



Vivekananda
International
Foundation

VIF PAPER
November 2022

SECURITY VISION 2047

A HUNDRED YEARS SINCE INDEPENDENCE

Four fighter jets, likely the Tejas Mk1A, are shown in a staggered formation against a blue sky with light clouds. They are flying from left to right.

Air Marshal Diptendu Choudhury
PVSM, AVSM, VM, VSM (Retd)

A single fighter jet, likely the Tejas Mk1A, is shown in a steep climb against a blue sky with light clouds.

© Vivekananda International Foundation

Published in 2022 by

Vivekananda International Foundation

3, San Martin Marg | Chanakyapuri | New Delhi - 110021

Tel: 011-24121764 | Fax: 011-66173415

E-mail: info@vifindia.org

ISBN: 978-93-91498-04-7

Website: www.vifindia.org

Follow us on

Twitter | [@vifindia](https://twitter.com/vifindia)

Facebook | [/vifindia](https://www.facebook.com/vifindia)

Disclaimer: The paper is the author's individual scholastic articulation. The author certifies that the article/paper is original in content, unpublished and it has not been submitted for publication/web upload elsewhere, and that the facts and figures quoted are duly referenced, as needed, and are believed to be correct.

All Rights Reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means electronic, mechanical, photocopying, recording or otherwise without the prior permission of the publisher.



Air Marshal Diptendu Choudhury (Retd), PVSM, AVSM, VM, VSM, Distinguished Fellow, VIF. He is a former Commandant of the National Defence College, New Delhi, the author is a highly experienced member of the Indian Air Force's top leadership echelon. He is also an active member of MPIDSA and USI, a Distinguished Fellow at the CAPS, and a scholar, writer and speaker on air power, national security and strategy.

Security Vision 2047: A Hundred Years since Independence

“India’s growing engagement is accompanied by deeper economic and defence cooperation”.

“Promote a democratic and rules-based international order, in which all nations, small and large, thrive as equal and sovereign. We will work with others to keep our seas, space, and airways free and open”.

*“We should all have equal access as a right under international law to the use of common spaces on sea and in the air”.*¹

- Prime Minister’s Keynote Address at Shangri La Dialogue, 2018

A Caveat

A comprehensive national security vision for India is a challenge in the present times. But as we are a quarter away from a hundred years of independence, it is also the right time for a national vision to regain India’s glory and position as a great power in the world. Twenty five years are enough for a nation’s rise, driven by self-confidence, faith, belief, an achievable ambition and the vision to get there. The road to achieve a great power status must be navigated with an equally pragmatic distant security vision. The scope of a security vision for India in a complex world is vast and varied. This essay is neither comprehensive nor conclusive, but suggests a graded strategic approach in the near, mid and long term over the next twenty-five years, and addresses certain key areas of security and comprehensive national power. It seeks to draw attention of the leadership, policymakers and the security establishment, that a broad national

1 https://mea.gov.in/Speeches-Statements.htm?dtl/29943/Prime_Ministers_Keynote_Address_at_Shangri_La_Dialogue_June_01_2018

consensus be formed on the contours for a long-term security vision towards a great power goal.

Quo Vadis India?

Every Indian has grown up with an awareness of its rich and glorious ancient civilisational past. A past, which the scientific analysis of evidence from recent excavations reveals to be at least nine thousand years BP (before the present).² Proud though we are of its historical legacy, India's Colonial past had scarred our collective consciousness and weighed heavily on the nation's growth and development since 1947. Independent India came into being with the trauma of partition, violent communal bloodsheds, immense challenges of shortages of food and wherewithal, and an economy in distress, ravaged by the British Empire and its wars. These challenges defined the priorities of the nation, and the immediate needs were managing the effects of partition, bringing peace and harmony into civil society, nation building, and governance.

Four wars fought in just over two decades of emergence as a free nation forged and tempered a sense of nationhood, but were debilitating for our economic growth and development. The wars kept our security outlook bound to a continental territorial construct of our land boundaries and underscored the threat from the two adversaries of Pakistan and China. The development of an indigenous deterrent capability to manage this persisting threat drew international opprobrium and fettered the nation with sanctions. Along this arduous journey, we rose from the disparaging label of a third-world country to the resurgent nation that we are today. A strong vibrant economy that has remained resilient through the debilitating challenges brought upon by the pandemic.

As we approach seventy-five years, India has not only emerged stronger, the unconditional help and support extended to other nations driven by the world embracing the ancient verity of '*vasudhaiva kutumbakam*', has elevated its global standing. The challenging years have also coalesced us as a nation and strengthened the sense of nationhood of our people. Seen from a Kautilyan construct, India's progress has been remarkable. It has adhered to the threefold path of '*raksha*' or protection of the state from external aggression, '*palana*' or maintenance of law and order within the

2 <https://www.nature.com/articles/srep26555.pdf>

state, and ‘*yogakshema*’ or safeguarding the welfare of the people.³

We are a nation that began with ‘*a comprehensive grand strategy at the dawn of its independence, to meet both external and internal challenges towards becoming a major actor in the international community.*’⁴ India’s rise has been thus far fuelled by modest ambitions within our modest means. As we enter the last quarter towards completing a centenary of independence and having emerged as a middle power, it is time to look ahead boldly. All strategies have a shelf life of applicability and usefulness, and if not seen afresh, become self-limiting. The unique and sophisticated Indian strategic culture evolved out of Kautilya’s treatise the *Arthashastra*, enabled the first pan-Indian empire of the Mauryas which covered most of the Indian subcontinent. This pragmatic realist Kautilyan approach which underpinned subsequent empires and kingdoms, which were systematically crushed in the colonial years of subjugation, is still prevalent in our habitus and its political normativity remains ingrained in Indian statecraft. That it is not articulated and plays a role in a diffused manner, can be explained as ‘*that set of shared beliefs, assumptions, and modes of behaviour, derived from common experiences and accepted narratives (both oral and written), that shape collective identity and relationships to other groups, and which determine appropriate ends and means for achieving security objectives.*’⁵

The re-emergence of our ancient strategic approach of ‘what is best for the state’, and that strategy truly belongs to the state and its citizens, is evident today. The comprehensive grand strategy of the past has evidently been distilled and narrowed to focus on economic growth and progress, as this end would provide the ways and means to not only deal with the external and internal challenges, but it would also elevate our international standing. The visible markers of the successful outcome of this strategy are the swift bounce back of the economy, despite the international downturn, the assertive use of the military instrument for punitive political signalling, resilient actions within our borders, and a self-assured international outlook. As a nation, India is at the crossroad with the choice of reclaiming

3 LN Rangarajan, *The Arthashastra*, Penguin Random House India, 1992, p. 3.

4 K. Subrahmanyam, *Grand Strategy for the First Half of the 21st Century, Grand Strategy for India 2020 and Beyond*, Edited By Krishnappa Vekatshamy and Princey George, Pentagon Security International, New Delhi, 2012, p.13.

5 Thomas G. Mahnken, *United States Strategic Culture*, Science Applications International Corporation Report, Contract No: DTRA01-03-D-0017, Technical Instruction 18-06-02, revised November 13, 2006, McLean, VA, Science Applications International Corporation (SAIC), p.4.

India and the ‘wonder that it was’ or to continue on a plateau of mediocrity and ambivalent goals.

Where do we go – *Quo Vadis* India? The closely interlinked and interdependent threefold path of *raksha*, *palana*, and *yogakshema* provide the grand strategy for India’s future.

Rise to a Great Power

History of the world stands testimony to the rise of nations that have invested in a future vision, strategies to leverage the ways and means to get there, and commitment and resilience to achieve their goals. For India, the Bhagavad-Gita provides the appropriate and justified grand strategic vision and goal of ‘*Tejastejasvinamaham*’- ‘of the splendid I am the splendor.’⁶ The transition from a third-world country to its sharp upward trajectory was made by an accommodative and adaptive approach in the past, often constrained by the circumstances and limited to the near future. Today India is relatively well placed in its ways and means to expand its future vision beyond modest ambitions to achieve the ends of where we want to be. It is time we exchanged our modest goals and aspirations for bolder and bigger ones to establish and secure our position in the world. Having achieved a middle power status while maintaining its strategic independence despite polarising influences, and with its increasing growth trajectory, empowers the nation towards a more ambitious future vision. *The four cornerstones for India’s rise are – ambition, future, strategy, and vision. Ambition – a strong desire, future – the time ahead, strategy – the way ahead, and vision – to see where we want to be.* It is on these cornerstones that we must build to achieve our ‘splendorous’ goal.

India today justifiably can and must transform its great power aspirations into an achievable ambition. Our strengths are – a proud civilisational lineage, being the largest democracy, a growing economic and digitech capability, immense human resource potential, a favourable demographic profile, and a mature and robust comprehensive national power. The continued increase in capability, capacity and confidence in the future will enable us to realise the great power ambition if we choose to be one. This choice becomes a necessity given that India will soon be the most populous country in the world and the future needs of our large young

6 S Radhakrishna, *The Bhagavad-Gita*, Chapter 10, Verse 36, Harper Collins India, 1993, p. 315.

and aspirational demography. *Defining a timeline for the future presents the challenge of quantifying how far ahead we must think. The year 2047, when we complete a hundred years of India's independence which is twenty-five years hence is an appropriate one.* Also, within this timeline, five years hence could be considered as near or short term, fifteen years hence the mid-term, and twenty-five years the long term.

Given the often overwhelming short-term imperatives and the impermanence of strategy itself, a long-term strategy timeline is a difficult proposition. In the past, this has led our strategic approaches to be limited to the short term of governmental tenures. This limited us from taking a long-term holistic overview and narrowed our vision to the near long term of a decade at best. This has changed in recent years as we as a nation have become more confident and assured of our future. The Chinese approach of a long-term vision to regain its civilisational great power status and matching, if not overtaking the United States of America, and its graduated strategy to get there, elucidated in its periodic White Papers on Defence over almost three decades, serves to highlight the necessity of a future vision.⁷ The centenary of India's independence provides an ideal timeline for its rise to great power.

We are a nation that has civilisationally believed that the world is truly one family, a world where all nations grow and prosper together. But this faith of ours will be put to test increasingly in the future by our strong neighbour, with whom we not only share borders but also the Asian continent. All indications underscore the fact that its ambitions and actions will be impediments to our legitimate rise, and a threat to our sovereignty, peace and prosperity in the future. Thus, *it is imperative that we achieve our great power ambition, secure our sovereignty, ensure the safety of our people and provide the opportunity to fulfill their aspirations, in a rules-based, harmonious and peaceful world.* This is imperative, not just for our national interest, but for our international interest as well.

The External Strategic Canvas

The world today is changing at an unprecedented pace accompanied by power shifts. Classical bipolarity has become a historical term, unipolarity was a passing moment, and a multipolar world appears to be the only

7 <https://www.andrewerickson.com/2019/07/china-defense-white-papers-1995-2019-download-complete-set-read-highlights-here/>

option to bring normative stability to the current geopolitical churn.⁸ The structural great power confrontation between the United States and China is here to stay in the foreseeable future. This rivalry goes beyond the erstwhile ideological and security construct of the Cold War era and spills over into the geopolitical, geo-economic, global finance, science and technology, energy and resources, international structures and institutions, and practically all domains of national security. The reducing power dominance and influence of the US, has already brought India onto the high table of nations, who bank their commitment to a rules-based international order, as a significant regional player and as a counterbalance in Asia. This has become more so with Pakistan's pivot to China as its valued ally, ceding Afghanistan to the Taliban, the challenges facing South East Asia which is the future locus of the global economy, and the security construct of the Indo-Pacific region.

China sees India as a spoiler in its regional dominance, and global ambitions, and has already demonstrated its strategy and actions to prevent our rise in power and stature. It's coercive and expansionist strategies have polarised the world and especially the region, as it seeks to create an alternative authoritarian world order and the international system. The geopolitical dynamics between US-China, Russia-Europe, and Russia-China, have spilled over onto older influential powers and rising middle powers. Countries like Russia, Turkey, and Iran will strive for greater power and influence, and this is to China's advantage as it seeks to create an alternative world order. As China continues to pursue a strategy of expansion of sovereignty to regain its 'perceived' historical territories and maritime spaces, India's border issues with China in all likelihood will get more complex.

