The Journal of the United Service Institution of India APRIL-JUNE 2025 USI

U.S.I. JOURNAL

INDIA'S OLDEST JOURNAL ON DEFENCE AFFAIRS

(Estd. 1870)

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United Nations Peacekeeping in Ukraine: Is it a Possibility?	Major General (Dr) AK Bardalai, VSM (Retd)

Vol CLV APRIL-JUNE 2025 No 640

USI Latest Publications: 2023-2025

Pub Code	Type	Title of Publication and Author	Price '₹'	Year
CMHCS-13	Book	THE SUKRANITI: STATECRAFT AND WARCRAFT by Col Pradeep Kumar Gautam (Retd) **M/s Pentagon Press**	995	2025
CMHCS-12	Book	FORGOTTEN: HISTORY OF HONG KONG SINGAPORE ROYAL ARTILLERY by Col Mandeep Singh (Retd) **M/s Pentagon Press**	995	2025
OP-1/2025*	Occasional Paper	MANIPUR QUAGMIRE by Col Sachin Mahadik **USI of India**	Nil	2025
CMHCS-11	Book	BECAUSE OF THIS: A HISTORY OF THE INDO-PAK AIR WAR OF DECEMBER-1971 by Air Mshl Vikram Singh (Retd) **M/s Pentagon Press**	7,995	2025
M-4/2025 (UN Forum 2024)	Monograph	USI ANNUAL UN FORUM 2024—CHANGING CHARACTER OF CONFLICTS—CHALLENGES TO PEACE OPERATIONS AND INTERNATIONAL HUMANITARIAN LAW; edited by Maj Gen PK Goswami, VSM (Retd), Maj Gen (Dr) AK Bardalai, VSM (Retd) and Col KK Sharma (Retd) **M/s Manohar Publishers & Distributors**	350	2025
Adm/SYB-2025*	Year Book	STRATEGIC YEAR BOOK 2025; Editor-in-Chief: Maj Gen BK Sharma, AVSM, SM** (Retd); edited by Maj Gen Sanjeev Chowdhry (Retd), Ms Komal Chaudhary, Mr Vinayak Sharma, and Ms Richa Sharma **M/s Pentagon Press**	2,950	2025
M-3/2025	Monograph	DRONES AND VIOLENT NON-STATE ACTORS: THE MANKIND'S QUEST FOR VIOLENCE by Maj Gen Anil Kumar Mehra, AVSM, VSM (Retd) **M/s Manohar Publishers & Distributors**	350	2025
M-2/2025	Monograph	CHINA'S STRATEGIC CULTURE AND ITS IMPACT ON THE PEOPLE'S LIBERATION ARMY by Brig Sanjay Kannoth, VSM **M/s Manohar Publishers & Distributors**	250	2025
M-1/ 2025	Monograph	COMPREHENSIVE STRATEGIC DETERRENCE TO MEET INDIA'S FUTURE CHALLENGES by Brig (Dr) Rajeev Bhutani (Retd) **M/s Manohar Publishers & Distributors**	250	2025
Adm/SYB-2024*	Year Book	STRATEGIC YEAR BOOK 2024; Editor-in-Chief: Maj Gen BK Sharma, AVSM, SM** (Retd); edited by Maj Gen Sanjeev Chowdhry (Retd), Ms Komal Chaudhary, Mr Vinayak Sharma, and Mr Mihir S **M/s Vij Books of India Pvt Ltd**	2,750	2024
P-39/ 2023*	National Security Paper-2023	THE INDO-PACIFIC CONSTRUCT—INDIA'S MARITIME HIGHWAY TO GREAT POWER STATUS by Vice Adm (Dr) Anil Kumar Chawla, PVSM, AVSM, NM, VSM (Retd) **M/s Vij Books of India Pvt Ltd**	395	2024
M-5/2024*	Monograph	FUTURE EMPLOYMENT OF AIR POWER—STRATEGIC INFERENCES FOR INDIA by Air Mshl (Dr) Diptendu Choudhury, PVSM, AVSM, VM, VSM (Retd) **M/s Vij Books of India Pvt Ltd**	395	2024
M-4/2024*	Monograph	CHINESE AND RUSSIAN MILITARY ARTIFICIAL INTELLIGENCE: DRIVERS OF NATIONAL GOALS by Brig Pawan Bhardwaj **M/s Vij Books of India Pvt Ltd**	395	2024
M-3/ 2024*	Monograph	Fifth General KV Krishna Rao Memorial Lecture INDIA'S STRATEGIC AUTONOMY OPPORTUNITIES AND CHALLENGES IN THE EMERGING WORLD ORDER, Manekshaw Centre: 05 Oct 2023 by Gen Anil Chauhan, PVSM, UYSM, AVSM, SM, VSM, Chief of Defence Staff, Amb Sujan R Chinoy (Retd), Director General, Manohar Parrikar Institute for Defence Study and Analyses, and Lt Gen Ata Hasnain, VSM, UYSM, AVSM, SM, VSM** (Retd); edited by Maj Gen Sanjeev Chowdhry (Retd), Ms Komal Chaudhary, and Mr Vinayak Sharma **M/s Vij Books of India Pvt Ltd**	295	2024
M-2/ 2024*	Monograph	PROTECTION OF CIVILIANS IN MODERN CONFLICTS AND INTERNATIONAL HUMANITARIAN LAW edited by Maj Gen PK Goswami, VSM (Retd), Maj Gen (Dr) AK Bardalai (Retd), and Ms Kompal Zinta **M/s Vij Books of India Pvt Ltd**	395	2024
M-1/ 2024*	Monograph	PRESENT AND EMERGING THREATS TO NATIONAL SECURITY IN DIGITAL AND CYBER SPACE—AN ANALYSIS OF SECURITY AND LEGAL ISSUES by Lt Cdr Bharat Singh (Retd) and Gp Capt Raja Singh (Retd) **M/s Vij Books of India Pvt Ltd**	395	2024
OP-8/2024*	Occasional Paper	BLOODSHED IN BALOCHISTAN: PAKISTAN'S FESTERING WOUND by Maj Gen Jagatbir Singh, VSM (Retd) **M/s Vij Books of India Pvt Ltd**	250	2024
OP-7/2024*	Occasional Paper	SPECTRUM, TELECOMMUNICATION NETWORK FOR SPECTRUM, AND DEFENCE COMMUNICATION NETWORK OF THE INDIAN ARMED FORCES by Air Mshl (Dr) Rajeev Sachdeva, AVSM (Retd) **M/s Vij Books of India Pvt Ltd**	350	2024
OP-6/2024*	Occasional Paper	RELEVANCE OF GEOECONOMICS: EMERGENCE OF INDIA AS A GEOECONOMICS POWER, CHALLENGES, OPPORTUNITIES, AND THE WAY AHEAD by Col Dheeraj Kumar **M/s Vij Books of India Pvt Ltd**	350	2024
OP-5/2024*	Occasional Paper	INTERNATIONAL HUMANITARIAN LAW IN CONTEMPORARY PEACEKEEPING OPERATIONS: CHALLENGES AND OPPORTUNITIES by Wg Cdr (Dr) UC Jha (Retd) **M/s Vij Books of India Pvt Ltd**	250	2024
OP-4/2024*	Occasional Paper	PROTECTION OF CULTURAL PROPERTY IN ARMED CONFLICT by Wg Cdr (Dr) UC Jha (Retd) **M/s Vij Books of India Pvt Ltd**	250	2024

ISSN 0041-77OX Volume CLV April-June 2025 No 640

U.S.I. JOURNAL



Published by Authority of the Council
Postal Address
Rao Tula Ram Marg, (opposite Signals Enclave)
Post Bag No. 8,
Vasant Vihar PO, New Delhi-110057

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IVRS: 87006-92369

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Website:	www.usiofindia.org

The USI Journal is a peer-reviewed publication, published quarterly in Apr, Jul, Oct, and Jan. Subscription per annum w.e.f. 01 Jan 2016: In India ₹ 1,100.00. Postage extra (160 for four issues). Subscription should be sent through Bank Draft/Local/Multicity Cheque in favour of Director General USI of India. Articles, correspondence and books for review should be sent to the Director Editorial. Advertisement enquiries should be addressed to the Director Administration. Overseas annual subscription (By Air Mail) - £50 or US $80

United Service Institution of India

For

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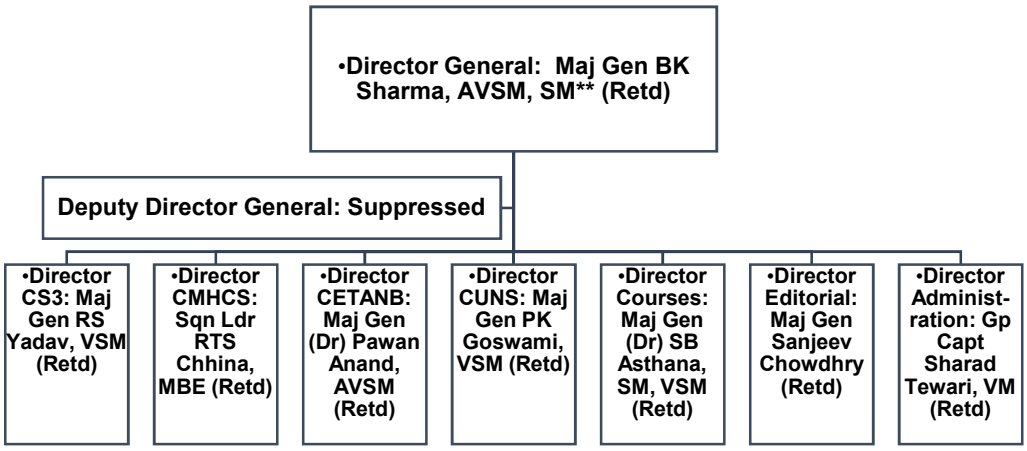

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	Capacity	Full Day up to 8 hours	Half Day up to 4 hours	Additional per hour	Additional for Sat/Sun/ Holidays	Security Deposit
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Notes -

1. 18% GST extra.
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1. The USI conducts Online Pre-Staff Course (OPSC) and correspondence courses for Defence Services Staff College (DSSC) - Army, Navy and Air Force (IAF) and Defence Services Technical Staff Course (DSTSC) – Army Entrance Examinations and Promotion Examinations Parts B and D.
2. The Courses have been remodelled to make it more interactive, and the admission procedure has been simplified to make it user friendly.
3. Membership of the USI is mandatory to join any correspondence course and OPSC-2025.
4. Schedule of Correspondence Courses 2025.
5. Course Schedules:

Course	Commencement of Course	Date of Exam	Cost All Subjects	Cost per Subject
DSSC (Army)	Second Week of Nov 2024 **Registration open for 2025**	Sep 2025	₹ 9,000/-	Tactics B - ₹ 3,000/ Current Affairs and Military History – ₹ 2,000/- (each) Science and Military Technology – ₹ 1,500/- Tactics A – ₹ 1,300/- Administration and Military Law – ₹ 1,200/-
DSSC (Navy)	Second Week of Jan 2025 **Registration open for 2025**	Jul 2025	-	Paper 1 – ₹ 3,000/- (Current Affairs, Military/Naval History and Maritime Strategy)
DSSC (IAF)	Second Week of Nov 2024 **Registration open for 2025**	Jul 2025	-	Correspondence Course • Military History – ₹ 3,000/- • Current Affairs – ₹ 3,000/- Online Course • Current Affairs – ₹ 4,000/- • Refer to Prospectus available on the USI website for other details
Part B	Second Week of Jan 2025 **Registration open for 2025**	Jun to Jul 2025	₹ 3,000/-	Tactics, Current Affairs and Military History – ₹ 1,000/- Administration and Military law – ₹ 800/-
Part D	First Week of Apr 2025 **Registration open for 2025**	Oct 2025	₹ 4,000/-	Tactics, Current Affairs and Military History – ₹ 1,500/- Administration and Military law – ₹ 1,000/-

5. **Contact Programs**. Three contact programs for DSSC/DSTSC (Army)-2025 have been planned. Dates are: 16 to 21 Jun 2025 and 14 to 19 Jul 2025. Separate test papers will be set for each programme. Fees - ₹ 7,000/- per contact programme and ₹ 3,500/- only for material of each contact program.
6. **USI OPSC**. USI Online Pre-Staff Course. One capsule of three subjects (Military History, Science and Military Technology, and Current Affairs) for 2025 will be conducted from 19 to 31 May 2025. Details are available on the USI website.
7. Correspondence courses for Special to Corps subjects are not conducted.
8. **Mode of Payment**. Multicity cheque or bank draft payable at New Delhi in favour of Director General USI of India or Net Banking/UPI QR code. Bank details are available on website.
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13. **Prospectus and Form**: Available on Website and from Course Section.

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See USI website : www.usiofindia.org for complete details and form			

$(For 3 years commencing 01 Jan) *(one year for one course only but applicable for all courses in that year)

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- The United Service Institution Journal invites original research articles related to national security, defence, and military history, preferably not exceeding 3,000 words. Each submission must include an abstract, limited to 10 per cent of the article's length, and be sent as a Word document via email to direditorial@usiofindia.org. The author must affirm that the article is unpublished and not under consideration elsewhere. The Director Editorial reserves the right to edit the manuscript.
- Endnotes with complete bibliographic details are mandatory; a bibliography is optional. The article should be formatted in Arial, size 12, using UK English, and must avoid symbols like %, & unless essential. Dates should follow the format 24 Jun 2020, and abbreviations should be spelled out on first use.
- Submissions must include the author's full name, address, and a brief CV. Serving military officers must follow relevant publication guidelines. Upon publication, authors will receive a copy of the journal, three offprints, and a suitable honorarium.
- The endnotes should be in the following format: Name of Author, Title of Publication (in double quotes), Name of Publisher (in italics), Date of Publication, Date accessed on.
- For the complete Publication Policy of the USI, please visit the USI Website (https://www.usiofindia.org/)→Publications Tab→Guidelines for Contributors.

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Members interested in undertaking research projects may submit research proposals to the USI (CS3/CMHCS). At present, ten Chairs of Excellence have been instituted in CS3; namely, the Field Marshal KM Cariappa Chair, Admiral RD Katari Chair, Air Marshal Subroto Mukherjee Chair, Professor DS Kothari Chair, Ministry of External Affairs Chair, Flying Officer Amandeep Singh Gill Chair, General Bipin Rawat Chair, Lieutenant General PS Bhagat Chair, Bhawanipur Education Society College Chair, Assam Rifles Chair, Abhay Tripathi Chair and Gandhi Mandela Chair. There are three Chairs in CMHCS; namely, the Maharana Pratap Chair, the Chhatrapati Shivaji Chair and the USI-War Wounded Foundation Chair. Copies of the Rules for Award of Fellowship Grants and Conduct of Research are available on the USI Website.

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Editorial

Dear Readers,

I am delighted to present the United Service Institution of India's (USI) Journal for the second quarter of 2025. Throughout the past 155 years, the USI has consistently been committed to delivering strategic insights on matters crucial to national security and geopolitics.

The Apr to Jun 2025 issue of the USI Journal continues our commitment to providing rigorous analysis, diverse perspectives on matters of national security, defence strategy, and global affairs. This quarter's edition features a carefully curated selection of articles that engage with contemporary challenges as well as enduring themes in strategic thought. The diversity of viewpoints reflects the increasingly complex and interconnected nature of today's security environment.

This edition comprises 12 meticulously researched articles covering a range of topics, from the Russo-Ukrainian War—covering Operation Spider Web and a possible United Nations (UN) Peacekeeping Mission in Ukraine—to the geoeconomics front focusing on the return of Donald Trump to the White House and various trade corridors and the effects geopolitical churn has had on them. Furthermore, there are submissions on non-contact and non-kinetic warfare and Operation Sindoor. Finally, there are write-ups on defence acquisition, the China-United States (US) contestation in Oceania vis-a-vis Papua New Guinea, the use of UN peacekeeping as a tool of Indian diplomacy, provision of care for war-wounded personnel for the betterment of recruitment in the armed forces, a chronicling of the armies that have operated on Indian soil from the Aryan to the Maratha period, and one on the 'Meghna Heli-Bridging Operation'.

The lead article by Major General BK Sharma, AVSM, SM** (Retd) Mr Neelotpal Mishra, dis titled *'Geopolitics of Trade Corridors in Eurasia'* focuses on the Middle, the International North-South Transport, the Chennai–Vladivostok Maritime, the India–Middle East–Europe Economic, and the Northern Sea Route corridors. He explains the geopolitical disruptions, sanctions, and strategic

recalibrations and how these corridors mark the emergence of a diversified and inclusive global order. The second write-up by Lieutenant General DP Pandey, PVSM, UYSM, AVSM, VSM (Retd) is titled *'Restraint in Force Application for Strategic Outcomes'*. It explores the concept of strategic restraint in the use of military force, using the case of Operation Sindoor (2025) as a contemporary reference. The author further argues that restraint in military action, though often unpopular with public sentiment and media narratives, can yield significant strategic, political, and diplomatic advantages using past wars India has fought in.

The third article titled *'Trade Policy and National Security: The Geoeconomic Challenge of Trumpism'* by Dr Sanjaya Baru focuses on the historical evolution and contemporary resurgence of protectionist trade policy in the US, particularly under the Trump and Biden administrations. Against this backdrop, it emphasises the imperative for India to strengthen its domestic foundations—economic, industrial, technological, and human capital—to safeguard strategic autonomy. The narrative of 'Rising India', historically driven by gross domestic product growth, now requires a redefinition grounded in manufacturing capacity, defence self-reliance, and global competitiveness. The next write-up by Major General (Dr) AK Bardalai, VSM (Retd) titled *'United Nations Peacekeeping in Ukraine: Is it a Possibility?'* delves into the details of Russia-Ukraine War and how the recent developments suggest that a potential ceasefire may be gaining momentum. If a ceasefire is achieved, establishing a monitoring mechanism will be crucial to ensure its effectiveness. It further explores the possibility of deploying UN peacekeepers to oversee the ceasefire and the structural and operational considerations necessary to support such a mission.

Major General Jagatbir Singh, VSM (Retd) in his article *'Spider Web: An Attack with Far-Reaching Implications'* details the operational ingenuity, including clandestine transport, remote launches, and use of open-source autopilot frameworks. It underscores broader implications for airspace management, the vulnerability of rear areas, and the necessity of adaptive defence strategies. Furthermore, it draws lessons for India and calls for regulatory oversight of drone manufacturing, enhancement of

counter-drone capabilities, and a whole-of-nation approach to emerging threats. The sixth piece of this journal is submitted by Brigadier (Dr) Biju Jacob, VSM, titled *'Redefining Defence Acquisitions: Transitioning from Traditional Qualitative Requirements to Technology-Based Procurement'*. It argues that the existing General Staff Qualitative Requirement (QR) model negatively impacts agility and innovation, which result in outdated capabilities of the defence forces. It highlights the challenges faced by the QR model and what makes the Technology-Based Procurement model more advantageous. It delineates an implementation framework and outlines a phased approach and essential policy reforms.

The next article by Professor Kiranpreet Kaur Baath titled *'Peacekeeping as Diplomacy: India's Strategic Future in Global Politics'* argues that India's peacekeeping engagements, from UN Operation in the Congo in the 1960s to UN Organization Stabilization Mission in the Democratic Republic of the Congo in the present day, should be understood not only as operational commitments but as deliberate forms of peace diplomacy. It examines the theories of soft power, strategic narratives, and middle-power diplomacy, from the lens of how India's peacekeeping legacy can be reframed as a strategic asset—supporting its aspirations for global leadership. The eighth submission by Ms Manah Popli titled *'Balancing United States and Chinese Influence in Papua New Guinea: Opportunities for South Pacific Cooperation'* attempts to analyse whether Pacific Island countries are trying to balance between the Chinese and the US interests in the South Pacific region. It attempts to highlight the benefits of the balancing act for the Pacific Island Countries through the lens of Papua New Guinea. Further, it analyses whether the balancing game is sustainable in the long run. It concludes by briefly looking at the opportunities this regional dynamic might present for India.

The ninth article of the Journal is the winner of the USI Gold Medal Essay Competition 2024 titled *'Non-Contact and Non-Kinetic Warfare in the Indian Context: Concepts and Pathways'* and is written by Flight Lieutenant Vatsalya Yadav. It examines the evolution of warfare, focusing on the emergence and implications of non-contact and non-kinetic conflict in the 21st Century. Tracing

the trajectory from classical battlefields to fifth-generation warfare particularly explores the Indian context, detailing how hybrid threats—from cyber-attacks to disinformation campaigns—challenge national security. It ends with providing recommendations for improving the national defence apparatus. The tenth feature is the winner of the USI-War Wounded Foundation 2024 titled '*Caring for the War-Disabled: How Will Their Treatment Impact Future Recruitment*' and is authored by Squadron Leader Aryan Raj Chowdhary. It explores the critical link between the care of war-disabled soldiers and the long-term sustainability of the Indian Armed Forces.

The penultimate submission titled '*Leap Across the Meghna River: A Tactical Manoeuvre Leading to Strategic Victory in Indo-Pak War 1971*', written by Colonel Vikas Yadav, is the winner of the Lieutenant General SL Menezes Memorial Essay Competition 2024 and critically analyses the famed '*Meghna Heli-Bridging Operation*', which proved to be a significant tactical airlift manoeuvre that played a vital role in destabilising the enemy's Centre of Gravity and eventually defeat of Pakistan in the Eastern Sector. The final article of this edition of the Journal is the from the USI archives. A noteworthy addition from this issue onwards is the inclusion of a selected article from the USI Journal archives. This initiative is intended to highlight the enduring value of past scholarship and to demonstrate how historical reflections continue to enrich current debates and understanding. The article *'Armies of India from the Aryans to the Marathas'* by Jeffrey Greenhut highlights how India's geography, particularly the exposed northern plains, shaped its military history through repeated invasions. Each invading force brought distinct military systems, leaving a lasting impact. The piece traces this cycle of conquest and adaptation from the Aryans to the Marathas, illustrating the evolving nature of warfare in the subcontinent.

The last part of the journal contains three book review articles and the same number of short book reviews, which are as follows:

- *Who Dares Wins* by Lieutenant General YK Joshi, PVSM, UYSM, AVSM, VrC, SM (Retd); Reviewed by Major General Jagatbir Singh, VSM (Retd)

- *No Mission Impossible—Memoirs of a General in War and Insurgency* by Lieutenant General JBS Yadava, PVSM, AVSM, VrC, VSM (Retd); Reviewed by Colonel (Dr) RC Patial, SM, FRGS (Retd)

- *Spies Among the Sands: Assessing Seven Decades of Mossad and Israeli National Security* by Prem Mahadevan; Reviewed by Mr Vinayak Sharma

- *Ancient Strategies: Lessons for the Modern Leader* by Nick Sawyer; Reviewed by Colonel Harjeet Singh (Retd)

- *Requiem for a Soldier* by Abhishek Amal Sanyal; Reviewed by Colonel Ravinder Kumar (Retd)

- *Heritage Under Siege: Protection of Cultural Property in War* by Wing Commander (Dr) UC Jha (Retd) and Group Captain Kishore Kumar Khera, VM (Retd); Reviewed by Ms Komal Chaudhary

We hope that the articles presented here stimulate meaningful reflection, critical engagement, and informed dialogue among our readers across the military, academic, and policymaking communities.

In conclusion, the USI Journal remains steadfast in its mission to provide a platform for informed discourse and strategic analysis. As we eagerly await your feedback and suggestions, we express our sincere gratitude for your continued support. A special acknowledgement is extended to all the authors whose efforts have brought this journal to fruition.

Happy Reading!

Major General Sanjeev Chowdhry (Retd)
Director Editorial

Geopolitics of Trade Corridors in Eurasia

Major General BK Sharma, AVSM, SM (Retd)[@]**
Mr Neelotpal Mishra, dis[#]

Abstract

Eurasia, once seen as peripheral in global trade, is emerging as a vital hub, driven by geopolitical disruptions, sanctions, and strategic recalibrations. Trade corridors like the Middle Corridor, the International North-South Transport Corridor, the Chennai–Vladivostok Maritime Corridor, the India–Middle East–Europe Economic Corridor, and the Northern Sea Route are transforming regional connectivity and bypassing vulnerable chokepoints, such as the Suez Canal and Malacca Strait. These corridors reflect the geopolitical ambitions of emerging powers and provide frameworks that are grounded in flexibility, resilience, and regional cooperation. Despite infrastructure and geopolitical challenges, these routes mark the emergence of a more inclusive and diversified global order.

Introduction

Eurasia—long considered peripheral in global commerce—is fast emerging as the strategic heartland of transcontinental trade. As traditional maritime routes, such as the Suez Canal and the Strait of Malacca, face mounting geopolitical and logistical vulnerabilities, the tectonic plates of global connectivity are shifting inland. This transformation is driven by the emergence of new trade and energy corridors that crisscross the continent, reshaping the dynamics between Asia, Europe, and the Middle East. In line with these developments, India has been continuously trying to boost her inland waterways by leveraging rivers, canals, backwaters

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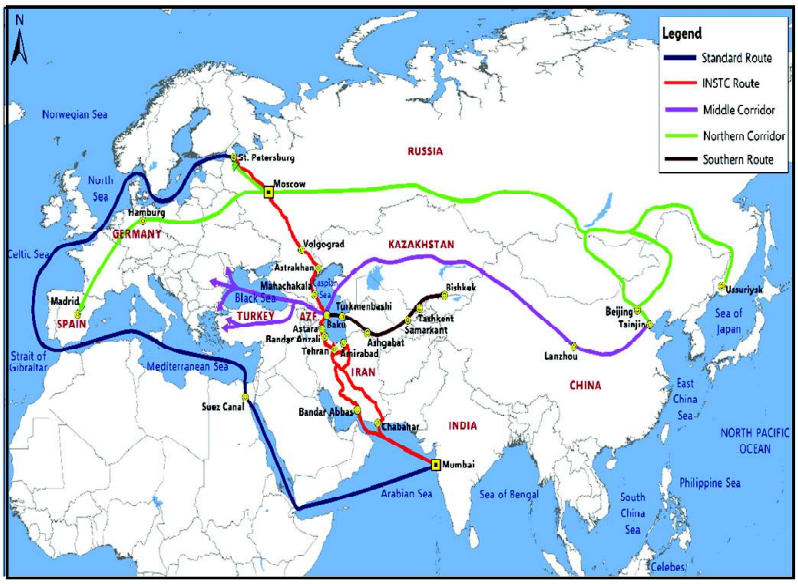
Journal of the United Service Institution of India, Vol. CLV, No. 640, April-June 2025.

and creeks as a means to connect its industrial heartland for evacuation of deep hinterland cargo to its sea ports.[1]

Anchored in Mackinder's vision of the Heartland[2], corridors—such as the Middle Corridor (MC), International North–South Transport Corridor (INSTC), Vladivostok-Chennai Maritime Corridor (VCMC), India–Middle East–Europe Economic Corridor (IMEC), and the Northern Sea Route (NSR)—are not merely conduits of commerce; they are instruments of strategic diversification, geopolitical hedging, and regional assertion. They bypass chokepoints, redistribute economic influence, and reposition Eurasia as the linchpin of a more resilient, multipolar global order.[3] Together, these corridors represent an alternative vision of the Chinese-led Belt and Road Initiative (BRI). They embody a new geography of cooperation rooted not in hegemony, but in the pragmatism of multipolarity.[4] For emerging powers like India, these corridors offer both opportunities and challenges in redefining global trade flows and geopolitical alignments, as well as their influence in Eurasia.

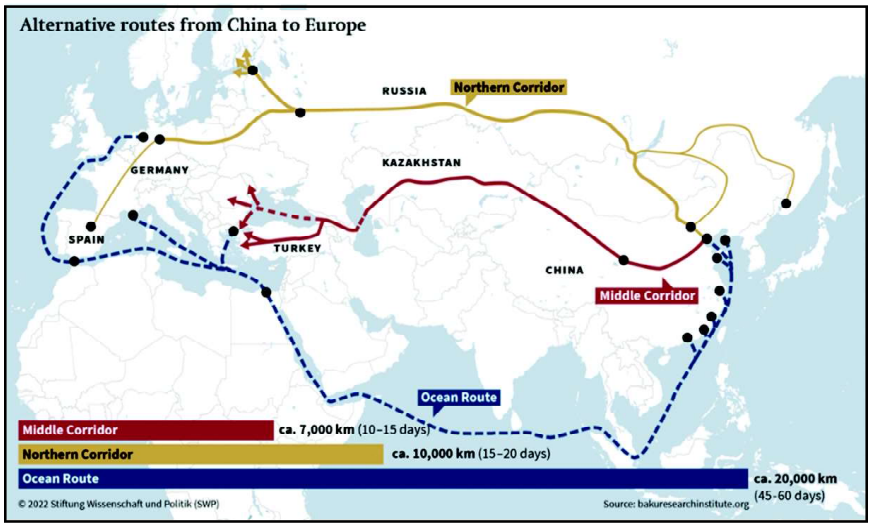


Map 1: Trade Corridors
Source: *European Neighbourhood Council*[5]

The Middle Corridor

The Trans-Caspian International Transport Route, backed by the World Bank and the European Union's Global Gateway initiative, offers an alternative to the conventional Northern Corridor, which

passes through Russia, and the Southern Corridor, which passes through Iran, by combining rail and sea transportation. Its overall length is between 6,500 and 7,000 kms, and it connects China to Europe via Central Asia, the Caspian Sea, and Turkey, which occupies a pivotal position along the route. It offers a 12 to 15-day overland route, compared to the 40-day maritime journey via the Suez Canal. By 2030, MC is expected to have a capacity of up to 11 million tonnes of cargo annually.[6]



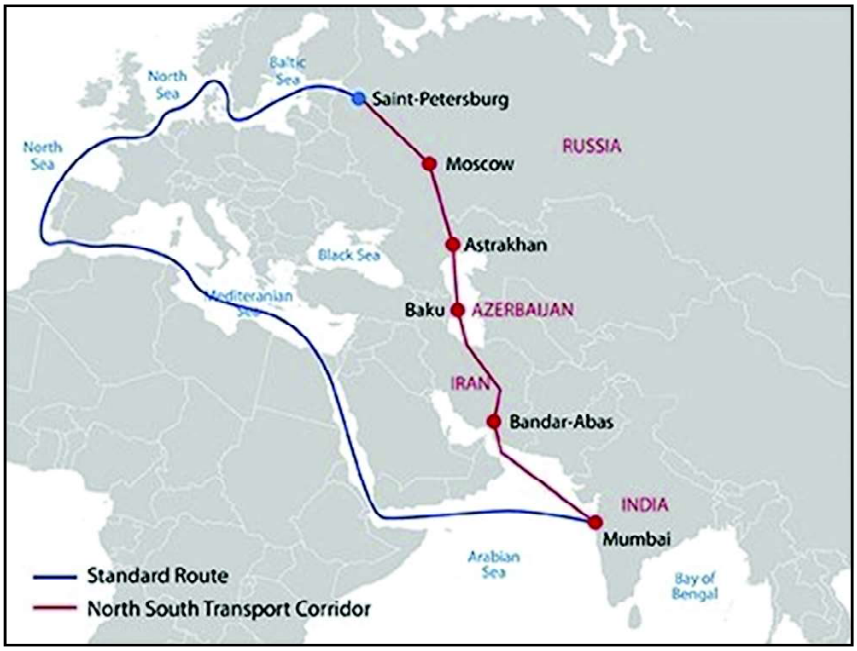
Map 2: Alternative routes from China to Europe
Source: *Stiftung Wissenschaft und Politik*[7]

Cargo traffic along the corridor increased significantly in 2024. Kazakhstan reported a trade volume of over 04 million tonnes, while Azerbaijan handled more than 18.5 million tonnes.[8] Major infrastructure projects, such as the development of new terminals at Azerbaijan's Alat port, the expansion of Kazakhstan's Aktau port, and the Anaklia deep-sea port in Georgia, as well as port extensions in Turkey, are currently underway.[9] Additionally, a USD 650 mn World Bank-funded project is underway to enhance the Zhezkazgan-Karagandy railway section, aiming to improve connectivity and climate resilience.[10] Meanwhile, the European Union has pledged EUR 10 bn to strengthen connectivity in Central Asia, demonstrating its support for MC as a more stable geopolitical alternative to northern routes, which are impacted by the conflict in Ukraine.[11]

MC provides China with a safer conduit to Europe, thereby, enhancing its BRI. It strengthens Turkey's regional ambition as a geostrategic bridge between Asia and Europe. The corridor's passage through areas rich in gas, oil, and renewable resources presents opportunities for the development of cross-border energy infrastructure. Along the corridor, pipeline, power grid, and energy transit network projects are being contemplated or extended, particularly in Kazakhstan and Azerbaijan, to improve regional energy security.[12] Furthermore, it provides landlocked Central Asian nations with access to new energy markets and integration into international energy systems. Furthermore, improved digital connectivity encourages regional collaboration in innovation, cybersecurity, and technology, transforming MC into both a physical and a digital link between the East and the West.

The International North–South Transport Corridor

Conceived in the year 2000 by India, Russia, and Iran, the INSTC stretches 7,200 kms from Mumbai to St Petersburg through Iran's Bandar Abbas and Chabahar ports and beyond to the Caucasus.[13] It is India's answer to bypassing Pakistani and Chinese bottlenecks. It reduces travel time from 40 days (via Suez) to 15–20 days, and lowers freight cost by 30-40 per cent.[14] For Russia, it is a lifeline to the Indian Ocean, and for Iran, it is a rare opportunity to monetise its geography amid continued sanctions. This corridor forms a significant prong of Russia's pivot to Asia. Russia and Iran are collaborating on the construction of a 162-kms-long Rasht–Astara railway in Iran.[15] The INSTC has also seen a notable growth in cargo quantities; in 2024, the eastern branch alone transported up to 02 million tonnes, up from 6,00,000 tonnes in 2023, with a target of 03 million tonnes set for early 2025.[16] The INSTC has increased vitality and digital importance in the changing Eurasian environment. From the resource-rich regions of Central Asia, Russia, and Iran to energy-deficient markets like India, the corridor facilitates the movement of gas, oil, and other energy resources.[17]

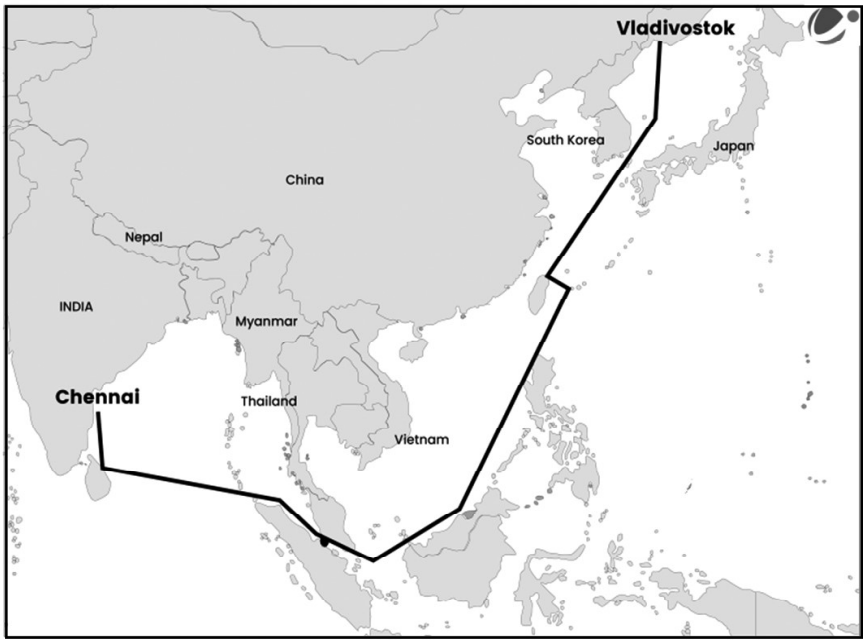


Map 3: The International North–South Transport Corridor
Source: *India Narrative*[18]

The INSTC enhances energy security for nations like India by providing more reliable and direct access to alternative suppliers. The corridor presents opportunities to strengthen cross-border digital infrastructure and connectivity, thereby, facilitating regional trade through increased efficiency and transparency. This would be possible by the growth of fibre optic networks, smart logistics, and digital trade platforms along the route. In recent years, the INSTC has gained renewed momentum. Test runs have demonstrated its operational viability, and member countries are working on improving infrastructure, digitising customs processes, and aligning the corridor with other regional initiatives, such as MC and the Chabahar Port development. In essence, the INSTC is not merely a trade route but a cornerstone of India's strategic vision for enhanced regional integration, economic resilience, and geopolitical influence across Eurasia.[19]

The Vladivostok-Chennai Maritime Corridor

It is a strategic sea route connecting the port of Chennai in India with Vladivostok in Russia's Far East. Covering approximately 5561 NM (10,298.97 kms), this corridor significantly enhances maritime connectivity between the two nations by reducing the cargo transport time between Indian ports and Russia's Far East from the traditional 40 days to approximately 24 days, offering a 40 per cent reduction in transit time.[20] The route aligns India's 'Act Far East' Policy with Russia's Pivot to Asia. This is significant for India as it has surpassed China to become the largest buyer of Russian oil in Jul 2024.[21]



Map 4: Vladivostok-Chennai Maritime Corridor
Source: *Vision IAS*[22]

The VCMC stands as a testament to the deepening India-Russia strategic partnership, offering a robust framework for enhanced economic engagement and regional connectivity. The corridor became operational in Nov 2024, with container ships carrying commodities such as crude oil, metals, and textiles arriving at Indian ports. The corridor provides India with direct access to the resource-rich Russian Far East, facilitating the import of energy resources and other commodities, thereby, reducing reliance on

different markets. The efficiency and security of maritime trade can be significantly enhanced by the development of digital trade infrastructure, including smart ports and automated customs processes. India plans to integrate additional eastern ports, such as Visakhapatnam and Paradip, into the corridor, thereby, enhancing its capacity and reach. Efforts are underway to upgrade port facilities, streamline customs procedures, and adopt advanced shipping technologies to support the corridor's operations. The corridor supports projects, such as the Kudankulam nuclear power plant.

Even though transit times have shortened, the VCMC still faces economic obstacles due to low cargo quantities and underdeveloped port facilities, particularly on the Russian side. These issues limit efficient handling and the expansion of commerce. Bureaucratic and regulatory obstacles, such as convoluted customs processes and the lack of effective banking lines between Russia and India, further slowdown operations. The VCMC faces geopolitical challenges as it navigates the contested South China Sea, which may lead to naval blockades or regional hostilities, in addition to impediments stemming from western sanctions. The corridor's resilience to geopolitical disruptions is diminished by the lack of a comprehensive international structure to monitor and protect its operations.

