instead, they need to be all brought and kept on the table to allow the best and optimal exploitation, whether one, a combination, or all are leveraged to provide bespoke solutions to the nation. After all, despite parochial service centric approaches to theatres in the past, no future military strategy can afford to look at India's security challenges from isolated domain centric perspectives any longer. Non-inclusion of salience of the overarching aerial domain in India's future military strategy will, without an iota of doubt, jeopardise national security. The convergence of air and military strategy is an inescapable and critical future imperative.

Endnotes

1 https://www.indiatoday.in/india/video/air-force-continues-to-remain-a-supporting-arm-to-the-armed-forces-cds-general-rawat-1823272-2021-07-02

2 https://theprint.in/opinion/theaterisation-isnt-duplicating-units-in-all-services-satisficing-has-consequences-in-war/1805571/

3 chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/ https://www.mea.gov.in/Uploads/ PublicationDocs/191_panchsheel.pdf

4 *Russian Military Doctrine*, Russia Strategic Initiative, p.3, https://oe.tradoc.army.mil/wp-content/uploads/2022/06/RSI-Russian-Military-Doctrine-Primer-Final-single-page-04282022.pdf

5 *China's Military Strategy*, The State Council Information Office of the People's Republic of China, May 2015, Beijing, http://eng.mod.gov.cn/xb/Publications/WhitePapers/4887928.html

6 Ibid

7 Diptendu Choudhury, *The Salience of Air Power in Accelerating Land Operations*, CLAWS Journal, September 2023, Vol.16, No.1, pp 9-12

8 Arzan Tarapore, *The Army in Indian Military Strategy: Rethink Doctrine or Risk Irrelevance*, Working Paper, Carnegie India, August 2020

9 Maj Gen B S Dhanoa, *Rebalancing forces against China: An ongoing process or a paradigm shift?* Expert Speak, ORF, Jul 05, 202, http://20.244.136.131/expert-speak/rebalancing-forces-against-china-an-ongoing-process-or-a-paradigm-shift

10 https://www.usiofindia.org/strategic-perspective/evolving-indias-military-strategy.html

11 https://www.vifindia.org/article/2023/september/22/A-Waning-Conventional-Deterrence-A-National-Security-Portent%20%20

12 Diptendu Choudhury, *Expanding Role of PLAAF in China's National Security Strategy*, MP-IDSA Strategic Analysis, Taylor & Francis, 2020, pp.531-532

13 Air Marshal (Dr) Diptendu Choudhury, *Breaching the Dragon's A2AD: Strategic Targeting is the Key,* USI Strategy Year Book 2023,Vij Books, New Delhi, 2023, p.182

14 https://theprint.in/defence/need-organisation-structure-best-suited-to-indian-conditions-iaf-on-theatre-commands/1154350/

15 Diptendu Choudhury, A Force for all Theaters, The Indian Express, February 14 2023, https://indianexpress.com/article/opinion/columns/indian-air-forces-revised-doctrine-adopts-a-holistic-approach-to-the-countrys-security-imperatives-8442975/