The China Factor

China will remain the most significant and strident challenge in India's security construct and the primary continental challenge. Paired with its client state of Pakistan, especially with the current Afghanistan scenario, will continue to impact our external security policies over the next decade. The Chinese-occupied Aksai Chin is geographically vital, as it links Tibet to the important Xinjiang province, which shares borders with Mongolia, Russia, Kazakhstan, Kyrgyzstan, Tajikistan, Afghanistan, Pakistan, and India. Be it

8 Charles Krauthammer, *The Unipolar Moment, America and the World 1990*, <https://www.foreignaffairs.com/articles/1990-01-01/unipolar-moment>

the Shanghai Cooperation Organisation (SCO), the Belt and Road Initiative (BRI), or the China Pakistan Economic Corridor (CPEC), these are China's gateways to the resource-rich Central Asian Region and southwards to the Arabian Sea, and therefore vital for its economic, political, security and diplomatic initiatives.

The CPEC project, which links the Xinjiang province to Gwadar deep-sea port in Pakistan, is a serious security concern because it passes through Gilgit-Baltistan in Pakistan Occupied Kashmir (POK) and increases the strategic vulnerability of J&K. China's ability to exert influence on Pakistan's economy is substantial since Beijing is Islamabad's largest creditor. The continuation of challenges that the corridor currently faces due to Pakistan's internal administrative and security issues, especially in Baluchistan, could lead to China putting boots on the ground along the CPEC corridor to safeguard its interests. The direct routes into the Arabian Sea through the Gwadar port and the China Myanmar Economic Corridor which opens into the Bay of Bengal at Yangon and Kyaukpyu, are vital to Beijing as they ease the pressure on its Malacca Dilemma. From India's perspective, both routes enable China to not only access the Indian Ocean but also sandwich India's eastern and western coasts.

India has no choice presently but to contend and manage its engagement with China, which can be expected to continue and possibly expand its coercive foreign policy. The geographic points of its force applications join to form clear 'outward arcs of expansion' towards its perceived great China's historical boundaries – in the East and South China Seas, the Indian state of Arunachal Pradesh and the Union Territory of Ladakh over land. The array of its actions over the recent years have been: firstly, to an articulated plan; secondly, it has amply indicated its intent with deliberate strategic signalling; thirdly, it has been consistent in adhering to its red lines. It has adopted a stridently comprehensive aggressive-exploit-all-means approach in its foreign policy; and finally, from a strategic standpoint, it has been remarkably consistent in its unpredictability of actions. It is this 'consistency of unpredictability' that India must exploit towards proactive counter strategies, using an overarching comprehensive and long-term approach.

Need for Multi-dimensional Approach

A long view of India's rise to a great power status will serve to keep us focused and seek innovative and alternative strategies. *It must not let itself become security-obsessed in a particular domain with China and*

Pakistan, instead adopting a comprehensive security overview. Since they will remain the primary threat in the coming years, reacting in isolated individual domains detracts from taking a comprehensive multi-domain security approach. Thus, allowing the border imbroglio with China and cross-border terror from Pakistan to be viewed and overlaid into merely a collusive continental threat, will inevitably narrow our options in the strategy playbook. Taking a localised approach by leaving it only to the Army to resolve tactically or only nuanced diplomacy at a macro level detracts from a robust multi-domain approach. A single domain local approach only serves to encourage both the antagonists, who themselves use aggressive strategic communication, to see our localised approach and our subtle and nuanced signalling as a sign of weakness. This narrow approach further emboldens them to use it as asymmetric leverage to their advantage, by continuing to keep the issues on a low burner and regulating the 'heat' on their terms. This enables the continuance of salami-slicing and subversive terror strategies ties us down militarily, lowers the credibility of our strategic communication, and weakens our deterrence strategies. With deterrence as the current bedrock of our security, we can ill-afford its weakening and reduction of its credibility. Future security strategies and actions therefore must be evolved using a comprehensive approach, exploiting all elements of comprehensive national power.

A Strategic Opportunity

China's external strategy has had the unintended consequence of pushback of firm international reactions and brought its actions under close scrutiny. The region and the world are watching China very closely, and not in the way it intended itself to be perceived. The next unintended consequence is the growing evidence and realisation across all nations which are engaged with China economically and financially, that they cannot hope to engage China on their own – that is bilaterally and on China's terms. Its actions and their timing have if anything coalesced affected nations to come together. *Aside from the US-China rivalry, powers like India and Australia standing up rather firmly in quick succession have definitely encouraged all countries in the region and the world to review their engagement with China, and more importantly amongst each other.*

This has led to the creation of a window of strategic opportunity for India. Firstly, to review its relationship and engagement with nations with whom it shares common values and interests, regionally and globally, so as to

emerge as a viable counter to a China-dominated unipolar Asia and in the wider Indo-Pacific region. Secondly, to further India's position as a global power. The former will need a recalibration of India's foreign policy engagements, which must adopt a 'whatever-it-takes' smart power strategic approach – whether unilateral, bilateral, or multi-lateral, with the long-term central aim of securing our position regionally and globally. India must leverage treaties, agreements, memorandums of understanding, and any bespoke arrangements or even alliances, as long as it serves India's strategic interests in the long term.

Building synergies with other nations while at the same time balancing trade-offs will have to be done adroitly. The latter will necessitate a wider overview with the long-term goal of strengthening all aspects of Comprehensive National Power to a stage where the impact and outcome of China's strategies can no longer significantly impact ours. For this, steepening and sustaining India's upward growth trajectory will be foundational, as this will also enable us to invest in strengthening the capabilities and capacities of our hard power. *A strong economic base and an equally strong hard power capability will consequently enable a smart-power path to our global rise.*

The Strategy of Domain Fusion – Arcs and Pivots

“The Conqueror (India) shall think of the circle of states as a wheel - himself (the nation) at the hub and his allies drawn to him by the spokes though separated by intervening territory as its rim.”

- Kautilya, Arthashastra, Book 6, Chapter 2, Verse 39⁹

The Kautilyan Mandala theory which governed interstate relations and foreign policy of the state provides insight into a contemporary approach that could be adopted towards India's security dynamics of the future - from the near to the distant future. In the past, the extent of India's strategic interest was identified to extend from the Gulf of Aden to the Malacca Straits, and this was adequate given its geo-political needs, economic potential, and military capability. If India is to become a global power, the future extent of its spread will need to expand its geographical domains of interest, engagement, and influence in the land, sea, and air spaces. *The*

9 LN Rangarajan, *The Arthashastra*, Penguin Random House India, 1992, p. 505.

expanded geographical spread would need to change from a mere 'area of interest' to an 'area of influence' in the mid-term future. India's goals have never been or will be hegemonic, and therefore in the long-term, it must be in a position of 'influential control', where it must as a global power be able to influence and exercise control – not to dominate but to shape its interests. *India's future security strategy must be across all three geographical domains of land, sea, and air, not as individualistic but as fused domains of security.* The legacy approach of nations being identified as a continental or maritime power based on the strength of the army or the navy lost its sanctity with the rapid rise of air power post-World War II. The third dimension of vertical domination over land and sea spaces made air inseparable from the surface domains and led all major powers to review their domain-centricity.

In India, the preponderance of territorial threats has led us to a continental-centric approach to security. In recent years with trade and commerce as the foundations for building a strong economy, the maritime domain has gained ascendance. *Despite the changes the world over, in India not only do we look at these two domains independently, but we also do not syncretise the all-encompassing third domain in our national power and security matrix.* Each domain has its strengths and limitations both from economic and security perspectives, based on capacity, reach, and speed. Exploiting the air domain to strengthen and influence the surface domains has already gained salience amongst all major powers of the world. Therefore, *a fusion of the geographically defined domains of land, sea, and air, will be a defining change in India's strategic thinking, growth, power, and security calculus.* It must be clarified here that while only the geographically and sovereignty-defined three domains have been included, cyber and space domains which are considered global commons, are equally important and covered later.

Loci of India's Expanding Arcs - Maritime Realm

While border security remains a serious concern to our territorial integrity at least till the mid-term, it must not become a sole, overwhelming concern in the short-term that inhibits a wider long-term national security perspective. The continental threat must be seen from a larger perspective rather than just a border-centric approach. As discussed, *limiting the focus at border conflicts to the expropriation of the existential continental threat will tie us down to a narrow strategic perspective, and will continue to inhibit us from achieving our long-term ambition. Our national interests and*

security will therefore be better served by adopting a ‘two-layered expanding arcs of influence’ by the fusion of sea and air domains in the maritime realm.

The suggested first layer is an extended defensive arc constituting our island territories in the West and East. The second layer is an arc of our geo-strategic interests and comprises specific places and areas amongst countries with whom we have been historically linked and have strategic relations. Investing and developing India’s smart power base and capability in a series of strategically important loci of places and areas, along the two-layered arcs of influence, will enable us to significantly enhance our influence and consolidate our national interests.

The maritime realm is the wellspring of India’s economic growth and great power rise, and therefore the security of the sea and air spaces of India’s interest is a long-term strategic imperative. Though the Indo-Pacific construct is important for the coming together of nations affected by China’s attempts to dominate the region and serves to elevate India’s normative power status, the Indian Ocean Region (IOR) remains our most important area of strategic interest from economic, geopolitical, and security perspectives. The initiatives towards securing and strengthening our interests in this realm across both domains must increase in priority.

A Cooperative Engagement Model

While the Prime Minister has presciently articulated this in the Shangri La Dialogue in 2018, it needs to be fleshed with policy and purpose. The extant Security and Growth for All in the Region (SAGAR) strategy must be strengthened and energised towards greater presence and developing influence. India must expand its involvement, engagement, and presence in the Indian Ocean Rim Association (IORA) countries. Instead of developing bases, it must build relationships to leverage access to places, through mutually beneficial cooperative engagements. *Cooperative security should be the overarching umbrella of increasing Indian maritime and air power presence in the region.* India must actively enable and leverage a ‘participative and cooperative’ model to emerge as the major player in the IOR in the mid to long-term. This is a long-term national imperative to offset China’s dominance over the South Asian waters.

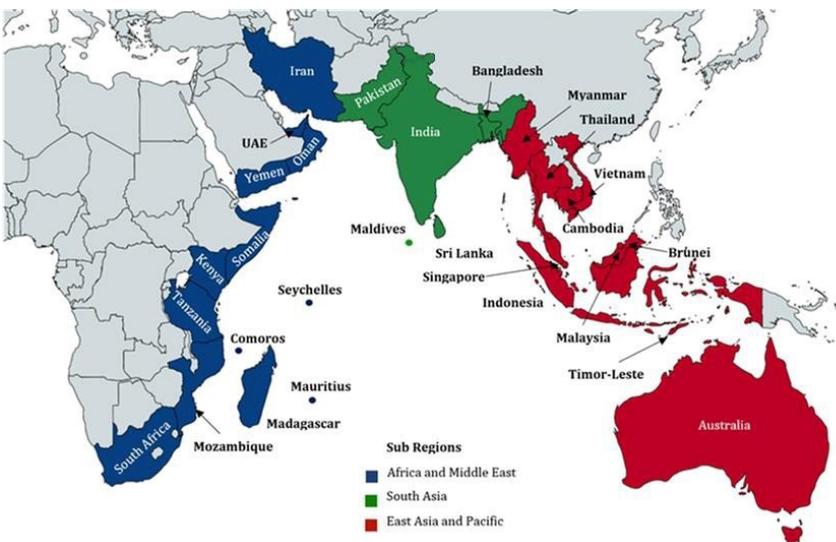
This model has extensive strategic possibilities of leveraging the Indo-Pacific construct between the US and its regional allies from the Pacific Ocean

from the East, and the India sponsored IORA from the West. This will not only serve to contain China's attempts at gaining maritime domination and influence which impacts all major and region players. *Most importantly for India, it will provide a potent and vital leverage against our heavily weighed continental threat imbalance.* This has immense potential to accelerate India's great power rise in the long term to achieve our 2047 goal, while establishing it as a key player in international stability and balance.

Fostering Strategic Leverage

A viable future strategy to attain this important leverage capability is suggested in the following paragraphs.