The Northern Sea Route-Arctic Gateway for India's Eurasian Integration

The NSR, a maritime corridor skirting the Russian Arctic coast from the Kara Sea to the Bering Strait, is rapidly emerging as a transformative route in global trade. Enabled by receding Arctic ice due to climate change, this high-latitude passage significantly shortens the distance between East Asia and Northern Europe by up to 40 per cent. It can reduce maritime transit time by 10 to 15 days compared to the traditional Suez Canal route.[23]

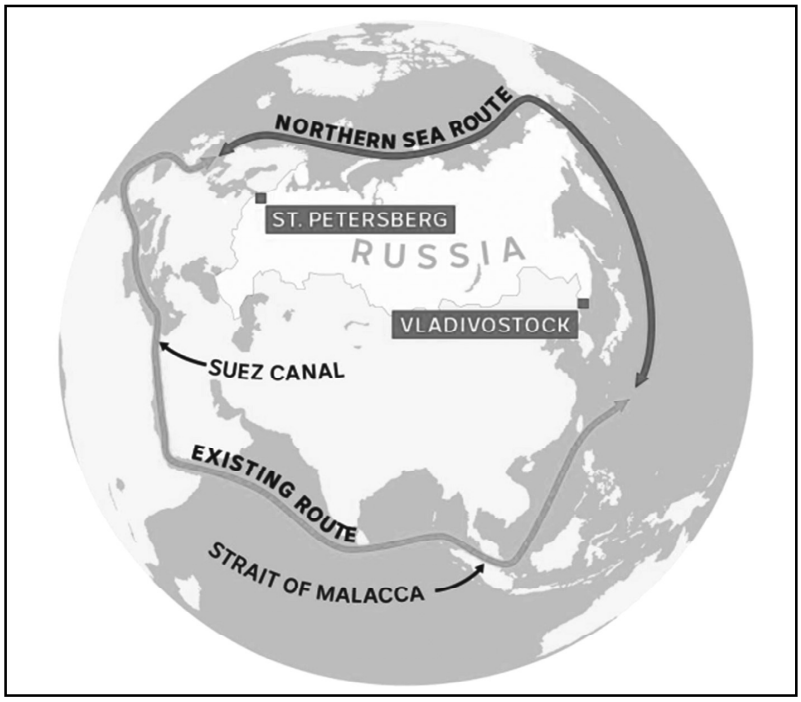


Figure 1: Northern Sea Route
Source: *Observer Research Foundation*[24]

Russia has heavily invested in Arctic infrastructure; a network of ports, including Murmansk, Arkhangelsk, and Sabetta, has been expanded, and a fleet of nuclear-powered icebreakers ensures navigability across much of the year.[25] In 2024, cargo volumes on the NSR exceeded 35 million tonnes, primarily composed of Liquefied Natural Gas (LNG) from the Yamal and Arctic LNG 2 fields, crude oil, and minerals. Russia's ambitions are bolstered by China's collaborative efforts under the 'Polar Silk Road' initiative, a northern flank of its BRI, which further elevates the NSR's geostrategic profile.

For India, the NSR offers far-reaching strategic dividends. First, it provides an alternative shipping corridor that circumvents chokepoints such as the Suez Canal and the Strait of Malacca, both of which are vulnerable to geopolitical disruptions. As global supply chains face increasing instability, the NSR could serve as a northern resilience corridor, enhancing India's logistical flexibility and strategic autonomy. Second, the NSR serves as a gateway to Arctic energy resources. Russia's Arctic zones are among the

most resource-rich regions globally, and India's access to Arctic LNG, crude oil, and critical minerals could significantly augment its energy security strategy. With Indian public sector enterprises, such as Oil and Natural Gas Corporation Videsh, already invested in Russian energy ventures, enhanced maritime access via the NSR could solidify long-term resource partnerships. Third, participation in the NSR-linked corridors would allow India to reinforce its scientific, commercial, and strategic presence in the Arctic. As an observer in the Arctic Council and a proponent of the Security and Growth for All in the Region doctrine, India has signalled its interest in the polar region. Utilising the NSR for trade and energy transport aligns with this broader vision, moving India from a peripheral observer to an active stakeholder in Arctic affairs. The VCMC proposes a direct sea link between India's eastern seaboard and Russia's Far East. From Vladivostok, Indian goods can be transhipped northward to Arctic ports via Russia's Pacific–Arctic maritime spine, eventually connecting to the NSR. An alternative and highly strategic option lies in integrating the INSTC with Russia's inland river and canal systems; such as Astrakhan or Olya, entering Russia's Volga River system using the Volga–Don Canal and Volga–Baltic Waterway, cargo can be routed to Saint Petersburg, Murmansk, or Arkhangelsk, providing direct access to the NSR.

Despite these advances, the NSR faces substantial operational and geopolitical challenges. Its seasonal accessibility, coupled with extreme weather, ice hazards, high insurance premiums, and inadequate search and rescue infrastructure, limits year-round reliability. Additionally, the militarisation of the Arctic, particularly by Russia, and western sanctions following the Ukraine conflict complicate broader international investment and access. Yet, these challenges have not diminished the NSR's allure, especially for countries like India, which seek strategic redundancy, diversified energy sources, and deeper engagement in the Eurasian and Arctic domains.

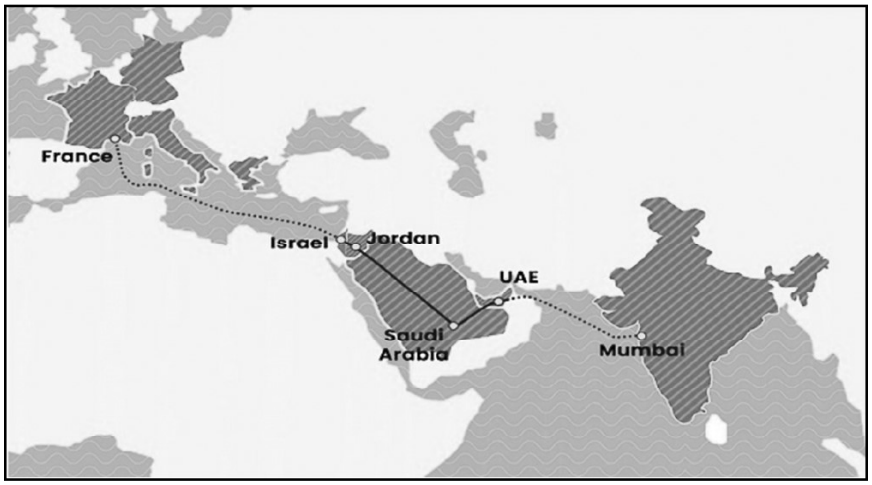
The India–Middle East–Europe Economic Corridor

Announced during the G20 summit in New Delhi on 09 Sep 2023, the corridor involves key participants, i.e., India, the United States, the United Arab Emirates (UAE), Saudi Arabia, France, Germany, Italy, and the European Union. Its estimated length is 4,800 kms,

combining rail and maritime transportation to streamline the movement of goods and services across continents. Its eastern leg will connect Indian ports with West Asian hubs, such as Jebel Ali (UAE), Dammam (Saudi Arabia), and onward through Jordan to Haifa in Israel. From there, the western leg continues into Europe via ports in Greece and Italy. Beyond physical transportation, the IMEC plans to integrate energy infrastructure, including electricity cables, hydrogen pipelines, and high-speed data cables, promoting energy cooperation and digital connectivity.[26]

In Feb 2024, France appointed Gérard Mestalla as its envoy for the IMEC project, highlighting its commitment to playing a central role in the corridor's development. Following the G20 summit, India and Saudi Arabia agreed to strengthen their economic and security ties, with discussions encompassing the IMEC project. In Jun 2024, India's cabinet approved the construction of the Vadhavan port near Mumbai, a deep-water port with an investment of USD 9.14 bn, aimed at boosting trade with Europe and serving as a key component of the Indian Maritime Economic Zone.

The corridor is viewed as a strategic counterbalance to China's BRI, providing an alternative route that enhances the geopolitical influence of the participating nations. However, the corridor's success is not guaranteed. The geopolitical complexities of the Middle East, such as the Israel-Iran tensions, internal rivalries within the Gulf, and the fragile normalisation processes involving Israel and Arab states, pose considerable risks to the seamless functioning of the corridor. The ongoing Israel-Hamas conflict, if prolonged, could disrupt key nodes in the corridor's western leg. In response to the IMEC initiative, China is likely to intensify its BRI engagements, especially in overlapping regions like the Gulf and East Africa. It may also apply strategic pressure on countries such as Saudi Arabia and the UAE, which are part of both the BRI and IMEC frameworks. This dual participation could lead to balancing challenges for these nations, as they attempt to hedge between two competing global infrastructure architectures. This pact also faces potential constraints due to new geopolitical divides and increased competition among regions. In response, Beijing might step up BRI investments or put pressure on IMEC members who support both blocs (such as Saudi Arabia and the UAE).



Map 5: India–Middle East–Europe Economic Corridor
Source: *Vivekananda International Foundation*[27]

Conclusion

These corridors, though promising, are not without friction—many grapple with infrastructure gaps, geopolitical volatility, and ecological concerns. Yet, they are reshaping Eurasia's strategic geography, diversifying trade flows, and reducing reliance on monopolised routes. For India, the pursuit of IMEC, INSTC, VCMC, and engagement with NSR is both an economic imperative and a geopolitical strategy. Together, they offer pathways toward a resilient, multipolar world grounded in inclusive and decentralised connectivity.

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Restraint in Force Application for Strategic Outcomes

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Abstract

This article explores the concept of strategic restraint in the use of military force, using the case of Operation Sindoor (2025) as a contemporary reference. It argues that restraint in military action, though often unpopular with public sentiment and media narratives, can yield significant strategic, political, and diplomatic advantages. Drawing from historical precedents, such as the 1971 Indo-Pak War, Kargil Conflict, and Balakot strikes, the discussion contextualises India's approach to calibrated responses that prioritise long-term national objectives over short-term gratification. This article also reflects on the strategic outcomes achieved through limited force application, including geopolitical positioning, validation of defence reforms, and neutralisation of hostile infrastructure, while highlighting the risks of overreach. It advocates for mature political decision-making and escalation control as key tenets of effective statecraft in contemporary conflict dynamics.

Introduction

The events following the heinous terror attack in Pahalgam on 22 Apr 2025 reignited national outrage and demands for retribution. Amidst overwhelming public sentiment, the Indian government launched Operation Sindoor to deliver a swift and

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Journal of the United Service Institution of India, Vol. CLV, No. 640, April-June 2025.

precise military response. However, the real story lies not in the magnitude of military might, but in the restraint exercised after the objectives were met. This article analyses the strategic merit of such restraint, in contrast to the often emotion-driven public and media calls for escalation.[1]

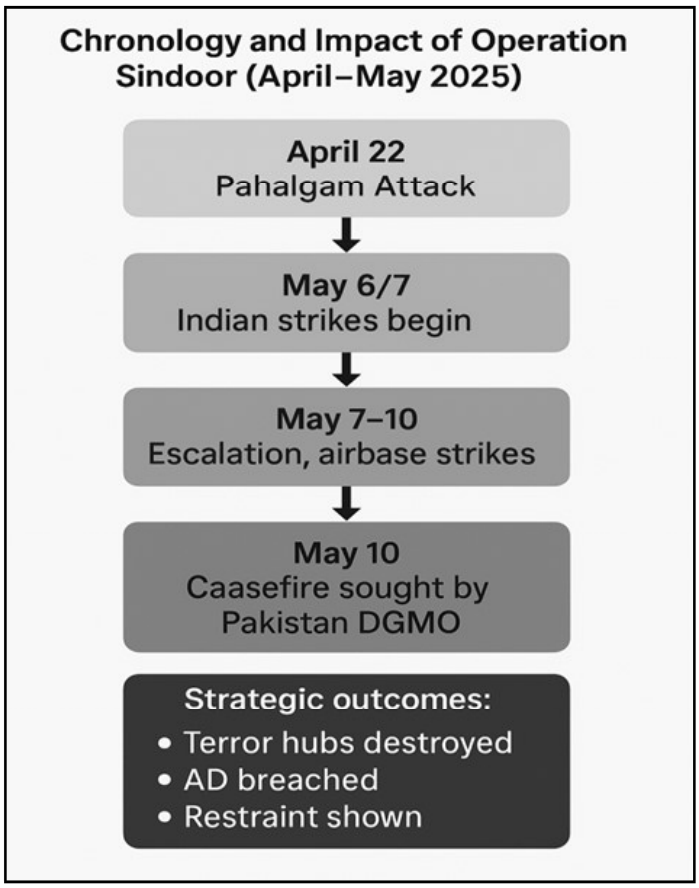


Figure 1
Source: *Compiled by the author*

The Trigger: Pahalgam Attack and National Sentiment

Post 22 Apr 2025, the anger of the Indian population was palpable and visible when 26 innocent lives were taken in the renowned tourist destination of Pahalgam in South Kashmir. Such terror acts were a norm few decades before, but had scaled down after abrogation of Article 370 in 2019. The nation was witnessing fruits

of peace in Jammu and Kashmir (J&K) and the local population was reaping the benefits of peace and stability. The dastardly act by Pakistan-controlled terrorists caught the attention of the world, as the killings were carried out in front of women and children after careful and deliberate identification based on religion. Men were asked to recite *kalma* (Islamic declaration of faith), and they were stripped down to check if they were Hindus and shot dead brutally. A country that had chosen to forget the genocide of partition—wherein lakhs of Hindus and Sikhs were brutally killed, and women were raped, murdered, and raped again—was bound to see such events repeated. The genocide of Kashmiri Pandits in the 1990s was conveniently brushed aside from the history by Indians and in recent times, when news of similar carnage emerged from Bangladesh after the elected government led by Sheikh Hasina was thrown out, the same was ignored again.

This time around, the images and videos of the incident finally shook the psyche of the entire country—except for a few—only because of the power of social media and digital platforms, where they streamed onto the mobile phones of everyone. Finally, the entire nation wanted retribution. For once, the political parties across the spectrum and the entire social fabric of the country came together. There were no religious biases nor were there any ideological differences. In the modern world, media can start wars, and if possible, fuel them to the last the person alive. Bringing down the enemy and the entire ecosystem was the singular message to the ruling dispensation.

Operation Sindoor: Execution and Impact

Operation Sindoor was launched within 15 days. On the night of 06/07 May 2025, the launchpads across Pakistan-occupied J&K (PoJK) were pulverised. Following Prime Minister Narendra Modi's directive to 'Destroy those behind the terror attack in Pahalgam', the Indian Armed Forces conducted blistering attacks on nine terrorist launchpads and camps in PoJK and Pakistan's Punjab province. For the first time, attacks were carried out in Pakistan's Punjab, destroying the global headquarters of the infamous Jaish-e-Mohammad (JeM) and Lashkar-e-Taiba (LeT) at Bahawalpur and Muridke, respectively, reducing them to the ground. While the military objectives set by the political leadership were achieved by the armed forces on the very first night, the country was not

satisfied and demanded more. The Pakistani military offered themselves as further bait by sending drones and missiles across the entire International Border (IB) and the Line of Control and broke the ceasefire across the region of J&K. The cycle of punishment every 24 hours, in response to Pakistan's attempts to escalate, was measured, proportionate, and restrained—targeting only military objectives. Pakistan kneed early, within 88 hours, the shortest ever military conflagration in the modern history of military engagements, wherein on 10 May 2025, the Director General Military Operations (DGMO) of Pakistan asked for a ceasefire.[3] The entire air defence system of Pakistan was breached and laid bare, as Indian missiles and drones rained hell and death on 11 airfields and several other critical installations. Pakistan had already approached the United States (US) for intervention, but was politely ignored by India, stating that the issue was bilateral. Off-ramping had been offered daily from 07 May onwards, and Pakistan was required to seek a ceasefire directly. The pause button was hit by the Indian military on 10 May 2025. The military mission, as dictated by the political establishment, was achieved and much more.

Map 1: Target Zones: Operation Sindoor
Source: *Hindustan Times*[4]

Strategic Restraint vs Public Sentiment

However, the nation, particularly the media, legacy, digital and social, were unsatiated and wanted more.[5] The demands from the political establishment from the other side of the floor were particularly feverish to push for more with obvious reasons and so were from those who were armchair experts on warfighting. The prevailing perception and sentiment running amok was that the pause in Operation Sindoor—a gesture of restraint—was a loss; a comprehensive victory was just days away, or so went the contention, the common refrain, and the public desire. It very quickly became a political slugfest and the decision, nearly a political suicide for the ruling party.

Is strategic restraint a curse word? A weakness? Non-muscular? These questions rise in the minds of the practitioners of warfare and statecraft, and with the common public every time the country has the winning hand. A citizen unaware of ramifications of application of force and the unintended consequences is obviously frustrated, as if unleashing war machinery is like a limited-over cricket match in the Indian Premier League where with more wickets in hand in the last few overs, a faster run rate is mandated to ensure a comprehensive win.

There are numerous considerations for the application of the armed forces, the last tool of diplomacy in statecraft. They range from the geostrategic environment, the economic compulsions, and the political atmosphere, including the rage and capacity of the population to undergo a prolonged warfighting scenario. Military hardware, human resource, morale, logistics, and overall stamina are also factors for consideration. At times, the winning side, in the process of overexploitation after an overwhelming victory, overextends itself—resulting in a severe turnaround, isolation on the world stage, economic setbacks, and strategic reverses. The strategic leadership, particularly the political dispensation leading the country, must be mature to ensure stringent escalation control, and restraint and rein in the military at the most appropriate position of strength, after which the direction and trajectory of the conflict or war cannot be anticipated. The recent example of the Russia and Ukraine conflict and the German offensive into Russia during the World War II are instructional. This has political cost and only a mature nation and leadership are capable of such a decision.

One needs to argue that all political dispensations, after the debacle of 1962—due to an over reach, with ill-prepared military and no clear mission, which resulted in a severe loss of face for the country—have since matured enough to understand the calibration and management of the military force. The political dispensations, over the past three decades, have shown great sagacity and an understanding of both the power and the limitations of using military force as the final arbiter when other elements of statecraft fail. They have displayed, repeatedly, a far better understanding of the strategic restraint and patience as compared to the strategic community responsible for various verticals of the elements of statecraft. They have also shown a great deal of insight into understanding public emotion and the influence of the geopolitical, economic, and informational environment since 1962. Barring the deployment in Operation Pawan in Sri Lanka, which, again, one could argue was not solely the fault of the political leadership but also the result of certain influences that changed the paradigms of military force applications. In all minor or major interventions/conflicts/wars within and outside the country, since 1962, the armed forces had clear mandates and missions. After achieving the outlined missions within the restrictive guidelines laid out by the leadership of the day, the military force was sheathed again. In each set, the strategic outcomes were immensely favourable. The same shall be in the instant case of Operation Sindoor.

Strategic Restraint in Past Conflicts

The instances of force applications, since 1962, are those where the application of force was nuanced and followed by timely disengagement. The 1967 minor artillery duel at the tactical level in Nathula, the induction of forces through the heli-borne route to stop the Chinese in Sumdurong Chu in 1986-87, and the air-borne induction of forces for Operation Cactus into the Maldives in 1988 were mission-specific and the escalation was controlled.

The economic and diplomatic rise of India in the past decade has been unprecedented in a rapidly evolving and complex geopolitical and economic environment. This rise has not been appreciated and, therefore, there has been a great amount of friction. Yet, the calibrated and proportional response to the Uri incident through a surgical strike in 2016, followed by the Pulwama

incident responded by the Balakot strike across the IB while retaining the escalation control against an irrational neighbour, is a textbook case of restrained application of military force to meet the internal political aspirations and showcase the political and national will to the external environment.

Similarly, through the careful management of the Doklam incident in 2017 and the Galwan Valley imbroglio of 2020 against a far more powerful adversary (economically, militarily, technologically, and diplomatically), the country ensured that the military situation did not spiral out of control. It came out on top with the focus remaining on the long-term agenda of *Viksit Bharat@2047* (Developed India at 2047).[6]

There are many other examples of politically mature strategic decisions that were marked by restraint and patience; however, the 1971 War, the Kargil Conflict of 1999, and Operation Sindoor in 2025 serve as case studies in the consistent application of strategic patience and restraint, despite being undertaken by different political and military leaderships in contrasting geostrategic environments.

Therefore, in 1971, even when the rout in the Eastern Sector was completed within two weeks, more than half of the Pakistani Army had been taken as prisoners of war, and its morale was at its lowest, the government of the day called off the war. There were segments in the military dispensation and political leadership who wanted to push the advantage in the Western Sector, where operations could have been progressed by sidestepping the high on morale forces from the Eastern Sector. However, the politico-military objectives had been met and there was no reason to prolong the conflict. This maturity comes to those responsible and maybe it is cultural. The strategic outcomes were phenomenal once restraint was exercised and the urge to continue beyond the success achieved was controlled. India emerged as a responsible nation that had exercised the ultimate and the last tool of state policy—the military—to ameliorate the conditions of millions of Bengalis in the erstwhile East Pakistan who were being butchered, raped, and pillaged by the brutal force of Punjabi-led Pakistani Forces. There was *jus ad bellum* (the right to go to war) to cross the IB, and once the Pakistan Army offered surrender, there was no need to push the military offensive further. The last tool of statecraft was sheathed.

Conflict/ Operation	Year	Action Taken	Restraint Shown	Strategic Outcome
Nathula Clash	1967	Tactical Artillery Use	No escalation	Tactical advantage maintained
Operation Cactus	1988	Airborne insertion	Mission-specific withdrawal	India's regional leadership reinforced
Kargil Conflict	1999	Offensive in LoC sector	No expansion beyond LoC	Global credibility, sanctions lifted
Balakot Strikes	2019	Cross-border air strikes	No wider war	Counterterror message sent, 6-year calm
Operation Sindoor	2025	Precision attacks	Stopped post-Pak DGMO request	Redefined regional doctrine on counterforce

Table 1: Past Operations

Source: *Compiled by the author*

Strategic Restraint Amidst Escalation

India gained international respect for its responsible behaviour and its military might was acknowledged by the world. The country could focus on other pressing issues of looking after the population, uninterrupted by the enemies in the North and West. There were many other strategic outcomes, but the most important was that the stature of India grew worldwide as a peaceful and responsible nation, despite a powerful and professional military, and peace in the region prevailed for nearly three decades to come out of the poor economic conditions in which the colonial masters had left at the time of independence.[7]

Similar strategic restraint was witnessed in the Kargil War of 1999. Once the politico military objectives were achieved within the laid down restrictions of the government of the day, the ceasefire was accepted and India emerged as a responsible and mature nation in a strife-ridden subcontinent and was able to unshackle the chains of sanctions and isolation imposed in 1998

by the world community after the nuclear test.[8] The alternative was to have scaled up the conflict in depth through the employment of air force and/or expanding the conflict areas elsewhere into full-scale war without detailing other strategic outcomes. It is important to highlight that the current economic progress and India's rising stature across all elements of national power are the result of the strategic restraint exercised by the government of the day. The leadership took a decisive call to evict the intrusion, established clear parameters for conflict management, and called off the current operation once all key mission objectives were accomplished. The levers of control for escalation were kept in safe and mature hands.

Operation/ Event	Year	Strategic Action Taken	Restraint Shown	Strategic Outcome
Kargil Conflict	1999	Limited use of air power	Yes	Diplomatic success, image of restraint
Balakot Airstrikes	2019	Targeted non-military assets	Yes	Global legitimacy, de-escalation
Operation Sindoor	2025	Specific precision strikes	Yes	International respect, peace preservation

Table 2: Strategic Restraint

Source: *Compiled by the author*

A similar situation is evident in the current scenario of Operation Sindoor. Popular sentiment across the nation—particularly amplified by the media—calls for a war to decisively finish Pakistan. China and the deep state led by the military-industrial complex of the Western world wants the conflict to continue, if possible, scale up. The rest of the world does not care. The decision to hit the pause button—when the country was ahead and the military-terror infrastructure was being effectively targeted—is nothing short of political suicide, particularly in India, where actions are often politically motivated and rarely driven by national security considerations. Yet the government, which had laid out a clear and unambiguous mission for the armed forces, decided to call off the assaults the very next day of the first strike on 06/07 May 2025 and the same was offered to the Pakistani

establishment. The proportional, precise, and specific targeting of only the terror infrastructure—including their headquarters—while excluding military targets on the first night, and then gradually scaling up to include military targets in subsequent nights, solely to signal non-escalatory intentions to both Pakistan and the international community, is extremely challenging and difficult to execute.

The escalation control was firmly in the powers of the government that was also exercising other tools, such as suspension of the Indus Water Treaty, on the table to tighten the levers. Whatever the reasons may be—left to imagination and speculation—the Pakistanis sought the mediation from the US administration, which seized the proverbial 'Last Straw' to salvage some credibility, having promised to end the Ukraine–Russia conflict within a day of taking office, but failing to deliver even after five months of swearing in. The Indian government paused Operation Sindoor only after a formal request by Pakistani DGMO on 10 May 2025.

Establishing a New Normal in Regional Security

With application of only a fraction of military power and far less than that in terms of the national power, the assigned politico objectives were achieved. The number of strategic outcomes of the 88 hours of display of military prowess were significant. The popular and emotional angst of the nation was met with the strikes at nine major terror hubs across, including the global Headquarters of JeM, LeT, and Hizbul Mujahideen.

In terms of strategic outcomes, a new normal has been established by India in the subcontinent aka the American way of 'War on terror'. India will deliver punitive strikes by targeting specific and precise objectives at will—such as terror networks, launchpads, training camps, headquarters, and leadership. Additionally, a clear strategic message was conveyed to the international community. Having provided proof of the complicity of Pakistan in terror strikes in Uri, Pulwama, and many others attacks to the world with no avail, India will decide for itself the punishment to terrorists and their masters. The worldview and international organisations' oversight has become irrelevant.[9]

In terms of application of force, limited strikes as punitive punishment has become a new strategic path as it provides a period of intervening peace. After the surgical strikes in 2016, post the Uri terror attack, there was a period of peace for three years till Pulwama in 2019. Thereafter, the Balakot strike, conducted just 12 days later, provided a period of relative calm lasting six years—until the Pahalgam terror attack. A gap between the sub-conventional to conventional has been created for subsequent utilisation by punitive punishment on Pakistan.

Another extremely important strategic shift that has not found adequate space for discussion is the suspension of Indus Water Treaty. Water will be used as a weapon and any treaty signed with any country is up for review if the national security is challenged. A very direct message by the Prime Minister signalling towards the Pakistani people was given on the same recently during a political rally in Gujarat, "I want to tell the people of Pakistan—*sukh chain ki zindagi jiyo, roti khao, warna meri goli to hai hi* (live a life of peace and eat your bread in calm, or else, my bullet is always ready)".[10] He distinguished between the people of Pakistan and the establishment and said, "The people of Pakistan need to come forward to get rid of terrorism in their country. Their youth will have to come forward".[11]

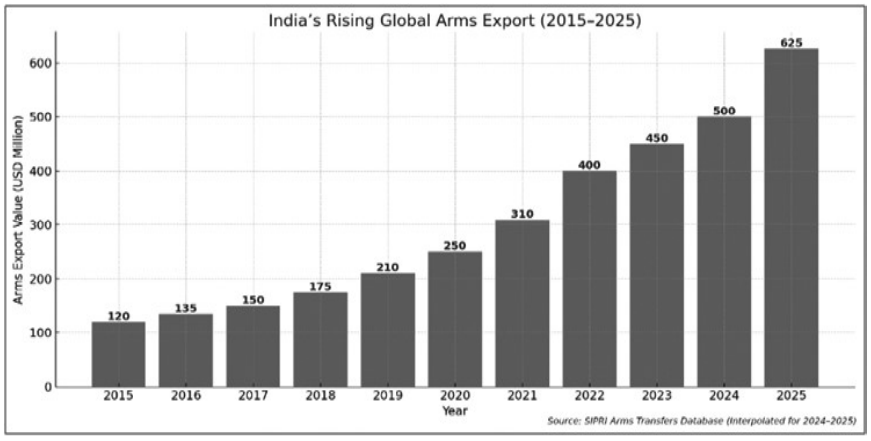
Strategic Validation and Global Messaging

During this short period, a significant degree of validation was achieved across multiple facets of defence transformation. This included reforms in the armed forces, the effectiveness of indigenous systems, and the broader push towards indigenisation and self-reliance through initiatives like *Atmanirbharta* (self-reliance), the induction of Agniveers, enhanced jointmanship, the establishment of the Department of Military Affairs and the Chief of Defence Staff, and the corporatisation of defence public sector undertakings. Additionally, the operational integration of new platforms such as Akash, BrahMos, Akashteer, drones, loiter munitions, and advanced navigation and communication systems into a cohesive warfighting network was also demonstrated. Similarly, the breaching of the Chinese-based air defence systems and attacks on the Pakistani airfields with absolute freedom was an assessment for the Northern Front capabilities. These validations are showing enhanced interest in the world market for the Indian-

made defence products. It is a strategic outcome for not only economic enhancements in terms of export but also a reduction in the import bills, a degree of autonomy in exploitation of in-house developed systems. The finest outcome is the technological investments that will commence within the country through public and private enterprise towards niche and cutting-edge systems.

Figure 3: Weapon Systems Operation Sindoor

Sources: *Machine Maker*[12]*, Current Affairs Adda*[13]*, Military Watch*[14]*, and OrbitsHub*[15]



Graph 1: India's Global Arms Export

Source: *Compiled by the author*

India has reaffirmed its position in the world as a responsible nation that wants to rise in stature for the global good and avoids wars, a message and articulation, which has been the common theme for all political leadership since Independence. The military capacity and capabilities exist but will be exercised with restraint and in a proportional manner when compelled.

The Chinese equipment myth has been shattered. It will affect its military-industrial complex and the desire to export to the countries in the debt grip. The technology might as well have been busted. For a rising economy and a late starter in investment in technology, India had a doubt about itself. That barrier has been broken. The future has opened opportunities for research and development in niche and cutting-edge technology and manufacturing.

The world will intervene and international organisations will come forward to stop a brewing conflict. Moving towards war was a commonplace belief in the strategic environment of the country, even though the failings were obvious in the ongoing Ukraine-Russia and Hamas-Israel conflicts, where the same countries are fuelling war through technology, equipment transfers, and provision of funds. This incapability or unwillingness to intervene—as stated by US Vice President JD Vance on 07 May, the second day of Operation Sindoor—is an important strategic lesson for the political, military, and diplomatic leadership: the country must be prepared for a long war.

Lastly and most importantly, the nuclear bluff of Pakistan was called out. While the debate on the control and the use of nuclear arsenal by Pakistan, when redlines are crossed, will continue, the strategic message is clear—Pakistan will be hit before thinking of the employment of nuclear bomb and the consequences for Pakistan will be devastating.

The Strategic Value of Restraint

There are many more strategic outcomes of the restraint shown during the current imbroglio, the true implications of which can be analysed only after a few years, as articulated by former Chief of the Army Staff General VP Malik, who led the Indian Army during the Kargil conflict. The leadership's shift in understanding—that *Viksit Bharat@2047* will be achievable only with a strong military

that ensures a *Surakshit Bharat* (Protected India)—is an outcome that is incidental.

As on date, there continues to be an emotional high and celebratory environment and cheer within the country which itself is a major strategic outcome and a strong validation coming from across the world of the success of Operation Sindoor. It is, therefore, imperative to understand the true value of restraint in application of military force, because overuse has diminishing returns over time, and it severely retards the overall growth of a country.

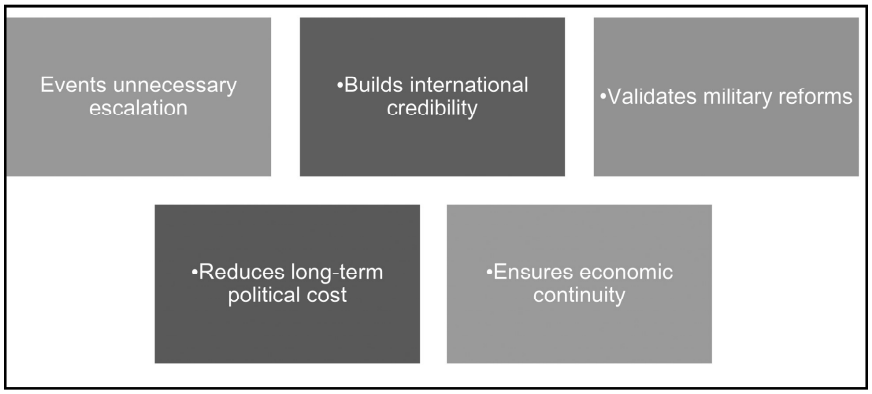


Figure 4: Why Strategic Restraint Pays
Source: *Compiled by the author*

Conclusion

Operation Sindoor stands as a textbook case of responsible and restrained force application. Despite public clamour and political costs, India's decision to halt after achieving mission objectives has reinforced its position as a mature power. The strategic dividends—diplomatic credibility, technological validation, and regional stability—demonstrate the long-term value of military restraint. This article underscores that in the evolving landscape of hybrid warfare, the true test of power lies not just in its application, but in the wisdom to hold it back when needed.

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Trade Policy and National Security: The Geoeconomic Challenge of Trumpism

Dr Sanjaya Baru[@]

Abstract

This article traces the historical evolution and contemporary resurgence of protectionist trade policy in the United States (US), particularly under the Trump and Biden administrations. It explores how trade, technology, and investment are increasingly wielded as instruments of geoeconomic statecraft, especially in the context of rising US-China rivalry. The article argues that India, while benefiting from strategic convergence with the US, faces new economic risks, including tariff threats and transactional expectations. Against this backdrop, it emphasises the imperative for India to strengthen its domestic foundations—economic, industrial, technological, and human capital—to safeguard strategic autonomy. The narrative of 'Rising India', historically driven by gross domestic product growth, now requires a redefinition grounded in manufacturing capacity, defence self-reliance, and global competitiveness. Drawing lessons from both Western and East Asian experiences, the article highlights the need for integrated development in research and development, education, and export-oriented industrialisation to support national security and global standing. This is the essence of India's geoeconomic grand strategy.

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Journal of the United Service Institution of India, Vol. CLV, No. 640, April-June 2025.

Introduction

The resurgence of protectionist trade policy in the United States (US), often justified under the banner of 'Fair Trade', is not without precedent. Historically, the US has oscillated between liberal trade regimes and assertive protectionism—whether in the 1930s, the 1970s, the Reagan era, or the Trump Presidency. In each case, economic anxieties and strategic recalibrations have pushed the US to adopt more restrictive trade measures. The present moment, marked by the US-China competition, rapid technological shifts, and economic nationalism, reflects a broader trend in American statecraft—one where trade, investment, and technology are increasingly leveraged as instruments of geopolitical influence.

Historical Patterns of the United States Trade Protectionism

Responding to European and Japanese competition, the Nixon administration sought to legislate the Trade Act of 1971 that would have raised tariffs steeply. This attempt was, however, foiled fearing a backlash from trade partners. Senator Abraham Ribicoff, Chair of the Senate Finance Committee, undertook a tour of Europe and returned home to warn the US Congress that, if enacted, the Trade Act 1971 would have sparked off a 'Trade War'. In his report on 'Trade Policies in the 1970s', Ribicoff stated that, "Strong threats of retaliation against the US were made by common market spokesmen and by several other countries. Fundamental relationships between ourselves and our closest allies were at stake—but these consequences seemed to have been ignored by our policy makers".[1]

Despite this warning, the Nixon administration persisted, perhaps buoyed up by the successful outreach to China that summer. A Congressional Commission that enquired into the subject of 'National Security Considerations Affecting Trade Policy' (1971), took the view that 'Trade policy is national security policy' and advocated a policy shift from the ideology of free trade. After the dismantling of the Bretton Woods system of exchange rate determination in 1973, which led to a sharp devaluation of the US dollar, President Richard Nixon shifted his focus to trade policy. The Trade Act of 1974 gave enormous powers to the President in the realm of trade and tariff policy. It was in response to the economic challenge posed by the rapid rise of the post-war economies of Germany and Japan that the US Congress enacted the Trade Act of 1974.[2]

The policy instruments made available by the 1974 Trade Act, like Special and Super 301, were deployed by the US against Japan in the 1980s. Walking in the footsteps of Nixon, another Republican President Ronald Reagan weaponised trade policy to force Japan to reduce its export surplus vis-à-vis the US. Providing intellectual justification for Reagan's actions, Harvard historian and the author of the theory of 'Clash of Civilisations', Samuel Huntington wrote an essay on *Why International Primacy Matters*, and focused on the US' 'Economic Primacy'.[3] To quote:

> "In the coming years, the principal conflict of interests involving the US and the major powers are likely to be over economic issues. The US' economic primacy is now being challenged by Japan and is likely to be challenged in the future by Europe. Economists are blind to the fact that economic activity is a source of power, as well as well-being. It is, indeed, probably the most important source of power and in a world in which military conflict between major states is unlikely economic power will be increasingly important in determining the primacy or subordination of states".

In the realm of military competition, the instruments of power are missiles, planes, warships, bombs, tanks, and divisions. In the realm of economic competition, the instruments of power are productive efficiency, market control, trade surplus, strong currency, foreign exchange reserves, ownership of foreign companies, factories, and technology.

President Donald trump has walked in the footsteps of former Presidents Nixon and Reagan. To understand the logic of Trump policies, it is useful to revisit the thinking of American strategists on the importance of geoeconomic dominance and on addressing economic challenges posed by other countries. As early as in 1971, Abraham Ribicoff observed in his report to the Congress:

> "Today, the traditional methods and old slogans of international trade and investment are simply not relevant when dealing with the increased power of the European Economic Committee and Japan. The pre-eminent trading position of the US in the world has faded, and we have run into difficult economic times,… The issue

in 1971 for the US is no longer trade expansion through free trade, but through fair trade".[4]

If it was European Union (EU) and Japan, then today, it is EU, Japan, China, India, and the rest of the world. The central strategic challenge for the US economic policy today is for it to recover and secure its geoeconomic dominance in the global system. After vanquishing the Soviet Union, the US had emerged as the dominant global political and military power. The competition with the Soviets was, albeit, in ideological and geopolitical terms. The Soviet Union imploded due to its economic weaknesses. What is evident today is that, while the US remains the primary global military power, its economic and technological status is being challenged by China. Beijing does not yet pose a geopolitical or military challenge to the US, but it certainly has begun to challenge the economic and technological dominance of the US.