Western Arcs. West Asia and the Gulf region remain critical to India due to its energy requirements and therefore, is a critical centre of gravity. The Gulf of Aden is the vital maritime trade link on which India's economy and growth are dependent. A secure and stable Arabian Sea region is essential to not only our trade, energy, and maritime interests, but it also becomes an area of future competition and contention with China's land access to the region by way of the CPEC and Gwadar Port. To secure India's interest in the region, we must leverage Iran, Oman, Kenya, and Mauritius, which are all nations with whom we share historical linkages. Geographically they form the outer arc of our geo-strategic centre of gravity. Working towards acquiring transit access rights as against exclusive base rights must become near term priority, and developing these 'places' to be able to leverage them in our interest, should be a mid-term goal. To elaborate:-



- For India *Chabahar Port* is a critical locus in Iran, both for maritime interests as well as continental access to the resource-rich five ‘Stans’ of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan of the Central Asian Republics. Recent foreign policy initiatives must under-pinned with increased security engagement in way of military exercises, and especially transit access to airbases, wherever possible into this landlocked region. This is especially so since road access from Chabahar port via the Zaranj–Delaram Highway in Afghanistan into the Central Asian Republics (CAR) cannot be exploited with the current situation. Alternative overland routes though not viable presently, must be continue to be actively sought.
- Strategic access to port and airbase facility in *Oman* assumes great importance, not only as a gateway to the Gulf region which is our energy source, but it also overlooks the Gulf of Aden through which passes our key trade routes. Oman was the first Gulf nation to extensively partner with the US militarily, but the US presence has dwindled over the years and is an ideally situated access base. India already has access to the Port of Duqm but needs to develop access to an air base. This region has already become the focus of all major maritime powers due to its strategic importance geopolitically. Piracy, arms and drugs transit, the proximity of conflict flashpoints, etc., have been used as reasons to enhance the naval presence of the US, UK, France, Russia, Iran, Saudi Arabia, and Egypt. While the Indian Navy (IN) also maintains its presence, increased Chinese involvement as a part of the BRI and its base in Djibouti in the strategic Horn of Africa are likely to impact India’s future interests. India must seek access rights to an air base in the region to support its maritime security interests. Kenya’s importance has already been recognised by India as a leading African nation. Its geographic location on the East coast of Africa provides a strategic overview of the IOR from our West, and is an important locus in the outer arc of India’s area of influence. Access rights to a port and airfield facility will not only provide a presence in continental Africa, but will also allow access to the southern reaches of the ocean, providing unprecedented aerial and maritime reach and influence.
- *Mauritius* serves as a gateway to the Indian Ocean for maritime traffic rounding the Cape of Good Hope. The island nation is integral to our future salience in the Indian Ocean and a key pillar in our development partnership. Here too India must increase its engagement to swiftly bolster our transit presence and frequency of access, to this vital location. This country becomes doubly important due to its near equidistance between Kenya and Maldives, and with the inclusion of Oman in our strategic influence, helps effectively to have a foot in the Western IOR.

- *Maldives* is the third locus in the wider IOR construct. India is already actively involved with this island nation, which is also geo-strategically located. While Indian Naval presence already exists, developmental support and access rights to the Gann airfield in the southernmost atoll of Addu would be of immense strategic importance. It will enable the Indian Air Force to act as an asymmetric counter to Chinese naval presence, and support the IN in providing security and stability in the region. The Maldives also strategically helps to connect India's external Western arc of influence to the inner defensive arc of the Lakshadweep Islands.
- The *Lakshadweep Island* chain is India's strategic outpost on the Western flank and forms an inner defensive arc vital in reinforcing defensive ability, and outwardly it expands our power projection and allows effective engagement in the net security of the region. This Island chain must be bolstered from a security perspective on priority, at par with the border area development in the North and the East. All necessary infrastructure, operational facilities, and suitable military inventory must be concentrated on expanding early warning, monitoring, and extended air and maritime defence capabilities and capacities. The development of fighter-capable airfields is a critical imperative to enable extended reach and swift response in the maritime and air domains over the entire region.

Eastern Arc and Pivots. The Bay of Bengal has become our eastern strategic centre of gravity and India's initiatives in the region underscores this. China has established a direct port access to Chittagong and a submarine base in Cox Bazar in Bangladesh, which is also the second largest recipient of Chinese loans under the BRI initiative. Similarly, the Kyaukpyu special economic zone and deep sea port development in Arakan enable Chinese access to the Bay from Myanmar. This enables China to straddle India from the East and is a security concern on our Eastern seaboard. The concern will become a greater challenge in the future with the increase in Chinese capability and capacity development in the Bay of Bengal. Therefore, unlike the Western Arcs, on India's east, the geography dictates that strategy has to be a combination of a 'reverse arc' and pivot points in the South Asia region. The reverse arc would comprise of Andaman and Nicobar Islands and Indonesia. India's strategic loci on the East should include Malaysia, Singapore, the Philippines, and Vietnam, with whom we already share significant security engagements. To elaborate:-

- Strategic location of the *Andaman Islands* has long been appreciated but left inadequately developed and leveraged. Despite being designated as

a tri-services Command, enough has not been done towards bolstering India's security in the region. The island chain dominates the Malacca Straits and provides swift access to the Sunda Strait, which is the gateway to the South China Sea (SCS). This is therefore the jugular vein of China's maritime trade and energy and underpins its deepest strategic concerns. While both these straits are within reach of our maritime and air power, expansion of our hard power capacity in this union territory, as has been suggested for the Lakshadweep Islands, should be a high-priority goal in the immediate near term. Strategic expansion of fighter-capable airfields and associated infrastructure, increase in air defence sensors along with integrated air defence weapons systems, and a logistics hub are long overdue. While long-range kinetic air power capability from the mainland has already been demonstrated and exercised, positioning of permanent air power and long-range air defence assets will immediately expand India's security and influence in the Eastern IOR and the SE Asian seas. This also serves as a vital counterbalance and counter leverage to the continental threat in India's north and northeast.

- Vital importance of *Indonesia* to our security cannot be overstated. Our long and close historical and cultural linkages along with the current economic ties need to be bolstered expeditiously to enable greater security engagements. Given its geostrategic location and geography which brackets the SCS, Indonesia is a true pivot nation to all our future security and strategic interests from the near to the long term. This nation is a vital locus like no other, for not only maritime sea-air domain strategy, but our continental land-air strategy as well. Port and air base access here must be bolstered with the wholehearted expansion of defence cooperation and active engagement.
- *Malaysia, Vietnam and the Philippines*, while clubbed together simply due to regional proximity and commonality of our strategic interests, are individually vital pivots as they encircle the SCS. It must be clarified at this stage that while India has no intent to become embroiled in the SCS dispute, it has strategic stakes in the oil and gas exploration contract which it seeks to extend. Our naval presence in the region has already made India a limited player. While increase in defence cooperation and military support must be a near-term priority, developing access to air bases in this region will be a game changer. This is because of fundamental two reasons:-
 - China's anti-area access denial strategy, development and militarization of artificial islands in the heart of the so called 'Nine Dash Line', and extensive and ever-increasing use of its air force have already enabled it to not only project its power in the maritime domain up to its 'first island chain', it also allows it to strategically dominate the vital airspace

above it. Securing control up to the 'second island chain' in both sea and air domains is the Chinese goal as will ensure its primacy in the region. That Kind of rapid shift of the balance of power in the region in China's favour is a grave concern for the US and its allies and is the crux of the Indo-Pacific security construct.

- The increasing capability of the People's Liberation Army Air Force (PLAAF) to assert its influence over the neighbouring countries gives China an added instrument of coercion and enables multi-domain dominance. Amongst the South East Asian countries, Taiwan, Indonesia, Malaysia, Philippines and Vietnam, all have small air forces. Most of them have a mix of combat aircraft of varying vintage with very limited modern air defence capability, which they are struggling to upgrade. Simply put, none of these nations' air forces can match up to the PLAAF individually. Yet, all of them are running programs to modernise their air forces since they realise that a credible conventional deterrence against China is only possible with strong air forces with a modern inventory. Together, these air forces could provide a strategically asymmetric option for their nations to collectively exercise sovereignty over the contested waters in the region.



- India can play a significant out-of-the-box strategic role here by exploiting its air force-to-air force connects towards building a defensive and deterrent air power capability amongst these nations in the near term to mid-term. Ranging from conducting training and exercises, capacity

building, assistance from our aeronautical and defence industrial base, sale and supply of air defence radars, surface-to-air guided weapons and strategic weapons as we have done with the Philippines, to potential joint tasks and missions, the options are many. This would also provide the much-needed asymmetric advantage to our maritime power and will enable the creation of a game-changing collective airpower deterrence capability in the security matrix of the nations affected by China's military coercion. This is an area that can be easily developed given that India has already engaged and exercised with most of the Air Forces in the region. Access to air bases in these countries will not only provide India a security counter leverage in future border conflicts, but it will also enable us to become a serious player in the Indo-Pacific construct. An increase in India's capability and displayed intent towards stability in the South East Asian region will not only increase the confidence of the concerned countries in India, it will also serve to reinforce India's position regionally and internationally, as a mature and responsible future global power. This will consequently and equally importantly have a direct impact on the security and stability of India's core strategic interest and influence the IOR.

The vast maritime domain which is largely left to an overstretched IN must be strengthened with a more innovative, comprehensive, and joint aeromarine approach wherein India's strengths in the maritime and the airspace domains are combined for our future interests. The long 'response-reach' lag of maritime responses to situations can be compensated with the swifter response and the extended reach capabilities of land-based air power. The current fighter inventory of the Indian Air Force (IAF) with long-range stand-off precision weapons, mission packaged with Airborne Warning & Control Systems (AWACS)/ Airborne Early Warning and Control System (AEW&CS) /maritime reconnaissance aircraft and flight refuellers, is a potent coercive force. It enables air power to be jointly applied with naval power more effectively across widely separated maritime spaces towards enhancing net security, enabling regional stability, and undertaking tasks in the national interests. Thus, *in all future security scenarios, the inclusion of air power in the security narrative from the beginning will provide a wider range of options and response strategies, and will certainly serve as an asymmetric advantage to our current deterrence strategy in the short and mid-term.* An important caveat here is that while our capabilities exist in the maritime and air domains in the near term, our capacity will need to be strengthened over the mid to long term, concurrently with our economic growth and power rise.

Mainland Security – A Full Spectrum Approach and Leveraging Pivots

Border threat from China and the sub-conventional terrorist threat from Pakistan are both increasingly using grey zone tactics and will remain our perennial challenge in the near to mid-terms. These will continue to be regularly exploited to serve the strategic interests of our hostile neighbours in order to try and keep India under pressure, thus forcing it to stay engaged by committing human resources and capital.

Pakistan

Pakistan will keep sponsoring terror and subversion attempts, continuously pushing the envelope to India in order to exploit the space below the escalatory threshold of a conventional limited war. While the Balakot air strike clearly laid down India's red line on large-scale terror attacks, Pakistan perceives that India's economic and growth priorities will keep it from engaging it in a conventional, albeit limited conflict. As a state which has demonstrably traveled too far down the road as a state sponsor of terror in India and Afghanistan, it will continue to push India's strategic patience. It has successfully established India as its existential threat amongst its people and thereby the cause of all its national problems and challenges. Given the close proximity of its military, the keepers of its power, with the authoritarian leadership of its strategic friend China, the situation is unlikely to undergo any structural change and will have to be managed as such in the near term. But in the mid to long term, India must aim to put an end to this debilitating and distracting challenge, despite its seeming implausibility. While not discounting the preferable peaceful initiatives towards normalisation of relationships, history is replete with its duplicitous and unreliable behavior, something which has become a second nature in its statecraft.

India will therefore have to carry the big stick and demonstrate her proclivity to use it. We must widen and strengthen our hard power options of security responses across all spectrums in synergized accompaniment with other elements of national power, and keep demonstrably re-iterating our willingness to respond swiftly, robustly and comprehensively. In the near and mid-term, Pakistan must be treated as a strategic challenge which must be countered through a full spectrum of relentless actions. Sustained *diplomatic leveraging, digital, software, information and perception*

dominance, economic, trade and financial leverages through international institutions, diaspora leveraging, promoting international legal norms, exploiting the upper riparian dominance of the Indus River, exploiting the internal fissures in its north and south, etc., every possible option must be included in India's strategic playbook along with the full spectrum of kinetic and non-kinetic hard power options.

China

With 'national rejuvenation' as its grand strategy, all political, economic and military decisions of the current dispensation in China is designed to achieve the 'China Dream' - of a well-governed, socially stable, economically prosperous, technologically advanced, and militarily powerful great power by 2050. Having positioned himself as the most powerful leader since Mao, consolidated his future by removing the time limits of the presidential tenure, and move away from the erstwhile collective leadership of the Party towards a personality driven individual leadership, Xi Jinping will endeavour to remain in power till as long as possible. China will therefore remain the central challenge for India with its current strategies and power trajectory, increasingly pushing it towards a clash of interests with India's power rise and goals of 2047. Its great power competition with the US, and the acute sensitivity to its position as the creator of an alternative international system, will make it unlikely to get into serious confrontation with India given its present strategy construct. But it will see the rise of India's power as a hurdle in its ambitions, and prefer to obstruct and diminish any future possibility of competition. While in the near and mid-term India will have to contend with the Chinese machinations, to realistically achieve her justified aspirations she must aim to overcome the hurdle in the long term by 2047. This will certainly not be easy, but is definitely achievable if India sets that as her grand strategy, and pursues it with a single minded commitment. It must be considered that any lesser goal will place India in an unequal position in the long term, subordinated by China's future policies and strategies.

Any resolution of the border issue in the near to mid-term is very unlikely, primarily as the 'recovery' of its perceived historical territories is a part of the China Dream. It serves its strategic interests to keep India under pressure till it can dictate terms from a position of strength in the long term. An irredentist China will continue to militarily salami slice in the uninhabited areas of dispute and create new 'normals' by systematic

encroachments into habitable areas in the near and mid-term. Removal of such forced *fait accompli* encroachments will be near impossible due Chinese civilian population having occupied the geographical space for over two decades. *To prevent the furtherance of its border-strategy, India has to lay down its red lines with a long-term vision, and pursue it continuously and aggressively in the near and mid-term - till it is in a position in the long term to force China towards a settlement that is to India's advantage, or at the least a mutually agreeable one.*

Collusive Concerns

Strategic friendship between China and Pakistan will increasingly tilt towards the latter becoming a total client state in the hope of economic recovery due to its accumulated debt, CPEC commitments, military equipment dependency, and close irreversible political engagement. With the Pakistan military remaining in power in the foreseeable future, and its historical pre-disposition towards the US, there is all likelihood that China will in the future politically leverage Pakistan permanently into its side. This will enable China to dominate the geopolitics in its West, which is its BRI gateway to Central Asia and Europe. With Pakistan firmly under its spell in the future, it will be able to strategically squeeze India militarily to its geo-political advantage. On Pakistan's part, it will increasingly attempt to leverage China's direct support against India, politically and economically. Militarily, while it would be of enormous strategic advantage to have China's direct involvement against India, Beijing will not militarily collude with Islamabad in any conflict of the latter's making.

China will avoid any direct large-scale conflict with India for three reasons: Reintegrating Taiwan remains its highest strategic priority, and it will not render itself vulnerable by opening another front simultaneously against a militarily strong adversary; India's demonstrated resolve on the Eastern and Northern borders and willingness to up the ante in case of direct military action; and most importantly, the possibility of a military failure will severely undermine its great power image and will be seen as a defeat of its grand strategy, both nationally and internationally. At the same time, China will definitely leverage Pakistan's willingness to collude against India, if the situation so warrants, but on Beijing's terms and under its control.

It must be considered here that *any collusive military action would be an unacceptable 'two-adversary war' for India where the fronts could be many.*

In the extreme possibility of such an occurrence, it would suit China to open two fronts in our North and East like in 1962, with Pakistan opening the Western one. Such a war between three nuclear-armed nations is a worst-case scenario due to the high risk of escalatory control failure. Though this is an unlikely possibility since the nuclear triangle is viewed by the world with grave concern, even a lesser level of collusive action will put India under undesirable pressure, and therefore, discouraging the possibility of a two-adversary war will be to our advantage. We must therefore take a hard realist view to exploit and leverage every instrument of power to create an international pushback against such a possibility and exploit every opportunity to sow discord and encourage dissent in the collusive partnership.

Building Continental Pivots

India's continental options are boxed in by geography, an adversarial neighbourhood, and the long-contested borders in the West, North, and the North East. India must actively seek to create access to places that can be used as pivot points for force application leverages in the continental domain. Given the geography and the political dynamics, *the Tajikistan model could be used to develop friendly access to airfields across a wide strategic arc of pressure on continental China's key strategic counter-force and counter-value centres of gravity*. If India's major cities and strategic assets can be threatened by China, there is no reason why we should not actively develop continental pivots to be able to similarly threaten its counter-pressure points and upgrade our deterrence towards a coercive capability. While the likelihood of the application of such coercive pressure may not arise, the strategic option to do so must be developed in the near and mid-term to ensure China is forced to contend with India's power trajectory in the long term. For example:-

- The *Gissar military aerodrome* developed and maintained by India in Tajikistan is a critical locus for its strategic proximity to the Wakhan corridor connecting Afghanistan and China and the Gilgit-Baltistan region in POK. The airbase provides vital counter-pressure options to not only Kashmir and Ladakh regions, which are surrounded from three sides by China and Pakistan, but also to counter Pakistan's strategic depth concept. India must in the near and medium term strive towards greater influence and user access to this vital pivot with regular activation and deployment in the way of exercises, transit usage and short cooperative deployments.

- Developing airfields of *Nyoma, Daulat Beg Oldi and Fukche* in Ladakh, and their regular all-season operations will enable invaluable and swift air-logistic access into the high-altitude Northern region. Despite the Indian Army's concerns about the proximity of these airfields to the border and their consequent vulnerability to artillery, India must take a quid-pro-quo approach given the proliferation of Chinese airfields all along our borders. Vulnerability to Indian aerial and surface firepower has not deterred the Chinese and should not, therefore deter us. This should be a near term priority.
- Friendly access to an *air base in North Vietnam* would provide an excellent pivotal foothold to counter China's continental dominance, target its depth strategic centres of gravity, and provide the option of a counter-pressure to the 'Greater Tibet' and the Arunachal regions. The commonality of inventory of Russian origin makes this a strong interoperability option. Infrastructure development support, training support, joint exercises, supply of military equipment and armament, etc., in the near and medium term, would be a win-win strategy for India's military and defence industry as well. In the long term this would help to diversify and strengthen India's strategic options.
- A similar development of friendly access to an *air base in Myanmar* will be another strategically important pivot and India must actively pursue the possibility of such an advantage. It not only completes a strategic arcing against continental China but provides another vital counter-pressure pivot. It also enables the straddling of the Chinese-developed ports in Bangladesh and Myanmar, between our East coast and the southern states of the North East. This possibility could be pursued and developed in the near and mid-term.

While attempting to develop such continental pivots may be contrary to past policies and is bound to create geopolitical concerns and possibly exacerbate regional tensions, it is time for India to up its great power game. The recent state behavior of even normative powers has been centred on national interests, and therefore India must de-hyphenate its legacy moral high-ground position for a strident realist position in the future to serve its core interests. There is bound to be significant opposition to such a strategy from within India's diplomatic, strategic and security establishment, as well as strident opposition that India has not reached a power position to do so as yet. The single common answer to all such concerns is that *given the developmental and power differential with China, we will always be behind the curve unless we are ambitious, up our strategy*

game, and start acting now with an eye on the distant goalpost of the year 2047. And finally, even if actual access for military usage during a conflict remains a question, periodical if not regular peacetime access itself will serve as a strategic counter pressure on China with the possibility of threats opening up from multiple fronts.

Upgrading India's Deterrence Strategy

Nuclear Deterrence

India's nuclear doctrine has been steadfast in adhering to the strategy of Credible Minimum Deterrence to showcase three key aspects: our reliance on deterrence in national security; that we are a responsible nuclear state; and our commitment to global disarmament. The strategy rests on the pillars of civilian control, a credibility based on minimalism, and no first use. To our justifiable credit as a true constitutional democracy, there has never been any debate on the pillar of civilian control. However, the other two pillars have generated concerns in view of Pakistan's full spectrum deterrence policy and China's progressive move towards a capability of nuclear coercion.

The Pakistani concept of deterrence is elastic and contradictory, with vocal posturing of a low nuclear threshold, use of tactical nuclear weapons, and capacity building of its arsenal. Its political, military, scientific, and diplomatic leadership are experienced in escalation control and nuclear signalling, which are regularly honed and fine-tuned through war games.¹⁰

Chinese interpretation of deterrence includes dissuasion and compellence, unlike India's conservative interpretation. From China's perspective, it's No First Use (NFU) policy against non-nuclear states does not apply to India being a nuclear-armed state. It considers launch on warning to be compatible with its NFU approach. The PLA Rocket Force and presumably its Strategic Force follow a well-defined deterrence ladder and believe in maintaining a capability of waging 'real war', including mounting nuclear strikes. China is accelerating its development of strategic nuclear warheads in an effort to amass 700 by 2027 and 1,000 by 2030, more than doubling last year's estimate, according to the U.S. Defense Department's

10 <https://carnegieendowment.org/2016/06/30/pakistan-s-nuclear-use-doctrine-pub-63913>

2021 China military power report.¹¹ Recent reports also confirm the vast expansion of underground missile silos, deployment of ICBM warheads, increasing holdings of ground-launched IRBMs, development of nuclear-capable hypersonic glide vehicles, regular monthly computer simulations of its nuclear doctrine, etc., all of which indicate China's move towards nuclear coercion. In the bigger geo-political picture, China hopes to force the US away from strategic assault towards mutual vulnerability. Western analysts assess that China is strengthening its capabilities to "fight and win wars against a strong enemy," a likely euphemism for the United States. The report concludes, that it is also to "coerce Taiwan and rival claimants in territorial disputes, counter an intervention by a third party in a conflict along China's periphery, and project power globally."¹²

India certainly falls in the category of 'rival claimants of territory'. Therefore, in India's long-term strategic interests, it is imperative to analyse and prioritise all policy options and open the window for the possibility of a doctrine review. A dogmatic adherence to a theoretical construct of deterrence that, 'India's nuclear weapons are deterrents only against nuclear attack', may in all probability become severely self-limiting against a change in China and Pakistan's deterrence approach. Our 'massive retaliation' operational doctrine of 2003 runs into serious conceptual and capability contradiction with our concept of 'minimum deterrence'. Viewed with the NFU it indicates a 'none or total' retaliation, and this provides a vast conflict space for our adversaries to exploit. The very high threshold goes against our advantage, as it reduces the possibility of massive retaliation to a somewhat rhetorical outcome. The conceptual contradiction is equally serious as it detracts from our credibility due to a capability mismatch vis-à-vis our adversaries. Similarly, a minimum credible deterrence approach lays the lowest minimum on the size of our arsenal and detracts from the credibility of massive retaliation.

These structural issues need to be reviewed in the near term *to lay a roadmap for a nuclear deterrence strategy for the future, which caters to bespoke coercive deterrence approaches for China and Pakistan separately, instead of a cookie-cutter approach for both*. In the mid-term, increasing our deterrence capability should be the priority so as to be able to leverage it to India's advantage in the long term. Towards this, strengthening our triad

11 <https://www.armscontrol.org/act/2021-12/news/pentagon-sees-faster-chinese-nuclear-expansion>

12 Ibid

in terms of sub-surface and aerial capacity for greater deterrence flexibility, building a mobile and agile surface capability for swift mobility and surprise deployment, modernising command, control, and communications, and dispersed infrastructure for first strike resilience should be the focus areas in the near and mid-term. Gaming, analysis, and consideration of all future deterrence postures of China and Pakistan, individually and jointly, must drive a 'realism plus' review of our current deterrence posture towards a coercive one.

Conventional Deterrence

There is no escaping the fact that for us to be untethered from China's coercive policy and security strategies, and to be accepted and respected as a great power in the future, building a strong 'counter-coercive deterrence' capability is inescapable. This can only be achieved in the long term, for which India's conventional capability has to be built up with a holistic approach through the short and mid-terms. The near term must focus on strengthening the existing asymmetric leverages in our current conventional deterrence, for application in both continental and maritime military domains. For example, the need to include the offensive air power capability in the border equation was not considered necessary till Doklam. *The swift and extensive offensive air power activation in the recent Ladakh crisis, with a clear intent to undertake all operational tasks and provide support to the entire range of military operations envisaged in a possible high-altitude conflict, was a display of asymmetric deterrence of India's high-altitude offensive air power capability.* The asymmetric advantage was in India's favour because, despite China's airpower inventory advantage, it could not match India's capability in the region, in the given situation.

India's demonstrated capability of taking the enemy by total surprise in carrying out a kinetic mission deep in its territory in peacetime, India's professional and credible performance in a large number of international air exercises with leading Western Air Forces, and its high-altitude air warfare experience in Kargil, remains a serious operational concern for China. Despite its numerical and technological advantage, the PLA Air Force lacks offensive air warfare experience, something it is trying to build by exercising with Pakistan Air Force regularly. During the week-long visit of the Senior Vice Chairman of the Central Military Commission, PLAAF Gen Xu Qiliang, who is also the senior most military officer in the PLA in 2019, he met all the political and senior military leadership in Pakistan to

strengthen strategic communication, enhance mutual trust and improve defence cooperation. His visit has resulted in support to Pakistan AF in select virtual war domain capabilities in North Kashmir, Ladakh, and Siachen, and is said to have succeeded in impressing upon Pakistan the significance of enhancing the PAF's role in war. This was in all likelihood to offset the asymmetric advantage of India's high-altitude offensive air power capability. Therefore, unlike in the past, the *Indian military establishment needs to exploit its air power by including it from the beginning in every security situation and leverage every asymmetric capability to widen its basket of choices and response strategies.*

Development of a deep continental and maritime strategic reach, capability and capacity is no longer an option but an imperative, which must be invested in the mid-long term. Our indigenous defence industry needs to accelerate its programs to be able to produce long-range aerial platforms and kinetic vectors, stand-off precision weapons, long-range surface-to-air guided weapons and air defence systems, extended beyond visual range air to air and air-to-surface missiles, etc., weapons that have strategic capabilities and are able to target and apply pressure on our adversaries deep inside their territories and areas of interest. This must be a mid-term goal. In the near term, *India must strengthen its continental and maritime reach by investing in force multipliers, specifically flight refuellers, airborne early warning platforms and long-range combat aircraft. Despite contrarian views, leasing a squadron of long-range bombers in the interim, till we revive our fighter squadron bench strength, will complement our surface and sub-surface capability to provide a potent strategic capability in the maritime and air space realms.* It will also signal India's seriousness of intent to ensure its security and national interests in the larger IOR and Indo-Pacific region.