In an important book published in 2012, in the aftermath of the trans-Atlantic financial crisis and the subsequent acceleration in the rise of China, Edward Luttwak (*The Rise of China vs the Logic of Strategy*), advocated the 'Geoeconomic Containment' of China aimed at preserving 'The world's equilibrium without worse forms of conflict'.[5] In Luttwak's view, "The only remaining means of resistance (to China) would then be 'Geoeconomic', to apply the logic of strategy in the grammar of commerce". He suggested that the US restrict trade with China; deny China access to key raw materials; and stop technology transfers that China would still need. All this aimed at 'Impeding China's growth'.[6]

From Decoupling to De-Risking

Advocating a focus on geoeconomics in shaping the US statecraft and foreign policy, Robert Blackwill, former US Ambassador to India from 2001 to 2003 and Jennifer Harris, scholar and former government official specialising in the US foreign policy and economics, advised US policymakers to ask three questions with respect to the country's relations with other countries: How does it affect America's economic position in the world? How can India use geoeconomic tools to advance its strategic interests? How can India shape emerging economic trends to produce geopolitical results beneficial to the US, to its allies and friends, and to a rules-based global order?[7]

It may be recalled that during his first term, Trump followed up on such advice with policy action on trade, raising tariffs of several products. Beijing retaliated, targeting USD 100.0 bn worth of mainly agricultural goods from the US.[8] Former President Joe Biden retained the Trump tariffs and by the middle of his tenure used industrial policy to target China. Biden's Creating Helpful Incentives to Produce Semiconductors for America Act imposed export controls and offered subsidies aimed at benefitting American companies and curbing high tech exports to China. The act specifically sought to support domestic production of semiconductors and limit China's capacity in this area. China called it technology blockade and said it was aimed at controlling their rise. Indeed, technology has become the new battlefront with the US determined to end China's access to western technologies and ensure the continued global domination of the US technology firms in fields ranging from metals to artificial intelligence.

President Trump and President Biden have tried to walk the talk, but it has not been easy. Trump's talk of 'Decoupling' was replaced by Biden team shifting focus to 'De-risking'. For example, while declaring that the US would act when its vital interests are at stake, Janet Yellen, Secretary of Treasury, cautiously added, "But we do not seek to decouple our economy from China's. A full separation of our economies would be disastrous for both countries. It would be destabilising for the rest of the world".[9]

Speaking soon, thereafter, at the Brookings Institution, US National Security Advisor (NSA) Jake Sullivan outlined the US economic strategy aimed at reviving and revitalising the country's economy with a view to re-asserting the US global economic leadership. He ended his talk with the caveat, "We are for de-risking and diversifying, not decoupling" from China.[10]

The US has taken measures to reduce its economic dependence on China. It has also taken measures to restrict China from drawing on the US' technology. More such action can, of course, be expected from President Trump; however, there are limits to what the US can do, imposed by existing dependencies.

While India may face collateral damage because of the actions aimed at China, Trump has repeatedly named India as a target for tariff hikes. What can and will be done and what is done must, of course, be carefully evaluated against what is threatened. The

point to note is that the US may regard India as a geopolitical partner in dealing with China's rise and spreading global influence, but it is beginning to view India as a potential target for the US action with respect to trade and investment.

Navigating the Trump Challenge

The geopolitical reassertion of American interests has worked well for India in dealing with a rising China and instability in West Asia. The US-India strategic partnership has worked well and has broad political support in both countries. Successive governments in both countries have carefully nurtured this relationship. However, on the other hand, President Trump's focus on the bilateral trade imbalance, on Indian emigration, and the larger geopolitical and geoeconomic game of asserting 'America First' is potentially problematic for India.

First, the US has emerged as India's biggest trade partner. In 2024, the total trade in goods and services was estimated to be USD 120 bn. President Trump has targeted the gap between Indian exports to the US and imports from the US, and has said that he expects India to reduce tariffs and further open-up the Indian market to the US exports. What action he would take remains to be seen.

Second, it may be suggested that India has managed to keep its overall trade deficit in check by balancing the high and rising trade deficit with China against a high and rising trade surplus with the US. President Trump could well suggest that India is managing its problem with China by creating a problem for the US.

Over the past quarter century, there have been two different perspectives within the policymaking community in the US on the economic relationship with India. One view has been essentially transactional. What will India do in exchange for what the US does. A second view has been that any US action that benefits India is in itself in the US' interest since India's rise would balance China's growing influence within Asia. If Trump's geoeconomic statecraft places greater emphasis on what the US would get in return for support to India, then more would be expected from India. India would then have to assess what aligns with its own national interests as opposed to what serves the interests of improved US-India relations.

What does this mean for India? To begin with, New Delhi must seek to insulate itself from the collateral damage it may face because of the US' actions against China, even as it aims to benefit from US-China competition. India must take full advantage of emerging opportunities but should also be prepared for actions that could harm its economic interests in the realms of trade, technology, and immigration. Initiatives for technology transfer, begun during the Biden presidency, that have not yet seen much light of day, may get derailed as questions of intellectual property rights and the US strategic interests come to the fore. It remains to be seen how many of the initiatives recently announced during the visit of the US NSA Jake Sullivan to India will fructify and how soon.[11]

At any rate, the US approach will remain increasingly transactional, and it will have to be seen what the quid-pro-quos would be. The US would have interest in increasing its share of Indian defence spending. Washington would also offer opportunities for co-production and technology cooperation where India would also have something to offer in exchange. It should be recognised that US dependence on Indian science, technology, engineering, and mathematics talent as well as on skills offered to the US corporations through Global Capability Centres based in India has increased. Hence, this is already a two-way street to an extent. What must be noted is that Indian talent is voluntarily participating in Make America Great Again (MAGA), while India must seek and negotiate access to the US high-tech.

Beyond managing the 'Trump Challenge', Indian policy must explore other options with respect to foreign trade. India already has several free trade agreements and the free trade agreement with the United Arab Emirates has proved to be of great value. Seeking free trade agreements with the US, the EU and the United Kingdom is one option. India may be well advised to re-examine its options in Asia, looking at membership of Regional Comprehensive Economic Partnership and Comprehensive and Progressive Agreement for Trans-Pacific Partnership.

India's capacity to take advantage of the strategic partnership would depend largely on its own investment in domestic capabilities and capacities. By ensuring *Atmanirbharata* (Self-reliance) in the nuclear and space programmes, despite the US sanctions, India has enhanced its capacity to strike deals with the US in these

fields. Similarly, in the defence and technology fields too, domestic investments will determine the efficacy of external cooperation.

Economic Power as Strategic Foundation

This brings the author to the nub of what constitutes Indian geoeconomic statecraft. The task for India remains what has always been its primary policy goal, namely, to strengthen the economic, financial, scientific, industrial, and technological foundation. Much is written these days about India's 'Grand Strategy'. India's grand strategy has always been about reversing the course of history, recovering the lost space in the global economy, sustaining economic development aimed at improving the lives and well-being of every citizen, and re-engaging with the world economy and global polity on equitable and respectable terms. This brings the discussion to the core of what constitutes Indian geoeconomic statecraft. The task for India remains what has long been its primary policy goal: To strengthen its economic, financial, scientific, industrial, and technological foundation.

The NSA Board (NSAB) stated in its Strategic Defence Review of 2000:

> "Economic power is the cornerstone of a nation's power in the contemporary world. The economic size of a nation matters and is an important element of national security. Low economic growth, low productivity of capital and labour, inadequate investment in human capital and human capability, and a reduced share of world trade have contributed to the marginalisation of the Indian economy in the world economy."

The NSAB then went on to state, "The economic security challenge for India is to pursue above average national income growth at the annual rate of 7.0 to 8.0 per cent so that India's share of world income is commensurate with her population size and a larger economic base can more truly reflect India's status in the global arena".

The Arithmetic of Rising India

The required economic agenda emphasised improved human development indicators, increased public investment in education and public health, an improvement in the fiscal indicators and capacities of the governments of the union and the states, an

increase in the share of manufacturing in national income, an investment to Gross Domestic Product (GDP) rate of above 30 per cent, improved competitiveness of domestic enterprise and, as a consequence, an increase in India's share of world trade and investment flows. All these remain goals even today, despite an improvement in the record over the past quarter century.

It is useful to remember that the 'Rising India' story was built on three simple numbers. From 1950 to 1980, the Indian economy grew at an annual average rate of growth of 3.5 per cent. This was only marginally lower than between 1980 and 2000, when India grew at an annual average rate of 5.5 per cent, while China's growth accelerated to double digits, averaging close to 10 per cent. This was a significant improvement from China's earlier growth, which had been closer to 4.0 per cent. In the period 2003 to 2011, the Indian economy grew at around an average rate of 8.5 per cent. Thus, while India lagged behind China, it too demonstrated the capacity to grow at higher rates. India's rapid rise in the period 1995-2010 altered the geopolitical discourse around India.[12] The three numbers—3.5, 5.5, and 8.5—defined a certain narrative about Rising India.

The recent deceleration in India's economic growth to an average annual rate of 6.5 per cent has, therefore, to be reversed. Even the anticipated annual average rate of growth over the next five years remains pegged at 6.5 per cent. India would still be among the world's faster growing economies, but this is not adequate to catch up with East Asia, especially China (as shown in Table 1).

1950-1980	3.50
1980-2000	5.50
2003-2011	8.50
2011-2020	6.40
2020-22	Covid Years
2023-24	8.20
2006-2024	6.33
2024-2030	6.50 (forecast)

Table 1: India: Real Gross Domestic Product Growth Rates (Factor Cost)

Source: *Compiled by the author*

India must set its sights higher, aiming to achieve growth rates upwards of 7.5 per cent—not only to generate more employment and industrial capability but also to mobilise the fiscal resources required for human development, social and physical infrastructure, and defence capability.

Manufacturing as Strategic Backbone

It has become fashionable among some economists to claim that, since India has performed well in the services sector, the country can continue to focus on services and need not be overly concerned about its inadequate manufacturing capacity and capability. This is a spurious argument. Manufacturing must be viewed both from the viewpoint of its ability to generate low and semi-skilled, non-farm employment as well as from a purely national security perspective. A robust and globally competitive manufacturing sector is the foundation of national defence capability. *Atmanirbharat*a in defence cannot be attained as a stand-alone goal. It can only be attained on the foundation of a robust domestic manufacturing base.

It is not a coincidence that economies with a large industrial base like Britain, France, Germany, Japan, the US, and China also host many arms manufacturing firms. Of the world's top 100 companies in arms manufacture and military services, 40 are listed as the US firms, eight as Chinese, seven are British, and five each are based in France and Germany. India has only three defence-related firms, all public sector companies, in the top 100. At least one objective of Trump's 'America First' and MAGA strategy is to in fact improve the global competitiveness of the US manufacturing, including arms manufacturing.

India remains import-dependent in arms and the on-going global battle for market shares in defence sales has been between various suppliers to India—Russian, American, and European. Since 2005, when India signed the defence cooperation agreement with the US, Russia's share in India's defence imports has declined and the US share has increased. These are well-known facts. The so-called 'Strategic Partnerships' between India and western powers have largely been about securing access to the Indian arms market. During the recent visit of Prime Minister (PM) Modi to the US, President Trump has pushed for increased defence sales to India. To view defence purchases from the US, a means of bridging the trade deficit, would be misplaced and wrong.

Strategic Autonomy Needs Industrial Strength

Defence equipment imports create strategic dependencies and so must be viewed as part of a wider strategic partnership rather than merely as import of goods. It is not in India's interests to continue to be import-dependent in defence and much less to be dependent on a single major source. Reducing India's dependence on Russia and widening its options is a well-advised move. This process should not end up in some other country replacing Russia as the dominant source of defence equipment. For India to become self-reliant in defence capability, it is imperative that the domestic manufacturing base widens and grows. Industrialisation and technological development at home provide the foundation of defence capability.

The United Service Institution has hosted an important initiative on '*Atmanirbharata* In Defence Capability'. Recently, the Chief of the Air Staff cautioned that *atmanirbharata* in defence cannot be at the expense of national security.[13] There is a view that since public sector enterprises have not delivered adequately in this field, government policy must encourage private enterprise and foreign investment. The bottom line, however, is that self-reliance in defence capability cannot be pursued as a standalone strategy. It must be an integral part of a larger strategy of industrial development that has several components. Be it public sector or private sector, what is needed is technological capability and investment in Research and Development (R&D).

The modernisation and technological development of the defence and strategic sectors cannot be pursued independently of the overall development of industry and of R&D capacity and capability. The example of the Soviet Union testifies to this. The Soviets had out-performed the West in nuclear and space technologies and developed advanced capabilities in defence manufacturing. Yet, the Soviet Union could not catch up, leave alone compete, with the West in a wide range of manufacturing and services sectors. It is the East Asian economies that developed faster investing in industrial and technological capabilities.

To begin with, enhanced investment in education, technical skills, and R&D is required to make Indian firms globally competitive. Industrial production must be to-scale in a globally competitive and integrated world. Securing economies of scale

will require manufacturing not only for the home market but also for the global market. It is this understanding that would have encouraged the PM to modify his initial Make in India policy as 'Make-in-India, Make for the World'. India has been seeking to increase its share of the global arms market. In doing so, India may have opportunities to collaborate with certain countries, as it has in exporting BrahMos missiles to Vietnam and the Philippines, or arms to Egypt and the Gulf. However, this will also run the risk of coming up against competition with existing partners. Careful calibration of the manufacturing and exporting strategy with diplomacy will be required. After all, today's partners may become tomorrow's competitors, if not challengers.

Conclusion

As global economic power shifts and great power competition intensifies, India's challenge is two-fold—managing external pressures, particularly from the US, while fortifying its domestic economic and industrial base. The foundation of India's geopolitical and defence capabilities lies not merely in partnerships but in sustained investments in innovation, manufacturing, education, and global competitiveness. The narrative of Rising India must now be redefined not just by high GDP growth, but by strategic self-reliance, robust industrialisation, and effective geoeconomic statecraft. This is the essence of India's grand strategy: Reclaiming its rightful place in the global order through enduring internal strength.

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United Nations Peacekeeping in Ukraine: Is it a Possibility?

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Abstract

The Ukraine conflict, ongoing since 2014 with Russia's annexation of Crimea, escalated when Russia again invaded Ukraine in Feb 2022. Despite efforts by the United Nations (UN) and world leaders to negotiate a settlement, the war persists. However, recent developments suggest that a potential ceasefire may be gaining momentum. If a ceasefire is achieved, establishing a monitoring mechanism will be crucial to ensure its effectiveness. Two key challenges will arise: determining the mechanism's structure and deciding on participant composition. The possibility of deploying UN peacekeepers to oversee the ceasefire has been discussed. This article examines the options available to the international community if a consensus is reached on utilising UN peacekeepers for ceasefire monitoring and explores the structural and operational considerations necessary to support such a mission.

Introduction

The latest initiative by the United States (US) to bring an end to the Ukraine war has brought some hope. Presuming Russia and Ukraine may be amenable to a role in United Nations (UN) peacekeeping in the supervision of the ceasefire, various authors have already explored the technical elements of a ceasefire and who should monitor the ceasefire.[1] Not that the feasibility of peacekeeping as a conflict management tool in Ukraine had not been explored earlier.[2] This article proceeds under the assumption

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Journal of the United Service Institution of India, Vol. CLV, No. 640, April-June 2025.

that there will be a ceasefire and UN peacekeeping will be an acceptable option for supervising the agreement.

The Context

Adhering to the principles of peacekeeping is one of the primary conditions for a UN peace operation to succeed.[3] However, strictly adhering to the principles is not always easy because of their inherent ambiguity in interpretation. Even if Russia and Ukraine agree to let the UN monitor a ceasefire, the consent may not be absolute but conditional. Some of the conditions can even be implied. This will be a challenge. Conditional consent would imply the host state agreeing to the deployment of the peacekeepers, applying different conditions for the mandate, Status of Force Agreement, and use of force, etc. For example, before the deployment of UN Operation in Somalia, the rebel leaders remained sceptical of the international organisation's likely hidden agenda. At the same time, the main fighting factions desperately needed the UN to obtain economic aid. Ali Mahdi Muhammad, the then-President of Somalia consented. But General Mohamed Farrah Aideed, a prominent Somali military and political figure, best known for his central role in Somalia's civil war during the early 1990s, had to be persuaded by Mohamed Sahnoun, the Special Representative of the Secretary-General (SG), to accept the deployment of 500 peacekeepers for the protection of humanitarian convoys. Aideed's consent was conditional. He withdrew his consent when SG Butros Butros-Ghali recommended to the Security Council to deploy 3,000 peacekeepers, without consulting either Sahnoun or Aideed. This enraged Aideed, who considered this as a breach of faith. What followed immediately was an escalation of violence.[4] Most of the time, the conditions will not be reduced to writing but will be conveyed verbally during negotiations. Similarly, in the case of Ukraine, the UN focal point must have explicit trust of Russia and Ukraine and understand how best to satisfy both sides. Essentially, for the sake of peace, some strategic compromises will have to be made by the parties to the conflict and the international community.

As regards the use of force, the biggest challenge will come from the non-state actors who are fighting on both sides. Arguably, regular troops—including foreign forces (e.g., from North Korea) and international volunteers on both sides—also pose significant

challenges. These are loose organisations and can easily get out of control of their handlers and may even continue to operate with tacit support from the main parties to the conflict. Another challenge is finding the Troop Contributing Countries (TCCs) that would be willing to participate in such a mission and would be acceptable to both parties. The member states from the West may neither be inclined nor acceptable to Russia. For instance, the idea of 'Coalition of the Willing' is floating around for some time. Such a force, however, is meant for the security of Europe and Ukraine, either in the form of a deterrent force in the absence of a ceasefire agreement or a proper peacekeeping mission.[5] While such an arrangement is likely to be acceptable to Ukraine for peacekeeping—given the context of the Russian invasion—it is unlikely to be acceptable to Russia. At the same time, it might be quite possible to find some neutral European nations (even if smaller in size) to volunteer to contribute their soldiers, depending on the overall framework of the mission and the mandate. At best, their contributions can only be very small in number. Even the capable nations from the Global South may not be inclined to make political and military sacrifices by getting caught in the hostile space, including the mercenaries. These being political challenges, the UN and those who are taking the lead in brokering a ceasefire, hopefully, will be able to find some kind of acceptable solution. Nations contribute to peacekeeping based on their national and strategic interest. Therefore, even listing the likely and willing contenders for peacekeeping will be difficult.

Force Structure of the Mission

Considering the likelihood of a permanent ceasefire and a consensus for UN peacekeeping in the Security Council, the following options can be studied:

- **Armed Contingents Comprising Well-equipped and Well-trained Peacekeepers**. Armed contingents will be expected to enforce the ceasefire violations. The consequences of enforcing peace between Russia and Ukraine might not only trigger another conflict but will bring fatality to the peacekeepers. Enough resources would be required to cover 400 kms of land front, as well as the naval areas of the Black Sea. Besides the geography or complexities of the terrain, the structure of a peacekeeping force will

depend on other factors, such as the aim and mandate of the mission, etc. This can be commented on only after a field visit by the technical team of the UN. Nevertheless, going by the experience of past missions, an armed peacekeeping mission for Ukraine will have to be much bigger than what UN Protection Force was.

- **Lightly Armed Peacekeeping Mission**. In case of a lightly armed mission, weapons are expected to be used solely for self-defence. In the event of renewed violence, such missions can, at best, defend themselves against small arms fire—and that too, only for a limited duration. To put it differently, it is to provide only the bare minimum staying power until the peacekeepers can be extricated to a safe zone.

- **Unarmed Military Observer Mission**. An unarmed military observer verification mission comprising peacekeepers from neutral countries supported by a liaison and coordination mechanism is likely to be more suitable to facilitate a ceasefire. Reporting by unarmed observers drawn from neutral countries will be more impartial.

- **Civilian Peacekeeping**. If acceptable to the main parties to the conflict, even a UN civilian observer mission in line with the Organisation for Security and Cooperation in Europe's Special Monitoring Mission is another option worth considering. So far, these observers have performed well in various missions.[6]

- **Multi-dimensional Observer Mission**. An unarmed observer mission comprising military, civilian, and police peacekeepers can also be effective and provide credibility to the ceasefire verification mechanism. Military peacekeepers would find it easy to deal with foreign militaries in a hostile environment because of their familiarity with the basic military culture. There is potential for civilians to participate in UN observer missions, either independently or, better, by complementing the military peacekeepers in an integrated UN observer mission. Civilians can also bring with them certain nuances of peacekeeping that may go unnoticed by the military peacekeepers in the normal course.[7] Apart from them, police can be equipped with special investigative skills. There

can be situations when there are allegations and counter-allegations; in such cases, police investigation skills come rather handy. The best combination can be found when forensic experts can be built into each team or kept centrally within easy reach.

Recommended Option

Under Chapter VI, peacekeepers, when armed, can use force in self-defence and the defence of the mandate. Use of force, perhaps, is the most controversial of the three principles. The inherent ambiguity in its interpretation, at times created by the scholarly debates and legal experts, is used by some unwilling TCCs not to use force, even while it is justifiable. Besides, the interpretation of how much the minimum is varies. For example, General Rupert Smith, who commanded the UN force in Bosnia, asserted that the application of force should be sufficient to alter the decision-maker's mindset—that is, the individual or party against whom the force is applied.[8]

In Ukraine, a peacekeeping mission with armed contingents, unless stronger than both the Russian and Ukrainian armed forces, will not be able to defend itself. For example, despite being armed with heavy arms, including main battle tanks and howitzers, which is rare in UN peacekeeping, the UN Interim Force in Lebanon (UNIFIL) was not able to prevent an all-out conflict between the Israel Defense Forces (IDF) and Hezbollah. As for self-defence, the UNIFIL peacekeepers were forced into bunkers by the IDF and moving outside the bunkers was possible only when permitted by the IDF. Therefore, there was no utility for armed contingents in South Lebanon, even for self-defence. If one were to pinpoint the reasons for the success of the UNIFIL until the recent conflict, it was more because of an effective liaison and coordination mechanism of the UNIFIL and less of the robust structure of the mission. Such a mechanism essentially involves addressing potential triggers of a major conflict at the tactical level through communication, collaboration, and cooperation.

There will always be a threat to peacekeepers, regardless of the mandate, structure of the force, and how capable they are. Before the IDF invasion of South Lebanon on 01 Oct 2024, the author was under the impression that a robust force like the UNIFIL was a political deterrence to both the IDF and Hezbollah. But the

recent conflict proved him wrong. Deterrence relies on the perceived ability and willingness to follow through on threats or consequences. If the credibility of follow-through is lacking, deterrence may fail. For this, besides the peacekeepers willing to make sacrifices, it needs political and military support from the TCCs. If such support does not come through because of political compulsions, arming peacekeepers to their teeth is meaningless. Would a peacekeeping mission in Ukraine be any different?

Besides, armed contingents, depending on their attitude to peacekeeping, could be seen as intrusive and offensive. Therefore, deploying unarmed observers to supervise the ceasefire agreement will be more cost-effective. In all peacekeeping missions, there is a section of public and civil affairs, generally headed by a senior and seasoned civilian staff member. This section coordinates and supports military peacekeepers with the political content of the conflict. Time is of paramount importance. Hence, integrating them at the tactical level will help diffuse a situation and produce better results.

Though not the primary role of peacekeeping, another challenge will be how best peacekeepers can adapt to peacebuilding-related activities. Post the ceasefire agreement, several international agencies would be working around the clock on reconstruction activities. However, the local populations who have lost lives of their near and dear ones and property will look up to the peacekeeping missions to chip in, especially in the fields of reconstruction and health care, in their respective area of operations. When a multi-dimensional observer mission is combined with substantive capabilities for infrastructure development (such as a force engineering company), demining, and medical care (Level III hospital), it enhances local legitimacy and becomes more acceptable to both sides, thereby, adding to the credibility of the UN. Given the current challenges and looking at the likely advantages over other options, a multi-dimensional observer mission, combined with force assets (as explained above), seems to be more suitable for ceasefire verification in the Ukraine War.

Conclusion

The success of a peacekeeping mission in Ukraine hinges on several crucial factors. Firstly, the mission should only be deployed after a ceasefire agreement has been reached and if there is a

genuine chance of achieving partial success. Without a reasonable prospect of success, investing in a peacekeeping mission would be futile.

Like true for all missions, even in Ukraine, a peacekeeping mission, more specifically a mission with formed contingents (armed), will face several strategic and operational challenges. Among many, ambiguity in the UN peacekeeping norms, especially adherence to the principles of peacekeeping, will be a big challenge. Apart from that, interpretation of the mandate, operational interoperability among the contingents, finding well-equipped and well-trained peacekeepers, presence of non-state actors, interference by the TCCs (in terms of issuing national caveats), restriction of freedom of movement by the parties to the conflicts, including the non-state conflicts, difficulty in removing unexploded ordnances from the operational areas, likelihood of ceasefire violations, and difficulty to verify the violations are some of the main challenges that are likely to come in the way of mandate implementations. Such challenges, however, are not insurmountable. The centre of gravity of the success of a peacekeeping mission in Ukraine at the strategic level is the continuous presence of consent from Russia and Ukraine. Considering that the UN Security Council and the member states would have risen to fully support a peacekeeping mission in Ukraine (if accepted by both sides) and ensure presence of the consent, if the willing member states, instead of issuing caveats, encourage their peacekeepers to make it their obligation to implement the mandate, UN peacekeeping in Ukraine is possible.

Another important success factor is the need for effective leadership. A leader who can think and act from both a political and military perspective—a rare combination of skills. In the context of Ukraine, the leader heading the peacekeeping mission must be able to navigate the delicate balance between Russia and Ukraine, where a single misstep could light the short fuse and reignite the conflict. A military practitioner with diplomatic skills, adequate mastery over the language, who can think and make quick decisions, factoring both political and military dimensions would be ideal for this role. While with adequate training, a military leader will be able to wear the common hat of a political and military leader, the opposite is not true. Furthermore, the Ukraine conflict has highlighted the renewed possibility of large inter-state conflicts,

making it essential to explore alternative models for conflict resolution.

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Spider Web: An Attack with Far-Reaching Implications

Major General Jagatbir Singh, VSM (Retd)[@]

Abstract

The article examines Operation 'Spider Web', a covert Ukrainian drone strike that penetrated deep into Russian territory, targeting strategic airbases with unprecedented precision. Blending elements of magical realism and cutting-edge warfare, the attack bypassed Russia's formidable air defence by launching first-person view drones from within its borders, employing smuggled commercial technology, remote control systems, and likely artificial intelligence-assisted targeting. This marked a tactical shift in modern conflict, demonstrating how low-cost, improvised systems can inflict high-value damage. The article details the operational ingenuity, including clandestine transport, remote launches, and use of open-source autopilot frameworks. It underscores broader implications for airspace management, the vulnerability of rear areas, and the necessity of adaptive defence strategies. Drawing lessons for India, the article calls for regulatory oversight of drone manufacturing, enhancement of counter-drone capabilities, and a whole-of-nation approach to emerging threats. Ultimately, the operation exemplifies how technological innovation, not just firepower, is redefining warfare.

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Journal of the United Service Institution of India, Vol. CLV, No. 640, April-June 2025.

Introduction

Magical realism is a genre of writing that blends fantasy and reality in a way that feels natural and believable. On 01 Jun, drone-based operations on Russia launched by Ukraine striking five airbases deep inside Russian territory aligned both fantasy and reality, which prompted the Economist to rank it 'Among the greatest military raids in history'.[1] Soon after, the Russian Defence Ministry said in a statement, "Today, the Kyiv regime staged a terror attack with the use of First-Person View (FPV) drones on airfields in the Murmansk, Irkutsk, Ivanovo, Ryazan, and Amur Regions".[2] Ukraine, stated that at least 40 aircrafts had been damaged, specifying that these included nuclear capable Tu-95 and Tu-22 strategic bombers, earlier used to 'Bomb Ukrainian cities'. Russia's Defence Ministry only confirmed that "Several aircrafts caught fire".[3]

Two of the airbases struck, Olenya and Belaya, are around 1,900 kms and 4,300 kms from Ukraine. The first is in the Russian Arctic and the other in Eastern Siberia. The operation is another example of just how rapidly technology and innovative thinking are changing the battlefield. It marks a turning point in how low-cost, improvised unmanned systems can be employed with strategic impact deep behind enemy lines. To quote the Economist, "New technology deployed inventively can be lethal".[4]

The increasing and innovative drone deployment, concealment, and fusion with precision weapons undoubtedly shows the asymmetric power of low-cost high impact operations.

The Conduct

The Ukrainian media claimed that the large-scale special operation was conducted by *Sluzhba Bezpeky Ukrayiny* (SBU), Ukraine's Special Security Service. The planning and preparation started 18 months ago. Russia has highly capable Air Defence (AD) systems and so, it was impossible to strike it from Ukraine. Hence, a plan was made to hit Russia from within Russia, thereby, by-passing its AD wall. The operation has been launched under a special operation, code-named *Pavutyna* (Spider Web), aimed at degrading Russia's long-range strike capabilities. President Volodymyr Zelenskyy congratulated SBU head Vasyl Maliuk for the 'Absolutely brilliant result' of the operation.[5] Ukraine reportedly planned the attack for a year. The drones were packed onto pallets inside

wooden containers with remote-controlled lids and then loaded onto cargo trucks, with the crates being rigged to self-destruct after the drones were released, obliterating forensic evidence and preventing Russia from analysing the technology used. These cargo trucks then smuggled the drones into Russia, blending with normal Russian highway traffic. The trucks were camouflaged with wooden structures, likely posing their payload as cargo shipments, such as lumber or construction materials.[6] Some of these may also have had false license plates or forged documents to pass Russian checkpoints unnoticed. As an added advantage, Russia's vast road network and relatively porous internal transport system made it hard to monitor every vehicle. The trucks were then apparently driven to locations near airbases by drivers who were seemingly unaware of their cargo. Finally, the drones were launched and set upon their targets.

Roofs of the wooden cabins carried by the trucks were opened by remote control, with the drones being simultaneously launched to attack Russian airbases. Once launched, these aerial vehicles relied on Global Positioning System/inertial guidance systems to fly autonomously toward distant Russian airbases. The drones were adapted to FPV multirotor platforms, which allows the operator to get a first-person perspective from the aerial vehicle's onboard camera.

Apparently, Ukraine used North Atlantic Treaty Organization-supplied satellite data and Intelligence, Surveillance, and Reconnaissance (ISR) to identify the exact positions of Russian bombers, gaps in radar coverage, and safe launch zones deep inside Russia.[7]

Videos circulating online show the drones emerging from the roof of one of the vehicles involved. A lorry driver interviewed by Russian state outlet *Ria Novosti* claimed that he and other drivers tried to knock down drones flying out of a truck with rocks. "They were in the back of the truck, and we threw stones to keep them from flying up, to keep them pinned down", he said.[8]

Using 117 drones, Ukraine was able to reach regions thousands of kilometres from the front, compared to its previous attacks which generally focused on areas close to its borders. Once the drones were launched from within their territory, Russia's defences had very little time to react, as the aerial vehicles bypassed swiftly border surveillance.

The SBU stated that the strikes had managed to hit Russian aircrafts worth USD 7 bn at four airbases. The cost curve, using relatively cheap systems to destroy billions of dollars' worth of Russian combat power, has also been turned on its head.

As per reports regarding Operation Lion, Israel's Mossad had smuggled weapons into Iran ahead of the 13 Jun strikes, establishing a base of operations from which it remotely launched explosive-laden drones and positioning short-range, precision weapons near critical surface-to-air missile systems.[9]

This base played a pivotal role in the early stages of the operation, with Unmanned Aerial Vehicles (UAVs) launching overnight to neutralise surface-to-surface missile launchers, radar systems, and AD networks. These strikes from within were not high yield in firepower but strategically designed to create temporary blind spots in radar coverage and confuse ground coordination during the critical opening moments of the Israeli air campaign. The base was established through gradual smuggling of drones, surveillance gear, and command modules via Mossad intelligence networks, and is believed to have operated with local assistance from sleeper cells or sympathetic insiders. This is similar to what was witnessed in the Ukrainian drone strike on Russian strategic assets.

Use of Commercial Technology

Ukraine demonstrated a hybrid approach to drone warfare that combined remote human control with elements of autonomy and potentially Artificial Intelligence (AI)-assisted functionality. While the operation was not fully autonomous, the available evidence suggests that AI likely played a supporting role in both flight stability and targeting, particularly in enabling precise strikes on vulnerable components of high-value aircraft.[10]

Apparently, the FPV drones were controlled through Russian mobile telecommunications networks, including 4G and Long Term Evolution (LTE) connections. These networks provided sufficient bandwidth to support real-time video transmission and command inputs across vast distances, allowing Ukrainian operators to manage drone flights from outside Russian territory. This avoided the need for any physical ground control stations or nearby operators. As per reports, the drones relied on a software-hardware system built around ArduPilot, a widely used, open-source autopilot framework designed

for UAVs. In this case, each drone was integrated with a compact onboard computer, connected to a webcam and an LTE modem via Ethernet. The camera feed was used for visual navigation, while control signals were routed through ArduPilot.

In addition, AI-assisted targeting appears to have been integrated into the drones' attack logic. According to open-source intelligence, SBU teams studied construction and visual profiles of the targeted aircraft to identify precise weak points which enabled rapid and precise final-stage manoeuvring during the dive attack.

Ubiquitous Role of Drones

Drones first came to the fore during the Azerbaijan-Armenian Conflict, and these were the Turkish TB2 Bayraktar. However, the Russia-Ukraine War has seen the rise of an array of military capabilities including the use of drones en-masse as one-way attack systems previously only used in small quantities.

Prior to the war, drones were associated with remotely piloted platforms, such as the MQ-9 Reaper—a High-Altitude Long-Endurance (HALE) system—and the Heron, a Medium-Altitude Long-Endurance (MALE) system. These were essentially large platforms capable of loitering thousands of feet in the air for days to conduct surveillance missions and/or launch precision Hellfire missiles against potential targets.

Military drones, also known as unmanned aerial vehicles, are broadly categorised by their size, mission, and capabilities. These include micro/nano drones, tactical drones, MALE drones, HALE drones, and unmanned combat aerial vehicles. They are used for reconnaissance, surveillance, strikes, and logistics.

There is also the tactical use of quadcopters for small-unit surveillance, FPV one-way attack systems flown in short ranges into targets, and longer-range one-way attack systems like the Iranian-built Shahed-136, which can go hundreds or thousands of kilometres and it has been used regularly by Russia in this conflict.[11] The use of these drones for attack has become a new, ubiquitous form of conventional warfare. Many are based on commercially-available technology, and they are relatively cheap—from as little as a few hundred dollars to tens of thousands of dollars. They are easy to produce and often have open architectures, which means the software is easy to update in response to jamming or other defensive

countermeasures. AI is being increasingly used to enhance the capabilities of military drones, such as autonomous navigation and target recognition. In addition, there is an increasing employment of smaller drones in swarms working together to achieve a common goal. One-way attack drones of different sizes and ranges at speed and scale have transformed the battlefield. Operation Spider Web also appears to show the growing use of AI in one-way attack drones. AI, in this context, does not mean the most advanced and expensive large language models, but often simple algorithms trained on very specific datasets.

Evaluation

The idea behind Operation Spider Web was to transport small, FPV drones close enough to Russian airfields to render traditional AD systems useless. President Zelenskyy said the attack "Had an absolutely brilliant outcome" and dubbed it as 'Russia's Pearl Harbour', one that demonstrated Ukraine's capability to hit high-value targets anywhere on enemy turf, dealing a significant and humiliating blow to the Kremlin's stature and Moscow's war machine.[12]

"Our people operated across several Russian regions in three different time zones. And the people who assisted us were withdrawn from Russian territory before the operation, they are now safe", the Ukrainian President stated.[13]

Dr Steve Wright, a United Kingdom-based drone expert, told the BBC that the drones used were simple quadcopters carrying relatively heavy payloads.[14] However, in his view, what made this attack 'Quite Extraordinary' was the ability to smuggle them into Russia, and then launch and command them remotely. This, he concluded, had been potentially achieved through a link relayed through a satellite or the internet. Although the full extent of the damage from these Ukrainian strikes is unknown, the attacks showed that Kyiv was adapting and evolving in the face of a larger military with deeper resources. As per Justin Bronk of the Royal United Services Institute, "If even half the total claim of 41 aircrafts damaged/destroyed is confirmed, it will have a significant impact on the capacity of the Russian long-range aviation force to keep up its regular large-scale cruise missile salvos against Ukrainian cities and infrastructure".

Lessons Regarding Air Space

Nations treat their airspace as sovereign, a controlled environment that is mapped, regulated, and watched over. AD systems are built on the assumption that threats come from above and from beyond national borders. Yet, Operation Spider Web exposed what happens when countries are attacked from within. The drones flew low, through unmonitored gaps, exploiting assumptions about what kind of threat was faced and from where. In low-level airspace, responsibility fragments and detection tools evidently lose their edge.

As per Lieutenant General Ashok Shivane, former Director General Mechanised Forces, "AD grids are designed to track ballistic arcs, intercept radar signatures, counter drones, and maintain exclusion zones. None of those countermeasures apply when the threat is pre-assembled behind the lines, activated by remote control, and flown by handheld devices. Russia's vast AD network was not breached; it was bypassed. And that distinction is fatal". [15]

Spider Web worked, not because of what each drone could do individually, but how the operation was designed. The cost of each drone was low, but the overall effect was high. This is not just asymmetric warfare, it is a different kind of offensive capability for which nations need to adapt. Beyond the battlefield, the impact of this operation is perhaps even more significant. What Spider Web confirms is that the gaps in airspace can be used by an adversary with enough planning and the right technology. They can be exploited not just by states and not just in war. The technology is not rare, and the tactics are not complicated. What Ukraine did was to combine them in a way that existing systems could not see the attack coming. It also shattered the illusion that distance ensures safety. This is now a universal vulnerability and a defining governance challenge of drones in the low-level airspace. This means that airspace is widely accessible. It is also difficult to keep out drones with unpredictable flightpaths. It showed how little the margin for error is in an airspace where cheap systems can be used with precision. As demonstrated, the cost of failure can be strategic.[16]

Lessons for India

The ability to use precise mass capabilities at speed and scale especially when fused with advancing AI for guidance places enormous pressure on defensive measures. The technology, which used to be available only with the armed forces of nations are now highly adaptable by non-state actors. An example that comes to mind is the targeting of commercial shipping in the Red Sea by the Houthis. But what is more concerning is the use of sleeper cells or local support to facilitate use of this technology which now renders even areas in depth as vulnerable. Anyone who can smuggle, hide, and pilot small drones can cause destruction with surprise and creativity. The attacks, both in Russia and Iran, therefore, clearly are a case of failure of intelligence.

Rear areas are now increasingly vulnerable. This will necessitate for hardening of shelters to protect assets from attacks, dispersal of critical assets to avoid putting them all at risk in case of an attack, and countermeasures to defeat such drone attacks. Rear-echelon installations and critical infrastructure must now need to be accorded similar security as frontline positions. Anti-drone measures must be put in place to defend high-value targets. There may also be a need develop new tactics and anti-drone capabilities akin to an AD umbrella used to protect an offensive formation.

This strike also represents a widening cost to kill ratio with cheap drones targeting and damaging expensive aerial assets, heralding a new norm in modern warfare which reemphases the impact of drones and non-contact kinetic attacks. This necessitates a re-examination of inventories with expensive weapon platforms needing to be balanced by many cheaper capabilities.