Multi-Domain Deterrence

China's comprehensive deterrence approach and deterrence signaling have consistently been multi-dimensional, using multiple instruments of national power ranging from military strength, economic leverage, diplomatic influence, and information manipulation. It believes that 'informatization' of its conventional capabilities bolsters its conventional deterrence capabilities, and it provides a wider range of utility options compared to nuclear deterrence because they are more usable and provide greater flexibility. While there are evident parallels with the cross-domain deterrence of the US, China has crafted its own path to what it

sees as best suited to its national, security interests. *It has selected domains where the critical vulnerabilities and strengths of the US military machine can be exploited and countered.* It has chosen cyber warfare as an area of deterrence given the extensive network dependency of the US war fighting approach. It has chosen to build an extensive rocket force with intercontinental capabilities to offset the worldwide continental reach and expeditionary capability of the US. It has leveraged space for its own satellite system to build its own space domain awareness and kinetic weapons systems to counter the space-dependent domain awareness and weapon systems of the US. It has chosen to exploit gray zone tactics to penetrate its key networks and data centers, research and development facilities, laboratories, cutting-edge technology, industrial establishments, trading, and finance organisations, and every possible leverage, against the US and countries of China's strategic interests. It has sought to offset the US advantage of a strong expeditionary and intercontinental airpower by its enormous thrust to its drone capabilities and building a strategic Air Force which will soon outnumber the US in terms of new generation combat aircraft. It has used cyber-attacks to target American commercial, military, and financial systems.

While space was once China's state-controlled enterprise, three privately owned super factories backed with enormous funding, will soon be able to produce up to 1000 satellites per year. The Chinese Communist Party's (CCP) penetration in all commercial, private, and academic spaces of China, enables a 'whole of society approach' towards its drive to dominate space in every way. It has been actively engaged in all space-related UN and other forums, and actively cooperated in international consortiums of space-based global earth systems to distribute information on agriculture, water management, weather, public health, etc., and telecommunications. It has used space programs to support its foreign policy, engaging with European space joint initiatives with Russia and Asia-Pacific Cooperation Organisation. It is actively pursuing its manned space programs and seeks to leverage the commercialization of space as a domain where it becomes the dominant player in the world. All these capabilities and activities have an *embedded Chinese presence in practically every space-related field, much like its economic engagement with almost all countries of the world. This provides China with deterrent leverages in almost all domains.*

Information and cyber deterrence from a Chinese perspective emphasise the use of psychological pressure or threats against its opponents. The driving force is to shift the psychological balance in its favour by adversely altering

the risk calculus of the enemy to defeat him. China has for long *invested strategically in the capability to pervade the military, politics, economy, culture, and science and technology of its 'target nations' and this enables it to exercise coercive deterrence in all adversarial domains.* The ambiguity between information deterrence and information offense, diversity of cyber and information attacks, malicious software, database disruption, etc., are aggressively leveraged given the lack of attributability. This impacts not only the adversary but also others, due to the inter-connectedness of networks and the global grid. Finally, China's sophisticated control and leveraging of state and privately owned networks, media, and information tools enables expansion to a people's war, where it is able to coalesce its large populace to come together against an enemy to wage war on the net.

India cannot hope to match China's scale, scope, and commencement time-line advantage of multi-domain deterrence, but must concentrate on developing strategic areas of asymmetric advantage and counter capabilities. Every window of opportunity must be exploited, with active collaboration and cooperation of strategic partners towards joint development of key capabilities, leveraging our strengths of software development, digital-technology power, and the ability to achieve world class space capabilities at fraction of costs. This is an area that needs to be built across near-medium-long terms. *India's space program needs to become a more inclusive national one, which includes a critically needed military space program.* This must be prepared comprehensively in the near-term, and be pursued aggressively with an active whole of government approach and private enterprise over the mid-long terms. It must focus to bridge the critical deficiencies and gaps in our current deterrence capabilities in the near and mid-terms, and help build a coercive deterrence capability in the long term. Some key areas of building a multi-domain deterrence are as suggested:-

- Intelligence and 'constant-stare' visibility across our borders, especially the disputed areas, future conflict zones, and threat areas, are India's Achilles heel in our defence and deterrence. The urgent need for real-time perpetual surveillance and analysis capability of our adversarial airspace, Air Defence Identification Zones, in-depth look across our borders and all sovereign maritime spaces must be fused to provide information dominance. Multi-domain space-based command, control, communications, computers, intelligence, surveillance, and reconnaissance capability is the very bedrock of the military instrument of power. A multifold enhancement of this capability is a national security imperative of possibly the highest priority in the near term. Creation of a national multi-domain-multi-sensor fusion centre is needed, where

inputs from all types of sensors, imagery, and intelligence systems are employed to provide a 24x7x365 visibility of the entire volume of our domains of interest i.e., airspace, continental, and maritime spaces, and are analysed in real-time for all our national security requirements.

- Extensive resilience and high survivability capacity building of our cyber defence in the near term, and swift development of niche offence capabilities directed towards targeting and exploiting the adversaries' deterrence vulnerabilities in the mid-term, have to be developed. In the mid to long term, we have to move towards total integration of cyber warfare into full-spectrum capability in all domains of national power. This will need a timeline prioritised multi-layered embrace strategy across public, private, and military domains. Harnessing the potential of India's vast 'net savvy' youth in the creation of a mega data fusion and cyber analytics commission for defensive and offensive cyber activities in the near term, will enable leveraging its benefits and provide a counter capability against China in the mid and long term.
- Space will have to be integrated into a war fighting domain in our national security. This is a mid-long term goal, for which our strategies and policies will have to be formalised in the near term. Given the range of threats, air and space defence has to be approached with an integrated aerospace defence perspective to include air and near-space defence, as well as space based and enabled offensive capabilities. Outer space will need extensive civil-military handshake and handholding to balance budgets and capabilities into a synergized credible national power instrument. Advanced layered missile defence, kinetic and non-kinetic defensive and offensive systems will have to be invested in to develop joint coercive lethal capabilities. These must be able to penetrate enemy air and missile defence systems deep into adversarial airspaces in the continental and maritime domains, so as to target diverse weapon systems, static and mobile theater and ballistic missile networks, as well as strategic centres of gravity. This will need again need a timeline prioritised multi-layered embrace across public, private, and military domains.
- Information dominance, data security and sovereignty, and disruptive capabilities are areas that must be leveraged using India's strong digital and information technology base and reach. Our population is as much a weapon given our democratic structure compared to China's autocratic party-driven construct. Our free media must be leveraged as a force multiplier in building information dominance. Our immense potential of a technologically aware and innovative younger generation can be used as a strategic weapon against the rapidly aging Chinese demography. Legislations of data storage and access have to be pushed aggressively to prevent the vulnerability of personal data from being leveraged against

our national interests. Data ownership of the rapidly growing young Indian population in the hands of multinational companies and data storage centers outside India is an immense vulnerability in any future context. This must be turned around as an important pillar of India's multi-domain deterrence capability.

The Government's call to the IAF to transform into an aerospace force is a clear message of the future security expectations of the nation.¹³ While it has no ambitions to be the sole military keeper of the space domain like many leading nations, the air-space continuum and the larger understanding of the vertical dimension and operational commitment to exploit it in the national security interests, makes IAF's organisational construct well suited to transform into a truly future ready aerospace power. This future necessary transformation which will need to commence in the near term and to be achieved by the mid-term, will depend on the strategic vision of the political and military leadership to achieve this in a comprehensive manner taking the other services, the civilian space organisations and the industry on board.

Review of Military as an Instrument of Power

India's self-defence oriented legacy has tied down the use of its potent military instrument of power in a way that despite having one of the second largest Army in terms of active personnel and combat equipment, the fourth largest Air Force in terms of combat aircraft, and the seventh largest Navy, it has not been leveraged adequately. For any great power ambition, every national instrument needs to play a role in a nation's Comprehensive National Power (CNP) and geo-political strategy. Unfortunately, our dominant conventional war orientation has constrained and limited the understanding and exploitation of force as a potent and multi-dimensional national instrument. With our vast population and India's position in the world, national security today has assumed a much wider construct. Threats are no longer just territorial, but encompass a wide range of domains.

Four factors come into play vis-a-vis India's boundaries with its neighbours. The first is the widely accepted international proscription against the use of force to alter interstate boundaries or what is known as the territorial

13 AIR National News, May 05, 2022, <https://newsonair.gov.in/News?title=Rajnath-Singh-exhorts-Indian-Air-Force-to-become-Aerospace-Force-and-be-prepared-to-protect-country-from-future-challenges&id=440389>

integrity norm. The second is that in India's case large sections of its unresolved boundaries and territories are with Pakistan and China who are also our main adversaries. Thirdly, several reasons ranging from force deployments and civilian settlements and permanent constructions close to the borders, to terrain challenges and nuclear deterrence, have made the erstwhile military concept of large-scale capture of territory to enforce national will on the adversary, an unviable possibility. Despite India's international stand on the POK and Aksai Chin areas, the possibility of redeeming these areas remains a distant possibility in the near to mid-term, especially given the current close friendship and the strategic stakes between China and Pakistan. Thus, the resolution of the border issue to our advantage can only be possible in the long term. Finally, while a full scale long drawn out war over the border issue may be unlikely, the extant possibility of localised conflicts within the nuclear escalatory space has been demonstrably proven.

This brings into question whether the larger issue of national security can be equated to the unresolved boundary issue, and can it any longer be resolved solely on the basis of overwhelming force? The unacceptable costs in terms of human lives and economic loss make it an unacceptable option, as it runs contrary to India's economic growth and long-term ambitions. But with high-intensity limited conflicts remaining a possibility, and the increasing multi-domain threats and wider challenges to our nation and our sovereignty, people, democratic freedoms and way of life, national security has become every citizen's concern. Thus, the military is no longer the sole keeper of national security, all elements of comprehensive national power have a role and responsibility in it, and are equal keepers. In a way, this is already at work in our statecraft informally, but our governmental construct is not cohesively structured to do so with the existing somewhat department-centric and silo-based approach. *A comprehensive approach is now undeniably the way ahead, and an all-of-government approach needs to be structurally formalised in dealing with matters of national security.* To secure India's future in the long term, amidst the current geo-political churn, growing regional concerns, own internal challenges and extant threats necessitates India to be strong and powerful. Economic strength, strong diplomacy, and internal stability are important, but to achieve a great power status amongst nations who believe in carrying a big stick, India's large military must become strong to complete the power quartet. For this, *a realist review of our current military strength, its future employment as an instrument of power in national security, and its future roles in the national interest are much needed.* There are four 'bridges' suggested as a

way forward in the following paragraphs.

The Civil-Military Bridge

In India, the unquestionable loyalty of the armed forces to the Constitution, and the unshakeable civilian control over the military, are not only givens but are the vital keystones of our national strength. And yet after seventy-five years of independence the two structural aspects which need to be addressed for greater leverage of this instrument, lie in the heart of the two hierarchical domains of the civil and the military. The first is the inadequate domain knowledge between the civil and the military and the unwillingness to bridge it in a mutually beneficial democratic manner. The other is the single service bias in the security establishment and higher defence organisational structure. Post-Independence, it has been the Army that has dominated the military narrative of the nation despite the role played by other services. From the liberation of Goa in 1961, and the wars of 1962, 1965, and 1999, the other services were not a part of the military planning, and were brought on board later. Post the 1971 Bangladesh war, PC Lal noted in his memoirs that the Army Chief's public statements were *"an expression grows out of feelings that the Army is the senior service and numerically the largest, that the threats to India's security are from the land frontiers, and that the country's defence has to be in the hands of the Army."*¹⁴ A similar concern is expressed by a former Chief of Naval Staff (CNS) in the nuanced line of his essay on higher defence reorganisation – *"murmurs that a million-plus strong force must get its due in the HDO."*¹⁵ PS Das examines why there is the feeling, *"that it is the main, if not the only, armed force"*.¹⁶ He reasons that almost all conflicts have been continental or land wars, and the Army has been the predominant player. Due to this, the country has been border focused on its threat perceptions. Cross-border terrorism and insurgency have been persistent security issues that have been dealt with by the Army. Also, since the air and naval forces have had long periods of peace between wars, the Army has been continuously engaged, either in a military conflict or in a low-intensity mission. Its size gives it a sense of self-importance within the Army and a consequent defensive attitude amongst

14 Air Chief Marshal PC Lal, *My Years with the IAF*, Lancer Publishers, New Delhi, 1986, p.325.

15 Admiral Arun Prakash, *Op Cit.*

16 Vice Admiral P.S. Das, *Jointness in India's Military — What it is and What it Must Be*, *Journal of Defence Studies*, IDSA, Volume 1 No. 1, August 2007, pp.1-12.

the other services. The IAF has traditionally been seen only as a supporting arm and therefore consistently defended its independent stature, while the Navy was in a better position because it operates in a domain where others can only provide support.¹⁷ Assessments of over a decade ago continue to play out even today.