The former Chief of the Army Staff General Manoj Mukund Naravane has also flagged the lack of accountability in India's growing drone ecosystem. "It must be made mandatory for all such companies to register themselves and provide details of their manufacturing or assembly capacities, with a record of sales and verified end-users. An underground market for drones cannot be allowed to flourish", he said.[17] He recommended that all drones be registered at local police stations, including their technical parameters. "Unauthorised possession or sale of drones needs to be made an offence through suitable legislation, on the lines of the Arms Act. All agencies need to work seamlessly to deal with this emerging threat".[18]

As per Major General BK Sharma (Retd), "Defence innovation must be agile, anticipatory, and synergistic to accelerate procurement cycles. The Defence Research and Development Organisation, the armed forces, and industry partners must be galvanised to develop indigenous capabilities, including drone swarms, autonomous intelligence, surveillance, and ISR systems, Electronic Warfare (EW) systems, AI, anti-drone systems, and smart logistics. Operation Spider Web underscores that national security is no longer solely a function of defence forces but merits a whole-of-nation approach".

Solutions can range from low-cost options such as overhead protection and camouflage to EW and jamming, engagement by AD weapon systems and by looking at developing new methods to track and disable drones on approach.

Conclusion

This will undoubtedly go down as one of the most sophisticated covert operations of the Russo-Ukrainian War so far. Ukraine, though outgunned by Russia, has responded by developing a cheap and sizeable inventory of attack drones. The innovative use of these drones has now been clearly exhibited, showcasing the strategic value of this asset.

Though the consequences of the attacks on Russian military capabilities are difficult to estimate at this stage, their symbolic significance is important for Ukraine, as it has been facing setbacks on the battlefront. Kiev, which has banked on expanding the use of domestically produced drones during the ongoing conflict, has now surprised Russia and the world with this new approach. From critical military infrastructure to civilian sites, the vulnerability to small, precise, and hard-to-detect systems is growing. Conventional AD is often ill-suited for this new threat landscape, prompting an urgent call for innovation in early detection, EW, and layered physical defences. Together, these trends point to a future where technological agility, not just industrial scale, determines strategic advantage.

To quote Major General Sharma, "The operation succeeded not through firepower but through a convergence of innovation, decentralised execution, and rapid decision-making. It was a testament to the weaponisation of software and the integration of civilian technology into the fabric of national defence".[19]

There is no doubt that this attack will go down as one of the finest out-of-the-box ideas of this conflict, executed with amazing ingenuity, rendering the entire AD system sterile and raising huge questions regarding the management of airspace with repercussions far beyond the conflict.

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Redefining Defence Acquisitions: Transitioning from Traditional Qualitative Requirements to Technology-Based Procurement

Brigadier (Dr) Biju Jacob, VSM@

Abstract

The contemporary world is characterised by technological advancements, and this has an impact on the defence procurement model as well. The existing General Staff Qualitative Requirement (QR) model negatively impacts agility and innovation, which result in outdated capabilities of the defence forces. This article examines the shift from a QR-based procurement method to Technology-Based Procurement (TBP) model and highlights the importance of adaptability, flexibility, and continuous integration of advanced technologies in real-time. This article highlights the challenges faced by the QR model and what makes TBP model more advantageous. It delineates an implementation framework and outlines a phased approach and essential policy reforms. It further investigates the challenges and proposes risk mitigation strategies, such as a change in management approach, integration of cybersecurity, training programs on modular contracts, and the use of digital tools for all personnel involved in the procurement process. Lastly, the article concludes with tangible recommendations, illustrating how TBP may improve operational preparedness, reduce costs, and foster continuous innovation within defence procurement, which is the need of hour.

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Journal of the United Service Institution of India, Vol. CLV, No. 640, April-June 2025.

Introduction

To ensure national security, the role of defence procurement is crucial, as it provides the armed forces with adequate resources. However, for the longest time, defence procurement has been based on the Qualitative Requirements (QR) process. General Staff QR-based process constitutes predefined specifications, which have rigid standards of compliance. While this model ensures a high standard of quality, it often hinders innovation and adaptability in procurements. The security landscape today is rapidly evolving; therefore, dynamic procurement frameworks are the need of the hour to meet the strategically evolving demands of modern warfare. It is notable that under the QR-based model, the procurement processes often face delays and may result it exorbitant prices. Although this model might inhibit innovative solutions, it surely does offer strategic advantages. This model is comprehensive and emphasises the quality of defence equipment, but it is unable to incorporate cutting-edge technology during the production process. This is where the Technology-Based Procurement (TBP) model comes to the forefront. Even in the United States (US) Department of Defense, the procurement often encounters delays. This has led to them adopting the TBP model, which lays emphasis on adapting updated technologies in defence acquisitions.[1] Therefore, this article explores the feasibility of TBP model by analysing the limitations of the QR-based procurement model. The aim is to outline a resilient framework for procurement system, which incorporate advancing technologies in real-time and explore the pathway to transition from QR-based model to TBP model steadily.

Analysis of Qualitative Requirements-Based Procurement Process

The QR-based procurement process in defence is characterised by a detailed criteria for military acquisitions, which ensures that the procured equipment meets stringent standards and maintains uniformity across products. The primary stakeholders in this process include government bodies, procurement agencies, and department of defence, and all these agencies collaborate with each other to ensure that all acquired products adhere to adequate standards and comprehensive specifications for defence acquisitions.[2] The primary focus of the QR-based model is to reduce risk; as a

result, it prioritises risk mitigation over flexibility. Therefore, this model constitutes rigid processes, where any change in the initial specification is discouraged or in some cases, even penalised.[3] This type of framework includes detailed documentation, rigorous testing, and stringent standards to exclude and minimise any uncertainties that might occur. While this model takes into consideration quality-control and accountability, it has several limitations.

- **Rigidity**. The entire QR-based model requires strict adherence to criteria and predefined specifications. However, due to rapid technological advancements, the initial requirements often fall out of scope with the emergence of fields, such as Artificial Intelligence (AI), big data computing, and machine learning.

- **Bureaucratic Delays**. The procurement of any equipment requires extensive approvals.[4] Each phase—from requirement assessment to vendor selection to quality assurance—involves multiple levels of authorisation and checks to minimise risks; however, this in turn prolongs the procurement process.

- **Inflexible Process**. It is not feasible to adjust additional requirements or incorporate new changes mid-process; therefore, the model lacks adaptability. It affects the agility of the armed forces by not coping with the changing operational landscapes and emerging dynamic threats. Even if the stakeholders agree to any minor change mid-process, this sole decision again needs to go through a process of revaluations and assessments, which again prolongs the procurement timeline.

- **Innovation**. This in any form is discouraged in the QR-based procurement, primarily because the process requires strict adherence to established criteria and uniformity. This tends to push the defence industry to comply with the standards rather than innovate, as the QR process does not accommodate cutting-edge technologies readily.[5] It is important to note that the service QRs are specific to that service.

Many developed nations, like the US, adopt approaches such as the Advanced Concept Technology Demonstration, where mature technologies are offered to the armed forces, allowing military commanders to assess their operational suitability and, thereby, leverage the nation's advanced scientific and technological capabilities.[6] The Russians adopt 'Baseline Standards', grouped into basic profiles as modular building blocks, which are later refined into functional standards with specific requirements, an approach well-suited for nations relying on indigenous military hardware to ensure effective lifecycle support.[7] Another example is that of England, which makes its procurement decisions in 'Make' or 'Buy' format. This kind of methodology is highly practical, especially for a country which imports military equipment and simultaneously builds it indigenously as well.[8] In fact, even India, under the Defence Acquisition Procedure[9], categorised the procurement and acquisition of military equipment under 'Buy' and 'Buy and make', in addition to the setting up of Innovations for Defence Excellence to support startups in this sector.[10]

Transition to Technology-Based Procurement

The battlefield of today is characterised by technological advancements, such as AI and unmanned systems, as a result, a QR-based model cannot maintain operational readiness. Therefore, it is only appropriate that technology is incorporated into the procurement model, as it would facilitate the adoption of cutting-edge technologies and ensure that the armed forces are better prepared to respond to threats in a dynamic manner. Defence supply chains are becoming increasingly complex, especially since they involve the movement of parts across various countries, which, if not done aptly, runs the risks of slow delivery of critical equipment and supply chain shocks.[11] The TBP model emphasises the importance of goals, such as battlefield capabilities or improved communications. This not only results in shortened procurement timeline but also helps in integrating incremental changes in the defence acquisition procedure. TBP approach helps in aligning with the rapid pace of innovation and advancements, which further increase the operational readiness of the armed forces.[12,13]

Additionally, the TBP model also helps the private sector, especially the tech-focused industries, to collaborate and engage in the defence sector as they refrained from doing so initially because of the rigid structure of the QR model. The TBP model

helps in expanding the supplier base to deliver the products with sophisticated capabilities.[14]

Countries throughout the world are reforming the procurement models, especially in defence. A recent example of this could be the recent policy paper published by United Kingdom (UK) Ministry of Defence titled *Integrated Procurement Model—Driving Pace in the Delivery of Military Capability.*[15] With respect to technology, it is essential to be informed from the very beginning about factors, such as the industrial base and the exportability of any product or technology, to design resilient supply chains. To tackle the emerging geopolitical challenges, the policy considers the options of delivering 'Minimum deployable capability' rather than waiting, which otherwise might be too long. With this policy, the UK is looking into adapting rapidly to the technology opportunities and evolving threats by incorporating their technological 'Know-how' in their design philosophy to meet the export challenge. This policy aims to work on its methodology to come up with the most apt way to cater to spiral development, technological advancement, and procurement method which is not complex.[16]

Some of the key features of the TBP model include real-time data integration, which help the procurement agencies to quickly make informed decisions by considering market trends, risk factors, and capabilities of the supplier, which further helps in minimising any delay in procurement and helps to tackle outdated technology. Unlike the QR-based model, which is static, the TBP model is more agile as it allows the defence forces to maintain operational advantage by swiftly adopting new technologies and reducing procurement cycles. It helps the equipment production to be expanded and upgraded as and when required. Moreover, the TBP has various advantages such as encouraging innovation throughout the procurement cycle, which helps in incorporating all emerging technologies as they develop.[17] It also attracts multiple suppliers to push for a market which is more competitive and innovation driven. Most importantly, it improves the operational readiness of the defence forces as it can adapt latest technologies without extensive delays.

Implementation Framework for Technology-Based Procurement

In contemporary times, the defence industry follows a TBP model, which is structured and is implemented through a phased approach. In addition to this, it also includes policy reforms and stakeholder engagement. For instance, incorporating cutting-edge technology in weapons system is crucial and this can only happen through collaboration with strategic partners.[18]

Technology-based Procurement (TBP) Model - Implementation Framework	**Phased Approach**	**Planning**
		Execution
		Evaluation
	Stakeholder Engagement	**Leadership**
		Procurement Teams
		Technology Providers
		End-users
	Policy and Regulatory reforms	**Flexible Policies**
		Cyber Security Standards
		Private Sector Collaboration

Table 1: Technology-Based Procurement Model—Implementation Framework

Source: *Compiled by the author*

As illustrated in Table 1, a structured approach is essential to optimise the resources, manage risks, and transition to a TBP model. This framework can further be categorised as phased approach, stakeholder engagement, and policy and regulatory frameworks.

- **Phased Approach to TBP**. A phased approach can further be divided into planning, execution, and evaluation. The planning phase sets the foundation of TBP. It establishes

the objectives, timelines, and resource allocations. This phase allows defence agencies to conduct a comprehensive need assessment, wherein TBP can bring immediate and long-term benefits. This phase involves market research to understand the present technologies and potential industry partners. To engage the technology providers enables defence agencies to gauge the feasibility of integrating innovative solutions and to form an outline of procurement strategies that are adaptable to the evolving capabilities.[19] In this phase, strategic roadmaps can be developed outlining short-term and long-term milestones. These effective roadmaps would present measurable benchmarks that enable stakeholders to track progress, identify challenges, and implement corrective measures as prescribed. Another important plan is financial assistance needed, as TBP models often involve incremental funding to support an agile procurement cycle. By breaking down into phases, defence agencies can allocate resources more efficiently, reducing financial strain and allowing more agility in response to the emerging technologies.[20] The execution phase emphasises on active engagement with vendors, iterative testing, and real-time adaptability. This phase would allow defence agencies to implement agile procurement practices, facilitating continuous testing, and refinement of technologies throughout their development. One of the options is to go for modular contracts as they ensure the updating of equipment, as the new technology becomes available. It allows the defence forces to quickly and efficaciously respond to ever-changing operational landscape. It also enables the agencies to monitor progress and performance metrics during the procurement cycle to make data-driven decisions. It is the adaptability during this phase that helps the defence agencies to remain dynamic and adapt new technologies without restarting the entire procurement process again, as was the case with stringent specifications of the QR-based model. The third phase under this approach is the evaluation phase, wherein the primary focus is laid on assessment of the performance of the procured technologies. The factors that are considered are its scalability, adaptability, and performance which further helps the defence agencies in making informed decisions about any future procurements. This phase also constitutes the valuable insights of the end-

users, which serves as feedback and helps in improving usability and efficaciousness of the any acquisitions in the future.[21]

- **Stakeholder Engagement in TBP**. In addition to the phased approach, another factor to successfully transition to a TBP model is effective stakeholder engagement. The primary stakeholders in the defence procurement include defence agencies, civilian leadership, technology providers, and the end-users, and all these stakeholders play a significant role in implementing any model successfully. Leadership is crucial in defence acquisitions because it is responsible for the funding and adequate policy support through continuous commitment. Leaders with the defence agencies and the government can help in pushing for a TBP model by emphasising the benefits of the TBP model, as it is cost-efficient and bolsters innovation. To incorporate technological advancement, the technological providers become equally important in the planning and the execution process, as they facilitate a steady integration. Moreover, the role of procurement teams is significant as it is their knowledge and expertise that allows for greater incorporation of cutting-edge technologies in the field of defence. Finally, end-users also form the crucial part of the procurement process as the acquired products and technologies should be in consonance with the needs and demands of the military personnel. The feedback provided by the end-users is critical as it enhances the overall effectiveness of the TBP model.[22]

- **Policy, Regulation, and Innovation Enablers in TBP**. Policy and regulatory framework form another important pillar of the comprehensive framework of the TBP model, as it is these frameworks that bolster innovation and push for modular contracting. Traditionally, the acquisition procedure emphasised strict compliance with specifications, which were often restrictive in nature. However, the TBP model promotes continuous improvement by encouraging incremental funding and flexible contracting. This type of procurement model helps the defence agencies to procure the components of the project, as and when they become available, rather than waiting for completing of the entire project. Another factor to be taken into consideration is the alignment of cybersecurity

standards with the TBP model. Incorporating technology into the procurement process involves real-time data and potentially vulnerable technologies; therefore, policies must ensure that both suppliers and defence agencies adhere to regular cybersecurity assessments in order to maintain robustness in the procurement process.[23] While the capabilities of the public sector have significantly improved in the 21st Century, collaboration with private sectors is the need of the hour as it would bring expertise in defence acquisition. To encourage private sector collaboration, the government should work on coming up with a single window to accelerate approvals, reduce bureaucratic delays, and simultaneously promote tech-startups. For instance, the US has the Federal Acquisition Regulation, which supports rapid acquisition through programs like the Defence Innovation Unit and encourages innovation by allowing flexible contracting options.[24]

While the shift from the QR-based model to the TBP model is sought after, this transition also presents several challenges that defence organisations must address to ensure effective implementation. The first challenge is to get the traditional stakeholders to adopt the TBP model as they are accustomed to the QR-based approach. The defence procurement has been QR-based since long, therefore, incorporating technology in the process is bound to encounter resistance. A few reasons for this resistance could be the vulnerability and unpredictability of a TBP model and familiarity with the already existing model.[25] Secondly, data security concerns arise as a direct consequence of incorporating technology into any defence acquisition procedure. Defence agencies manage a vast amount of sensitive information, and the use of technology increases the risk of data breaches; therefore, adequate security protocols must be enforced. Finally, the workforce should be proficient and skilled in comprehending modular contracts, real-time data, emerging technologies, etc. This necessitates training and skill development to optimise the benefits of the TBP model.[26]

Risk Mitigation Strategies

To address the risks and challenges for successful TBP implementation, a structure risk mitigation approach is essential. Firstly, a gradual change in management strategy would be highly

effective, the phased implementation allows the stakeholders to adapt progressively, easing the transition from traditional QR-based procurement. Further, early involvement of procurement teams and leadership, along with fostering a culture of innovation, can further reduce resistance to some extent. The leaders can build stakeholder confidence and support by communicating the benefits of the TBP model, such as faster acquisition cycles and increased flexibility. Secondly, the data security risks can be mitigated by integrating robust cybersecurity measures throughout the TBP process. Defence agencies should establish strict cybersecurity standards for vendors, ensuring that any integrated technology meets high security benchmarks and helps mitigate the risk of data breaches. The integrated procurement model would acquire a better military capability.[27] Also, regular cybersecurity assessments, along with vendor compliance with government data protection protocols, become extremely crucial. The real-time monitoring systems can also help detect and address potential threats quickly, minimising vulnerabilities tied to digital integration.[28] With respect to skill development, which is another essential risk mitigation measure, training programs in agile procurement, modular contracts, and digital tools should be available to all procurement personnel. Partnering with technology vendors for specialised training can enhance team capabilities, especially in managing innovative technologies and real-time data. Cross-functional skill development and blending technical and procurement expertise enables teams to effectively navigate TBP's demands.[29] The defence procurement procedure, often amended more frequently than weapon systems, has increasingly served merely as a procedural guide open to flexible interpretations. Therefore, the focus should be on civil-military fusion, with works on cyberspace, AI, space, robotics, and so on, leveraging India's substantial technological and knowledge resources.[30] To conclude, addressing the challenges of TBP requires thoughtful change management, strengthened cybersecurity practices, and targeted skill development.

Conclusion

The adoption of a TBP model necessitates a strategic, phased approach to maximise its efficacy and minimise challenges. The defence agencies should first push for incremental changes, for instance, the entire transition could initially start with pilot programs

to refine the model and tailor it according to India's strategic requirements and defence acquisition landscape. This would help the stakeholders to familiarise themselves with the TBP process based on real-time feedback. Second, the 21st Century has seen a phenomenal increase in the use of information technology across almost all sectors. Therefore, collaboration with experts in the private sector becomes critical for a successful defence procurement process, as it would promote innovation. Third, utilising technology has its cons, primary being its vulnerability to cyber threats. Therefore, strict data protections should be put in place. And lastly, as already stated, all these incremental changes are devoid of foundations if the government does not invest in skill development. To conclude, the transition to a TBP model is transformative step to modernise defence procurement as it would help defence forces to enhance their operational readiness and aim for a long-term success in a rapidly evolving security landscape.

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Peacekeeping as Diplomacy: India's Strategic Future in Global Politics

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Abstract

This article argues that India's peacekeeping engagements, from United Nations Operation in the Congo in the 1960s to United Nations Organization Stabilization Mission in the Democratic Republic of the Congo in the present day, should be understood not only as operational commitments but as deliberate forms of peace diplomacy. Drawing on theories of soft power, strategic narratives, and middle-power diplomacy, the article examines how India's peacekeeping legacy can be reframed as a strategic asset—supporting its aspirations for global leadership. Simultaneously, the article critically interrogates the reputational, structural, and policy challenges that may inhibit India's ability to leverage peacekeeping into lasting diplomatic capital. By repositioning peacekeeping as a site of normative statecraft, the article contributes to a growing body of scholarship that explores how emerging powers engage with and reshape the global governance architecture.

Introduction

India has established itself as one of the most consistent and substantial contributors to United Nations (UN) peacekeeping operations, with a history that traces back to the formative years of the UN's peace enforcement mandate. From the deployment of Indian medical and diplomatic support in Korea during the 1950s to its continued presence in more recent missions such as United

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Journal of the United Service Institution of India, Vol. CLV, No. 640, April-June 2025.

Nations Organization Stabilization Mission in the Democratic Republic of the Congo (DRC) (MONUSCO) and UN Mission in South Sudan (UNMISS), India has cultivated a reputation as a reliable and principled actor in international security governance.[1] While traditionally framed through lenses of humanitarian commitment, non-alignment, and moral responsibility, India's peacekeeping engagements have increasingly been recognised as a strategic asset, a tool to assert normative claims and enhance diplomatic leverage on the global stage.[2]

As the global order transitions toward multipolarity, characterised by shifting alliances and contested multilateral frameworks, India is recalibrating its foreign policy orientation. No longer content to operate solely as a regional actor, India now seeks to redefine its international identity as a normative global power, committed to reforming multilateral institutions, strengthening Global South solidarity, and asserting its candidature for permanent membership in the UN Security Council (UNSC).[3] Within this evolving context, peacekeeping provides a high-impact diplomatic platform through which India can project soft power, foster bilateral and regional partnerships, and craft a self-image as a responsible and pragmatic international actor.[4]

This article contends that India's long-standing and ongoing participation in UN peacekeeping must be understood not only as an operational or altruistic commitment, but as a form of peace diplomacy, a strategic intervention aimed at securing long-term diplomatic capital, and international legitimacy. By reframing peacekeeping through a foreign policy lens, the article explores how India might better integrate this legacy into its broader global ambitions, including multilateral leadership, strategic partnerships, and South-South cooperation. At the same time, it critically interrogates the tensions and contradictions inherent in this strategy: the reputational risks, institutional incoherence, and policy under investment that may undermine its effectiveness.

In doing so, the analysis situates India's peacekeeping trajectory within key debates in international relations, especially those concerning global governance, middle-power diplomacy, and the performative dimensions of international legitimacy.

Peacekeeping as a Diplomatic Asset: A Theoretical Lens

Reconceptualising peacekeeping as a diplomatic tool necessitates a shift away from purely security-centric interpretations toward frameworks that account for its symbolic, normative, and strategic dimensions. Traditionally, peacekeeping has been analysed within the field of security studies, primarily in relation to conflict mitigation, force deployment, and civilian protection.[5] However, a growing body of scholarship has begun to reposition peacekeeping within the theoretical terrain of soft power diplomacy, norm entrepreneurship, and strategic narrative construction.[6]

For India, a state situated at the intersection of postcolonial legacy and rising power status, peacekeeping offers a unique mechanism for the projection of soft power, defined by Joseph Nye as the ability to shape preferences through attraction rather than coercion.[7] India's contributions to peacekeeping, largely undertaken without explicit political or economic preconditions, facilitate the construction of a strategic narrative of India as a principled, inclusive, and multilateral actor. This image aligns with India's long-standing self-positioning as a non-aligned, anti-colonial voice committed to international justice and cooperative security.

Moreover, peacekeeping can be interpreted as a form of performative diplomacy, in which the act of participation serves to perform and reaffirm India's identity as a responsible stakeholder in the global governance architecture.[8] These performances are not merely symbolic; they carry material and reputational implications, particularly in Africa, where India's peacekeeping presence intersects with historical ties, economic cooperation, and South-South development rhetoric.[9] In this way, peacekeeping becomes an instrumental practice for cultivating regional trust, enhancing bilateral relationships, and reinforcing India's leadership credentials in the Global South.

This diplomatic utility is further underscored by the concept of strategic narratives, the use of communicative actions to shape international understandings of a state's identity, intentions, and role.[10] India's sustained presence in missions often neglected by major western powers allows it to frame itself as a defender of global justice, postcolonial solidarity, and ethical interventionism. Such narratives bolster India's claim to multilateral leadership and lend normative weight to its calls for UNSC reform.[11]

Also, the middle power theory posits that states that are neither hegemonic nor marginal can still exert influence by facilitating cooperation, mediating conflict, and shaping norms.[12] India's peacekeeping diplomacy, when viewed through this lens, emerges as a means of accumulating moral capital and symbolic authority, compensating for its historical exclusion from the core decision-making structures of global governance, despite its demographic and military scale.

By synthesising insights from soft power theory, narrative diplomacy, and middle power scholarship, this article repositions peacekeeping as a deliberate and underexploited instrument of Indian foreign policy, a site where global visibility, moral authority, and diplomatic strategy converge.

India's Historical Role in United Nations Peacekeeping

Having participated in over 50 of the UN's 71 peacekeeping operations[13], India stands as one of the most significant Troop-Contributing Countries (TCCs) globally. Its role in shaping the architecture of post-World War II peacekeeping cannot be overstated, having contributed not only personnel but also ideological legitimacy and institutional leadership.

India's involvement began with the UN Command in Korea (1950–54), where it provided a medical unit, signalling its early commitment to humanitarian principles. However, it was the UN Operation in the Congo (1960–64) that marked a turning point. India's military engagement during the Katanga crisis demonstrated its capacity to undertake complex, high-risk missions in postcolonial conflict zones. The performance of Indian officers, such as Major General Indar Jit Rikhye and Rajeshwar Dayal, highlighted India's capacity to contribute not just manpower but also strategic leadership.

During the Cold War, India's peacekeeping footprint expanded across Cyprus (UN Peacekeeping Force in Cyprus), Lebanon (UN Interim Force in Lebanon), and Namibia (UN Transition Assistance Group), where its reputation as a non-aligned, neutral actor enabled it to mediate tensions in ideologically polarised environments.[14] These deployments reinforced India's diplomatic identity within the Non-Aligned Movement, illustrating a form of global engagement rooted in solidarity with newly independent or conflict-affected states.

Post-Cold War, India's involvement intensified with deployments in Rwanda (UN Assistance Mission for Rwanda), Sierra Leone (UN Mission in Sierra Leone), and the DRC (UN Organization Mission in the DRC and MONUSCO). These missions exemplified a shift from traditional peacekeeping to multidimensional operations encompassing humanitarian aid, civilian protection, and institutional rebuilding. Indian medical and engineering contingents were pivotal in restoring critical infrastructure, offering a template for integrated peacebuilding interventions.

Equally significant has been India's gender-inclusive approach to peacekeeping. The deployment of the first all-female Formed Police Unit in Liberia (2007-16) represented a paradigmatic shift, aligning India with the Women, Peace and Security (WPS) agenda under UNSC Resolution 1325.[15] These contributions were both symbolic and strategic, enhancing India's normative credentials within the UN system.

India's peacekeeping strategy may be characterised by three core principles: sustained scale of deployment, emphasis on South-South solidarity, and minimal political conditionality. Despite these contributions, however, India's peacekeeping legacy has not been systematically translated into diplomatic capital, an underutilisation, the author argues, must be redressed to advance India's aspirations for global leadership.

Contemporary Diplomatic Benefits of Peacekeeping

In the evolving geopolitical landscape, UN peacekeeping functions as a strategic conduit for diplomatic signalling, soft power projection, and multilateral engagement. As India seeks to transition from a regional actor to a global leader, its robust peacekeeping legacy offers both symbolic capital and strategic leverage to support its aspirations.

India has consistently outperformed several current permanent members in terms of troop contributions and mission engagement, particularly in protracted and high-risk theatres such as the DRC (MONUSCO).[16] These deployments not only exemplify India's operational reliability but also affirm its willingness to assume substantive responsibility in global security affairs. The country's sustained involvement in such missions strengthens its normative

argument for institutional reform by highlighting its commitment to collective peace and burden-sharing within the UN system.

Beyond multilateral forums, peacekeeping has emerged as a significant vector of India's South-South diplomacy, particularly in its relations with Africa. Through deployments in Liberia, Sudan, South Sudan, and the DRC, India has cultivated goodwill, legitimacy, and trust across a continent central to its multilateral strategy. These missions complement broader diplomatic overtures, such as the India-Africa Forum Summits, by grounding political rhetoric in tangible on-the-ground engagements. In contrast to extractive models of foreign engagement often pursued by other powers, India's peacekeeping presence resonates with narratives of postcolonial solidarity, mutual development, and ethical partnership.[17]

In the context of an increasingly competitive and militarised Asia, where China's foreign policy's assertiveness dominates regional discourse, India's long-standing and ideologically rooted peacekeeping commitments provide an alternative narrative of peaceful leadership and ethical statecraft. Unlike China's more recent and strategically calculated engagement in peace operations, India's contributions are perceived as authentic and principled, enhancing its normative credibility. This positioning is particularly salient in forums, such as Brazil, Russia, India, China, and South Africa, and the Shanghai Cooperation Organisation, where India's peacekeeping identity supports its broader soft power agenda.

India has also adapted to the evolving nature of peace operations, which now encompass institution-building, humanitarian relief, and post-conflict reconstruction. Its deployments of engineering units, medical staff, and administrative personnel reflect a shift toward developmental diplomacy—one that reinforces bilateral ties and projects a more holistic image of India as a stabilising force. These engagements not only bolster India's humanitarian credentials but also build operational trust in the Indian military, fostering pathways for defence cooperation, training partnerships, and regional security collaboration.

A particularly distinctive feature of India's peacekeeping diplomacy is its emphasis on gender sensitivity, as discussed in the previous section. These contributions are not merely symbolic; they advance the global WPS agenda and reinforce India's image

as a progressive international actor committed to inclusive peacebuilding.

Taken together, India's peacekeeping diplomacy functions at the intersection of pragmatism and normativity—projecting a state identity grounded in stability, developmental ethics, and multilateral cooperation. However, the long-term efficacy of this diplomatic tool depends on its strategic integration within India's broader foreign policy objectives. Without deliberate alignment, peacekeeping risks remaining an underutilised asset rather than a cornerstone of India's global diplomatic identity.

Strategic Limitations and Risks

Despite the apparent benefits, India's peacekeeping diplomacy is constrained by a series of strategic and structural limitations that, if left unaddressed, risk diminishing its global influence. Following are some key limitations and risks seeking proper addressing:

- **Fragmented Institutional Coordination**. A fundamental challenge lies in the absence of an integrated policy linking India's peacekeeping operations with its foreign policy objectives. Unlike China, which coordinates peacekeeping with economic statecraft and infrastructure diplomacy, India's efforts remain largely siloed within the Ministry of Defence (MoD), with insufficient synchronisation with the Ministry of External Affairs or India's Permanent Mission to the UN. This lack of strategic messaging has prevented India from converting operational contributions into diplomatic capital. The underutilisation of peacekeeping in strategic forums, public diplomacy, and leadership training programmes reflects a broader issue of institutional incoherence.

- **Reputational Vulnerabilities**. UN peacekeeping has increasingly come under scrutiny due to allegations of misconduct, sexual exploitation, and civilian harm.[18] While India's record remains relatively strong, reputational risks are collective; the failures of one contingent can undermine the credibility of the entire peacekeeping architecture. India's limited transparent disciplinary mechanisms may exacerbate these risks, eroding the ethical legitimacy that it seeks to project.

- **Domestic Apathy and Narrative Deficit**. Peacekeeping remains marginal in India's domestic political and media discourses. Unlike other aspects of strategic policy, such as defence procurement or diaspora engagement, it lacks electoral salience and public resonance. This narrative deficit limits its mobilisation as a soft power instrument and hampers efforts to link peacekeeping with national identity or developmental aspirations.

- **Operational Overstretch and Human Costs**. India's peacekeeping deployments, though diplomatically beneficial, impose a human and logistical burden. With over 180 fatalities till date, India has borne some of the heaviest casualties among TCCs.[19] Concurrent military commitments in the Kashmir Valley and along the Sino-Indian border add further strain, raising questions about sustainability and strategic prioritisation.

- **Competitive Diplomatic Terrain in Africa**: While India's peacekeeping record in Africa has generated goodwill, it must navigate the optics of a former colony deploying troops in other postcolonial states. Moreover, India faces stiff competition from China, Turkey, and the Gulf states, who offer extensive economic incentives, infrastructure projects, and media engagement. In this context, peacekeeping, if not situated within a larger ecosystem of economic and cultural diplomacy, may struggle to sustain influence.

The Future: Peacekeeping and India's Global Political Aspirations

As the international system transitions toward a multipolar order, India stands at a pivotal moment in its diplomatic trajectory, negotiating the tension between its historical commitments to non-alignment and its aspirations for a more pronounced role in global governance. In this reconfigured geopolitical environment, UN peacekeeping offers India a versatile and underleveraged platform to amplify its diplomatic presence, consolidate its normative identity, and assert its credentials as a responsible stakeholder in global affairs. However, to realise the full strategic utility of peacekeeping, India must reconceptualise it not as a subsidiary military or humanitarian endeavour, but as a central pillar of its foreign policy and soft power infrastructure.

A future-facing strategy must begin with the recasting of peacekeeping as strategic diplomacy. India's continued participation in UN missions should be informed by a deliberate alignment with broader foreign policy objectives, ranging from its Indo-Pacific vision and South-South cooperation to its longstanding advocacy for UNSC reform. This necessitates a coordinated inter-ministerial architecture involving the Ministry of External Affairs, MoD, and India's Permanent Mission to the UN, ensuring coherence in narrative construction, mission selection, and diplomatic follow-up. Moreover, India could elevate its influence by focusing on missions that align with thematic priorities, such as gender inclusion, post-conflict development, and regional solidarity, particularly in Africa and the Caribbean. By adopting a mission-driven, ideationally consistent approach, India can move peacekeeping from the margins of its strategic discourse to its centre.

Parallel to strategic deployment is the imperative of narrative construction and visibility. Transforming India's legacy in peacekeeping into diplomatic capital requires active storytelling through military memoirs, cultural diplomacy, oral history archives, and peacekeeping exhibitions. Institutions such as the Manohar Parrikar Institute for Defence Studies and Analyses, the Military Literature Festival, and Indian cultural centres abroad could serve as platforms for narrating peacekeeping as part of India's evolving identity as a humane, peace-oriented power. Public diplomacy initiatives must move beyond numbers and medals to foreground the lived experiences of peacekeepers, the ethical dilemmas they navigate, and the communities they serve.

Further, to sustain and scale its peacekeeping diplomacy, India must invest in institutionalising peacekeeping leadership and knowledge. This involves developing inter-ministerial coordination mechanisms, peacekeeping-focused policy cells, and interdisciplinary training modules that integrate tactical preparation with cultural competence, ethical reasoning, and diplomatic literacy. More importantly, India must maximise creating leadership pipelines that allow military personnel returning from UN missions to transition into policymaking, diplomatic training, or academic research roles, thus, embedding operational experience into strategic statecraft.

India must capitalise on initiating a multilateral mechanism that could facilitate peer learning on ethical challenges, peacekeeper welfare, and accountability frameworks, while advancing a collective voice on reforming the UN's approach to peace operations. By shaping not just practice but the norms governing peacekeeping, India can expand its influence from a participant to a country that redefines how peacekeeping is understood and governed.

Finally, India must ensure that its peacekeeping engagements are intimately connected to its larger agenda of global governance reform. Being one of the largest contributors to UN peacekeeping, India possesses the moral authority to critique and reshape multilateral institutions.

Conclusion

India's contributions to UN peacekeeping are among the most substantial and sustained in the history of the organisation. Peacekeeping offers India a multi-faceted diplomatic instrument: it is at once a vehicle for strategic visibility, a site of normative contestation, and a platform for reimagining multilateralism. However, this potential will remain unrealised unless peacekeeping is embedded within India's long-term foreign policy vision, supported by narrative infrastructure, institutional coherence, and leadership investment.

This article has argued that India must transition from viewing peacekeeping as a subsidiary obligation to understanding it as a cornerstone of its foreign policy toolkit. Through a combination of strategic mission selection, narrative amplification, institutional reform, and multilateral coalition-building, India can leverage peacekeeping as a soft power resource and a platform for global leadership. Such a transformation would not only support India's aspirations for a permanent UNSC seat and greater influence in global governance institutions but also reaffirm its identity as a postcolonial state committed to ethical engagement and inclusive multilateralism.

In an era where legitimacy, narrative, and normative capital are as important as material power, peacekeeping presents India not only with a proud past to commemorate, but also with a powerful future to shape. Whether India will seize this opportunity

may well determine the trajectory of its global role in the decades to come.

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Balancing United States and Chinese Influence in Papua New Guinea: Opportunities for South Pacific Cooperation

Ms Manah Popli[@]

Abstract

This article is an attempt to analyse whether Pacific Island countries are trying to balance between the Chinese and the United States (US) interests in the South Pacific region. It looks at the Chinese attempts to attract South Pacific countries and the Chinese actions to ascertain its interests in the region. Since the region consists of 13 countries and the dynamics between each country with the two global powers are evolving, the article takes up the relations between Papua New Guinea (PNG) with the US and China as a case study. This article attempts to highlight the benefits of the balancing act for the Pacific Island Countries through the lens of PNG. Further, it analyses whether the balancing game is sustainable in the long run. It concludes by briefly looking at the opportunities this regional dynamic might present for India. The analysis indicates that though PNG can maintain a balance between the US and Chinese interests, which has benefited it so far, it would require time and deeper study into different South Pacific countries for a conclusive sustainability argument.

Introduction

The world's attention was drawn to the South Pacific in Jul 2024, as China offered security deals to Papua New Guinea (PNG). The offer had come after a line of security deals signed

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Journal of the United Service Institution of India, Vol. CLV, No. 640, April-June 2025.

by China with Pacific Island Countries (PIC) in 2023 (Vanuatu, Solomon Islands, etc).[1] While the details of the security deal are not public yet, it was opined that China's deal would cater to the internal policing needs of these nations. What followed this offer from China was a scramble from the United States (US) with counteroffers to maintain the status quo within the region.[2] The US (and its allies, Australia, and Japan) consider the South Pacific as its area of interest, while PNG is officially deemed a 'Traditional Security Partner'.[3] The US-South Pacific relations date back to World War II's (WWII) Battle of the Coral Sea in the Pacific Theatre, establishing the base of future US relations within the region.[4] However, even with the West's historically significant influence, the PIC in the South Pacific have become the largest concentration of states to recognise Beijing over Taiwan[5] within the last five years, causing a huge diplomatic blow to the US in its own backyard. PNG was no different, despite the US State Department officially describing it as a 'Like-minded Democracy' and a 'Key partner for the US in the Indo-Pacific region' in its congressional report.[6] China's increasing interest in the South Pacific is important to observe when placed within the broader context of the Indo-Pacific and the New Cold War[7] dynamics with the US. Furthermore, within the South Pacific, PNG makes for an interesting case study as it has been at the centre of increased attention from both China and the US. Therefore, this article posits a question of whether PNG is towing a great balancing act between the East and the West. The article uses secondary resources of qualitative nature and employs content analysis as the research method, grounded in the interpretivist methodological framework within international relations. Lastly, to keep true to the nature of this journal, the article also looks at areas of opportunity for India in the South Pacific and PNG, amid the ongoing global power tussle.

China's Interests in the South Pacific

Chinese interests in the South Pacific can be summarised in four aspects: The narrative for leading the Global South, the counter to the US containment, the diplomatic competition with Taiwan, and its own political and security ambitions. China came up with a new foreign policy strategy to establish relations with developing states in the Global South in the early 2010s.[8] To establish its footing as the leader of the Global South, the Chinese initiatives are pitched as an attempt to establish a 'Fairer and more

reasonable' world order.[9] Though the Chinese presence in the South Pacific can be traced to early migration in the mid-19th Century, the relationship observed today can be attributed to PIC's signing up to be a part of the Belt and Road Initiative (BRI).[10] As a part of it, the Chinese President Xi Jinping declared the South Pacific as the 'Southern Leg' of the 'Maritime Silk Road' in 2013.[11] Subsequently, in 2014, with the aim of 'Collective security, prospering together', China and eight PICs announced a strategic partnership.[12]

The China-PIC strategic partnership began as the Chinese counter to the perceived 'US Containment'.[13] China has been actively participating in the battle of narratives. It counters the American narrative of 'Unfair Chinese practices' with its own narrative of the 'US containment of China'.[14] For China, the South Pacific also became an area of diplomatic competition with Taiwan by motivating Taiwanese supporters, politically and economically, to cut diplomatic ties with the latter.[15] Tied to this are also the security and political aspirations of China. The political aspiration includes attempts at altering the existing power structures and bringing in a new global governance structure.[16] The South Pacific became an ideal location for this political ambition as it is small in size, unlike Africa, and has been under the US's area of influence since WWII, and is also placed beyond China's 'Second Island Chain'. China engaged with PICs by creating narratives around colonial history, South-South Cooperation, and the BRI as PIC's tool to shed the Western sanctions (as seen in Fiji).[17] As the competition between the US and China increased, the PICs emerged as an area of military and strategic significance for the Chinese.[18] Chinese scholars like Wang Fan have argued that smaller nations will be the site for the new proxy wars in the new Cold War scenario.[19] Another reason for the increased interest is that the South Pacific controls trade routes and sea lanes of communications essential for the US and its close allies like Australia and Japan. Furthermore, China's attempt to engage in security deals with the PICs is also to secure the Chinese ambition[20] of increasing its capability to maintain and deploy forces far away from the mainland[21], leading to the creation of the 'Third Island Chain'[22].

The Balancing Act of Papua New Guinea

PNG is an island country in the cluster of the South Pacific Islands group. It occupies the eastern part of New Guinea Island and shares its land boundary with Indonesia on the west.[23] It is also Australia's much-forgotten closest neighbour, with only 3.7 kms to its nearest soil point across the Torres Strait.[24] In 2017, the Chinese Ministry of Commerce Report on PNG termed it as the 'Junction between Asia and the Pacific'.[25] It is because of its geography and participation in the BRI that PNG has found itself drawn into the new Cold War dynamics.

Analysing the exchanges between PNG and global powers, it can be argued that after noticing an increased interest by global powers after 2017, the PNG leadership opted for a two-pronged strategy. Firstly, they decided that PNG should be a part of major global initiatives coming its way, and secondly, it sought to maximise this opportunity of nations coming to it with deals that were tailored specifically for PNG's needs. Ever since PNG started BRI negotiations with China, there has been a visible increase in diplomatic engagement from its Western allies, as witnessed by the 'Step Up' foreign policy by Australia in 2017 to bolster infrastructure, healthcare, and education, New Zealand's 'Pacific Rollout' focussing on climate change, and the US' 'Pacific Partnership Strategy' to address PNG's security needs and diplomatic engagement.[26] In the meantime, the Chinese investments under BRI have also gained popular local interest. However, like most BRI investments, the PNG's local political leadership is increasingly worrying about excessive dependence on China and the population being left bereft of trickle-down benefits promised to them, which is in turn leading to strain in the relations with China. PNG is experiencing the same situation as the opposition leadership, which has made official statements regarding the overdependence on China and the lack of opportunities for the natives. This led to a change in regime in 2019. Since then, Prime Minister (PM) James Marape's government has been trying to achieve his strategy of non-alignment by trying to appease both China and the US. He has tried reaching out to China for an USD 11.8 bn loan to refinance the national debt while securing a USD 1.5 bn loan with lenient borrowing conditions from Australia instead.[27] Similarly, in 2020, PNG signed a new Comprehensive Strategic and Economic Partnership with Australia, while

announcing its commitment to the PNG–China bilateral relationship, dubbing it an 'Important development, investment, and trade partner'[28]. As of 2023, though Australia remains the largest foreign investor in PNG, China (through projects financed by the Asia Development Bank) has become its largest creditor.[29]

PNG has been towing a great balancing act militarily as well. On the Chinese front, the PNG Defence Force has established links with the Chinese People's Liberation Army since 2015.[30] As part of the arrangement, PNG has been acquiring equipment for itself from a defined Chinese budget.[31] Also, annual meetings are held between the two forces, in addition to posting defence attachés, military aid, and training for the PNG military and police officers in Chinese military colleges.[32] In the face of increasing security proximity with the Chinese, PNG has also entered into a partnership with the US through the Global Fragility Act in order to stabilise its internal security.[33] It attended the first US-Pacific Summit in Sep 2022, which culminated in the signing of a defence agreement in May 2023.[34] A separate agreement was also signed by PNG and the US for protection from illegal fishing through increased surveillance of PNG's exclusive economic zone by the US Coast Guard.[35] PNG has gained a total of USD 45 mn in funds from the US for security and economic cooperation, which includes protective equipment for PNG Defence Forces.[36] This was followed by another security pact with Australia in Dec 2023.[37] As recent as the third week of Jul 2024, PNG witnessed a high-level US civil and military delegation visit. As officially stated, the purpose of this visit was to accelerate the projects promised under the 'Defence Cooperation Agreement' signed between the US and PNG in 2023.[38] However, the visit could again be considered a counter-offensive as it came on the heels of Beijing offering a potential security pact to PNG.[39] The most recent and biggest win for PNG came in Dec 2024 as Australia and PNG signed a sports diplomacy pact and another bilateral security agreement under its Comprehensive Strategic and Economic Partnership in a give-and-take manner.[40] The world's first sports diplomacy pact with PNG will allow it to join the Australian National Rugby Team.[41] Australia followed this up with a contribution towards the Royal PNG Constabulary by delivering a new police patrol boat, starting the building of new policing facilities, and providing assistance with forensics, training, and recruitment.[42] However, some sources

claim that Australia made sure to get PNG to sign a separate agreement which ensures that if PNG were to enter a security agreement with anyone outside the 'Pacific Family' (ergo, China), it can legally withdraw the USD 384 mn investment promised under the sports pact.[43]

Though the recent agreement suggests an exclusive security alignment with Australia and, by extension, the US bloc, it should be kept in mind that such agreements have not prevented PICs from shifting their alliances, as demonstrated by Nauru in the recent past. The offer from Beijing, if it had been successful, would have meant that PNG joined the small but increasing list of nations (like Sierra Leone, Hungary, and Pakistan)[44], balancing a unique and delicate security and diplomatic arrangement with both—the US and China. PNG has, thus, been reaping rich dividends in this new geopolitical scenario by signing major security deals. It has also managed to secure its desired foreign investment, all within a span of five years. Despite Australian claims, in terms of regional balancing, the increasing on-ground Chinese presence in PNG and the PICs might continue to have an impact on foreign policy decision-making.

Can this balance between the United States' Influence and Chinese interest be sustained?

Arguments to support the claim that such balance can be maintained over a prolonged period are drawn from the precedent set by non-aligned countries during the Cold War, of which India was a flagbearer. Countries have started selectively entering piecemeal security deals with the US and China to suit their security needs, diluting the traditional security partnerships they are part of. Hungary is one example, which is a North Atlantic Treaty Organization's member and yet has entered a security agreement with China for its internal security needs.[45] The latest security agreement between Australia and PNG is an indication of this. While Australian sources claim that PNG has signed an exclusive security deal with it, PNG's PM Marape has given a public statement that exclusivity is not a part of this deal.[46] Within the PICs, an argument for sustainable balance can also be drawn from the Solomon Islands. It is the second largest recipient of Official Development Financing (ODF) after PNG among PICs.[47] The Solomon Islands was the first to sign a security deal with

China despite resistance from the West, and yet, Australia is still the largest ODF contributor to the Solomon Islands in 2024, followed by China.[48] Similarly, it might not be unfounded to infer that many instances might occur in the future, where, despite signing security agreements, countries having traditional security ties with one bloc will make sure that diplomatic ties with another are actively maintained for the purpose of exacting maximum benefits.

On the other hand, arguments for the claim that balance cannot be maintained can be drawn from the work of the Chinese scholar Wang Fan. He has argued that due to the dependence on cyber and technology, it will be hard for any nation to maintain non-alignment.[49] Though PICs are years away from cyber and technological dependency on China, they are slowly and steadily getting dependent on China for their development goals. A 2024 Lowy Institute report showcased that China has become the second largest ODF contributor and bilateral donor to PICs, surpassing the US.[50] Not just the contributions, but China has also employed a unique strategy of issuing direct budget transfers, in place of grants and loans, to realise its strategic interest.[51] Again, the Dec 2024 security pact by PNG and Australia can be quoted as an example of the end of balancing in terms of security alignment as well. Therefore, if the scholar's prediction was to come true, aligning towards one power might be the only way to survive the proxy wars. However, it would be unwise to conclude the debate this early. It will be interesting to observe the developments in the South Pacific in the next few years as the tensions between the US and China increase, especially to gauge the outcome of this balancing game and the implications of aligning or non-aligning in the new Cold War.

Opportunities for India

South Pacific has not been a region of concern or much attention for the Indian establishment, even though India has been taking on a more responsible role in the Indo-Pacific. However, New Delhi in the past has maintained cordial relations with the region mostly through humanitarian aid. To increase its engagement with the region, India launched the Forum for Indo-Pacific Island Cooperation (FIPIC) in 2014 under the Act East Policy.[52] Though a great initiative, progress under FIPIC had been sporadic and

largely limited to developmental assistance in terms of aid. In 2023, PM Modi visited PNG for the Third FIPIC Summit, which was being conducted 10 years after the last FIPIC Summit in 2015.[53] The 2023 Summit also perfectly coincided with the former US Secretary of State Anothony Blinken's visit to the Pacific. The timely execution of the Third Summit points to Indian foreign policymakers' openness to interact with the South Pacific despite the distance. It was during this summit that a 12-point action plan was announced for the 14 countries in the PIC group.[54] This plan is aimed at moving beyond humanitarian assistance and focusing on collaboration broadly in medicine, energy (solar), technology (information technology assistance) and security (Maritime and cyber), infrastructure (especially development of small and medium enterprises), and culture (through yoga).[55] If the South Pacific chooses to align with the West, it will create a significant gap resulting from the PIC gradual 'Withdrawal' from China. India will have a wide range of options from security to energy, to develop ties. Interestingly, PNG's PM Marape has also indicated he is open to more engagement with India.[56] There has also been insistence by the Quadrilateral Security Dialogue (QUAD) leaders for more engagement with the South Pacific as part of the Indo-Pacific[57] since all QUAD members (Japan, Australia, India, and the US), except for India have well-established ties with PNG. The US and Australia have security arrangements, while Japan has a bilateral agreement. India will need to conduct a country-specific review to assess the domestic needs of the PICs and formulate solutions that are aligned with its foreign policy objectives In case of PICs' alignment with China, India may face a major challenge in establishing a stronger foothold in the PICs when facing China in terms of the slow rate of disbursal of funds for the promised projects. As of 2022 (the most recent data available), out of the promised USD 598.0 mn, India has only spent around USD 105.0 mn, as compared to China's whopping USD 4.6 bn investment out of the promised USD 10.6 bn.[58] However, in this situation, India will still have soft power leverage to slowly and steadily work on its Forum for India–Pacific Islands Cooperation initiatives under the 12-point action plan, having been received positively by the leaders of the PICs, and India's advocacy of PICs in the G-7 and G-20 as the voice of the Global South. And finally, in case the non-alignment conditions prevail, India can still benefit from the increasing debt crisis from the BRI and mistrust among the local

population towards the Chinese. An added incentive for India to increase engagement lies in the fact that out of the 10 busiest seaports in the world, nine are in this region.[59] In conclusion, though challenges may be present in every case, the South Pacific provides India with the opportunity to take up the role of a credible leader in the Global South.

Conclusion

It is evident from the actions of both China and the US (and its allies like Australia) that the South Pacific, i.e., PICs, has become a region of increasing interest for both the US and China. From the situation in PNG, it can be concluded that the balancing act is indeed being employed by the PNG; if wielded wisely, it could reap enormous benefits for these smaller nations that have been largely ignored since WWII. However, it might be hard for these nations to sustain this balance as the pressure from global giants will be surmounting amidst the rising geopolitical tensions in the neighbouring Regional Security Complexes[60], specifically the South China Sea region. Though the developments in PNG, the case study for this article, indicated that the balancing of the US' influence and Chinese interests in the region might come to a decisive outcome very soon, it is still too early to call for an end to this debate. As for India, the emerging nations in this region may seek not only alternate partners for trade and diplomacy but also an experienced country that has previously navigated the balancing act—such as India did through the Non-Aligned Movement—to continue reaping long-term benefits.

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Non-Contact and Non-Kinetic Warfare in the Indian Context: Concepts and Pathways

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Abstract

This article examines the evolution of warfare, focusing on the emergence and implications of non-contact and non-kinetic conflict in the 21st Century. Tracing the trajectory from classical battlefields to fifth-generation warfare, it underscores how cyber operations, information manipulation, and economic and diplomatic coercion have redefined military strategy. This article particularly explores the Indian context, detailing how hybrid threats—from cyber-attacks to disinformation campaigns—challenge national security. Through case studies such as cyber disruptions in Mumbai and disinformation in Kashmir, it highlights India's vulnerabilities and adaptive responses. It further outlines the capabilities and challenges India faces in cyber warfare, information dominance, and economic resilience. To strengthen national defence, this article recommends integrated strategies across cybersecurity, strategic communication, indigenous technological advancement, and interagency coordination. Ultimately, this article advocates for a multifaceted, future-oriented approach to equip India against the complex realities of non-kinetic and grey-zone warfare.

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This is the first prize winning essay in the USI Gold Medal Essay Competition 2024.

Journal of the United Service Institution of India, Vol. CLV, No. 640, April-June 2025.

Introduction

Warfare has undergone significant transformations throughout history, transitioning from the era of swords and shields to mechanised armies, and now into the sophisticated realm of non-contact and non-kinetic strategies. In ancient times, warfare was characterised by direct confrontation, with physical proximity to the enemy often determining the outcome of battles. The Industrial Revolution brought about mechanised warfare, culminating in the mass mobilisation of armies and the introduction of advanced weaponry during the World Wars. The Cold War era witnessed the emergence of nuclear deterrence and the threat of mutually assured destruction, which significantly reduced direct military engagements between major powers.

In the contemporary world, the nature of conflict is increasingly shaped by advancements in technology, leading to the emergence of Non-Contact Warfare (NCW) and Non-Kinetic Warfare (NKW). These new forms of warfare emphasise achieving strategic objectives through indirect means, such as cyber-attacks, disinformation campaigns, economic coercion, and diplomatic manoeuvres. As noted by RAND Corporation's future warfare studies, the geopolitical landscape has shifted towards a multi-dimensional approach to conflict, where information, automation, and precision have become critical components of military strategy.[1]

The evolution towards NCW reflects a broader trend in global security, where adversaries seek to exploit vulnerabilities in digital networks, information systems, and economic structures without resorting to direct military confrontation. For example, hybrid warfare—a blend of conventional and unconventional tactics—has blurred the lines between combatants and civilians, as well as between war and peace. Cognitive warfare, another modern development, targets individuals' cognition and decision-making processes, often using disinformation and psychological operations, to disrupt societal cohesion.[2]

This transformation is particularly relevant for India, a nation positioned at the crossroads of traditional threats and emerging challenges. India faces conventional military threats from neighbouring adversaries such as China and Pakistan, alongside more modern threats in the digital and cognitive realms. Cyber-attacks targeting critical infrastructure, disinformation campaigns

aimed at destabilising public opinion, and economic coercion through trade restrictions have all become part of India's security landscape.

Historical Context of Fifth-Generation Warfare (5GW) in India

The historical development of warfare is categorised into generations, each characterised by specific technological advancements, strategic shifts, and operational tactics. Understanding this evolutionary path helps to contextualise India's adaptation to 5GW and its focus on non-contact and non-kinetic operations.

First to Third-Generation Warfare (3GW): The Foundations of Conventional Conflict.

- **First-Generation Warfare**. It refers to the period of classical conflicts where battles were fought with massed manpower, rudimentary weapons, and close-quarter combat. It was an era dominated by direct, physical engagements with infantry, cavalry, and basic artillery. Major historical battles such as those of the Napoleonic Wars exemplify this form of warfare, where strategies revolved around the positioning of large armies on battlefields and the direct clash of forces.

- **Second-Generation Warfare**. It emerged with the Industrial Revolution and marked a shift towards mechanised warfare. This period saw the introduction of mass mobilisation, artillery, machine guns, and trench warfare, as epitomised by World War I. The nature of conflict shifted from hand-to-hand combat to industrialised killing machines, leading to unprecedented levels of destruction. Military strategies became more sophisticated, relying on firepower and the capacity to sustain long battles through logistics and industrial output.

- **Third-Generation Warfare**. Also known as manoeuvre warfare, it emerged during World War II and is perhaps best illustrated by the German strategy of *Blitzkrieg* (an intense military campaign intended to bring about a swift victory). This strategy introduced mobility, speed, and the integration of combined arms (infantry, artillery, and air power) to overwhelm opponents. Rather than focusing on grinding, static engagements, 3GW emphasised surprise, rapid

advancements, and encirclement to disorient and incapacitate enemies. It was a significant leap forward in terms of operational effectiveness and coordination.

Fourth-Generation Warfare (4GW): The Rise of Irregular and Asymmetric Conflicts 4GW.

- **Origins and Evolution of 4GW**. It emerged in the latter half of the 20th Century, driven largely by the decolonisation process, the rise of non-state actors, and the proliferation of insurgent movements. This form of warfare emphasised irregular, guerrilla tactics and asymmetric conflicts, where weaker forces used unconventional strategies to challenge superior military powers. The Vietnam War, Soviet Afghan War, and more recently, the War on Terror, are key examples of 4GW.

- **Role of Non-State Actors and Blurred Battle Lines**. In 4GW, non-state actors such as insurgent groups, militias, and terrorist organisations became significant players, often operating outside traditional rules of engagement. These actors utilised tactics such as ambushes, sabotage, and psychological operations to undermine state power. 4GW also blurred the lines between combatants and civilians, challenging conventional military responses and complicating the legal and ethical dimensions of warfare.

- **India's Strategic Response to 4GW Challenges**. For India, 4GW presented new challenges, particularly in regions such as Jammu and Kashmir, the Northeast, and the Naxalite insurgencies. India had to contend with insurgent groups that used guerrilla tactics and received external support from adversarial nations. In response, the Indian military adapted by incorporating counterinsurgency and counter-terrorism strategies, relying on intelligence-driven operations, psychological warfare, and strategic use of paramilitary forces.

5GW: A New Era of Technology-driven Conflict.

- **Defining 5GW**. It represents the latest phase in the evolution of conflict, defined by its reliance on advanced technology, cyber capabilities, Information Warfare (IW), and space-based operations. Unlike previous generations, 5GW is not primarily about direct military confrontation or territorial

conquest. Instead, it revolves around battles fought in the cyber domain, through influence operations, and by disrupting an adversary's critical infrastructure

- **Tactics and Technology**. In 5GW, the focus shifts to achieving strategic objectives by targeting the cognitive and informational dimensions of the adversary. This could include cyber-attacks that disrupt communications and power grids, disinformation campaigns that sow discord and confusion, and economic coercion that weakens a nation's resolve without firing a single shot. The growing importance of Artificial Intelligence (AI), autonomous systems, and space technologies has further expanded the scope of 5GW, making it a truly multi-dimensional form of conflict

- **India's Cyber Challenge**. India's adaptation to 5GW has been driven by its recognition of emerging threats, particularly from its regional adversaries. The increasing frequency of cyber-attacks targeting India's critical infrastructure, financial systems, and defence networks has underscored the importance of cyber resilience. The attack on Mumbai's power grid in 2020, suspected to be a state-sponsored cyber operation, is one example of how non-contact strategies are being used to undermine India's security

- **Information Warfare Threats**. In addition to cyber warfare, IW has become a key concern for India. Disinformation campaigns, particularly those related to the Kashmir conflict and broader regional disputes, have been used by adversaries to destabilise internal politics and challenge India's international standing. These campaigns exploit the rapid spread of information on digital platforms, amplifying propaganda and false narratives to influence public opinion and sow divisions within Indian society.

India's Response to Fifth-Generation Warfare

Recognising the threats posed by 5GW, India has gradually shifted its focus towards developing the capabilities necessary to counter these new forms of conflict. This includes investing in cyber defence, IW capabilities, space-based technologies, and autonomous systems. The establishment of a dedicated Cyber Command within the Indian Armed Forces is one step towards

consolidating cyber defence efforts, though there is still much work to be done to fully integrate these capabilities across all branches of the military.

India is also increasingly involved in space-based operations, recognising the importance of satellite communications, surveillance, and Anti-Satellite (ASAT) weapons in modern warfare. India's successful ASAT test in 2019 demonstrated its growing capabilities in this domain, underscoring its commitment to defending its assets in space while preparing for potential conflicts that may extend beyond the Earth's surface.

Furthermore, the Indian military has begun to explore the potential of autonomous systems, such as drones and unmanned ground vehicles, for surveillance, reconnaissance, and even direct combat roles. These systems reduce the risk to human soldiers and allow for greater flexibility in operational planning, particularly in non-contact scenarios where physical presence on the battlefield is minimised.

India's strategic planners also recognise the need for a comprehensive approach that includes not only military modernisation but also strengthening societal resilience against non-kinetic threats. This involves collaboration between government agencies, the private sector, and international partners to enhance cyber security, protect critical infrastructure, and counter disinformation.

The Concept of Non-Contact and Non-Kinetic Warfare

At its core, NCW and NKW are designed to achieve strategic objectives without resorting to direct physical confrontation. This new form of warfare reflects the broader evolution of conflict, where influence, disruption, and control have become the dominant strategies rather than brute force and territorial conquest. Unlike traditional kinetic warfare, which relies on physical weapons and troop deployments to incapacitate or destroy the enemy, non-kinetic methods operate in domains that are less visible but increasingly critical, such as cyberspace, information networks, economic systems, and diplomacy.

One of the defining characteristics of NCW and NKW is its reliance on technology and innovation to undermine an adversary's ability to function effectively. The goal is not to defeat the enemy

through sheer firepower, but rather to create confusion, disable communication networks, disrupt decision-making processes, and erode public confidence. By targeting critical systems that support military operations, governance, and civilian infrastructure, NKW can bring about significant disruption without any physical engagement.

Cyber Warfare.

- Cyber warfare is one of the most prominent forms of NCW and NKW. It involves the use of digital attacks on information systems to disrupt, damage, or steal critical data from the adversary. In an interconnected world where communications, logistics, and control systems are heavily reliant on digital infrastructure, cyber warfare can be highly effective in paralysing military and civilian capabilities.

- Cyber-attacks can take many forms, from simple disruptions to sophisticated operations that target power grids, financial systems, or military command and control networks. These attacks can be carried out remotely, making attribution difficult and complicating responses. The anonymity of cyber warfare provides a degree of deniability to the aggressor, making it a preferred tool for state and non-state actors alike. A successful cyber-attack can cause operational paralysis, disrupt the economy, and instil fear and uncertainty in the affected population—all without a single shot being fired.[3]

Information Warfare.

- IW is another critical component of non-kinetic operations, focusing on the control and manipulation of information to influence the perceptions, beliefs, and actions of target audience. The advent of social media and the rapid spread of digital communication have provided new avenues for disseminating propaganda, misinformation, and psychological operations designed to shape public opinion and political decision-making.

- This form of warfare targets the cognitive dimension of conflict, seeking to undermine an adversary's will to fight or support a particular cause. It often involves spreading disinformation to create confusion, generate dissent, or destabilise governments. IW can also be used to bolster an

aggressor's narrative, gaining the support of neutral or even hostile audiences. For example, false narratives may be crafted to paint the adversary as an aggressor, justify military actions, or erode international support for the opposing side. By controlling the flow of information, a state can weaken the resolve of its adversary without direct military engagement.

Electronic Warfare (EW).

- EW targets the electromagnetic spectrum, which is critical for modern military operations. It involves jamming or disrupting the enemy's communication, radar, and navigation systems, rendering their military assets less effective or even useless. By interfering with signals used for coordination, reconnaissance, and precision targeting, EW can cause confusion and force the enemy to operate with reduced effectiveness.

- EW can be used in conjunction with cyber-attacks to create a broader impact on the battlefield, affecting everything from unmanned drones and aircraft to missile systems and ground troops. By degrading the enemy's ability to communicate or use key technologies, EW creates a significant tactical advantage for the attacker.

Economic Warfare.

- Economic warfare seeks to weaken an adversary by targeting its financial systems, trade routes, and economic stability. This form of warfare involves imposing sanctions, trade restrictions, and financial blockades to cripple the enemy's economy. By restricting access to vital resources, cutting off trade routes, and disrupting financial networks, economic warfare can exhaust an adversary's resources over time, forcing them to make concessions or weakening their ability to maintain a prolonged conflict.

- Economic warfare does not require physical confrontation, but it can have a devastating impact on a nation's economy, civilian population, and military capabilities. The effectiveness of this strategy lies in its ability to create sustained pressure that can lead to economic collapse or political instability. Moreover, economic coercion can be used in concert with diplomatic and military efforts to achieve broader strategic objectives without the need for kinetic operations.

Diplomatic Warfare.

- Diplomatic warfare uses the tools of statecraft to isolate, pressure, or coerce an adversary into submission or compromise. It involves forming alliances, leveraging international organisations, and using diplomatic channels to sway global opinion against the adversary. Diplomatic warfare also includes the strategic use of soft power, such as cultural diplomacy and international aid, to build influence and garner support from other nations.

- Through diplomatic manoeuvrings, a state can achieve its strategic objectives without engaging in direct conflict. By isolating the adversary diplomatically, the aggressor can weaken its legitimacy on the global stage, restrict its access to international support, and limit its ability to manoeuvre diplomatically. Diplomatic warfare can also be used to create coalitions that amplify the pressure on the adversary, making it more difficult for them to sustain their position.

Hybrid and Grey-Zone Operations.

- Hybrid warfare combines conventional military tactics with non-kinetic operations, creating a multidimensional approach that blends traditional force with new methods of conflict. Hybrid operations often involve the use of irregular forces, cyber-attacks, economic pressure, and information manipulation in conjunction with conventional military actions. This blend of tactics allows the aggressor to achieve their goals while avoiding the direct costs and risks of full-scale military conflict.

- Grey-zone operations are a subset of hybrid warfare, occupying the space between peace and open warfare. These operations involve activities that are more aggressive than normal state interactions but fall short of triggering a formal military response. Grey-zone operations often include covert or deniable actions, such as cyber-attacks that are difficult to attribute, or the use of proxy forces to engage in low-intensity conflict.[4]

- The ambiguity created by grey-zone operations allows the aggressor to push the boundaries of conflict without crossing the threshold that would provoke a military retaliation.

This approach exploits the legal and ethical grey areas of international relations, making it difficult for the targeted state to respond effectively. Grey-zone tactics can erode trust in institutions, create internal divisions, and weaken the enemy's ability to coordinate a coherent defence.

Case Studies of Non-Contact and Non-Kinetic Warfare in India

India has been subject to multiple instances of NCW and NKW, particularly in the form of cyber-attacks and IW. One notable example is the series of cyber-attacks attributed to state-sponsored actors from China and Pakistan. These attacks have targeted India's critical infrastructure, defence systems, and financial institutions, aiming to disrupt operations and sow chaos. Few of the case studies are as follows:

- **Cyber-Attacks on India's Critical Infrastructure**. In recent years, India's critical infrastructure has come under attack from foreign adversaries. For instance, in 2020, a large-scale cyber-attack targeted Mumbai's power grid, leading to widespread outages across the city. Though the attack was attributed to Chinese state-sponsored actors, the attribution remained ambiguous, making it difficult for India to respond with traditional military measures. This attack highlighted the vulnerabilities in India's cyber defence mechanisms and underscored the need for improved cybersecurity capabilities.

- **Disinformation Campaigns in Kashmir**. The Kashmir conflict has long been a focal point for disinformation and psychological operations. Various state and non-state actors have employed social media platforms to spread propaganda, incite violence, and manipulate public opinion both within Kashmir and internationally. These campaigns aim to delegitimise India's control over the region and to fuel unrest by disseminating false information.

- **Economic Coercion by China**. China has frequently used economic coercion as a tool of NKW against India. For instance, after the 2020 Galwan Valley clashes, China imposed unofficial trade restrictions on Indian goods and boycotted Indian products. In response, India banned Chinese apps and reduced its economic dependency on Chinese imports, exemplifying the tit-for-tat nature of economic warfare in the non-contact domain.

India's Current Capabilities and Challenges

India's capability in NCW and NKW is growing, but several challenges remain. The country has made progress in developing indigenous technologies for EW and unmanned systems, but significant gaps still exist, particularly in the cyber domain.

Cyber Warfare.

- While India has established a Cyber Command to oversee its cyber operations, the pace of development has been slow compared to global standards. India lags behind countries like the United States (US) and China in terms of offensive and defensive cyber capabilities. One of the major challenges is the lack of skilled manpower, particularly in cybersecurity and AI. Although India has a robust information technology industry, this expertise has not yet been fully harnessed for national security purposes.

- The bureaucratic hurdles in decision-making further compound the issue, with the integration of cyber operations across the armed forces being hampered by a lack of coordination between different government agencies. India also faces the challenge of indigenous software and hardware production, as much of its infrastructure relies on foreign technology, creating vulnerabilities to external manipulation.

Information Warfare.

- India has made strides in countering IW particularly in handling insurgencies in Jammu and Kashmir and the Northeast. However, it still faces challenges in effectively countering large-scale disinformation campaigns, particularly those originating from adversaries like Pakistan and China. The rapid spread of misinformation through social media platforms poses a significant challenge for Indian authorities, as it can fuel unrest and undermine the government's legitimacy.

- India's IW capabilities are also limited by the absence of coordinated public diplomacy efforts. While the armed forces have experience in psychological operations, the lack of synergy between military and civilian institutions hampers the effectiveness of these operations on a national and international scale.

Economic Warfare. Economic warfare remains an area where India has both strengths and weaknesses. India's growing economic clout provides it with leverage in diplomatic negotiations and trade disputes. However, its reliance on imports for key sectors such as energy and technology makes it vulnerable to economic coercion from larger powers like China. The COVID-19 pandemic further highlighted these vulnerabilities, as disruptions in global supply chains affected India's ability to access critical goods.

Pathways for Integration of Non-Contact and Non-Kinetic Warfare in India

To overcome these challenges and integrate NCW and NKW into its national security strategy, India must focus on several key areas:

- **Enhancing Cybersecurity Capabilities**. India needs to invest heavily in strengthening its cybersecurity capabilities. This includes building a larger and more skilled cybersecurity workforce, developing indigenous software and hardware, and establishing a more robust Cyber Command structure. Collaboration with the private sector and international partners will be essential for developing offensive and defensive capabilities.

- **Developing Strategic Communication and IW**. India must enhance its capabilities in strategic communication and IW. This includes countering disinformation campaigns more effectively, improving public diplomacy, and leveraging new technologies such as AI to influence public perception. Developing a centralised body to oversee IW efforts across civilian and military sectors would be beneficial.

- **Strengthening Economic Resilience**. Reducing economic dependency on imports, particularly in critical sectors like technology and energy, should be a priority for India. Diversifying trade relationships and fostering greater self-reliance in key industries will reduce India's vulnerability to economic coercion.

- **Investing in Advanced Technologies**. India must continue to invest in advanced technologies such as AI, unmanned systems, and robotics. These technologies will

play a crucial role in NCW, allowing India to maintain a technological edge over potential adversaries. Collaborating with international partners on research and development projects will be critical to accelerating technological advancements.

- **Improving Interagency Coordination**. A lack of coordination between government agencies has been a persistent problem in India's approach to NCW. Establishing a centralised command structure that integrates cyber, information, and economic warfare efforts would help streamline decision-making and improve the effectiveness of India's operations.

- **Building Alliances and Partnerships**. In an increasingly interconnected world, no country can tackle the challenges of NCW and NKW alone. India should focus on building alliances with like-minded countries to share intelligence, develop new technologies, and collaborate on cyber defence and IW. Partnerships with countries like the US, Japan, and Australia could provide India with valuable insights and access to cutting-edge technologies.[5]

Conclusion

NCW and NKW are reshaping 21st Century conflict. Traditional military tactics, based on direct force, are being supplemented by technology-driven methods in cyberspace, information, and global economics. These new tactics focus on disruption, psychological influence, and deterrence rather than conventional victories.

For India, adapting to this evolving landscape is crucial. Cyber-attacks, disinformation, economic coercion, and grey-zone operations pose significant security challenges, particularly in a region where adversaries use hybrid tactics combining traditional force with cyber and IW.

India must adopt a multi-faceted strategy. Enhancing cyber capabilities is essential due to the growing reliance on digital infrastructure for military, economic, and governance functions. This involves improving both defences and offensive capabilities to deter and respond to attacks.

Investing in IW is also vital. Controlling narratives, countering disinformation, and influencing public opinion are central to modern conflict. India must develop strategic communication tools to project policies and counter misinformation.

Additionally, India should invest in advanced technologies like AI, unmanned systems, and space-based platforms. These innovations are critical for modern military operations, offering enhanced surveillance, precision targeting, and automation. Fostering technological advancement will help modernise India's Armed Forces and maintain a competitive edge.

Improving interagency coordination is equally important. Non-contact threats span cyberspace, information systems, and economy, requiring a unified response. Effective defence necessitates cooperation among military, intelligence, civilian, and private sectors. Developing frameworks for seamless coordination is crucial for addressing hybrid threats.

As NCW and NKW grow in importance, India's defence strategy must focus on cyber resilience, strategic communication, and technological innovation to maintain security and influence in an evolving conflict landscape.

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Caring For the War-Disabled: How Will Their Treatment Impact Future Recruitment

Squadron Leader Aryan Raj Chowdhary[@]

"It was their concern for the country and its citizens that drove them to the battlefield. Now it's the turn of the citizens"

-General VP Malik, PVSM, AVSM (Retd) at USI 2022 Seminar

Abstract

This essay explores the critical link between the care of war-disabled soldiers and the long-term sustainability of the Indian Armed Forces. While India's military is globally respected for its valour, the invisible and visible wounds of its personnel returning from conflict often go under-addressed. This essay traces the historical evolution of care for disabled veterans in India, evaluates current medical, psychological, and economic rehabilitation programs, and identifies persisting challenges such as resource constraints, geographic disparities, and bureaucratic hurdles. It emphasises that the morale and retention of serving personnel, as well as the enlistment of new recruits, are deeply influenced by how the nation supports its war-disabled veterans. Drawing from global best practices—including models from the United States, United Kingdom, and Canada—the essay recommends strategic enhancements in infrastructure, mental health

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This is the winning essay of the USI-War Wounded Foundation Joint Essay Competition 2024.

Journal of the United Service Institution of India, Vol. CLV, No. 640, April-June 2025.

services, vocational training, and administrative efficiency. In doing so, this essay underscores the importance of veteran care as both a moral responsibility and a strategic imperative.

Introduction

The Indian Armed Forces, esteemed for their bravery and unwavering commitment, play a crucial role in safeguarding the nation. However, the toll of war often manifests in the lives of soldiers who return as war-disabled veterans, carrying both visible and invisible wounds. These veterans deserve comprehensive support and care to aid their transition back to civilian life. The quality of care provided to war-disabled soldiers is not just a measure of the nation's gratitude but also a crucial factor in shaping future military recruitment. Prospective soldiers often consider how veterans are treated when making decisions about enlisting, making this issue integral to the armed forces' long-term sustainability. This essay delves into the history, current support systems, and challenges faced by war-disabled veterans in India, exploring the impact of these factors on the morale of active personnel and the decisions of potential recruits. By examining the connection between veteran care and recruitment, the discussion underscores the importance of addressing the needs of war-disabled soldiers to maintain the strength and future of the Indian Armed Forces.

Historical Context of War-Disabled in the Indian Armed Forces

The history of war-related disabilities within the Indian Armed Forces is closely linked with the country's military conflicts, from the post-Independence period to the present day. After gaining independence in 1947, India was soon engaged in a series of conflicts, beginning with the Indo-Pakistani War of 1947-48. This conflict, along with subsequent wars such as the Sino-Indian War in 1962, the Indo-Pakistani Wars in 1965 and 1971, the Kargil War in 1999, and ongoing counter-insurgency operations, resulted in many soldiers sustaining injuries that left them with long-term physical or psychological disabilities.

In the early years, care for war-disabled soldiers was relatively unorganised, with limited resources dedicated to their long-term rehabilitation. Medical care was largely confined to military hospitals, with less emphasis on comprehensive rehabilitation, social reintegration, or psychological support. As the scale of the

problem became clearer, both the Indian Government and the armed forces began to recognise the need for a more structured approach to support war-disabled personnel. The creation of the Armed Forces Medical Services (AFMS) marked a significant improvement in the care available to injured soldiers. Over time, the AFMS has developed into a sophisticated network that includes hospitals and rehabilitation centres. Notably, the Military Hospital system, which includes institutions like the Artificial Limb Centre (ALC) in Pune, has been crucial in providing prosthetic limbs and physical rehabilitation for those who have suffered limb loss in combat.

The 1971 Indo-Pakistani War was a turning point in the recognition of the need for more comprehensive policies to support war-disabled veterans. The aftermath of this conflict, which saw numerous casualties and injuries, prompted the government to introduce more structured rehabilitation and welfare programs. Various pension schemes and financial support measures were introduced, acknowledging that disabled veterans would need sustained assistance to lead dignified lives after their service. By the late 20th Century, awareness of the psychological effects of warfare led the Indian Armed Forces to place greater emphasis on mental health care. The experiences of veterans from the Kargil War, many of whom returned with both physical injuries and psychological trauma, highlighted the need for mental health services. This prompted the development of specialised programs aimed at treating conditions such as Post-Traumatic Stress Disorder (PTSD), ensuring that war-disabled soldiers received more comprehensive care.

In recent years, the Indian Government has continued to refine its policies, introducing new measures such as the Disability Pension and War Injury Pension, which provide financial compensation based on the level of disability. Additionally, efforts have been made to improve access to care for veterans living in rural areas, though challenges remain.

Current Care and Rehabilitation Programs for War-Disabled in the Indian Armed Forces

The Indian Armed Forces have made significant strides in developing care and rehabilitation programs for war-disabled soldiers, recognising the importance of providing comprehensive

support to those who have sacrificed their physical and mental well-being in service to the nation. Over the years, these programs have evolved to address the multifaceted needs of disabled veterans, encompassing medical treatment, psychological support, social reintegration, and economic assistance.