This prevailing single service-dominant approach in matters military has historically manifested in a reluctance to take the junior services on board. Even in the Kargil conflict, the initial reluctance to involve the IAF senior leadership, and access its resources without professional counsel underscores this. The prevalent feeling of it being a support service articulated publicly by the late Chief of Defence Staff (CDS), unfortunately, exacerbates the idea that the IAF is not an equal stakeholder in National Security. In the planning and briefing prior to the surgical strike post the Uri terror attack, on September 23, 2016, of which the Prime Minister (PM), Raksha Mantri (RM), National Security Advisor (NSA), Chief of Army Staff (COAS), Director General of Military Operations (DGMO), and a few select officers were a part, the then Chief of Air Staff (CAS), who was ironically the Chairman Chiefs of Staff Committee (COSC), was not included. While the reasons for the Army wanting it to be an exclusive Army operation is understood, the non-inclusion of the Chairman COSC in the briefing is not. National security interests warranted that in view of even the merest possibility of a military reaction or an escalation from across, the other services should have been kept informed, and at the least, that IAF's Air Defence be kept on standby. Ironically, in the case of the IAF's Balakot strike, as per Raj Chengappa, "*the prime minister gave National Security Advisor Ajit Doval and the chiefs of the armed forces a free hand to plan out a strike for a limited objective but instructed them to keep him fully informed of the alternatives.*"¹⁸ In this case, all players were on board from the beginning. This was because the air strike could have elicited a military response from Pakistan, and naturally that warranted that all services be kept informed if not included as a part of the planning. On this issue, the political leadership also has an important role as the 'check and balance' of the system, in ensuring that all services are engaged equally, and the core

17 Ibid.

18 Raj Chengappa, Balakot: How India Planned IAF Airstrike in Pakistan, An Inside Story, March 15, 2019, <https://www.indiatoday.in/magazine/cover-story/story/20190325-balakot-airstrikes-pulwama-terror-attack-abhinandan-varthaman-narendra-modi-masood-azhar-1478511-2019-03-15>, accessed on June 10, 2021.

competencies and capabilities of each service are put on the table when contemplating any military application of force in the national interest.

Similarly on organisational and structural matters, the onus is on the political establishment to initiate building bridges with and among the military. It is telling that the National Security Council Secretariat (NSCS) has for years had senior retired practitioners as advisors from all services except the Air Force, despite it having fought in all wars, being the fourth largest in size in the world and ranked third among global air powers, ahead of the PLAAF, in 2022.¹⁹ The civil domain needs to reach out to understand that each service has unique core competencies, and must therefore engage all services equally. India's aviation industry expects Rupees 35,000 crore (US\$ 4.99 billion) investment in the next four years, the Government plans to invest US\$ 1.83 billion for the development of airport infrastructure along with aviation navigation services, and aims to have 220 new airports by 2025.²⁰ Civil aviation along with the Air Force and aviation elements of the other services constitute the nation's comprehensive air power. The PM has himself acknowledged the importance of “*equal access as a right under international law to the use of common spaces on sea and in the air*”, and “*work with others to keep our seas, space and airways free and open*”, way back in 2018.²¹ Given India's strategic dependency on the security contested IOR and the rapidly evolving security construct of the Indo-Pacific, the nation needs an air strategy and an air advisor for the future requirements of comprehensive air power from a security perspective. In its continued absence, the nation will be bereft of professional inputs on an important instrument of a multi-domain full spectrum military power, but also marginalise the nation's immense future comprehensive air power necessity.

Security-Strategy Bridge

The military is primarily a hard power instrument but not exclusively so, as it has an enormous soft power capability. Apart from being the primary instrument of force, it plays an important role in military diplomacy,

19 Global Air Power Ranking 2022, <https://www.wdmma.org/ranking.php>

20 Aviation Industry Report Jun 2022, <https://www.ibef.org/industry/indian-aviation#:~:text=Market%20Size,airplanes%20operating%20in%20the%20sector.>

21 Prime Minister's Keynote Address at Shangri La Dialogue (June 01, 2018), June 01, 2018 <https://www.mea.gov.in/Speeches-Statements.htm?dtl/29943/Prime+Ministers+Keynote+Address+at+Shangri+La+Dialogue+June012018.>

defence industry, environment protection, and supporting climate change, in *Atma Nirbhar* initiatives, securing the nation's economy by protecting India's sea lanes and airways for commerce, trade, and travel, and contributes to regional stability. The list of its soft power roles is equally long - humanitarian assistance, disaster relief, pandemics, fostering unity, peace, goodwill, etc. The interconnectedness of the military with other instruments of national power underscores the need to look at national security comprehensively, and leverage it optimally. In this, the role of strategic think tanks, policy groups and academia is immense as they are the intellectual repositories of knowledge and thought especially on all matters of national security – military and non-military. But these organisations need to strengthen their ranks with practitioners, subject matter experts, researchers, and analysts from all services and fields. Else most strategic thought and ideas inevitably get skewed to certain domains and fields. Most importantly, unless these institutions are infused with the younger generation of critical thinkers, researchers and analysts, they will inevitably reach a level of institutional hubris, where the current and the future are viewed merely from past and often dated perceptions.

Fulfilling the long-felt need for a comprehensive national security strategy needs no reiteration. However, given the threats are no longer limited to the military construct, and considering the current and future interconnectedness of all aspects of CNP, a fresh whole-of-government approach towards its formulation of the National Security Strategy (NSS) must be adopted, against the attempts to do so exclusively within the security establishment. Setting up a multi-domain national security commission comprising of members with a strategic outlook from all elements of CNP, strategic community, and the academia, to examine, analyse and prepare a Comprehensive National Security Strategy (CNSS), is suggested. Without getting into the debate on its necessity, two facts are undeniable. The absence of one leads to the perception of a reactive nation unclear of its destination, and on the other hand, its articulation is clear strategic communication of the national will, goals, and redlines, and the underlying steely resolve to adhere to them. This needs to become an immediate near-term imperative, as from it will flow all national imperatives, and it will become the basis for establishing prioritised timelines for achieving them in the short, medium, and long terms. This paper, while in no way comprehensive or prescriptive, could provide some basis in parts if not whole, for such a formulation. It is from the CNSS that will consequently and naturally flow the future roles of the military, revised doctrines, and military strategies.

Inter-Services Bridge

The existing two-dimensional-two-domain approach in India's military outlook has still not come to terms with the internationally accepted salience of the third dimension in warfare and its significant role in national security. The US, China, Israel, Japan, France, etc., and even Taiwan, are increasingly adept at leveraging the instrument of air power in their larger security and foreign policy interests. China has been systematically strengthening its air power over the last two decades as is evident from its three consecutive China Defence White Papers of years 2013,²² 2015,²³ and 2019.²⁴ In effect, the PLAAF inventory is adapting to its anticipated future missions, which include its Taiwan mission, maritime interests in the East and South China Seas and the larger Indo-Pacific construct, and, more recently, the Tibet Autonomous Region (TAR).²⁵ General Ding Laihang, the current PLAAF Chief has stated on China National Radio, *"In the past, our strategies and guidelines focused on territorial air defence. Now we have been shifting our attention to honing our ability in terms of long-range strategic projection and long-range strike."*²⁶

This plays into the larger question of the continued prevalence of the legacy mind-set of a single service dominance on matters of national security. The majority of the recent strategic narratives evident in the articulations by highly respected practitioners on matters of national security, in all forms of media, are unfortunately centred on the continental and maritime domains, with unanimity on the need to include cyber and space domains.^{27,28} The total absence of even a mention of the aerial

-
- 22 Andrew S, Erikson, China Defense White Papers—1995-2019, 23 July 2019 <https://www.andrewerickson.com/2019/07/china-defense-white-papers-1995-2019-download-complete-set-read-highlights-here/>
- 23 Ibid
- 24 Ibid
- 25 Diptendu Choudhury, Expanding Role of PLAAF in China's National Security Strategy, *Strategic Analysis*, Taylor and Francis, 44:6, 2020, p.521-52,
- 26 http://usa.chinadaily.com.cn/china/2017_09/05/content_31577141.htm (Accessed on August 30, 2020)
- 27 Lt Gen DS Hooda (Retd), *India's National Security Strategy, March 2019*, https://manifesto.inc.in/pdf/national_security_strategy_gen_hooda.pdf, accessed on 18 April 21.
- 28 Lt Gen Prakash Menon (Retd), *India's Path to Power, Strategy in a World Adrift*, Chapter 4, Hard Power, Centre of Policy Research and The Takshashila

domain in the narrative is starkly evident and disconcerting. A similar security approach proposed by a former military adviser to the NSCS amply underscores this prevalent narrative, *“There is a need to recognise the importance of the fact that land and sea operations are interdependent and should be synergised to meet national strategic objectives. The land and maritime strategies must be perceived of being part of a singular military weapon.”*²⁹ This narrow approach, of looking at securing only land and maritime borders without any reference to aerial borders, and limiting the security construct to only the continental and maritime strategies, ignoring the vertical offensive and defensive envelopment which is the very essence of air power, by military thinkers and the strategic community is reflective of the lack of understanding the importance of the third dimension. Is it possible to secure India from the land or sea militarily without securing the air? In today’s day and age, are land and sea strategies operationally viable especially in the Indian context with adversaries with strong air forces? Are the Indian air spaces over the mainland and its Island territories not equally a matter of its national sovereignty?

The inter-services differences are unfortunately out in the open and relationships are at an inflection point with the recent attempts at theaterisation of the services. As per Rahul Singh, the concept of theatre commands was disapproved by the then-IAF chief in April 2018, who said it would necessitate the creation of more assets. *“Compartmentalising will require more assets. We believe in one country, one theatre”*, he said, pointing out the dangers of cherry-picking western warfighting concepts. Two former IAF chiefs also spoke to oppose the idea of theaterisation.³⁰ What made the IAF Chiefs resist? It is the fact that the current concept is primarily an Army-centric organisational model, which subordinates offensive air power to the Army’s land theatre construct that is border centric and shallow in geographical depth. The continental threat in India’s context gravitates on the defensive construct of ‘not ceding an inch of territory,’ and limited-depth offensives. This goes against the very fundamental doctrinal premises of the employment of offensive air power

Institution, 2020.

- 29 Lt Gen (Dr) Prakash Menon, *India’s Theatre Command System: A Proposal*, Takshashila Discussion Document 2020-04 V1.0, Takshashila Institution - 12 June 2020, p.5.
- 30 Rahul Singh, Won’t copy models of the West: CDS Rawat, Hindustan Times, New Delhi, Jan 01, 2020 <https://www.hindustantimes.com/india-news/won-t-copy-models-of-the-west-cds-rawat/story-QSxEjHQBDa0H7xZA6YEUWUO.html>

followed by all Air Forces and which is an integral part of their military strategies. The IAF doctrine entails employing air power to strike deep inside adversarial spaces to impose our national will on the enemy. As Jasjit Singh explains, it “offers the political leaders a choice of reaching far into a conflict zone from outside and above from the skies” and “being able to control the process of escalation as well the degree of engagement-disengagement while being able to apply coercive and punitive power.”³¹ The current military thinking in India’s security context tends to look at apportioning air power from the limited perspective of fulfilling the theatre specific operational requirements of the other Services, rather than the holistic employment of air power against the adversary’s strategic vulnerabilities and centres of gravity, military and civil, in order to create strategic outcomes. Future air power employment in India’s security needs to be viewed from the larger perspective of the wider spectrum of military options that the IAF brings to the table in our security response matrix, ranging from the no-war-no-peace to the very real possibility of a full-scale war. A prescient quote by a leading air warfare strategist underscores this, “The increasing complexity of international politics and the unique flexibility offered by air power will entice us again towards parcelling our air forces for winning battles rather than unifying and focussing them for the winning of wars.”³² The significant strategic outcomes produced by the unfettered use of air power in the 1971 war, which was fifty years ago, appear to have faded in India’s security establishment and seem to be ‘missing’ in the current strategic military outlook. The last use of offensive air power was over two decades ago, in the 1999 Kargil conflict, where the politically mandated constraint on the usage of air power has left the residual impression that its sole role was to ‘support’ the surface operations. While the theatre command concept is outside the purview of this paper, its structural challenges as viewed from an Air Force perspective need to be considered in the context of India’s future security vision.

Should India reorganise its military on the theatre construct that the US is still struggling to optimise manpower, and budgets, with future multi-

31 Jasjit Singh, *Defence from the Skies*, Second Edition, KW Publishers, New Delhi, 2013, p.285.

32 General William A. Momyer, *Air Power In Three Wars*, Air University Press, Maxwell Alabama, 2003, p.379.

domain operations,^{33,34} or a Russian construct that has ostensibly not been effective in its war with Ukraine,³⁵ or on the untested Chinese model, a nation that has not seen serious combat since Korea? There is no doubt that India's model must be unique and the reorganisation model has to take into consideration the future security needs of 2047, simply because military transformation is a long-term process. For that the Inter-Service Bridge needs to be reinforced and strengthened. First, we need to readapt our war-fighting precepts to the future, and the creation of structures can follow. An approach that leverages all elements of military power smartly and is tailored to the varying threat requirements, domains, and levels of conflict is the need for the future. Second, the outcome of the transformation must be to provide India as a great power with a coercive deterrent capability, supported by an unparalleled range of military options in the long term. Third, the reorganisation must be future-relevant, adaptable, agile in character, and relatively flatter, swifter, and flexible structurally. Finally and most importantly, they will need to keep evolving and adapting to future requirements in the long term. India's security needs reforms that give it unified strategy formulation at the apex politico-military level, joint planning at the operational level, and synergy at the fighting level.

Government-Citizen Bridge

This is a vital area of focus as the power of information not only shapes perceptions and impacts outcomes, it can equally lead to unintended consequences when exploited by adversarial states and vested lobbies. The Russo-Ukraine war is a stark reminder of the need for maintaining a robust government-citizen communication bridge. Today, more than ever before national security directly impacts each and every citizen, and therefore it should equally be a matter of importance and concern for them. India's large population is an inadequately tapped national power – the will of the people. Articulation of the nation's broad strategic goals, security concerns,

-
- 33 Lawren Fish, Combatant Commands in an Era of Multi-Domain Battle <https://www.defensenews.com/opinion/commentary/2017/03/13/combatant-commands-in-an-era-of-multi-domain-battle-commentary/>
 - 34 Theresa Hitchens, All-Domain Ops Require Rethinking Combatant Commands:Goldfein <https://breakingdefense.com/2020/03/all-domain-ops-require-rethinking-combatant-commands/>
 - 35 Air Marshal Diptendu Choudhury, Russia's Military Understanding of Air Power: Structural and Doctrinal Aspects, <https://www.vifindia.org/article/2022/may/23/russia-s-military-understanding-of-air-power>

and national interests, outside the classified knowledge realm, to enhance the citizen's awareness is their right in a strong thriving democracy. The younger and the more aspirational India will increasingly need to be engaged on matters of the state. Doing so inclusively will enable leveraging their active support as equal stakeholders to contribute toward national security. For this, the government, all elements of national power, the strategic community, the academia, and most importantly the media will have to play an important and proactive role. Enhancing awareness by increasing the discourse, development of content and context-based narratives on important national issues is a vital first step. Strategic communication of India's national security imperatives and their overlaps with our future national interests, is a vital necessity for their widespread dispersal and will elicit active participation of the people-power. With India soon to be the world's most populous nation, carrying the people along on the path to a great power will yield enormous dividends in the near, mid, and long terms. Such strategic communication is also enormously important as an articulation of India's power rise and growth trajectory, and its place as a responsible and strong nation in the international community.

Securing the Nation Smartly

A 'smart' approach is needed to balance the ends, ways and means of India's great power trajectory. We have to be thrifty in our national approach to cut wasteful expenses in the present, so as to be able to invest more in future capabilities which will enable India's rise. Many steps have already been initiated, and many more will need to be done. Some of the key areas, ways and means are discussed in the following paragraphs.

External security and internal security are vastly different realms with different employment paradigms. Tying the Army down to fighting insurgency in Kashmir, detracted its attention from the borders and being taken by surprise in Kargil. It also serves the adversary's interests to have our professional Army tied up internally, in terms of loss of lives, attendant costs, and diminished local support where our forces are perceived as the enemy. Alienation of the military in the national perception has its own price to be paid and is often irreversible as has been proved in the North East and Kashmir. This is a dangerous territory where the protectors of the nation can lose the faith of its citizens. The danger of even the beginnings of a negative perception amongst them is something that it will play into the hands of our adversaries. The depth of mistrust tends to remain dormant

in many areas even today in the North and the North East and is extremely difficult to dispel. The Army must be delinked from counter-insurgency and internal security duties in the near term, and only be deployed in the rarest of rare cases. The military must give the highest priority to preparedness for wars, conflicts, and all such engagements as tasked and delegated by the national security strategy. Relieving the significant men, materiel, and resources committed to internal security will contribute toward filling some of the deficiencies on our borders.

Internal security, though extremely important for India's stability and growth, has possibly been given the preponderant security focus over the years. Without taking away from the enormous commitment of the Army and the security establishment and the tangible outcomes they have produced to date, it is time for a strategy change toward dealing with internal challenges. It has to be resolved in the near mid-term with low visibility and a comprehensive approach. The Central Armed Police Forces, State Police and other paramilitary forces must be solely responsible for internal security. While prevention of entry of terror elements through border areas where the military is responsible should continue to rest with them, the central and state forces have to step up their capabilities and capacities to deal with it as a law and order issue. Similarly, cross border arms, narcotics, contraband and human trafficking has to be dealt with in the future by adopting a multi-domain approach with extensive inter-agency and inter-ministerial engagement. This would need some structural and organisational changes in the immediate near term to enable fresh strategy applications in the near term. India must aim to end the insurgency by the mid-term, to be able to concentrate all its CNP toward its global power ambition.

Warfighting precepts of the military have to be realigned to future wars, conflicts, and contingencies. The default setting of the armed forces still remains large-scale conventional wars as per the current directives. While this was acceptable a couple of decades ago when overwhelming force was the mainstay of military strategies, it is not so today. All major powers have realigned their military precepts, doctrines, and strategies, to threat priorities assigned by the state based on larger national goals and strategies. In India's case where the possibility of a convention conflict remains a reality, the military has to be prepared for it. But the threat matrix has long spilled over into the sub-conventional, hybrid, and no-peace-no-war realms, where overwhelming force cannot be applied. A one size fits all approach toward the military application of force only serves to

undermine capabilities and capacities, because neither will the military get the budgets to arm and prepare for the unlikely full-fledged long-drawn conventional wars nor can it plan, invest and equip for future conflicts on its own without any indication of outcomes expected of it by the state. It cannot serve India's national interests in the future to have a military that has not adapted to the newer paradigms of warfare, and force structuring transformations that not only our adversaries, but almost all modern militaries have shifted to in their nation's future interests. Importantly, this will need a comprehensive national strategy vision – a '*door-drishti*', with an all of government approach to provide clear directions to all elements of CNP, which includes the military, on what the nation expects of them to achieve its 2047 goal.

The military more than most understand the need for modernisation and leveraging technology. The sheer seductiveness of advanced technologies makes it very easy for the military to get 'swept away' with their future prospects. The needs of the future have to be carefully calibrated in the light of the emergence of the wide range of advanced disruptive technologies like artificial intelligence, robotics, quantum tech, space and cyber capabilities, Nano-technology, directed energy weapons, hypersonic weapons, and platforms, all of which could have an immense scope of applications in military power. Transformation and adapting advanced technologies to military requirements come with prohibitive costs. They are expensive, research-intensive, are works in progress, have niche limited applications, and not an end in themselves. Most importantly they have a limited shelf life, till the 'counter' is produced or the 'next one' comes along. The military will do well to remember that given their costs, they should be cherry-picked to suit future service-specific roles, applications, and strengthening of core competencies, amidst competing budgetary demands, so as to produce joint outcomes in the larger national interest. Again, a clear definition of future roles and missions of the military, as expected by the state, will enable a cost-effective prioritised investment in future technologies, advanced autonomous systems, modernisation of key capabilities, and enable smart capacity building.

There is the need to 'leaning and meaning' of our military smartly, as the large standing military does not necessarily translate into power or capability. A number versus capability assessment vis-a-vis the US and China clearly underscores this. India's military has to become leaner and meaner. From the manpower-intensive border-focussed force that it is today India must transform its military into a leaner, more agile, and

potent forward projection capability force, which is capable of projecting military power from our continental pivots and two-layered loci located outside the country, onto our adversaries across maritime and continental spaces. Prioritised investments in bolstering our air, sea and land forces for swift mobility, long reach, and lethal joint force applications, will be to our asymmetric advantage against our two adversaries. Indian military must develop a regional operating model that straddles all domains for the creation of a ‘dynamic joint force posturing and force application’ capability, to offset pressures on the borders and open alternative points of pressure to distract, delay, deny, degrade and divert the adversary, not only to manage conflict escalation but also create a potent coercive deterrence capability. While it may seem an anathema to many, in keeping with the future needs of great power, the large teeth-to-tail ratio of the second largest Army in the world has to be ‘smartly’ downsized to enhance its combat capacity and lethality.

Considering the PLAAF’s long-term goals, our Air Force has to expand its integrated Air Defence, long-range offensive capacities, and credible bench strength for punitive deterrence. Jasjit may have been prescient when he suggested that- *“Our military grand strategy should be based on the Indian Army being deployed on strategically defensive and tactically offensive roles if we go to war: and the IAF employed on the strategically offensive role and tactically on defensive postures.”*³⁶ The Navy similarly has to smartly balance its force projection aspirations toward greater force application capabilities and strategies. Finding the suitable balance between numerical capacity and futuristic capabilities towards transforming into a coercive deterrent military over the mid to long term has to be carefully envisioned, planned, and executed.

Expanding India’s defence research, industrial, and export base ‘smartly’ to give high priority focus on defence products which expand and strengthen not only India’s own security needs, but simultaneously fill the critical defence needs of all countries in our future sphere of influence, has immense strategic potential for the mid and long-term. It will enable the development and firmly establish India as the major security player and defence supplier in the IORA, which is a strategic necessity so as to offset China’s domination of mainland Asia. It will also enable a strategic squeezing out of Chinese influence in the South East Asian waters, by sandwiching it between the Pacific and the Indian Oceans. Qualitatively

36 Jasjit, Op Cit, p.275.

proven indigenous defence production capacity must be stepped up, which includes ships, aircraft, radars, missiles, long-range weapons, surface-to-air guided weapons, etc. These must be produced and exported with low-profit margins and soft repayment arrangements. Focussing on stepping up India's exports in volume will not only create a strong strategic dependency but also bring in profits from the large numbers. It will enhance the creation of a follow-on product support base which will enhance our regional credibility and influence. It will also allow strategic interoperability of military platforms, systems, and weaponry for the possibility of cooperative security engagement options in the future, if necessary.

Disruptive and Grey Zone Strategies

“Miraculous results can be achieved by practicing methods of subversion”
- Kautilya, Arthashastra, Book 6, Chapter 2, Verse 39³⁷

India has long been on the receiving end of asymmetric covert war strategies through subversion and insurgencies, in the North East, the North, and the West. ‘Bleed India with a thousand cuts,’ is a military doctrine of Pakistan which is actively followed and supported by the Inter-Services intelligence, and continues in its attempts to disrupt peace.³⁸ Leveraging terror groups as a strategic weapon against India is a stated policy. Unlike Pakistan's overt support of terror and insurgent groups, China has been covertly active in assisting the separatist outfits in the Northeast over the past five decades. It has been one of the many factors that have sustained insurgency in the region. The international narcotics hubs of the Golden Crescent in the North West, and the Golden Triangle in the East, have made the adjacent regions in India vulnerable to drug trafficking, illegal weapons smuggling, counterfeit currency, and financial flow. These have been leveraged through narcotic trade and cross-border nexus for active implementation of the disruptive strategies of our adversaries.