Medical Care and Rehabilitation.

- Medical care for war-disabled personnel begins immediately after injury, with initial treatment often provided on the battlefield or in forward medical units. Once stabilised, injured soldiers are transferred to specialised military hospitals for further treatment. The AFMS play a crucial role in this process, operating a network of hospitals across the country, including premier institutions like the Army Hospital (Research and Referral) in New Delhi and the Command Hospital in Pune. A key component of medical care for war-disabled soldiers is physical rehabilitation. The ALC in Pune is a prominent facility that provides prosthetic limbs and other assistive devices to soldiers who have lost limbs in combat.

- In addition to the ALC, the Paraplegic Rehabilitation Centres in Pune and Mohali offer specialised care for soldiers with spinal cord injuries. These centres provide a range of services, including physiotherapy, occupational therapy, and vocational training, aimed at helping soldiers adapt to life with a disability and reintegrate into society.

Psychological Support and Mental Health Care. The psychological impact of combat can be profound, with many soldiers experiencing conditions such as PTSD, depression, and anxiety as a result of their experiences. The Indian Armed Forces have increasingly recognised the importance of addressing these issues and have developed mental health care programs to support war-disabled soldiers. In military hospitals, psychiatric departments are equipped to handle a range of mental health issues, offering both in-patient and out-patient services. Soldiers who require more specialised care may be referred to institutions like the Armed Forces Medical College in Pune, which has a dedicated psychiatry department that conducts research and provides treatment for a variety of mental health conditions.

Social and Economic Support.

- Beyond medical and psychological care, the rehabilitation of war-disabled soldiers involves ensuring their social and economic well-being. The Indian Government has established a range of schemes and benefits aimed at supporting disabled veterans and their families, recognising that financial stability is a crucial aspect of rehabilitation. The Disability Pension is one of the primary forms of financial support available to war-disabled veterans. This pension is granted based on the degree of disability and is designed to provide ongoing financial assistance to those who are unable to return to active duty due to their injuries. In cases of severe disability, soldiers may also be eligible for the War Injury Pension, which offers additional compensation to cover the costs associated with long-term care and support.

- Vocational training programs are another important aspect of social and economic support. These programs are designed to equip war-disabled soldiers with the skills they need to pursue alternative careers, particularly those who are unable to return to active military service. The Directorate General of Resettlement oversees these programs, offering courses in a variety of fields, from information technology to entrepreneurship. The aim is to help disabled veterans find meaningful employment and achieve financial independence.

Community and Family Support. The role of the community and family in the rehabilitation of war-disabled soldiers cannot be overstated. Recognising this, the Indian Armed Forces have developed programs that involve the families of disabled veterans in the rehabilitation process. Family members are often included in counselling sessions and are provided with information and resources to help them support their loved ones. This holistic approach ensures that the entire family is equipped to handle the challenges that come with a soldier's disability.

Challenges in Caring for War-Disabled Soldiers

Caring for war-disabled soldiers is a complex task that involves addressing a wide range of physical, psychological, social, and economic needs. Despite significant advancements in rehabilitation and support programs, several challenges persist in ensuring that

these veterans receive the comprehensive care they deserve. These challenges are multifaceted, encompassing resource limitations, geographical disparities, social stigmas, and bureaucratic hurdles, all of which impact the effectiveness of care and the quality of life for disabled soldiers.

Resource Limitations. One of the primary challenges in caring for war-disabled soldiers is the limitation of resources. While the Indian Government and armed forces have made substantial investments in medical infrastructure, the demand for services often outpaces supply. Specialised medical facilities, such as those offering advanced prosthetic limbs or cutting-edge rehabilitation therapies, are limited in number and often concentrated in urban centres. This scarcity means that many disabled veterans, especially those in rural or remote areas, may struggle to access the care they need. Moreover, the costs associated with long-term rehabilitation can be prohibitive. Advanced medical treatments, ongoing physical therapy, and the need for specialised equipment like prosthetics can place a significant financial burden on the government and the veterans themselves. Although pensions and financial aid are available, they may not always be sufficient to cover all expenses, particularly for those with severe or multiple disabilities.

Geographical Disparities. Geographical disparities further complicate the care of war-disabled soldiers. Veterans living in rural or remote areas often face significant barriers to accessing quality healthcare. Specialised facilities are usually located in major cities, requiring veterans from distant regions to travel long distances for treatment. This not only adds to their physical and financial strain but also poses logistical challenges, especially for those with severe disabilities who may find travel difficult. These geographical challenges also extend to the availability of support services. Rural areas may lack the necessary infrastructure for psychological counselling, vocational training, and social reintegration programs. As a result, war-disabled soldiers in these areas may not receive the comprehensive care that is more readily available to their urban counterparts, leading to disparities in recovery outcomes and quality of life.

Social Stigma and Mental Health. Social stigma remains a significant challenge, particularly in the context of mental health care for war-disabled soldiers. In many cultures, including parts of

India, there is a lingering stigma attached to mental illness, which can prevent soldiers from seeking the help they need. Within the military, where strength and resilience are highly valued, admitting to psychological difficulties such as PTSD or depression can be seen as a sign of weakness, further discouraging soldiers from accessing mental health services. This stigma is compounded by a lack of awareness and understanding about mental health issues among the general population and even within the military itself.

Bureaucratic Hurdles and Administrative Challenges.

- Bureaucratic hurdles present another significant challenge in the care of war-disabled soldiers. Navigating the complex web of paperwork and procedures required to access benefits and services can be overwhelming for veterans and their families. The process of applying for disability pensions, medical treatment, and other forms of support often involves extensive documentation, which can be particularly burdensome for those dealing with severe physical or mental disabilities.

- In some cases, delays in processing applications can result in veterans waiting months or even years to receive the support they are entitled to. These delays can have serious consequences, particularly for those who rely on financial assistance to cover the costs of ongoing medical treatment or who need timely access to rehabilitation services. Efforts to streamline administrative processes and reduce bureaucratic red tape are essential to ensuring that war-disabled soldiers receive the care they need in a timely manner.

Impact of Care on Morale and Retention

The quality of care provided to war-disabled soldiers plays a critical role in shaping the morale and retention rates within the Indian Armed Forces. Soldiers who witness the comprehensive and compassionate treatment of their injured comrades are more likely to remain committed to their service, confident that their own well-being will be prioritised should they face similar circumstances. Conversely, inadequate care can lead to decreased morale, reduced trust in the military institution, and ultimately, higher attrition rates.

Boosting Morale through Comprehensive Care. Morale is a key factor in the effectiveness and cohesion of any military unit. Soldiers are more willing to take on difficult and dangerous tasks if they believe that their institution values them and will take care of them and their families in times of need. When soldiers see that their injured comrades receive high-quality medical treatment, psychological support, and assistance with reintegration into civilian life, it reinforces their sense of loyalty and trust in the organisation. This assurance that the military will stand by them, no matter the circumstances, significantly boosts their morale, making them more resilient in the face of adversity.

Retention through Assurance of Care. Retention of skilled and experienced personnel is crucial for maintaining the effectiveness of the armed forces. When soldiers are confident that their health, well-being, and future are secure, they are more likely to commit to long-term service. The assurance of comprehensive care in the event of injury or disability is a significant factor in this decision-making process. If soldiers perceive that war-disabled veterans are neglected or face difficulties in accessing the care they need, it can lead to uncertainty and anxiety among the ranks. This fear of being abandoned in the event of an injury can cause soldiers to reconsider their commitment to the military, leading to increased attrition rates. In contrast, when the armed forces are seen as providing reliable and effective support for injured soldiers, it strengthens the bond between the military and its personnel, encouraging more soldiers to stay in service.

Trust in the Institution. Trust in the military institution is foundational to both morale and retention. Soldiers need to believe that the organisation they serve will protect and support them in all circumstances. The care provided to war-disabled soldiers is a tangible demonstration of this trust. When soldiers observe that their injured comrades are well cared for, it reinforces their belief in the military's commitment to their well-being. This trust extends beyond the individual to their families, who also need to feel assured that the military will provide for them if their loved ones are injured or killed in service.

Influence on Future Recruitment

The treatment and care provided to war-disabled soldiers have a significant influence on the future recruitment of personnel into the Indian Armed Forces. The perception of how the military treats

its wounded veterans directly impacts the willingness of young people to enlist, as well as the support of their families, who play a crucial role in the decision-making process.

Perception of the Military's Commitment. Prospective recruits often consider the long-term implications of joining the armed forces, including the risks of injury and disability. When they see that the military offers comprehensive and respectful care to its war-disabled soldiers, it reassures them that their well-being will be prioritised in case they face similar challenges. This perception enhances the appeal of military service as a viable career option, where individuals can feel secure in the knowledge that their sacrifices will be honoured and that they will not be left to fend for themselves if injured.

Influence on Families. Families are key influencers in the recruitment process, particularly in a country like India, where close-knit family structures often play a central role in major life decisions. When families observe that war-disabled veterans receive robust medical care, psychological support, and financial assistance, they are more likely to support their children's decision to join the armed forces. Conversely, if they perceive that the military neglects its injured personnel, families may discourage enlistment, fearing for the future security and well-being of their loved ones.

Attracting Quality Recruits. The armed forces seek to attract not just any recruits but those who are highly motivated, skilled, and committed. The treatment of war-disabled soldiers serves as a reflection of the military's values and ethics. When the military is seen as an institution that genuinely cares for its personnel, it attracts recruits who share those values and are more likely to serve with dedication. This, in turn, ensures a higher calibre of recruits, who are driven not only by the desire to serve their country but also by the confidence that they will be supported throughout their military career.

Case Studies: Global Perspectives on Care for War-Disabled Soldiers

Examining global case studies provides valuable insights into best practices for caring for war-disabled soldiers. Different countries have adopted various models to support their veterans, reflecting

cultural, political, and historical contexts. Notable examples include the United States (US), the United Kingdom (UK), and Canada, each of which has implemented comprehensive programs for the rehabilitation and reintegration of their war-disabled personnel.

The United States. The US has a long-standing commitment to the care of its veterans, enshrined in the establishment of the Department of Veterans Affairs (VA) after World War I. The VA provides a wide range of services, including health care, mental health support, vocational training, and housing assistance. A notable program is the VA's Adaptive Sports Program, which encourages participation in adaptive sports as a means of rehabilitation and social reintegration. This initiative not only aids physical recovery but also fosters camaraderie among veterans, helping them rebuild their identities after service. The emphasis on holistic care, combining physical, mental, and social support, has led to improved outcomes for veterans and serves as a model for other nations.

The United Kingdom. In the UK, the Ministry of Defence has developed a robust framework for the care of injured personnel through initiatives such as the Defence Recovery Capability. This program focuses on providing tailored support to wounded service members, facilitating their recovery and transition back to civilian life. One successful aspect is the establishment of Recovery Centres, which offer comprehensive rehabilitation services, including physical therapy, psychological support, and vocational training. The UK's emphasis on integrating wounded veterans into the workforce and society illustrates a commitment to not only treating injuries but also ensuring long-term well-being and employment opportunities.

Canada. Canada's approach to caring for war-disabled soldiers emphasises the importance of mental health support. The Canadian Armed Forces has implemented the 'Operational Stress Injury' program, which addresses psychological conditions stemming from military service, such as PTSD. This program provides access to mental health professionals and support groups, fostering a culture of openness around mental health issues. Additionally, VA Canada offers various benefits, including financial assistance and vocational rehabilitation, ensuring that veterans receive the necessary resources for a successful transition to civilian life.

Recommendations for Improving Care and Recruitment of War-Disabled Soldiers

Improving the care and recruitment of war-disabled soldiers in the Indian Armed Forces is essential for enhancing the overall effectiveness of the military while ensuring that veterans receive the support they deserve. The following recommendations aim to address the existing challenges and create a more inclusive and supportive environment for both current personnel and future recruits:

- **Enhance Medical Infrastructure**. Investing in medical facilities and resources dedicated to the care of war-disabled soldiers is critical. This includes upgrading existing military hospitals, expanding the reach of specialised rehabilitation centres, and ensuring that state-of-the-art medical technologies and treatments are accessible to all veterans. Establishing more ALCs and Paraplegic Rehabilitation Centres across the country will help provide timely and effective care to those in need, particularly in rural areas.

- **Strengthen Mental Health Support**. Recognising the psychological impact of combat is vital. The military should prioritise mental health services by increasing the number of trained mental health professionals and integrating psychological care into all levels of medical treatment. Awareness campaigns aimed at reducing stigma around mental health issues should be implemented to encourage soldiers to seek help. Creating peer support networks can also foster a sense of community among veterans and promote mental well-being.

- **Streamline Administrative Processes**. Simplifying the bureaucratic procedures for accessing benefits and services is essential for ensuring timely support for war-disabled soldiers. This can be achieved by digitising records and applications, allowing for easier navigation through the system. Training personnel in administrative offices to handle veteran-related cases efficiently will help reduce wait times and improve the overall experience for veterans seeking assistance.

- **Expand Vocational Training and Employment Opportunities**. To facilitate the reintegration of war-disabled soldiers into civilian life, the military should enhance vocational training programs that align with current job market demands. Collaborating with industries to create specialised training programs will equip veterans with the necessary skills to find meaningful employment. Additionally, establishing partnerships with private companies for preferential hiring of veterans can further aid in their transition.

- **Foster Family Involvement**. Involving families in the care and rehabilitation process is crucial. Offering family counselling services and support groups can help families better understand and cope with the challenges faced by their injured loved ones. Providing resources for families will not only assist in the emotional well-being of the veteran but also encourage families to support enlistment in the armed forces.

- **Promote Awareness and Outreach Programs**. Conducting outreach programs in schools, colleges, and communities can help raise awareness about the opportunities and benefits of a career in the armed forces. Highlighting the comprehensive care and support provided to veterans can positively influence perceptions and encourage more individuals to consider military service. Engaging with local communities through events and information sessions can also foster a sense of pride and support for the armed forces.

- **Leverage Technology for Rehabilitation**. Incorporating technology into rehabilitation programs can significantly enhance the quality of care for war-disabled soldiers. Telehealth services can facilitate remote consultations for veterans living in remote areas, providing them with access to specialists without the need for travel. Virtual reality therapy and other innovative rehabilitation techniques can also be explored to aid in the recovery process and improve engagement.

Conclusion

Caring for war-disabled soldiers is not only a moral imperative but also a crucial factor in maintaining the effectiveness and sustainability of the Indian Armed Forces. The treatment and support provided to injured personnel directly influence morale, retention rates, and future recruitment, shaping the military's overall reputation and appeal. By examining global best practices and addressing the challenges faced by war-disabled veterans in India, significant improvements can be made to enhance their quality of life.

Implementing comprehensive medical and psychological care, streamlining administrative processes, and expanding vocational training opportunities will ensure that veterans receive the support they need to reintegrate successfully into civilian life. Furthermore, fostering family involvement and promoting awareness of military service can positively impact recruitment, attracting motivated individuals to serve their country.

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Leap Across the Meghna River: A Tactical Manoeuvre Leading to Strategic Victory in Indo-Pak War 1971

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Abstract

The Indo-Pak War of 1971 stands out as a rare instance in India's history when the nation took the military initiative and achieved resounding success. The campaign was characterised by clear political objectives for the armed forces, exceptional joint planning at strategic, operational, and tactical levels, and exemplary tri-service coordination. The swift tri-service operation, often referred to as a 'Blitzkrieg', saw the Indian Air Force (IAF) play a crucial role and has been regarded as the fastest land advance since the North Africa campaign of World War II. The strategy focused on conducting a defensive war in the West while pursuing a decisive offensive in the East, culminating in a creative and innovative approach. A key early success was the IAF's achievement of air dominance over East Pakistan, securing control of the skies in just two days. Among the pivotal operations, the heliborne crossing on 09 Dec 1971, where the 110 and 105 Helicopter Units of the IAF airlifted troops of the 57 Mountain Division across the Meghna River, stands out as a turning point in the Bangladesh Liberation War. The exceptional

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This is the first prize winning essay of the Lieutenant General SL Menezes Memorial Essay Competition 2024.

Journal of the United Service Institution of India, Vol. CLV, No. 640, April-June 2025.

skill, professionalism, and bravery of the pilots and airmen were instrumental in transforming the dream of capturing Dhaka into reality. This essay critically analyses a significant tactical airlift manoeuvre that played a vital role in destabilising the enemy's centre of gravity, and eventually defeat of Pakistan in the Eastern Sector.

Introduction

India carried out extensive military preparations, including the mobilisation of troops along both the eastern and western fronts. Under the leadership of General Sam Manekshaw (the then-Army Chief), the Indian military meticulously planned operations to ensure full readiness. The primary goal was the liberation of East Pakistan. India aimed to swiftly defeat Pakistani forces in the East to minimise the possibility of international intervention. The Indian military employed a *Blitzkrieg* (An intense military campaign intended to bring about a swift victory) strategy, coordinating rapid attacks by the army, air force, and navy to overwhelm Pakistani defences. On the western front, India adopted a defensive strategy, focusing on containing Pakistani advances while concentrating on the decisive eastern theatre. However, limited offensive operations were conducted to capture strategic positions and ensure the security of Indian territory. The Indian Navy played a crucial role by establishing a naval blockade of East Pakistan, cutting off supplies and reinforcements to Pakistani forces. The 1971 India-Pakistan War resulted in a remarkable and decisive victory for India and the people of East Pakistan, showcasing the highest standards of military professionalism and timely strategic decisions. It also witnessed the birth of a new nation—Bangladesh. This war stands as one of the most significant events of the 20th Century, altering national boundaries in just 13 days following the outbreak of hostilities initiated by Pakistan on 03 Dec 1971. The intense conflict culminated in a complete victory for the Indian Armed Forces, allowing India to dictate terms to the Pakistani leadership and leading to a regime change that gave birth to Bangladesh. The war outcomes, in relation to intensity of conflict, has been represented in the Figure 1.

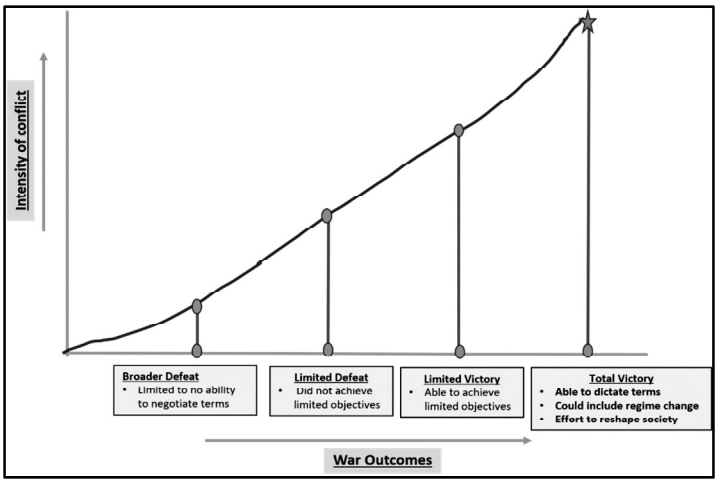


Figure 1: Spectrum of War Consequences

Military Strategy: Indo-Pak War 1971[1]

According to initial plans, in the North-Western Sector, the 20 Mountain Division was tasked with capturing Bogra and advancing to the Brahmaputra River. In the Western Sector, the newly raised 2 Corps, consisting of the 9 Infantry Division and 4 Mountain Division, was assigned to capture Jessore, Magura, and Faridpur, and then advance to Dhaka using inland waterways. In the North-Eastern Sector, the 101 Communication Zone, along with the 6 Infantry Division, was employed to advance along the Jamalpur-Tangail-Dhaka axis. In the South-Eastern Sector, under the 4 Corps, the 23 Mountain Division, 8 Mountain Division, and 57 Mountain Division were tasked with securing the area up to the Meghna River. During the war, the retreating Pakistani Forces destroyed the bridges on the Meghna River. In response, the Indian Air Force (IAF) created a heli-bridge using Mi-4 helicopters, enabling troops to cross the riverine and marshy areas from Brahmanbaria to Raipura in Narsingdi over the Meghna River. This bypassed the destroyed Meghna Bridge and the Pakistani defences in Ashuganj, without a single accident or loss to enemy fire. This heli-bridging manoeuvre was a masterstroke[2], allowing for the concentration of forces towards the final objective of Dhaka. These pivotal moments highlight how air power orchestrated the nation's military strength to achieve the liberation of Bangladesh and force the surrender of 93,000 Pakistani soldiers—the largest

surrender in the military history. The four Special Heli Borne Operations (SHBO), which had no precedent or established doctrine, were improvised during the conflict. They shortened the war and contributed to a swift victory, thereby, saving lives and sparing the agony of a prolonged conflict.

Sequence of Events Leading up to Operation Meghna[3]

The 4 Corps launched an offensive from three directions in the east, covering a stretch of 250 kms of the border between East Pakistan and Meghalaya in the north, and extending to the Feni salient in southern Tripura. The operations[4] focused on three key areas: Sylhet, Bhairab Bazar, and Comilla. Sylhet was in the north, Comilla in the south, and strategically positioned in the centre were the towns of Ashuganj and Bhairab Bazar, which guarded the crucial Coronation Bridge across the Meghna River. While facing two Pakistani divisions, the 4 Corps also had to overcome the challenges posed by the formidable riverine terrain, which was crisscrossed by rivers and streams, making it a logistical nightmare for any offensive action. Given the vast area to be secured, Lieutenant General Sagat Singh was tasked with capturing the three sectors mentioned and securing the eastern banks of the Meghna River. However, Lieutenant General Sagat had his sights set much further—on Dhaka. Despite his ambition, his superior commander and Army Headquarters in Delhi were hesitant to plan for the capture of Dhaka, considering it beyond reach within the 15-day strategic timeframe.

The Mighty River 'Meghna'. The Meghna River[5] is formed by the confluence of the Surma and Kushiyara rivers, which flow through the eastern part of Bangladesh. The river runs from north to south, eventually joining the Padma River to create the Gangetic delta. As one of Bangladesh's major rivers, the Meghna stretches between 5 and 15 kms at its widest point. The Meghna served as a formidable natural barrier, protecting Dhaka, the capital and seat of power in East Pakistan, from the east, as it flows north to south along the eastern part of the region. Lieutenant General AAK Niazi (Pakistani Eastern Army Commander) believed that if the Meghna River and its bridges remained under his control, Dhaka would be secure. His primary objective was to prevent the Indian Armed Forces from crossing the river Meghna. The most straightforward defence strategy was to hold the eastern banks of

the river. If forced to retreat, destroying the bridges would eliminate any possibility of the Indian Army crossing the mighty river.

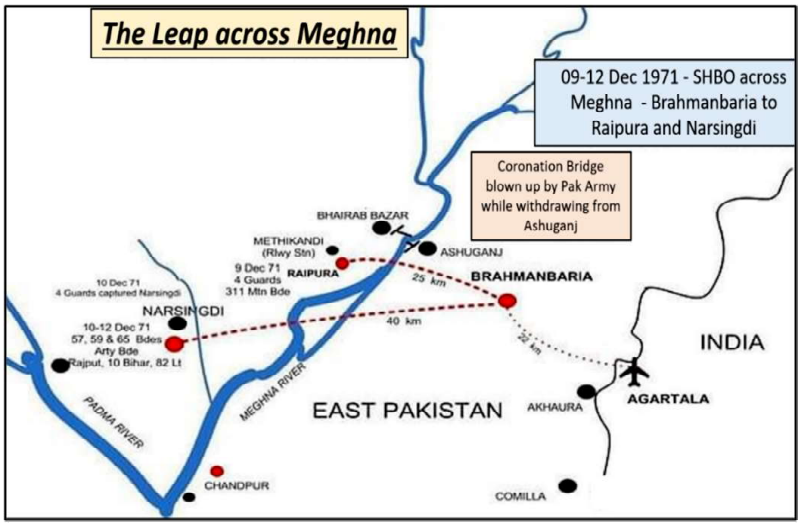
The Phases of Air-lift[6]. The 110 Helicopter Unit (HU), established on 19 Feb 1962, played a crucial role in the 1971 operations east of Dhaka. The unit's Mi-4 helicopters conducted extensive heli-bridging operations in the riverine terrain of East Pakistan, where the enemy had destroyed all major bridges. These operations[7] were skilfully led by the Commanding Officer of 110 HU, Squadron Leader CS Sandhu, who was later awarded the Vir Chakra for his leadership in these SHBO during the war. The magnitude of the task is evident from nearly 500 sorties flown under enemy fire throughout these operations.[8] The four phases (refer to Figure 2) of heli-lift conducted are as follows:

- **SHBO: Sylhet**[9]. Higher command formations had determined that Sylhet, a district and communication hub, held significant military importance, and its capture would deal a severe blow to the Pakistan Army. Consequently, HQ 4 Corps assigned the 4/5 GORKHA RIFLES (GR) of the 59 Mountain Brigade to capture Sylhet[10] and brought in Mi-4 helicopters from 110 HU to carry out SHBO to achieve this objective. The primary mission was to heli-lift the battalion (4/5 GR) to Mirpara, on the outskirts of Sylhet, to secure the railway bridge over the Surma River and occupy the Sylhet airport and radio station to support further operations. The challenges for the unit's helicopters extended beyond Sylhet, as they were subsequently tasked with carrying out additional SHBO[11] to support corps objectives as the battle advanced from different axes, including Raipura, Narsingdi, and Baidya Bazar.

- **SHBO: Raipura**. On 10 Dec 1971, the 4 Corps Commander made the strategic decision to advance beyond the east bank of the Meghna River and, if possible, move towards Dhaka. With the bridge over the Meghna destroyed, the task of heli-bridging a sizeable force[12] across the river fell to the helicopters. The operation began shortly before dusk, with around 100 troops being ferried to landing pads. By the time the second wave of helicopters arrived, it was already dark, but they landed safely. The troop movement continued throughout the night and into the next day. Although the Mi-

4 helicopters were typically designed to carry 14 troops, the load was increased to 23 men per trip.

- **SHBO: Narsingdi**. On 11 Dec 1971, eight helicopters from 110 HU were relocated from Brahmanbaria to Narsingdi. By 0730 hours, each helicopter had completed three sorties. After refuelling at Agartala, the second wave took off at 0900 hours, with each helicopter completing another three sorties. Two additional missions were flown, resulting in a total of 834 troops and 58,600 kgs of supplies being airlifted across 99 sorties. Although more sorties could have been conducted, the army was unable to keep pace with the rapid execution of the SHBO. On 12 Dec 1971, 35 sorties were carried out at Narsingdi, airlifting 234 troops and 18,520 kgs of supplies. Due to heavy ground fire, there were 30 casualties, and a helicopter was sent to Sylhet to evacuate them. Unfortunately, one helicopter crashed due to an in-air fire.



Map 1: Phases of Heli-lift Across Meghna River
Source: *Faugy Strategy*[13]

- On 13 Dec 1971, 282 troops and 14,850 kg of supplies were airlifted in 30 sorties. On 14 Dec, 12 helicopters were positioned at Daudkandi early in the morning to move a battalion of troops across the Meghna River to Baidya Bazar, just seven miles from Narayanganj on the outskirts of Dhaka. By evening, 810 troops and 22,650 kgs of supplies had been airlifted in 79 sorties.

- **SHBO: Baidya Bazar**. On 15 Dec 1971, SHBO continued, airlifting 1,209 troops and 38,100 kgs of supplies to Baidya Bazar. Despite one aircraft being involved in an accident, the morale of the unit remained high. The following day, most helicopters were taken in for maintenance and inspection. One helicopter, sent to Sylhet for casualty evacuation, successfully airlifted 16 casualties, while two others were used for army communication sorties throughout the day. In the evening, five helicopters participated in the Dhaka Surrender Ceremony.

The exemplary execution[14] of the Meghna operation[15] involved a significant tactical airlift[16], delivering over 6,000 soldiers and nearly 202 tons of various supplies, including equipment, small arms ammunition, water, kerosene, rations, and artillery with heavy ammunition directly to the battlefields, even across the vast Meghna River, which is over 05 kms wide. This was achieved continuously, day and night. Additionally, the helicopters facilitated the evacuation of hundreds of casualties, both friendly and enemy, on the return trips. The IAF helicopters consistently supported the ground troops' advance, demonstrating exceptional operational effectiveness.

The Concept of Air Assault and Defining Attributes of Helicopters

Air assault refers to the deployment of ground-based military forces using vertical take-off and landing aircraft, such as helicopters, to capture and hold strategically important terrain that had not yet been fully secured by the enemy. This method is a standard part of ground troop training, with equipment adapted for easier transport. It is distinct from airborne assault, where paratroopers and their supplies are dropped, and from air attacks, air strikes, or air raids, which rely solely on aircraft for the offensive. Air assault also differs from military transport operations like air landing or airlift, which require a secured landing zone, referred to as an airhead. The concept of air mobility has played a critical role in offensive military operations since the 1930s.

The first helicopter airlift and sling load mission, called 'Operation Windmill I', was conducted by the United States Marine Corps on 13 Sep 1951, during the Korean War. This mission supported a battalion clearing enemy positions along ridges surrounding an extinct volcano, known as 'The Punchbowl.' Seven

HRS-1 Marine helicopters completed 28 flights, delivering 18,848 pounds of supplies and evacuating 74 severely wounded soldiers. In 1952, the Special Air Service utilised Dragonfly helicopters to insert a small group of soldiers north of Kuala Lumpur. On 05 Nov 1956, the Royal Marines' 45 Commandos carried out the first-ever combat helicopter insertion during an amphibious landing as part of Operation Musketeer in Suez, Egypt.

The unique capabilities of helicopters position them as 'Force Multipliers' in any battle across tactical, operational, and strategic levels, providing leverage—a strategic and operational military advantage. Understanding the specific attributes of helicopters is essential to grasp their role as Force Multipliers in battle.

- **Access and Mobility**. Helicopters provide opportunity to the ground forces to be pre-deployed at any time, in the area of interest, as the circumstances demand. Exploiting the access afforded, helicopters can move 100 kms a day, unimpeded over all types of terrain. They can respond quickly to a situation and can disappear over the horizon, without the stigma of retreat. Time taken for helicopters to be replenished is also minimal.

- **Versatility and Flexibility**. Helicopters can, in seemingly offensive posture, appear over the horizon and yet withdraw as unobtrusively into a defensive deployment, sending subtle messages to friends and foes alike. Helicopters can change role and calibrate their response in terms of role, tasks, rapid response, and visibility, as required.

- **Lift Capability**. 'Airlift' is the only practicable means of deploying troops, equipment and logistics support, and subsequently, sustaining them on large scale. Airlift permits the land forces to scale major obstacles including rivers, mountains, and sea as well as capability to transit to other theatres as part of strategic manoeuvre.

- **Resilience**. Helicopters, though have limited capability to absorb the damage due to enemy action and weather conditions, operate forward in the highest threat environment combined with treacherous terrain condition.

Critical Analysis—How Leap Across Meghna River Shaped the Outcome of the Campaign

In 1971, the IAF had added more than a significant value in driving the operational outcome. It is imperative for us to critically analyse this tactical manoeuvre which led to strategic victory and provided a new dimension to futuristic warfare. The same has been covered in subsequent para.

Application of Manoeuvre Warfare. The theory emphasises defeating the enemy through means other than attacking his strength. Specifically, Manoeuvre theory seeks to 'Pre-empt' (defeating or neutralising the enemy before the fight has begun), 'Dislocate' (rendering enemy's strength irrelevant by removing the enemy from the decisive point or preferably removing the decisive points from them), and 'Disrupt' (neutralising enemy by successfully attacking or threatening his Centre of Gravity [CoG]) the enemy forces. The Helicopter-lift operations, named as Operation Cactus Lily, manoeuvred troops vectored directly at the enemy's CoG, thereby, acting on the enemy's morale, as explained below in Figure 3.

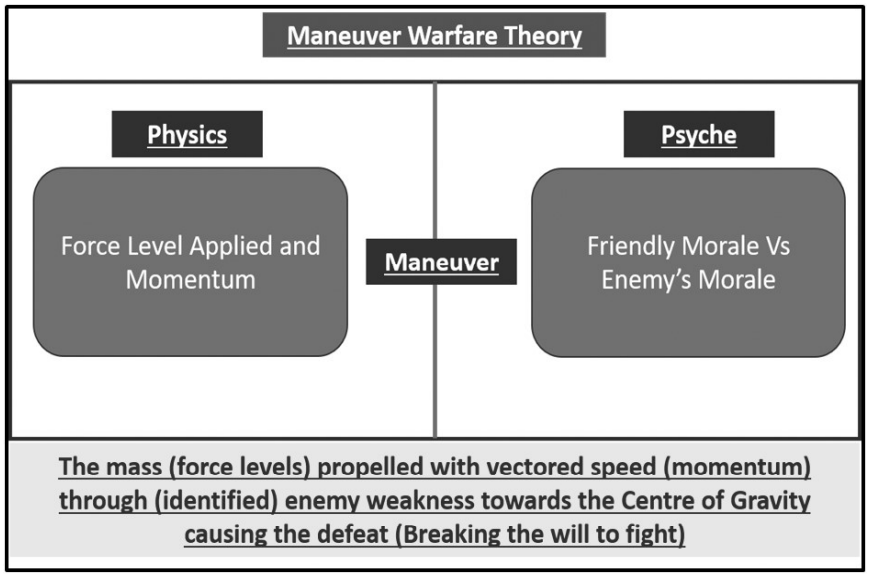


Figure 2: The Aspects of Manoeuvre Warfare Theory

This manoeuvre, according to the concept of functional dislocation, employed the combined-arms theory in battle to fight the enemy where and when he was weak, and presented him with a series of tactical dilemmas. Finally, it translated to the defeat of the enemy; principal target being enemy's mind as the force level applied with momentum targeted opponent's psyche. Thus, this action became the linchpin between the physics of war and the psychology[17] of war in the campaign.

Exercising Tenets of Combined Arms Theory. The important aspect with respect to the combined arms theory is to understand the 'Complementary Principle'. Each of the combat arms has strengths and weaknesses. The infantry troops have the capabilities to control terrain while moving silently to operate in highly restrictive terrain, however, they also have serious weaknesses; they lack high velocity and move slowly when dismounted and are vulnerable in open terrain. Helicopters and combat aviation contribute their strengths of overwhelming speed, lift capability, airborne reconnaissance, and lethal firepower, while their weakness lies in vulnerability to air defence fire, inability to control terrain. Tanks have good speed and firepower but they are not good at controlling the terrain and are too noisy. In a nutshell, each of the combat arms has strengths and weaknesses, which are compensated by the other arms and in 'Combined Arms Theory', each arm serves in battle to complement the others. The theory of combined arms and complementarity was applied in an outstanding manner during the Meghna heli-lift operations, focusing on friendly force by nullifying friendly weaknesses and synergetic combination means that when different combat arms work together, the sum is greater than the parts (refer to Figure 4). Lastly, while future weapons will evolve with the expansion of combat arms, the synergism achieved through their combined application will remain unchanged, transcending current technological and organisational constraints.

Application of Principles of War. The IAF's Mi-4 helicopters played a pivotal role in the eastern theatre, transporting the Indian Army troops across numerous waterways. Between 03 and 17 Dec 1971, helicopters in the east completed 2,404 sorties, lifting 185.7 tonnes of supplies, moving 5,945 troops and evacuating 1,179 casualties. The operations of the 4 Corps mirrored the speed and effectiveness of Rommel and Guderian's Blitzkrieg, as a force of more than nine infantry battalions, supported by artillery, armour,

and engineers, was preparing to attack Dhaka when the Pakistani Army chose to surrender. The crossing of the Meghna River in both the central and southern sectors of the 4 Corps operational area sealed Dhaka's fate, leading to an unconditional surrender on 16 Dec 1971. This force manoeuvre qualified application of principles of war in totality, such as Selection and Maintenance of Aim, Maintenance of Morale, Offensive Action, Surprise, Concentration of Force, Economy of Effort, Flexibility, Security, Co-operation, Simplicity, and Administration.

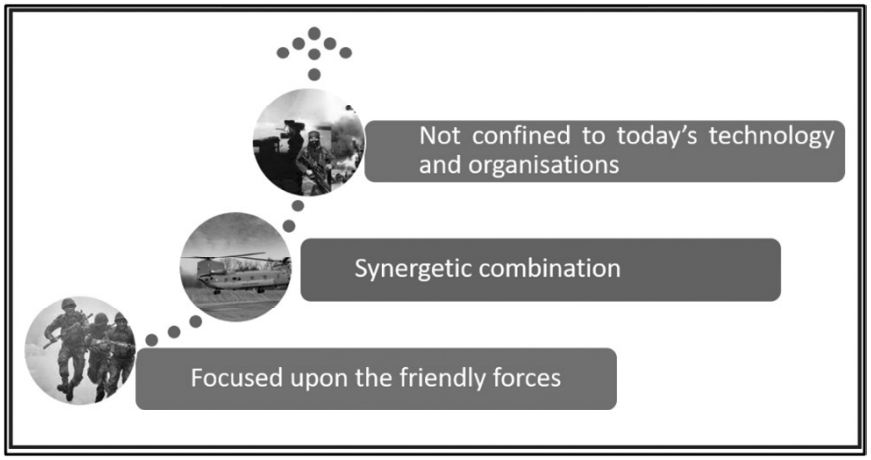


Figure 3: The Principle of Complementarity

Effects-Based Operation (EBO), which Outperformed Simple Attrition. The Meghna heli-lift operation was designed with clear objectives and a desired end state in mind, focusing on the effects needed to achieve these goals and how success would be measured. Resources were then aligned with specific actions to create those effects. This approach qualifies as an EBO, aimed at connecting tactical actions to strategic outcomes, ensuring that military objectives and combat actions aligned with the commander's broader strategic needs. EBOs often focus on second-order (or higher-order) effects rather than immediate results. The heli-lift operation served as a gateway to Dhaka, creating a higher-order impact in the war.

The Military Visionary Leadership. The creation of the heli-bridge across the Meghna River was the brainchild[18] of Lieutenant General Sagat Singh[19], who had been considering this bold strategy even before the war. He envisioned using vertical envelopment as

a manoeuvre to surprise the enemy, should the opportunity arise. When the Coronation Bridge at Ashuganj was destroyed, it gave Lieutenant General Sagat the chance to execute his daring plan. Despite facing significant opposition and warnings not to proceed, Lieutenant General Sagat, a commander of the calibre of Montgomery and Patton, took the initiative and created the opportunity himself. At the time, Air Chief Marshal PC Lal[20], who had served[21] as the Air Officer Commanding-in-Chief, Western Air Command, and later as Vice Chief during the 1965 war, led the IAF. He had effectively prepared the IAF, learning from the experiences of the 1965 war.

Conclusion

During Indo-Pak War 1971, heli-lift operations across Meghna River offered tactical and operational flexibility in terms of ability to quickly reconfigure and to project power at location of own choosing. The IAF was employed in offensive role as the overarching air operations offered the political leadership strategic choices and alternatives for sustainable and easily scalable levels. It was a fine example of how the application of manoeuvre warfare, combined arms theory, principles of war, EBO, and convergence of these strategic plans and the synergy at the highest levels of command coupled with excellent leadership can simultaneously produce physical as well as psychological shock.

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From the Archives

ARMIES OF INDIA FROM THE ARYANS TO THE MARATHAS

JEFFREY GREENHUT*

No factor determines the growth and direction of an early culture so profoundly as geography, and India is no exception. India is a subcontinent both closed and open. Separated from the rest of the world on two sides by oceans, and along the northern borders by great mountain ranges, its relative isolation enabled it to develop in its own fashion and its own way throughout most of recorded history. Internally, however, the great sweeping plain of Northern India provides no natural boundaries if the mountain passes should be breeched. Thus, the military history of India consists of successive invasions through the mountain passes of the Northwest, followed by gradual disintegration of the state established by the invaders, and then a new invasion. Each new invader had his own system of military organization, weaponry, and tactics. But the geography and the culture of Northern India soon influenced the new military system so that it gradually took on many of the characteristics of the old.

THE ARYANS

Around three thousand years ago, the original civilization of India, that of the Indus Valley, entered a period of great decline. Whether this decline was caused by pressure on the Northwestern Frontier by the Aryans, or whether the Aryans moved in to fill a power vacuum is impossible to determine. Yet probably sometime in this period this great wave of invaders out of Central Asia entered India. Like generations of invaders to come, the Aryan invaders were horse nomads. They were tribal in culture and bronze age in technology. Semi-nomadic pastoralists living chiefly on the produce of their cattle, their military system depended on the domestication of the horse. It was the horse which they held in highest veneration, and the horse which enabled them to complete the subjugation of the remnants of the Indus Valley civilization.

Originally, their military system was based on their social structure. Stratification among tribal peoples is usually rudimentary, with the chief and his lieutenants far closer to the mass of the people than is common in more developed societies. In the early period, the Aryan chief and his lieutenants fought from chariots, while the majority of the tribal groups fought on foot in an unordered mass.[1]

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[1] A. Berriedale Keith, "The Age of the Rigveda", *The Cambridge History of India, Vol.*

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Unlike the people of the West, whose fighting habits were determined by the heavy woods and rolling terrain of the European forests, the Aryans came out of Central Asia with its great fiat plain posing no limitation to mobility and range. Thus the chariot was their arm of decision, and in the Vedic period the Aryan chariots were of simple construction based upon the necessity to break them down and carry them on a nomadic march. Their most honourable weapon was the bow which, unlike the bows of primitive tribes, was drawn to the ear, but they also employed swords, spears, and axes. Coats of mail were known, but no evidence exists to support the supposition that they fought from horseback. This indicates that they lacked the stirrup.

As the Aryans moved eastward from the Indus, a gradual distinction took place between those who fought from chariots and those who laboured and fought on foot, A class of warriors grew up, freed of the labour of agriculture, whose function was to surround the king and be ready for battle.[2] By the sixth century B.C. the Aryan army was responsible only to the king and all tribal controls upon it had lapsed.[3] As the Aryan state developed, war became an expensive and formal matter. A code of chivalry developed which governed conduct between Aryans.[4] The code, far advanced for its day, prevented the use of barbed and poisoned arrows, and protected prisoners and unarmed and wounded men.[5] Further, war took on a semi-religious tone, as Brahmans regarded it as an *Upa-Veda*, a supplementary part of divinely inspired knowledge.[6]

Tactically, the army changed very little. They used the cavalry primarily as mounted archers, but the basic weapons were still the chariot and the foot archer.[7] As the state developed, so did the bureaucracy. High level military administration was split off and distinguished from civil administration. Yet the close relationship of military and political action was recognized, for the army included a Department of Diplomacy.[8]

By the sixth century B.C. the synthesis of Aryan and Indus cultures had developed the Hindu civilization. The Hindu states did not yet possess a standing army, and when the army was called to battle it followed the Aryan pattern of foot and chariots. Elephants had not yet been domesticated for war.[9]

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THE DECCANNI KINGS

South of the great plain of North India, military development was also under way. The culture of the Deccan was, like the original Aryan culture, tribal in origin. The early Deccanni kings recognized that if they were to break up the tribal structure and establish a powerful central government, they would need a non-tribal army. One of the first recorded instances of economic development for a political end was when, in the sixth century B.C., the Deccanni kings began to clear heavy jungle and bring wasteland under the plough. The settlers on this new land now owed their property not to the tribe but to the king. It was from this new class that the king recruited his professional army.[10]

By the beginning of the fourth century B.C. better methods of organization and technological development had added cavalry and war elephants to the army. The foot soldier had declined in quality if not quantity. The chariot was still considered the arm of decision. Soldiers in these armies were trained systematically and were probably relatively regularly paid.[11]

The military equipment of this period showed no great improvement over that of the Aryans. Infantry wore cotton quilted armor and carried bows and spears, as did the cavalry. Chariots had grown larger and now carried six men. The cavalry, still without the stirrup, was inferior to the chariot. Elephants had been domesticated and became a weapon of war.[12] With their immense size elephants fascinated Indian military leaders who were never free from the theory that elephants could somehow be made decisive on the battlefield. Yet in terms of mobility and striking power they were little more effective than chariots, since they carried only four men, the mahout and three archers.[13] Some Indian rulers recognized the unrealiability of elephants and did not use them directly as weapons but instead as observation platforms and to frignten the horses of enemy cavalry.[14]

By the third century B.C. the Hindu military system had become ritualized. Of the seven classes recognized by Megasthenes, the fighters were the second most numerous. They performed no work in their communities but that of fighting, and their community provided their weapons and kept their horses and elephants for them. They received regular pay in time of peace, so while not fighting they lived a ease and maintained numbers of dependents.[15] This military system received a great shock with the invasion of Alexander the Great.

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[10] B.K. Majumdar, pp. 26-30.
[11] R.C. Majumdar, H.C. Raychaodhury and Kalikinkar Datta, *An Advance History of India*, (New York: St. Martin's Press, 1965), p. 73.
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[14] R.C. Majumdar, *The Classical Accounts of India*, (Calcutta: Frima K.L. Mukopadhyay, 1960), p. 38.
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Alexander was one of the few leaders of antiquity who was able to effectively, use cavalry prior to the invention of the stirrup. He armed them with a bow, and the superior mobility of the cavalry and the long range of their weapons easily defeated the chariots of the Indian army. The chariots, no longer the light,easily drawn models of the early Aryans, had become heavy, slow, and prone to bog down.[16] Nevertheless, the organizational ability of even the local Indian states could oppose Alexander with large military forces. Poms, only a local monarch, opposed the army of Alexander with 30,000 efficient infantry, 4000 cavalry, 3000 chariots, and 200 elephants.[17]

CHANDRAGUPTA

Sometime after the withdrawal of Alexander's armies from India, the first great empire of India developed. Like all the empires to follow, it was based on a strong military system and a large standing army. The Empire established by Chandragupta maintained a vast standing army numbering hundreds of thousands of troops.[18] Military bureaucracy to support such a force was highly developed, and by the turn of the fourth century B.C. the military had been organized into six divisions: liaison, logistics, infantry, cavalry, war chariots, and elephants.[19]According to Pliny the army was immense, having a strength of 600,000 foot, 30,000 cavalry, and 9000 elephants, as well as a chariot corps.[20] The class structure of the army as a basis of recruiting had been dispensed with, both practically and theoretically. The troops included hereditary troops, feuditory troops, mercenaries, guild levies, and tribal troops. The hereditary troops and the majority of the mercenaries were Kshatriyas, as they were considered to be the most reliable. Guild troops were city militias who were probably available only when their city was threatened. Tribesmen were employed as auxiliaries.[21] The central government provided all equipment for the army.[22]22 The art of fortification was well developed. The great cities of the Empire had ditches, ramparts, earthen walls, or walls of wood or brick, having battlements, towers, water gates, portculluses, and a wide street running around the interior face of the wall. To insure the loyalty of the city, the Emperor scattered guardhouses throughout.[23]

Military theory was well advanced. The *Arthashastra* discussed types of battles, categories of battles, methods and time of march, advice for training exercises, maintenance, and discipline.[24] By the first century A.D. India's war theory had advanced even further. The state was to avoid war

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[16] R.C. Majumdar, p. 36.
[17] Hunter, p. 211.
[18] Drekmeier, p. 171
[19] Mc Crindle, p. 88
[20] Majumdar, Raychaodhuri, and Datta, p. 120.
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[22] McCrindle, p. 88.
[23] Thomas 5 p. 429
[24] B. K. Majumdar, p. 66

if possible and only to engage in war when attempts at peaceful settlement had failed. A formal code governing hostilities was in wide use. It governed the use of weapons against non-combatants, those fleeing, the wounded, the unarmed. In addition a chivalric code was in use. A warrior could fight only those armed as well as himself. Ambushes were prohibited.[25]

THE GUPTA EMPIRE

The Gupta Empire, 300 to 700 A.D., could field large armies. As before, the army consisted primarily of foot soldiers, but also included cavalry, elephant troops and charioteers. Theoretically, a single division of the army consisted of 109,000 infantry, 65,000 cavalry, 21,000 elephants, and 21,000 chariots.[26] These figures seem somewhat exaggerated.

The tactics of the Guptas, however, had been influenced by the reduction in jungle terrain and the mobile Sythian cavalry. Pre-Mauryan and Mauryan strategy had centered around the use of huge elephant forces which were useful in jungle and in positional warfare. However, mobile cavalry had defeated these. The Guptas remodeled the army on the Sythian pattern, with armored horsemen armed with lance and bow. Cavalry fought in well-ordered lines and close formation, and the chariot fell into disuse.[27]

Increasing use of the cavalry by the Guptas led to the problem of horse supply. Neither then nor ever was India suitable ground for the breeding and raising of horses. Yet cavalry was such an obviously superior force that Indian rulers felt they needed large quantities of horses. The expense of providing horses to its cavalry would become the major military expenditure of the state. The Gupta military system, unlike the Mauryan, was decentralized, showing both the inability of the government to enforce its will, and the increasing rise of the jati system which made strong central government less necessary for the maintenance of social order.[28] The Guptas relied upon the land tax to support the army, and the villages often paid their taxes directly to the army when it was nearby. Conscription seems to have existed, although whether it extended beyond the Kshatriya class is unknown.[29]

THE HARSHA EMPIRE

The next major empire in India after the Guptas was the Harsha Empire which, like its predecessors, depended on a strong standing army.[30]

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[25] Drekmeier, pp. 139-40.
[26] N.K. Sidhanta, *The Heroic Age of India*, (London : Kegan Paul, Trubner and Company, Ltd., 1929), pp. 139-40.
[27] B. Majumdar, p. 90.
[28] R . Majumdar, p. 81.
[29] Drekmeier, p. 175
[30] William Harrison Moreland and Atul Chandra Chatterjee, *A Short History of India*, (London: Longmans, Green and Company, 1957), p. 106.

The army, also like its predecessors, maintained the tradition of recruiting from all classes, not just Kshatriyas.[31] But some changes had taken place. By the seventh century A.D. chariots were clearly obsolete, their place being taken by elephants.[32] By this time the stirrup had been introduced and more use was made of cavalry, although it had not yet become the arm of decision. The Harshas used it for reconnaissance, surprize, pursuit, and rear attacks. They did not yet understand the use of the horse-bowman. Thus they armed the cavalry with lance or sword, only occasionally issuing a bow.[33] Logistically, the army was well organized. On the march it was followed by a long train of supply wagons carrying rations, medicine, forage, spare parts, and weapons. Further logistical support was provided by civilians including artisans, engineers, carpenters, smiths, surgeons, and merchants.[34] All of this indicates a highly efficient, well organized bureaucracy.

In the tenth century no single empire controlled the Northern Indian states. The various Hindu kings, however, recognized the need for military force and usually maintained standing armies trained and paid in times of peace. In war they supplemented these forces by contingents recruited from tribes and possibly from general levies of the kings subjects. In the Rajput kingdoms, the basis of the army was tribal, but in other kingdoms mercenary troops were employed.[35] 35 The Hindu kings resorted to drafts in time of war because of financial restraints on the size of the standing army.

THE TURKS

In the eleventh century, under the impact of the invading Turks, the Hindu military system collapsed. The primary cause of the collapse was the climate of India and the impossibility of breeding large numbers of horses under such conditions. Being unable to breed horses, Hindu kings were always short of cavalry, and being short of it, never relied upon it. Since they could never rely upon it, they never learned how to use it well or how to defend against it. They had no knowledge of how to use it in the charge as shock action, or of how to harass enemy troops with it. Their elephant corps was an attempt to make up for their lack of mobility, but it was of doubtful value. Further, their rules of war prohibited flank or rear attacks, and the very size and resultant immobility of the foot mobile army restricted them to what was essentially positional warfare in which smaller and more mobile enemy cavalry forces could defeat them. Finally, the political structure of many separate states did not support one army or a unified command, but only a collection of levies and allies impossible to control. Perhaps all of this would not have prevented the Hindu states from defending against a mediocre force of invaders, but they were fighting the Turks.[36]

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[31] K.A. Kilakanta Sastri "The Chalukyas of Kalyani," in G. Yazdani, *The Early History of the Deccan* hereafter cited as Yazadani, (London: Oxford University Press, I960),, pp. 417-8.

[32] Jeannine Auboyer, *Daily Life in Ancient India*, trans, by Simon Watson Taylor, (New York: The Macmillan Company, 1965), pp. 28-32.

[33] Auboyer, p. 284.

[34] 84Auboyer, pp. 283-6.

[35] Moreland, pp. 120.

[36] Majumdar, pp. 148-50.

The Turkish Emperors of the Delhi Sultanate knew that their power rested primarily upon the sword. Thus their administration paid great attention to the army. The Sultanate had a Ministry of War whose chief was the administrator of the army. He was not a tactical leader of troops, but his responsibilities did include recruiting, promotion, assignment, pay, and logistics. He was assisted by a large clerical staff both at Delhi and in the provinces. He kept a muster role of each soldier, and supervised the branding of horses to prevent fraud by subordinate officials.[37] Up to the fourteenth century troops were paid on the assignment system, many of the troops living in the villages from which they collected their pay. This meant significant delays in mobilization, so that by the fourteenth century the Sultanate kept a large standing army in the capital and paid it in cash.[38] The difficulties of transporting an army over such broad distances of the North Indian plain led to the distribution of the remaining troops throughout the country. These troops, commanded by the provincial governor, were responsible for coping with local disorders. Reinforcements could be brought in from neighboring areas or from Delhi if the situation warranted.[39]

The mounted horse archer was the most important force in this army. Each archer wore light armour and armed himself with a bow and sword. At times, they armoured their horses. However, the Sultans succombed to the siren's call of the elephant and considered a single elephant to be as effective in battle as 500 horses. As many as 1400 elephants were taken on campaign, and many of the Shahs kept 3000 in the stables. Elephants were considered so important that they became a status symbol. No one might possess an elephant without royal permission.

For their infantry the Sultanate recruited mostly Hindus and people who could not afford horses. Since they were slower than cavalry, the Sultanate did' not use them in campaigns which required swift movement.[40]

Like the army of the Guptas, the army was decentralized. Unlike the Guptas, the regular soldiers received direct grants of land whose revenue supported them. Granting of land gradually reduced the effectiveness of the army since land grants became hereditary rather than based on individual efficiency and competance.[41] On the other hand, the Sultanate had a well organized engineering department which could construct fortifications, fortify encampments, and throw pontoon bridges across rivers. On one campaign, 100,000 woodcutters accompanied the army.[42] . The entire army itself reached great size. Ala-ud-din Khilji commanded 475,000 horse, and Muhammad bin Thuglak was said to command almost 900,000.[43] Support-

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[37] Tshtiaq Husain Qureshi, *The Administration of the Sultanate of Delhi* (5th rev. ed.) (New Delhi: Oriental Books Reprint Corporation, 1971), pp. 37-8.
[38] Moreland, p. 152.
[39] Qureshi, p. 139.
[40] Qureshi, pp. 140-4.
[41] Majumdar, Raychaodhuri, and Datta, p. 333.
[42] Qureshi , p. 145.
[43] Qureshi, pp. 155-6.

ing an army of such large size required great logistical foresight. The Sultanate established supply depots throughout the state so that an army on the march would not have to plunder to maintain itself. Unfortunately, if the army left the state, it depended either on tributary chiefs to supply it, or on plunder. The army resorted to plunder only as a last resort because plundering a district quickly depleted all its resources and the army, unsupported, had to move on.[44]

The theoreticians of the period paid due regard to weather and terrain. They discussed ambushes and attacks, but their recommendations for the disposition of the forces on the battlefield were rigid. The army always ordered for battle with a centre, two wings, a vanguard, and a rear guard. They placed elephants to the front, and preceded them by armed slaves[45]

While the major military states were in North India, some attention should be paid to the contrasting military organization of the Deccan. The terrain in the Deccan was mountainous and hilly affording little room for the sweeping charges and huge armies of the Northern Plain. The Deccani armies depended mostly on foot soldiers selected from village militias. These kingdoms directly recurited their standing armies and supplemented them by local levies commanded by provincial officials.[46] The Deccani states were organized on a military basis and territory was apportioned among military chiefs. The states distributed land in lieu of salary and those who held land had to maintain a stipulated body of military force and also pay taxes. Their tactics depended on a combination of foot armies and strong points consisting of forts built on dominant terrain features.[47]

THE MOGHULS

The Delhi Sultanate disintegrated into a number of Hindu and Muslim states, none of which was strong enough to resist an invasion of a new wave of Turks, under the leadership of Babur. Babur had spent most of his life fighting, and what he had learnt showed in the organization of his army. It was not divided into regiments, but among the great followers of Babur, all of whom had had much service in the field. The fighting men consisted of ethnic turks, although after entering and establishing himself on the Indian plain, Babur recruited local levies and formed bands of mercenaries[48]

By the sixteenth century and the emperor Akbar, the Moghuls had established their military system. At the centre stood a relatively small standing army commanded, paid and equipped by the Emperor, Under Akbar it did not exceed 45,000 cavalry, 5000 elephants, and a mass of little

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[44] Qureshi, pp. 147-8.
[45] Qureshi, p. 149.
[46] A. L. Altekar, "The Yadvas of Seunadesa," in Yazdani, pp. 513-63.
[47] N. Venkataramanayya and M. Somasekhara Sarma, "The Kakatiyas of Warangal", in Yazdani, pp. 666-70.
[48] William Erskine, *A History of India under the Two First Sovereigns of the House of Taimur, Baber and Humayun*, (2 vols.), (London : Longman, Brown, Green and Longmans, 1854), pp. 540-1.

esteemed foot. For this army the Moghuls provided no standing logistical support.[49] Most of Akbar's strength consisted of contingents raised and commanded by chieftains or high imperial officers. The troops so recruited were mostly cavalry who were formed into regiments, but regulations did not require them to drill or to observe uniformity in dress or arms.[50] Thus the army was not an imperial army and the soldiers did not owe direct allegiance to the Emperor[51] 51 Until 1575 Akbar paid officers by assigning them land reserves*but during that year he reformed the military system so that officers were paid in cash, He also reintroduced the system of branding horses as a check upon fraud.[52]

Akbar's policy was to recruit officers on the basis of talent, and he required that any who desired to be an officer in the Moghul administration should start at the lowest level and rise by virtue of service to state. The only exception to this rule was that very high rank was, with few exceptions, reserved for princes of royal blood.[53] Nonetheless, the long range trend of Moghul administrative direction in military affairs, not withstanding Akbar's reforms, was quantity over quality. Theoretically, Akbar could call into the field a force of almost four and a half million cavalrymen.[54] Practically, of course, no one even remotely approached this figure.

The bureaucracy into which such enormous amounts of money flowed to support this non-existent force was both corrupt and inefficient. The army it supported became increasingly huge, unweildy, and unmarshal. With the death of Akbar, the decline of the Moghul army began.[55]

The decline first became apparent in the inability of the Moghul officers to order their army in battle, indicating an ill-disciplined force led by an untrained officer corps. According to Mandelslo, a native of Germany who travelled to India and reported in 1638, the army fought in a disordered manner, knowing nothing of the distinction of vanguard, main body, and rear guard. Yet technologically they kept abreast of the West. They adopted an artillery arm divided into light and heavy artillery. They also experimented with camel-mounted swivel guns. However, all the heavy artillery was under the direction of Christian, gunners, indicating a lack of real dedication by the Moghul commanders to the new arm.[56] Further, they were unable to cast cannons that matched those of the West and their cannons often exploded, making them unreliable in battle.[57]

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[49] Vincent A. Smith, *Akbar, The Great Mogul*, (Oxford The Clarendon Press, 1917), p. 361.
[50] Smith, p. 360.
[51] Majumdar, Raychaodhuri, and Datta, p. 563.
[52] R,P. Tripathi', *Rise and Fall of the Moghal Empire* (3rd ed.), (Allahabad : Central Book Depot, 1963), p. 230.
[53] Tripathi, p. 231.
[54] Frederick Augustus, *The Emperor Akbar* (trans. and rev. by Annette S. Beveridge), (Calcutta: Thacker, Spink, and Company, 1890), p. 286.
[55] Stanley Lane-Poole, *Medieval India under Mohammedan Rule* (*A,D.* 712-1964), (Delhi: The University Book and Stationery Company, 1963), p. 236.
[56] SurendraNath Sen (ed.), *Indian Travels of Thevenot and Careri*, (New Delhi: National Archives of Delhi, 1949), p. 243.
[57] Sen , p. 157.

Under Shah Jehan the process of increasing bureaucratization and expense and decreasing military efficiency became more apparent. By far the largest portion of the revenues of the state was abosrbed by the army and its bureaucracy, both of which he maintained on lavish scale. While the army never came up to its nominal strength, it was always larger than necessary and poorly trained.[58] Shah Jehan could bring no fewer than 450,000 men to the field, of which 200,000 were cavalry, 8000 officers, 7000 household troops, and 40,000 musketeers and artillerymen, plus an additional 185,000 cavalrymen commanded by princes and noblemen.[59] Yet only the nobility officered this huge force and, serving as members of family units, had clan and tribal loyalties greater than their loyalty to the Emperor. This was partly offset by the fact that the troops did not necessarily belong to the same jati as that of the noble since no system of proportional enlistment based on jati existed.[60]

By Aurangzeb's time the Moghul army had declined even further. The cavalry went into the field loaded down with heavy armour, saddles, and trappings. They were no longer the light horse archers of the steppes of Asia but were similar to the European knight, more concerned with survival and loot than with military efficiency.[61] The army was purely a mercenary force. There was no conscription and no fines for those who did not serve. Every soldier served voluntarily, and every soldier of equal rank, Muslim or Hindu, drew equal pay.[62] The army was no longer a force loyal to the Empire, but rather loyal to their own individual leader so long as he could supply them with pay and booty.

THE MARATHAS

The decline of the Moghul army would not have been noticed, and indeed might not have been serious, had not the Moghul Empire been challenged by one of the great regional powers of India, the Marathas. The Marathas, though fierce fighters prior to this period, had not posed a threat to the Moghul Empire because they had served as mercenaries for the Moghul emperors.[63] All this changed, however, with the succession of Shivaji to the throne of the Marathas. Shivaji introduced a regular standing army whose men served a full twelve months instead of the old system in which they served six months followed by six months of working the land. Further, he introduced a military organization which bypassed the simplistic decimal organization of the Moghuls. The basic unit was a squadron of twenty-five cavalrymen, five squadrons making a troop, and ten troops, a regiment. To each squadron he attached a farrier and a water boy. The infantry as well

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[58]S.M. Edwardes and H.L. O. Garrett, *Moghal Rule in India*, (Delhi : S. Chand and Company, 1962), p. 135.
[59] Edwardes, p. 123.
[60] Rafi Ahmad Alavi, "New Light on Mughal Cavalry "Medieval India, A. Miscellany (2 vols). , (New York: Asia Publishing House, cl 1972), vol. 2, p. 70.
[61] Elphinstone, pp. 659-660.
[62] Jadunath Sarkar, "*Aurangzib* (1658-1681)" in *The Cambridge History of India*, VoL IV, The Mughal Period, ed. by Wolseley Haig and Richard Bum, (Delhi: S. Chand and Company, 1963, hereafter cited as Cambridge Vol. IV), p. 241.
[63] Surendra Nath Sen, *The Military System of the Marathas*, (Calcutta: Orient Longman's Private, Ltd. , 1958), pp, 4-6.

was organized into squads, with five squads to a platoon and three platoons to a company.[64] This breakdown of Shivaji's shows that he had an intuitive understanding of the span of control of an individual on the battlefield. These are approximately the same numbers used in modem military structures.

While Shivaji was consolidating his rule within the Maratha territory, he maintained more infantry than cavalry. However, when his followers began to expand and raid, they reduced their proportion of infantry from between forty to sixty per cent down to ten per cent, all the remainder being cavalry.[65] Shivaji also increased the number of regular cavalry directly hired by him and concurrently reduced the proportion of cavalry responsible to native chieftains. He selected his officers, both infantry and cavalry, for their competence, and provided allowances for the disabled and pensions for widows.[66] By the time the Marathas came up against major Moghul forces, they had become what the Moghuls had originally been—light cavalry. They armed themselves with sword, matchlock, and bamboo lance. They were swift, strong, and mobile. They could not stand against a heavy charge, but could disperse and harass main bodies of enemy troops.[67] Moving with little baggage or equipment, they could cover up to fifty miles in a single march.[68] The Moghul armies were no match for them. Yet they never fully developed the tactical use of the cavalry. It was adequate for raiding, but never became the overwhelming instrument of war it had been under the Turks and other Central Asian peoples.

Both the army of the Moghul Empire and the army of the Marathas show great similarities in their decline. In both cases the decentralization of the army was one of the principal factors in the disintegration of the political body. Both states resorted to what was essentially a feudal system in the raising of troops, in which land was given in return for military service. Leaders of both states advocated policies of religious intolerance, the Marathas advocating militant Hinduism, and Aurangzeb and his successors advocating a militant Islam. Personal agrandizement of the officers led to divisions within the army and, particularly in the Moghul Empire, jealousy among the commanders reached such proportions that they would throwaway a victory rather than aid a rival Finally, both armies became deficient in military efficiency. The Moghuls were so undisciplined that the army eventually became nothing more than an untrained mob.[69] The Marathas were unable to keep pace with military methods brought in by the British and were defeated by them.[70]

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[64] Edwardes, p. 99.
[65] Surendra Nath Sen, pp. 64-5.
[66]Surendra Nath Sen, pp. 9-18.
[67] Elphinstone, p. 660.
[68] Surendra Nath Sen, p. 15.
[69] Wolseley Haig, "Muhammad Shah," in Cambridge Vo1. IV, pp. 374-6.
[70] Surendra Nath Sen, pp. xvii-xviii

This three thousand year survey of Indian military development shows recurring patterns. The ideal army for conquering the great flat plain of Northern India was composed of light mobile horse archers and, until the advent of the British by sea, all conquering forces into India met this pattern. Yet once they conquered India and established an empire, the factors which had prevented an effective defence by the occupying power went to work on the structure of the invading force. The few geographic boundaries meant that there were constant internal power struggles between regional groups. A chronic shortage of horses, and poor communication, led eventually to the downfall of the central government because of its inability to control outlying provinces. Once the central state disintegrated, a new grouping of smaller states arose, unified only by the success of a new invader who established mastery over the entire North Indian plain. The military organizations of the early states were superior to those of the later states. Asoka's system was more centralized and controllable than was that of the Gupta's Those of the Guptas and the Delhi Sultanate were better at their height than that of the Moghuls. Asoka could bypass the jati system and establish a strong central government. His successors were increasingly unable to do so.

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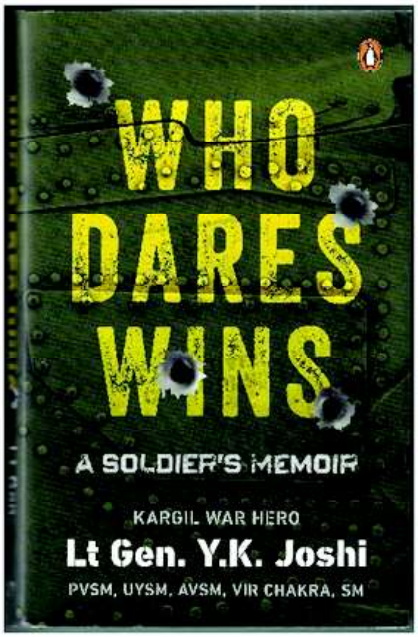
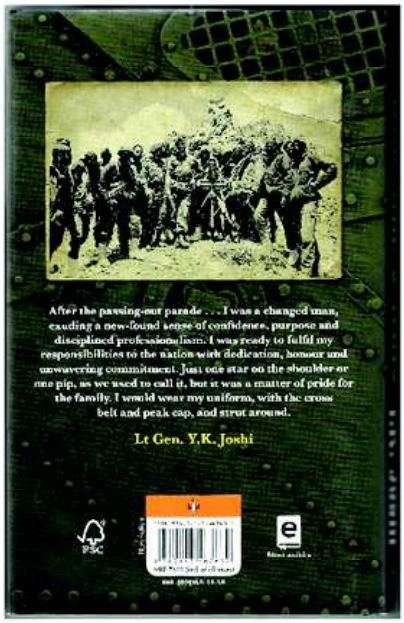
Review Articles and Book Reviews

Review Article 1





Introduction

Who Dares Wins: A Soldier's Memoir is not just the story of Lieutenant General Yogesh Kumar Joshi but a culmination of his experiences, shared with remarkable officers and soldiers who shaped his life and career. The high point, of course, was the outstanding achievements of his Battalion under his command during Operation Vijay, and he unhesitatingly states that "13 JAK RIFFLES, whose loyalty and bravery are quintessential, has been the wind beneath his wings". But while helping him soar, it was also "The cushion that broke his fall whenever he fell".

Writing an autobiography comes with significant challenges, the principal one being that the events covered have impacted the author in ways they may be unaware of, thereby, shaping their perspective and perceptions. However, Joe— as General Joshi is called— has displayed rare clarity while simultaneously providing an intimate glimpse into his thoughts and experiences, as well as insights into the various dimensions of conflict.

Who Dares Wins by Lieutenant General YK Joshi, PVSM, AVSM, Vir Chakra, SM, (Penguin Veer), Pages 240, Price ₹ 699.00, ISBN 9780143467632

The book's opening chapters reveal how a young boy, the first from his family to join the army, is shaped by his time at the National Defence Academy, Khadakwasla, and the Indian Military Academy, Dehradun. He emerges from his passing-out parade as "A changed man, with a new sense of confidence, purpose, and disciplined professionalism". Upon joining his Battalion in Nagaland, his Commanding Officer, Lieutenant Colonel Kulbir Singh Jamwal ensured that he was groomed in a manner that provided him with a strong foundation, enabling him to excel in every assignment he undertook.

About the Author

Lieutenant General YK Joshi served as the Northern Army Commander during Operation Snow Leopard. He had the distinction of commanding his brigade in Eastern Ladakh, his division in the same area, as well as the 14 Corps. Additionally, he served as the Additional Director General of the Military Operations Branch at Army Headquarters during the critical period of the surgical strikes against Pakistan in 2016, where he was responsible for planning the operations. Fluent in Mandarin, he also served as India's Defence Attaché in China and can rightfully be regarded as one of the army's finest strategic minds on China.

During the Kargil War, as the Officiating Commanding Officer (CO) of 13 JAK RIFFLES, Lieutenant General Joshi was awarded the Vir Chakra for his courage and leadership. Under his command, the Battalion launched four attacks, the most successful being on Point 4875, now known as Batra Top. The Battalion was honoured with the title 'Bravest of the Brave' as it was awarded two Param Vir Chakras.

The Book

The book covers multiple aspects, as General Joshi's career in the army spanned over 40 years. He served in diverse terrains across the country and held some of the most prestigious appointments. Throughout this period, he witnessed the transformation of India's security environment, providing readers with insights not only into his exceptional leadership qualities but also into the inner workings and ethos of the Indian Army as it navigated multiple challenges. However, the heart of the memoir lies in his first-hand account of the Kargil War.

Consider this: After serving in a challenging assignment with his battalion in counterinsurgency operations in Sopore, Jammu and Kashmir, he is sent as the Officer Commanding the Advance Party to Shahjahanpur in the summer of 1999. Now focused on the administrative tasks of handing and taking over, he is shortlisted, along with two coursemates, for an interview for the coveted appointment of Adjutant of the Indian Military Academy. Unfortunately, he is not selected and returns crestfallen to his duties—overseeing the takeover of equipment and assets in Shahjahanpur, swimming in the evenings, and setting up his house.

But the events in Kargil soon changed everything. Within a week, he and his men were ordered to report to Dras. That was the day Lieutenant Colonel Vishwanathan of 18 GRENADIERS made the supreme sacrifice at Tololing. Just days later, on 10 Jun 1999, he was leading a convoy from Srinagar to Ladakh—his first visit to an area that would soon become his *karambhoomi* (Land of Duty). On 12 Jun, he had a ringside view of the attacks on Tololing by 2 RAJPUTANA RIFFLES, and on 13 Jun, he found himself climbing to the heights, reaching Tololing at 0230 hours on 14 Jun after negotiating enemy minefields and braving relentless fire. Early that morning, he received an urgent communication—the General-Officer-Commander (GOC), Major General Mohinder Puri wanted to speak to him on the radio. The message was brief but life-changing: "Joe, you are now to take over command of the battalion, as your CO has fallen ill". Five days had changed everything.

That the battalion performed incredibly under his command is a matter of fact. The capture of the strategically important features of Point 5140 and Point 4875, along with the awarding of two Param Vir Chakras, is well documented. What stands out in his account is the rare granularity with which he details how the 'Impossible was made possible' and how his leadership shone in the most adverse situations. The battalion's achievements were nothing short of extraordinary.

Through a gripping narrative of decisive moments on the battlefield and the responsibilities of leadership, he provides insights into the emotions, resilience, discipline, determination, and innovations demonstrated during the conflict, including the Indian Army's use of the Bofors gun in a direct firing role. He also acknowledges that the media played a crucial role during the war, stirring nationalist sentiments among the youth of the nation.

But adjusting to normal life after experiencing the trauma of war was a challenging journey. The loss of colleagues is undoubtedly a heavy burden, and the emotions conveyed deeply affect the reader. However, as he reflects on Captain Vikram Batra, he states, "His infectious enthusiasm and never-say-die spirit live on in each one of us who had the privilege and honour of serving with him". He also highlights how the Indian Army, out of professional courtesy and respect, gave a befitting burial to enemy soldiers in accordance with their religious customs—despite their own country having disowned them.

In keeping with the traditions of the Indian Army, he, along with his wife Ina and the Subedar Major, visited the families of all those from his battalion who had laid down their lives for the nation. The bonds remain strong, and even as the Northern Army Commander, he and his wife continued to visit these families. This book covers much more—his tenure in China at a time when the focus was on maintaining peace and tranquillity rather than altering the status quo along the borders. Unfortunately, China's then-recent aggression had shattered that trust. He provides deep insights into the Chinese military mindset and their use of psychological operations. His experience as a United Nations Military Observer in Angola, caught in the middle of the conflict between the Angolan Army and National Union for the Total Independence of Angola, is also well documented, as are his multiple tenures in the Military Operations Branch of the Indian Army—where 'The Cage' remains the nerve centre of strategic decision-making.

The book also provides insights into the leaders he served under, such as Lieutenant General Mohinder Puri, describing how a fleeting encounter evolved into something sacred as he became his mentor and guide. He also reflects on General Bikram Singh, under whom he served in the Military Operations Branch, and acknowledges how frequent interactions—alongside his colleague Brigadier (later Lieutenant General) Arvind Datta—during General Bikram Singh's tenure as the Chief of the Army Staff made him realise that a military leader must ride the knowledge wave or risk being overwhelmed.

He acknowledges Lieutenant General Ranbir Singh, whom he succeeded as a Brigadier in the Military Operations Directorate and later as the Northern Army Commander, describing him as "A

thorough professional with whom he shared a phenomenal working relationship". The book also provides insights into his colleagues and subordinates, including Major General Alok Kacker, who, as a Captain at Infantry School, Mhow, had once taught him to fire an anti-tank missile—a skill that years later proved decisive when firing the missile on an enemy bunker at Point 4875 became a battle-winning factor. He also highlights Major General Pratik Sharma (later Lieutenant General and Northern Army Commander) as "The most stoic and balanced GOC", while recognising the contributions of his staff officers—Lieutenant Colonel Harsh Vardhan, who consistently offered "Blunt yet sane advice", and Colonel Munish Tamang, whose "Industriousness and dedication stood out in the most stressful conditions".

However, one crucial chapter remains unwritten—Operation Snow Leopard, which unfolded during his tenure as Northern Army Commander. With much anticipation, we now await the sequel, one that will shed light on Operation Snow Leopard through his lens.

Conclusion

There is no doubt that this memoir is exceptionally well-written, rich in facts, and offers a sharp, professional perspective on India's contemporary military history. The book presents valuable leadership lessons across various domains and provides a rare insight into the ethos of the Indian Army as well as the complex challenges faced by those who wear its uniform.

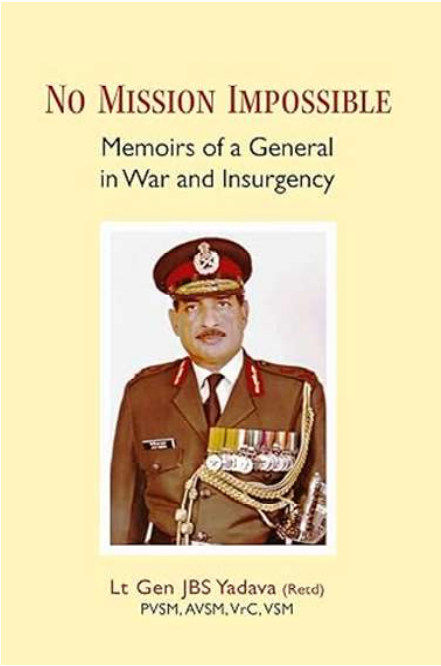
It is a difficult book to put down once picked up—an easy yet profound read. The immense canvas covered through the lens of General Joshi explores multiple facets of modern warfare, spanning from counterinsurgency operations to conventional warfare across India's diverse terrains, with a particular focus on the northern borders.

This book is not only an essential reading for students of India's security environment but also a crucial resource for decision-makers and those interested in India's military history.

By weaving personal anecdotes with pivotal military events, *Who Dares Wins* deserves a wider readership as it offers a compelling glimpse into the values, leadership, and sacrifices of those who serve the nation with courage, commitment, and purpose.

Major General Jagatbir Singh, VSM (Retd)

Review Article 2



Introduction

The initial impression was that the book would be a narration of the 1971 war, during which Lieutenant General Jai Bhagwan Singh Yadava, PVSM, AVSM, VrC, VSM (Retd) was wounded and awarded the Vir Chakra for gallantry. A glance through the contents suggested it might be an autobiography of a General, closely tied to his military career. However, *No Mission Impossible* is beyond all that. This engaging memoir by Lieutenant General Yadava chronicles his early life, ancestry, and extraordinary journey through war, insurgencies, and the diverse challenges of military life, presented in a chronological sequence. The author's writing style is in an easy, clear, and simple flow of language. His narrative captures the reader's attention with vivid descriptions of military operations and frank personal reflections.

No Mission Impossible: Memoirs of a General in War and Insurgency by Lieutenant General JBS Yadava, PVSM, AVSM, VrC, VSM (Retd), (Pentagon Press LLP), Pages 340, Price ₹ 1,995, ISBN: 9788198000248

A cat is believed to have nine lives, and the author has already lived six—beginning with a leopard pounce during a hunt in the Shivalik jungles of Dehradun, shortly after passing out of the National Defence Academy (NDA) and before joining the Indian Military Academy (IMA). He survived the encounter by shooting the leopard just in time, a moment that ensured he lives to tell the tale. Second was during the 1971 war with Pakistan in East Pakistan (now Bangladesh), when the bullets scraped his skull and pierced through his trousers. On another occasion, while swimming across the Narmada River, he developed cramps on the return and was carried away by the strong current, only to be rescued by a local. Now, at around 80 years of age—having survived war as a decorated hero and faced death at close quarters multiple times—General Yadava shares his life story, beautifully interwoven with the history of a nation whose significant moments he has witnessed and shaped. The 1947 Kashmir conflict, the Indian Army's defeat by China in 1962, the 1965 War, the liberation of Bangladesh, and the turmoil in Punjab and Jammu and Kashmir (J&K) have been effectively recapitulated for the reader.

The seasoned General provides a genuine and credible perspective on life in the military. The memoir delves deeply into the socio-political and operational challenges faced during his service, making it a detailed researched and informative document. The memoir spans a career that is both inspiring and thought-provoking, shedding light on wars and counterinsurgency operations. From battlefield strategic decisions to negotiations at the highest levels, the author takes readers through pivotal moments in his career, offering valuable insights into the interplay between military strategy and politics. Going through each chapter has been an enlightening experience. The author briefly highlights key issues from a few chapters.

Ancestry and Early Life

Initially, the reviewer felt that providing a space of 27 pages to cover ancestry and early life were on the plus side for a book titled *No Mission Impossible*. The author has delved deeply into his family background and childhood, providing historical insights into his ancestral roots—tracing his lineage from the Yadhuvanshis to the Bhattis, Yadavas, and Ahirs. He discusses General Reginald Dyer, infamous for the Jallianwala Bagh massacre, who was

indicted by the Hunter Commission and asked to resign—yet continued to justify his actions. Rudyard Kipling even raised a sum of GBP 30,000 for Dyer's rehabilitation. His former residence in Jalandhar now serves as an officers' mess. Alongside recounting his early life, the author vividly illustrates the historical significance of the places where his father, an army officer, was posted and where he accompanied him for schooling. While acknowledging the NDA and IMA as premier training institutions, the author remarks that they have increasingly become factories producing operationally efficient officers, but not necessarily military leaders who are thinkers and strategists—drawing from his own experience as an alumnus of both.

1965—A War of Lost Opportunities

The 1965 war has aptly been titled 'A War of Lost Opportunities'. Similarly, in retrospect, Pakistan believes that it missed the chance to annex Kashmir while India was engaged in the 1962 war with China. The author offers an honest narration, sharing lessons learned as a young officer and detailing higher-level operational planning. He highlights incidents of poor leadership, inadequate coordination among senior commanders, and a lack of aggressive initiative. His tenure in Ladakh (Darbuk) is described with vivid references to its flora, fauna, and the lakes Pangong Tso and Tso Moriri. A brief historical overview of Ladakh is also included.

The War for Liberation of Bangladesh

This is a chapter of real-life war battles during Dec 1971, where the author himself was wounded and saw death of his soldiers at close quarters. The peak winter in the riverine terrain witnessed the Gorkhas wading through the cold water without food and still fighting when bullets were whizzing past. Only someone who has experienced such situations can truly narrate them. It was a battle of wits and courage of the Indian Army, ably led by its young officers. The author has credited the Mukti Bahini for its support, along with the defected officers of the Pakistani Army who led its ranks. Brigadier Shabeg Singh and others who trained the Mukti Bahini have been given due credit.

In hindsight, given present circumstances, several of the author's earlier remarks appear even more relevant today. He reflects, "Many of us will continue to think whether our sacrifices

went waste or was it worth it to let go of Pakistan and Bangladesh scot-free at the cost of our national security. If Mrs Indira Gandhi had shown statesmanship, we would be a safer and secure country today. She failed both India and Bangladesh despite a brilliant victory".

The Intervening Years

Various tenures including the staff college and a tenure as the military attaché to the Indian High Commission of Malaysia at Kuala Lumpur have been covered. The author has described the functioning of a High Commission office, and the intricacies involved. An excellent narration of the working environment, this section will be particularly useful for any officer posted to a High Commission—especially one heading to Malaysia.

Punjab Insurgency

Anti-militancy operations in Punjab was a brilliant success, mainly due to political will and correct execution of policy by all instruments of the state after a long period of flawed policies and decisions. He commanded the brigade during the peak of militancy in Punjab and gives due credit to his units and officers for the excellent conduct of anti-militancy operations. At the same time, the Iraq War was ongoing and has been discussed in great detail—though it is felt that this section could have been omitted.

Insurgency in the Srinagar Valley

Kashmir was the cradle of Hindu civilisation and a great centre of learning till 1339 when it came under the Islamic rule. Shaivism came to the fore after the visit of Adishankaracharya in the 8th Century. The Shiva temple on the top of the Shankaracharya hill in the heart of Srinagar is a living testimony of that glorious period. Kashmir was also famous because of Sharda Peeth, a famous university and centre of great learning, which was destroyed by the Muslim rulers. Islam spread into the Valley through Sufi saints, with Sufism in the region representing a continuation of the Hindu Rishi tradition.

Major Brown and Captain Matheson of the Chitral and Gilgit Scouts incited Muslim troops to revolt and actively instigated accession to Pakistan. They hoisted the Pakistani flag on 04 Nov 1947. The disloyalty and treachery of these British officers led to

the imprisonment of Brigadier Ganshara by the rebellious Muslim troops of the Scouts and the 6 J&K Infantry Battalion, followed by the massacre of all the Hindu and Sikh soldiers of the battalion. The accession of Gilgit to Pakistan can largely be attributed to the actions of these two British officers.

India fell into the trap and agreed to the UN ceasefire and resolution. The Indian Army was three times larger than the Pakistani Army—so what was the urgency in accepting the ceasefire, questions the author. "It was a political and military blunder for which the country is paying dearly even today", he concludes.

A war against terrorists cannot be won unless external support is neutralised. The terrorists, on the other hand, received support and unlimited funding from Pakistan as well as various Arab and Muslim countries in the name of *Jihad* (Islamic religious war against non-believers). The author points out that India adopted a 'Reactive counterterrorism policy' rather than a 'Proactive Counterterrorism' approach.

Back to Punjab, Kargil, and Jammu and Kashmir Insurgency

Pakistani support for 'Operation Enduring Freedom' was deemed more important to the United States (US) than India's security concerns. Yet, India chose to rely on the US. The author was reprimanded for his offensive plans and cautioned against escalating the situation. General Powell succeeded in winning over the Indian leadership with vague assurances, effectively achieving his objective of keeping Musharraf on board in the war against Afghanistan.

'Operation Parakram' has been dealt with in great detail. The mobilisation ended after 10 months of deployment. It cost the nation INR 8,000 cr. Nearly INR 300 cr was paid to evacuees from border areas as compensation. However, Operation Parakram is termed as a failure and a futile exercise that exposed the weakness in decision making, political will to fight war, excessive dependence on the US and knee-jerk actions. The author concludes that "India chickened out" under American pressure not to attack Pakistan. He also offers an observation on the functioning of Army Headquarters, where he served as the Deputy Chief, describing it as "Overstaffed and slow-paced".

Key Takeaways from *No Mission Impossible*

- **Courage and Leadership**. The book explores the core qualities of military leadership, emphasising decisiveness, adaptability, and ethical responsibility in high-pressure situations, such as those encountered during the war and insurgency. It also provides examples of how leaders led their troops and made critical decisions under battle conditions.

- **Military Strategy**. It provides a glimpse into the nuanced planning and execution of operations in challenging terrains and against unpredictable adversaries. The book provides a rare perspective on India's military history post-independence through the eyes of a fighting General.

- **Human Element of War**. The author does not shy away from discussing the emotional and psychological toll of war on soldiers. The book also portrays the experiences and emotions of soldiers involved in combat and the impact on their lives and their families back home.

- **Counterinsurgency**. Drawing from his first-hand experiences, the author recounts the complexities and challenges of counterinsurgency warfare. He discusses the multi-faceted nature of insurgencies, emphasising the importance of understanding local environments and employing a balanced blend of hard and soft power.

- **Personal Life Journey**. As a memoir, the book provides insights into General Yadava's personal journey, his motivations, and his reflections on his career and the events he witnessed. He has expressed satisfaction with his career in the army and his post-retirement roles, having served both in the corporate sector and as a bureaucrat with the Government of Haryana.

Conclusion

Having read *No Mission Impossible*, it can honestly be stated that it is a masterpiece—masterfully integrating the events of the author's life with the broader sweep of history. The ongoing events, such as the 1965 Indo-Pak War, the 1971 Bangladesh Liberation War, and the insurgencies in Nagaland, Mizoram, Punjab, and J&K have been artistically knitted into the text. The author presents

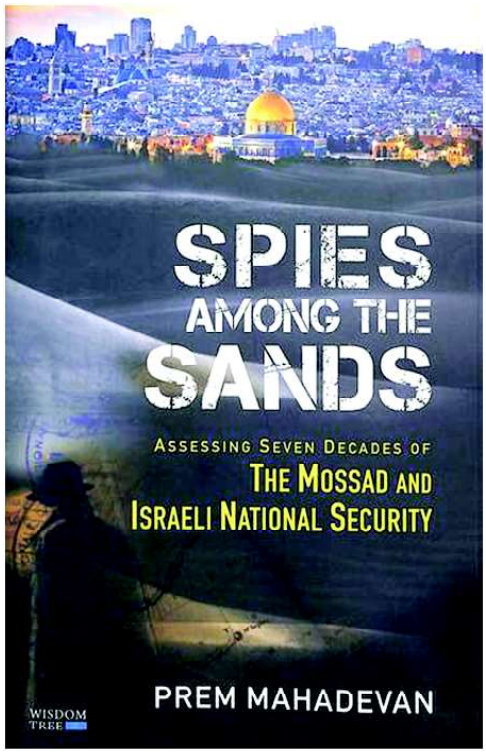
an honest account from his perspective as a young officer, supplemented by well-researched lessons linked to higher-level planning and strategic locations, along with his own analytical insights. General Yadava has duly acknowledged his seniors, colleagues, and juniors where appropriate, and, drawing on his remarkable memory, has clearly identified the formations, units, and officers who led or participated in various operations. The author as a frank critique has brought out the often-overlooked gaps in strategic vision in India's political and military leadership, which over the years have impacted national security in the long run.

Attempting a review of such a book—painstakingly interwoven with geography, history, and personalities through detailed and accurate research spanning 75 years—is bound to fall short. The author has candidly highlighted shortcomings and flaws in decision-making where necessary. However, it is noted that it would have been valuable had the author also offered his thoughts or suggested a 'Way Forward' on the Kashmir issue and the Bangladesh question.

No Mission Impossible offers invaluable lessons in leadership, resilience, and strategic thinking. The author's account is not just a recounting of military exploits but also a reflection on the values and sacrifices that define a soldier's life. For those aspiring military leaders, defence analysts, interested in military history, and strategy, this book is must-read. This gripping memoir stands apart for its candid narration of significant historical events of the time.

Colonel (Dr) RC Patial, SM, FRGS (Retd)

Review Article 3



Spies Among the Sands: Assessing Seven Decades of The Mossad and Israeli National Security (for brevity's sake, hereafter, referred to as *Spies Among the Sands*) by Prem Mahadevan delves into the world of espionage. The author is a researcher on intelligence studies and a terrorism analyst for the Centre for Security Studies, and as such provides a meticulous and insightful analysis of the Mossad, Israel's famed intelligence agency, and its role in shaping Israeli national security over the past seven decades. The book examines the Mossad's evolution, as well as its successes and failures, and the broader implications of Israeli intelligence operations in the volatile Middle East. Mahadevan's approach is both academic and engaging, making it a valuable read for scholars, intelligence professionals, and general readers interested in espionage, geopolitics, and military strategy.

Spies Among the Sands: Assessing Seven Decades of the Mossad and Israeli National Security by Prem Mahadevan (Wisdom Tree), Pages 360, Price ¹ 895/-, ISBN: 9788183286282

The book is not just a historical account of the Mossad's operations; it explores the methodologies, philosophies, and ethical dilemmas faced by Israeli intelligence. Mahadevan also examines whether Israel's intelligence edge can be maintained in an era of changing warfare, advanced technology, and shifting geopolitical alliances. Through careful analysis and comprehensive case studies, he offers a balanced perspective on one of the world's most secretive intelligence agencies.

Summary of the Book

Mahadevan structures the book around key moments in Israeli intelligence history, analysing its impact on national security and global espionage. He traces the Mossad's origins, its operations, its approach to counterterrorism, and its involvement in cyber warfare and covert diplomacy.

The Origins of the Mossad.

- Mahadevan begins with the foundation of Israeli intelligence, providing context on how the state of Israel, emerging in 1948 amidst hostility from neighbouring Arab nations, saw intelligence as a matter of existential survival. He details the early years of the Mossad, its initial struggles, and the institutional philosophy that shaped its ethos—a blend of military pragmatism, resilience, and deep-seated concerns about existential threats.

- This chapter explores the influence of European intelligence traditions on the Mossad, particularly the legacy of British and Soviet espionage tactics. Mahadevan also discusses how early Zionist militias, such as the Haganah and Palmach, laid the groundwork for Israel's future intelligence services.

Legendary Operations and Key Successes. Mahadevan dedicates significant portions of the book to detailing the Mossad's most famous missions including:

- **The Capture of Adolf Eichmann (1960)**. The daring Mossad operation in Argentina, where agents captured the Nazi war criminal and brought him to Israel for trial, cemented the agency's reputation as one of the most effective intelligence services in the world.

- **The Assassination of Black September Members (1970s)**. Following the 1972 Munich Olympics massacre, the Mossad launched Operation Wrath of God, a targeted assassination campaign against members of the Palestinian terrorist group Black September. Mahadevan examines the moral and strategic implications of these assassinations.

- **The Destruction of Iraq's Nuclear Program (1981)**. Operation Opera, which involved the Israeli Air Force destroying Saddam Hussein's Osirak nuclear reactor, is discussed in the context of Israeli intelligence's role in preventing existential threats.

- **Counterterrorism and Intelligence Sharing**. The book details how the Mossad has played a role in counterterrorism worldwide, collaborating with western intelligence agencies to neutralise threats beyond Israel's borders.

The Ethical Dilemmas and Failures of Israeli Intelligence. Mahadevan does not shy away from discussing the failures and ethical dilemmas that the Mossad has encountered. He highlights cases where intelligence miscalculations led to significant consequences, including:

- **The 1973 Yom Kippur War Intelligence Failure**. Despite multiple warning signs, Israeli intelligence underestimated the likelihood of a coordinated attack by Egypt and Syria, leading to a near-catastrophic military situation for Israel.

- **The Failed Assassination Attempt on Khaled Mashal (1997)**. Posing as Canadian tourists, Mossad agents attempted to assassinate Hamas leader Khaled Mashal in Jordan. However, they were caught, resulting in an embarrassing diplomatic crisis.

- **The Rise of Cyber Threats and Iran's Nuclear Program**. The book delves into how Israeli intelligence has adapted to cyber warfare, notably through its role in the Stuxnet virus attack on Iran's nuclear program. Mahadevan also questions whether Israeli intelligence can maintain its dominance in the cyber domain, especially as adversaries like Iran and Hezbollah continue to increase in sophistication.

The Future of Israeli Intelligence. Mahadevan concludes the book by discussing the future of Israeli intelligence in an increasingly digital and interconnected world. He questions whether Israel's traditional intelligence advantages—such as superior Human Intelligence (HUMINT), advanced surveillance, and covert operations—will remain effective in the face of Artificial Intelligence (AI)-driven warfare, drone technology, and cyber threats. The book also examines geopolitical shifts in the Middle East, particularly the Abraham Accords and Israel's evolving relationships with Gulf states. Will intelligence cooperation with countries like the United Arab Emirates and Saudi Arabia provide new strategic advantages? Or will internal political divisions and technological disruptions weaken Israel's intelligence dominance?

Critical Analysis

Strengths. One of the greatest strengths of *Spies Among the Sands* is its meticulous research. Mahadevan draws on declassified materials, interviews, and historical records to present a nuanced view of Israeli intelligence. He avoids the sensationalism that often surrounds espionage literature, offering instead a grounded and objective analysis. At the same time, although the book is academic in nature, Mahadevan's writing style remains engaging by blending historical narrative with technical analysis, making complex intelligence operations accessible to a wider audience. The book also covers an impressive range of topics, from classic espionage missions to modern cyber warfare. It critically examines not only intelligence successes but also failures, providing a balanced perspective. Furthermore, the author places Israeli intelligence within the broader context of Middle Eastern geopolitics, allowing readers to see how intelligence operations both shape and are influenced by regional dynamics.

Weaknesses of the Book. One of the most notable criticisms the reviewer can levy on *Spies Among the Sands* is the lack of insider information. However, considering the secretive nature of the Mossad, this absence must be viewed in context. Regardless, much of the book relies heavily on second-hand sources, forcing Mahadevan to analyse the information available, though he does a commendable job. While he does this commendably, first-hand accounts from intelligence officials would have provided additional depth. At the same time, while the book discusses the impact of

intelligence on national security, it does not delve deeply into how domestic political shifts within Israel have influenced the Mossad's operations. Considering the growing political polarisation in Israel, a more thorough examination of how intelligence agencies respond to domestic pressures would have been enlightening. Furthermore, certain sections on cyber warfare and intelligence methodologies may be difficult for readers unfamiliar with the technical aspects of modern espionage.

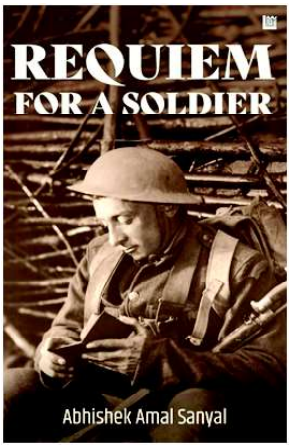
Conclusion

Spies Among the Sands is a must-read for anyone interested in intelligence, military strategy, and Middle Eastern geopolitics. Prem Mahadevan delivers a balanced and well-researched account of the Mossad's history, highlighting both its legendary successes and costly failures. The book is particularly relevant in today's world, where intelligence agencies are increasingly involved in cyber warfare, AI-driven surveillance, and asymmetric conflicts. Mahadevan's analysis prompts readers to consider whether the traditional strengths of Israeli intelligence—covert operations, strategic assassinations, and HUMINT—can remain effective in an era dominated by digital threats and political instability. While the book has minor shortcomings, particularly its limited access to Mossad insiders, it still is a compelling and informative read. Whether you are a scholar, a policymaker, or simply an enthusiast of espionage history, *Spies Among the Sands* offers a fascinating glimpse into the world of Israeli intelligence and the challenges it faces in the 21st Century.

Mr Vinayak Sharma

Requiem for a Soldier by Abhishek Amal Sanyal, (One Point Six Technologies Pvt Ltd), Pages 373; Price ₹ 299; ISBN: 9789358838589

About the Author



Abhishek Amal Sanyal, an alumnus of London School of Economics and a PhD scholar at IIM Kozhikode, is a passionate student of military history, with a focus on India's unsung role in the World Wars. Committed to honouring Indian soldiers, he is visiting all Param Vir Chakra award sites and plans to create a memorial. An adventurer at heart, he has completed scuba diving in the Andamans and aims to trek to Everest Base Camp, as well as retrace the 3 GORKHA RIFLES' journey during World War I (WW I). With a diverse career across finance, information technology, and shipping, Abhishek returned to India to raise his twin daughters. His book, *Requiem for a Soldier*, explores the human condition through the journey of an Indian soldier in WW I.

About the Book

In the ever-evolving landscape of Indian historical fiction, *Requiem for a Soldier* by Abhishek Amal Sanyal stands out as an emotionally charged and deeply immersive read. This novel is not just a story about a war; it is a tale of personal assessment of the cultural upheaval and the transformative power of experience set against the backdrop of India's noteless contributions to the WW I.

War, Identity, and the Personal Journey of Kumar Ganguly. The story follows the life of Kumar Ganguly, who is a privileged son of a Bengali *zamindar* (landlord). His life of wealth and tradition is upended when he gets enlisted in the British Indian Army. As Kumar journeys from the grandeur of colonial Bengal to the war-ravaged fields of Europe and Asia, his transformation is stark, both physically and psychologically. The author weaves a tale where the horrors of war become a crucible for self-discovery. The idyllic Kumar of his youth was replaced by a battle-worn soldier, forced to confront the fragility of human ideals and the weight of loss.

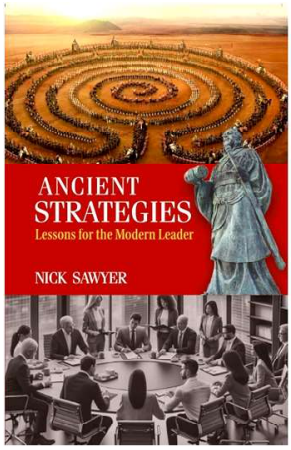
Colonial India and the Characters who Shaped a Soldier. Sanyal's novel is filled with a set cast of characters, each of whom represents a facet of India's complex colonial identity. *Zamindar* Ganguly, who imparts wisdom through daily recitations of *dohas* (couplets); the enigmatic Mahua, a woman of striking beauty and unfulfilled love; Subhendu, the idealistic journalist; and the red-haired Daley Flanegan, Kumar's British comrade-in-arms—all play pivotal roles in shaping Kumar's evolution. Through them, the novel explores themes of cultural pride, rebellion, love, and even betrayal. Kumar's struggles with his own conscience are central to the narrative of the novel. Initially bound by tradition and reluctant to challenge convention, his experiences in war force him to redefine his beliefs. The trauma of personal loss, whether through the brutalisation of Mahua or his own unrequited love for Mary, deepens his introspection. When Kumar returns from the war, he is no longer the man he once was; his innocence is lost and is replaced by a hardened understanding of fate and survival.

Historical Memory, Emotional Depth, and the Resilience of the Human Spirit. The novel's strength lies in Sanyal's intricate detailing of historical and emotional landscapes. The contrast between the opulence of colonial Bengal and the grim trenches of war are vividly portrayed, allowing readers to experience the stark shift in Kumar's journey. The author's commitment to historical authenticity ensures that the lesser-known contributions of Indian soldiers in the Great War are acknowledged with the depth and respect they deserve. *Requiem for a Soldier* is more than just another historical novel; it is a conversation on the dual nature of humans, the internal wars individuals fight, and the resilience required to forge new identities in the face of overwhelming adversity. Sanyal's storytelling not only honours the forgotten Indian soldiers of WW I, but also goes on to present a deeply personal tale of transition. As Kumar walks along the train, reflecting on the war and his own journey, the metaphor is made clear, that this is a story not just of war, but of a man seeking himself in the shifting tides of history.

Colonel Ravinder Kumar (Retd)

Ancient Strategies: Lessons for the Modern Leader *by Nick Sawyer (New Delhi: Pentagon Press), 2025, Pages 412, Price Hardcover ₹ 1,495, ISBN: 9788198000217*

Introduction



Project Udbhav, initiated by the Indian Army in 2023, endeavours to unearth the profound Indic heritage of statecraft and strategic wisdom embedded within ancient Indian texts on statecraft, warfare, diplomacy, and grand strategy. A valuable addition to the literature on India's past is *Ancient Strategies: Lessons for the Modern Leader*. The author, Brigadier Nick Sawyer is an alumnus of India's National Defence College and served as the United Kingdom's Defence Attache to India from 2022 to 2024.

Structure and Scope of the Book

The book analyses the works of six ancient strategists and draws out the key lessons articulated by each. These lessons are then contextualised and contemporised for the modern leader into an easy to absorb and easy to apply set of guidelines. Common lessons from across the ancient works are also extracted to provide the ageless fundamentals of effective strategy. The eclectic choice of ancient works analyses Asian strategies and writings, with Julius Caesar being an outlier.

Developing a Strategic Mindset

The first part of the book looks at developing a strategic mindset and studies the works of Miyamoto Musashi, especially The *Book of Five Rings*, and the Indian epic *The Mahabharata*. The foremost requirement for successful strategy is that a senior leader possesses a strategic mindset. Before any analysis, planning, or process could be applied to a complex problem, the strategic leader must be in the right frame of mind. Developing this can take a lifetime, as experience plays a crucial role. Both can be used to help create the strategic mindset for senior leaders that is critical for tackling complex problems in the 21st Century.

Adopting a Strategic Approach

The second part looks at what the author calls 'Adopting a strategic approach'. It is the cultural approach opted within the highest levels of a government or organisation on the 'Tradecraft' of strategy rather than how to deal with a specific problem or situation. It examines Kautilya's *Arthashastra*, which encompasses statecraft, governance, and warfare. It also looks at the *Purananuru*, a collection of works that gives advice to kings on how to manage their subjects and lands and offers some thoughts on adopting strategic approaches to complex problems, besides analyses of the Tamil concept of valour. Beyond its importance for understanding the development of South Asia's history, culture, religion, and linguistics, the *Purananuru* stands as a remarkable work of literature, offering an accurate and profound reflection of life in southern India 2,000 years ago. It is a collection of 400 heroic poems about kings, wars, and public life, of which two are lost and a few have survived into the modern age in fragments. The collected poems were composed by 157 poets, of which 14 were anonymous and at least 10 were women. It is indeed a hidden gem of world literature.

Strategy Toolsets from the Ancient West and East

Finally, the third part analyses the works of Sun Tzu and Julius Caesar and presents some strategic toolsets to assist with developing and implementing specific strategies. Strategy is very different to simple plans and tactics as it needs creativity and flexibility. Sun Tzu's *Art of War* and Julius Caesar's *Commentaries on the Gallic War* give some useful toolsets that can help senior leaders and their teams devise a successful strategy to deal with a specific problem set which are designed more as a checklist and prompt rather than a rigid set of rules.

The study of history by professional military personnel is important, if for no other reason than to further their own education. By studying history, one can identify their strengths, weaknesses, and those of enemies. The battlefield and technology will continue to change but there are many ancient verities that deserve study to draw relevant lessons.

Contribution to Modern Strategic Discourse

Spanning a comprehensive spectrum and eliciting useful lessons for the modern leader in a very readable and pellucid prose, the book presents the ancient texts in an engaging manner. The straightforward language to highlight relevance retains the readers' interest. With a vision to integrate ancient wisdom into modern military pedagogy, the book provides insights drawn from centuries-old principles to navigate today's intricate strategic landscape. The book is a valuable addition to the literature on the subject and offers insights and lessons for military professionals, diplomats, business leaders, and students of ancient history.

Ancient military history has come a long way. Nevertheless, there is much work remaining to be done. While war was a central part of ancient cultures and civilisations, it is still rare to see a military historian who studies the classics. The book's relevance and clarity are likely to resonate strongly as it represents an additional arrow in the quiver of knowledge and find its application in myriad ways. The book is well researched and provides some thought-provoking insights worthy of imbibing.

Ancient military history has always enjoyed popularity, and this continues to be the case. The subject can also be studied through television, the internet, and documentaries—albeit of varying quality. It would be difficult to overstate the importance of warfare and military institutions in the ancient world. Beyond the prevalence of warfare itself, nearly every facet of life in the ancient world—art, literature, music, religion, trade, agriculture, manufacturing, gender roles, architecture, education, and science—is both influenced by these and by warfare and the military institutions associated with it. It is little surprise, then, that warfare and the military have been central components of historical narratives for as long as such narratives have existed. All successful military leaders did not expect a plan of operations to survive beyond the first contact with the enemy. They set only the broadest of objectives and emphasised seizing unforeseen opportunities as they arose. Strategy is not a lengthy action plan. It is the evolution of a central idea through continually changing circumstances.

Final Reflections: Learning from the Past to Shape the Future

The book fills a critical gap in the literature on the subject and will be of keen interest not only to military formations and units but also to the diplomatic community and academic institutions as also individual researchers and readers. It has a useful bibliography which will be of interest to those who wish to study the subject further. This book is highly recommended for professionals and scholars alike who seek to comprehend the application of ancient military strategies to their modern context.

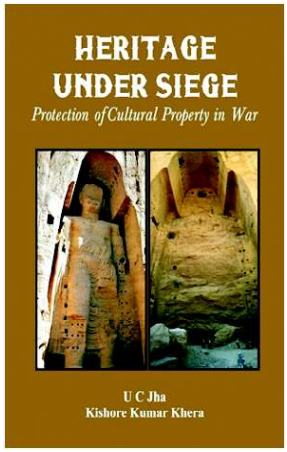
As war and national security have become subjects of increased public engagement, officers, defence analysts, and academics increasingly turn to the past to support or critique a wide range of national security issues, including doctrine, force structure, reform, and strategy. The past can certainly inform the future, and it would be unwise not to draw upon such accumulated experience.

Colonel Harjeet Singh (Retd)

Heritage Under Siege: Protection of Cultural Property in War

by U C Jha, Kishore Kumar Khera, (Vij Books, New Delhi), Pages 252, Price ₹ 995, ISBN: 9788119438518

Introduction



Heritage Under Siege: Protection of Cultural Property in War by Wing Commander (Dr) UC Jha (Retd) and Group Captain Kishore Kumar Khera (Retd) provides a comprehensive analysis of the intersection between cultural heritage and armed conflict. The book offers valuable insights into the historical, legal, and practical dimensions of protecting cultural property during times of war. Divided into three sections, it systematically explores the significance of cultural heritage, the evolution of legal frameworks, and the real-world challenges of safeguarding cultural property in conflict zones.

The Significance of Cultural Property in War

The first section of the book lays the foundation by explaining the importance of cultural property to communities and societies. The authors highlight how cultural heritage is often deliberately targeted

during armed conflicts to erase a community's identity and disrupt its historical continuity. They provide historical examples that illustrate how destruction of cultural sites has been used as a strategic tool in warfare, reinforcing the need for dedicated protection measures.

Legal Frameworks for Cultural Property Protection

The second section examines the evolution of international legal frameworks aimed at safeguarding cultural property. The authors provide an in-depth discussion of key international agreements, particularly the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict and its subsequent protocols. These agreements aim to prevent the destruction, theft, and illegal trade of cultural artifacts.

The authors also explore the role of international organisations, such as United Nations Educational, Scientific, and Cultural Organization and the International Criminal Police Organization, which collaborate with governments to enforce these protections. Despite these legal safeguards, the book underscores the persistent challenges in their implementation, citing examples where enforcement mechanisms have failed due to resource constraints, political resistance, and conflicting wartime priorities.

Challenges in Protecting Cultural Property in Conflict Zones

The third section shifts focus to the practical challenges of cultural property protection in active conflict zones. The authors analyse the difficulties in securing heritage sites during war, the role of military forces, and the involvement of international organisations. They examine recent case studies from Syria, Iraq, Afghanistan, and Libya, where cultural sites have been looted or destroyed despite existing legal protections.

The book argues that while international laws are well-established, their enforcement remains inconsistent. Many challenges arise due to inadequate funding, lack of political will, and the competing urgency of humanitarian crises. The authors emphasise the gap between international law and its real-world application, highlighting how cultural property often remains vulnerable in times of war.

The Ethical Dilemma: Cultural Heritage vs Human Lives

The authors delve into the ethical and moral dilemmas surrounding cultural property protection. They address the complex question of how to balance the safeguarding of cultural heritage with the

imperative to protect human lives during conflict. While acknowledging the tension between these two priorities, they argue that cultural heritage is not merely an aesthetic or historical concern but an essential component of a community's identity and continuity.

The book references notable cases, such as the destruction of the Bamiyan Buddhas in Afghanistan and the looting of the National Museum in Baghdad, to illustrate the far-reaching consequences of cultural destruction. The authors equate the loss of cultural property with an assault on collective memory and identity, reinforcing the urgent need for proactive measures.

Practical Solutions and Policy Recommendations

One of the book's most valuable contributions is its discussion of practical solutions to enhance the protection of cultural heritage. The authors propose several strategies, including stronger international cooperation to enforce existing laws more effectively, the establishment of specialised military units trained to protect cultural sites, greater involvement of non-governmental organisations, academic institutions, and local communities in monitoring and preserving cultural property, and improved intelligence-sharing and real-time intervention rather than reacting to destruction after it occurs. The authors advocate for a more proactive approach, stressing that preservation efforts must be embedded within military and diplomatic strategies rather than treated as an afterthought.

Conclusion

Heritage Under Siege is a well-researched and thought-provoking book that provides both historical context and forward-looking solutions for cultural property protection during wartime. The authors present a compelling argument for stronger international cooperation and better enforcement of existing frameworks. Their clear and accessible writing style, combined with extensive research and case studies, makes this book an essential read for scholars, policymakers, military strategists, and anyone interested in the intersection of law, conflict, and cultural heritage. It serves as both a call to action and a crucial contribution to the ongoing global discourse on safeguarding humanity's irreplaceable cultural legacy.

Ms Komal Chaudhary

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The following are eligible to become members of the Institution:

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- Any category mentioned above will be eligible even though retired or released from the Service.
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CMHCS-7/ 2024	Book	ALHA UDAL BALLAD RENDITION OF WESTERN UTTAR PRADESH: A WAR RENDITION OF INDIA by Dr Amit Pathak **Manohar Publishers & Distributors**	1,695	2024
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OP-8/2023*	Occasional Paper	First Lt Gen PS Bhagat Memorial Lecture LEGACY OF LT GEN PREM BHAGAT—A VISIONARY AND STRATEGIC LEADER, held at Manekshaw Centre on 14 Jun 2023, compiled by Ms Tanya Jain **M/s Vij Books of India Pvt Ltd**	350	2023

USI

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OUR ACTIVITIES

Centre for Strategic Studies and Simulation (CS3)

The erstwhile Centre for Research was re-christened as CS3 on 01 Jan 2005. The Centre focuses on detailed and comprehensive enquiry, research and analyses of national and international security related issues, and undertakes gaming and simulation of strategic scenarios, to evolve options for wider discussion and consideration.

Centre for Military History and Conflict Studies (CMHCS)

The CMHCS was established in Dec 2000 at the behest of the three-service headquarters for encouraging an objective study of all facets of Indian military history with a special emphasis on the history of the Indian Armed Forces. It focuses on diverse aspects of the history of Indian military evolution, policies, and practices—strategic, tactical, logistical, organisational, socio-economic, as well as the field of contemporary conflict studies in the broader sense.

Centre for Emerging Technology for Atma Nirbhar Bharat (CETANB)

The centre started as the Atmanirbhar Bharat Initiative in Apr 2022 and later rechristened as the CETANB on 01 Jan 2024 and includes Cyber Centre of Excellence (CCoE) as part of it, in conjunction with Cyber Peace Foundation. The centre's objective is to forge emerging technologies with geostrategic and geopolitical situations, with a view to make the services self-reliant by making possible the indigenous production of defence equipment and spares. The CCoE trains military personnel in artificial intelligence, cyber, and machine learning, in addition to cyber forensic analysis in its well-equipped lab. Furthermore, it helps MSMEs to break into the defence industrial ecosystem.

Centre for United Nations Studies (CUNS)

The centre was established as Centre for United Nations Peace Keeping (CUNPK) in 2000. It organises workshops, seminars, and training capsules for peacekeepers, observers and staff officers, both Indian and foreign. It also oversaw the practical training of the Indian contingents. In Aug 2014, CUNPK moved to the Integrated Headquarter (Army) of Ministry of Defence. The USI has now established CUNS, which is focusing on operational, strategic, and policy issues related to United Nations Peacekeeping. It also organises seminars and conferences on such issues.

Courses Section

The Institution conducts regular correspondence—interactive courses and mock test practices and assists armed forces officers in online and offline modes to help them prepare for promotion examinations and competitive examinations for entrance to the Defence Services Staff College, and the Technical Staff College. Over the years, this has been a significant and well-received activity.

Editorial Section

This section manages the USI's key publications including the *Strategic Year Book, USI Journal,* books, monographs, occasional papers, and joint publications. These works contribute to an informed discourse on defence, strategy, and national security. The *Strategic Year Book* offers an annual review of critical developments, while other publications provide deeper analysis and collaborative perspectives. The *USI Journal,* Asia's oldest defence journal (est. 1871), serves as a platform for military and strategic thought, welcoming contributions regardless of rank. The journal remains a vital space for responsible and quality-driven engagement.

USI Gold Medal Essay Competition

Every year, the Institution organises a Gold Medal Essay Competition, open to commissioned officers of the Defence Services of India, officers of the Territorial Army, Assam Rifles, and the Senior Division of the National Cadet Corps, and Gazetted Officers of the Civil Administration in India, including retired officers. These essays, the first one of which was introduced in 1871, constitutes a barometer opinion on matters that affect national security, in general, and the defence forces, in particular.

Lt Gen SL Menezes Memorial Essay Competition

This has been instituted from 2015 on a subject related to armed forces historical research. The essay competition is open to everyone across the globe.

USI War Wounded Foundation Joint Essay Competition

This essay competition was instituted in 2021 through a Memorandum of Understanding between the USI and the War Wounded Foundation. The competition is open to all across the globe and must be about issues relating to the experiences and/or rehabilitation of war-disabled personnel of the Indian Armed Forces.

MacGregor Medal

This medal is awarded to armed forces personnel for valuable reconnaissance and adventure activity they may have undertaken.

Lecture, Discussions and Seminars

A series of lectures, discussions, and seminars on service matters, international affairs, and topics of general interest to the services are organised for the benefit of local members in Delhi.

Library and Reading Room

The library holds over 68,000 books and journals, including some books from the 17th, 18th, and 19th Centuries, on an astonishing variety of subjects. While the principal emphasis is on strategy and defence, there are many works on different vistas of Indian life. There are memoirs, biographies, recollections, diaries, journals, and manuscripts for scholars and researchers. The reading room is air-conditioned, spacious, and well-stocked in terms of current reading material. The library was automated in 2002.

Printed by Manish Comprint, New Delhi - 110 015 Phone : 011-41037172