China has stepped up its efforts towards demographically filling disputed spaces in a strategy of ‘creating new normals,’ to complement its ‘salami-

37 LN Rangarajan, The Arthashastra, Penguin Random House India, 1992, p. 462.

38 Pakistan's Approach Has Been ‘Bleed India with a Thousand Cuts’ In J&K: Rajnath Singh, Outlook, June, 16, 2022 <https://www.outlookindia.com/national/pakistan-s-approach-has-been-bleed-india-with-a-thousand-cuts-in-j-k-rajnath-singh-news-202800>

slicing' strategy.³⁹ Cyber-attacks, data theft, technical dependency and domination for influence leveraging, psychological warfare to shape and manage adversarial perception - the list of China's grey zone applications against India is ever-increasing both in human and technical realms. China has evidently embraced all these aspects articulated over a decade ago as per the doctrine outlined in the seminal book 'Unrestricted Warfare' written by two PLAAF Colonels. It clearly indicates that China is preparing to confront the USA and its allies with asymmetrical or multidimensional attacks on almost every aspect of our social, economic, and political life. They used the Gulf War as a benchmark for future wars - *'Only "Desert Storm" can provide ready-made examples when we try to use previous wars to discuss what constitutes war in the age of technological integration-globalization. It is still, in some ways, not just the only [example], but the classic [example], and thus the only apple worthy of our careful examination.'*⁴⁰

India has no choice but to embrace the 'grey zone' to prosecute a disruptive and subversive counter-strategy against its adversaries. It must stop reacting but start acting aggressively to literally '*carry the fight into the enemy camp*' across all domains using every medium, route, and channel. It is time to shed our moral reluctance and inhibitions to embrace the 'realism plus' ancient historical approach to Indian statecraft. Geographical instabilities in Tibet, Xinjiang, Baluchistan, and Gilgit-Baltistan must be exploited in all possible ways to India's advantage. Beijing's One-China

39 The author's interpretation of a Chinese strategy of carrying out such activities that seek to alter the status quo repeatedly so that it becomes an accepted norm. The example of China's maritime claims, presence and actions in the South China Sea, embellished by the creation of militarised artificial Island, which it expects will become an accepted 'new normal' over time. In India's case, a similar strategy is evident with China setting up villages in the disputed areas on the borders of Arunachal Pradesh, which it expects will alter the territorial status quo in its favour over time, once they are allowed to remain.

40 Qiao Liang and Wang Xiangsui, *Unrestricted Warfare*, Beijing: PLA Literature and Arts Publishing House, February 1999 at <https://www.c4i.org/unrestricted.pdf>, Accessed on May17, 2021. The authors of this book published in 1999, identify the blind spots in the technology-driven American military doctrine. They argue that Douhet's prediction that 'the battlefield in the air will be the decisive one' seems to have achieved belated confirmation. However, everything that happened in the air over the Gulf far exceeded the imagination of this proponent of achieving victory through the air. Whether in Kuwait or Iraq, it represented an integrated air campaign that blended all the combat operations, such as reconnaissance, early-warning, bombing, dogfights, communications, electronic strikes, command and control, etc., together, and it also included the struggle for and occupation of outer space and cyberspace, p.68

Policy with respect to Taiwan must be countered to make it understand the price of its occupation of Aksai Chin, and offset its persistent attempts of territorial expansion in the unresolved border areas with India. China's long fingers reaching into the Indian sea-boards must be slowed down and made a cost-intensive proposition if not a prohibitive one. Every lever for disruption must be planned, prioritised, orchestrated, and exploited, both synergistically with other power leverages, as well as independently, to apply counter pressure to keep the adversaries surprised, destabilised, and guessing. A multi-pronged strategy of influence operations, public diplomacy, narrative-shaping, etc., by leveraging diaspora, international friends in places, the large Indian student community, and Indophiles, must be adopted. India must embrace a holistic approach of overt and covert strategies, and weaponise every instrument towards enabling its long-term goals.

Concurrent National Security Paradigms

A distant vision and strategy which looks twenty-five years ahead into the future with an ambition of a great power stature, cannot limit its security strategy from a purely hard power perspective. The Covid pandemic-triggered geopolitical upheavals have brought to the fore the necessity to address national security comprehensively so as to include the five critical imperatives of food, water, health, energy, and environment. While there are inarguably many more constituents of security, these five are fundamental to the sustenance of human lives, and therefore deserve possibly the highest priority. Not only is India set to be the most populous country by 2023 overtaking China, but our population is expected to rise to an estimated 1.668 billion by 2050.⁴¹ This translates to an 18 percent increase, which simply means that our food, water, health, and energy requirements too will increase, and the impact of environmental changes would also have to be managed. Each of these fundamentals is a specialised field and therefore needs to be examined in-depth and viewed from a national security lens, and will require individual security strategies. But all of these fundamental constituents have areas of overlap and close interdependencies with each other, and hence their security will need to be strategized synergistically. This paper seeks only to draw attention to the need for such strategies to be comprehensively included in the overall national security strategy vision.

41 World Population Prospects 2022 Summary of Results, p.6, https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf

This approach had been adopted by 195 nations in the UN Sustainable Development Goals of 2015, to promote prosperity and protect the planet '*leaving no one behind*'.⁴² India's security vision for 2047 will certainly need a more comprehensive and robust overarching strategy, with more granular action plans spread over the next twenty years. Some areas of key consideration are suggested in the subsequent paragraphs.

National Data Review. To evolve any strategy a ground reality check is the first step. Regular surveys conducted by international organisations are available but are sometimes disputed, essentially due to geopolitical biases, inadequate data, and unsuited 'one size fits all' base parameters. The national database in these key fields would certainly be dated due to the absence of recently conducted surveys by the Government, especially during the pandemic period. Accurate data is the first step for any comprehensive long-term strategy. Data harvesting to reset the national database will be the critical first step to set strategy benchmarks in these extremely complex, interrelated, and difficult-to-measure fields. The data harvesting process could ideally be combined into a comprehensive pan-India data survey with stringent timelines for collection and analysis. The process will need to be repeated periodically every five years, to enable the setting of strategy benchmarks and milestones, as well as enable their short, medium, and long-term reviews. A bespoke data collation drive will need to be initiated at the national level once the parameters and attributes of data to be collated are identified. This in itself will possibly need a commission to be formed in order to bring all data requirements, harness all available data sources, and analyse them. The National Informatics Centre, Niti Ayog's National Data Analytics Programme, and all other major public-private large-scale data-related institutions would need to be leveraged by the commission based on the National Guidelines for Data Quality in Surveys'. While e-surveys would be the backbone, to enable a pan-India penetration of the survey in the relatively inaccessible and rural reaches, the process could piggyback on the Election commission's electoral process.

Food Security. India has made tremendous progress as measured by important indicators of economic growth, poverty reduction, self-sufficiency in food grains, and the adoption of technologies. The Ukraine war, supply chain disruptions, and the continuing economic fallout of the COVID-19 pandemic are pushing food prices to all-time highs. Record high food prices have triggered a global crisis that will drive millions more into extreme

42 <https://www.undp.org/sustainable-development-goals>

poverty, magnifying hunger and malnutrition. The zero-hunger goal of the world is no longer on track due to the extant challenges. While India's efforts towards strengthening its food security safety net have been initiated with the National Food Security Act,⁴³ the National Nutrition Strategy⁴⁴ and the National Nutrition Mission much more will need to be done to mitigate the long-term challenges of our rising population. The reduction of arable land due to increasing land degradation, depleting water table, soil salination, climate change effects, and continuing agrarian crisis, are critical indices in our food security strategy.⁴⁵ These will have to be mitigated by individual and yet interlinked strategies of soil conservation, water table rejuvenation, balanced fertiliser usage, renewable energy access, etc., and will have to plug into an overarching strategy of rejuvenation of our agricultural sector.

In this, India cannot go it alone and has to build on food security partnerships with African nations and revise its strategies to leverage international institutions like World Trade Organisation, International Monetary Fund etc., in the short and medium-term. In the short and medium terms, a robust research and development base must be developed in the food and agriculture domain. This must include innovative development in soil, seeds, fertilisers, advanced sustainable high-yield cropping techniques with minimum water usage and generate a greater range of cropping patterns and sustainable cycles, genetic developments for high nutrient content, etc. With our long coastlines and a large number of Island territories, sustainable fishing should become a priority strategy focus. India must invest increasingly in the short and medium-terms in mutually beneficial regional agricultural growth and trade arrangements with specific countries of Africa, South America, and other region-specific crop-growing countries, to offset our shortages with our excess productions, for long-term benefits. While there are many more areas where food security strategy needs to focus on, and are beyond the scope of this paper, total hunger and malnutrition eradication should be a short-term goal, with a revised buffer stock and a failsafe and total penetration public distribution system. Pan-India availability, access, absorption, utilisation, and stability must become the medium-term goal. In the long term, with the largest population in the world, India needs to become the largest food producer with self-sufficiency in major food crops.

43 <https://nfsa.gov.in/portal/nfsa-act>

44 https://www.niti.gov.in/writereaddata/files/document_publication/Nutrition_Strategy_Booklet.pdf

45 Priya Rampal, A roadmap for sustainable food security, <https://www.orfonline.org/expert-speak/roadmap-sustainable-food-security>

Water Security. Global goals and national priorities on reliable energy, economic growth, resilient infrastructure, sustainable industrialisation, consumption and production and food security, are all inextricably linked to a sustainable supply of clean water. With millions of people, especially children dying of diseases of inadequate water supply, and studies indicate that over half the world's population will be living in water-stressed regions, its security is probably the highest priority along with food. With total water demand in India expected to rise by over 70 percent by 2025, a huge demand-supply gap is expected in the coming years. Water being a state subject, India faces a serious challenge as some reports indicate India to be severely water stressed by 2050.⁴⁶ The Government of India launched 'Jal Shakti Abhiyan-I' (JSA-I) in 256 water-stressed of the country, but a lot more needs to be done on a war footing.⁴⁷ While India aimed to ensure universal and equitable access to safe drinking water for all under the National Rural Drinking Water Program, it is unlikely to meet its 2030 targets. Its other ambitious goals are to improve water quality by reducing pollution, eliminating dumping and minimising the release of hazardous chemicals and materials, halving the proportion of untreated waste, and substantially increasing recycling and safe reuse, which need to be aggressively pursued in the short term.

India needs to substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity. Also, implement integrated water resources management at all levels, including through trans-boundary cooperation as appropriate. This includes the protection and restoration of water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes. By the mid-term, it must expand international cooperation and capacity-building support to developing countries in water and sanitation-related activities programs, including water harvesting, desalination, water-efficient wastewater treatment, recycling, and reuse technologies. While all current initiatives are positive steps, a long-term strategy is a critical security imperative that needs to be implemented with a timeline extended up to 2047. Its success will depend on strict implementation, close follow-up, regular review, and strategy reset whenever and wherever necessary. Given the close linkages between climate change and the environment, water

46 <https://www.oecd.org/india/India-Improving-Water-Security.pdf>

47 Ministry of Jal Shakti, New Water Security Plan, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1739097>

security needs the highest strategic priority, and much more needs to be done to match our population rise and the 2047 goal.

Energy Security. The national goals and the individual aspirations of the soon-to-be most populous nation of the world can only be met with steady and sustained economic growth. Economic security has therefore been recognised as the way forward for India's aspirations and goals. This is a vast and complex field, and while beyond the scope of this paper, one of the key drivers of economic security is steady, uninterrupted, affordable, and assured access to energy. India's energy system must be able to meet the short-term needs to respond promptly to sudden changes in the supply-demand, along with a balanced long-term strategy of timely investments to secure assured energy access in line with economic developments and environmental needs of the future. This is not easy as India's fragile energy security is under severe pressure due to high dependence on imported oil, regulatory issues, manipulation by oil cartels, and unclear natural gas pricing policies. It forces us to import from a variety of sources that are impacted by the volatile geopolitical uncertainties and thus leaves us vulnerable to manipulation and leveraging. Dependency on the middle-East for oil, the absence of direct land access, and the failure of the Iran-Pakistan-India and the Turkmenistan-Afghanistan-Pakistan-India natural gas pipelines to fructify, make India's primary energy supply to be totally sea-dependant. This makes the Gulfs of Aden and Oman our 'Malacca Dilemma,' and renders us vulnerable to the regional geopolitics of West Asia and the Gulf.

A two-year-old survey brings out that 304 million Indians do not have access to electricity and around 500 million Indians are dependent on solid biomass for cooking. The commitment to electrify all households 24x7 by 2022, and provide clean fuel to rural areas will need to be seen through in the short term. Leveraging non-conventional energy resources and making them affordable, should be a high-priority mid-term goal. A cost-benefit analysis of the available energy-efficient technologies and products across all sectors, especially agriculture, housing, and transportation, will be an important aspect of any energy strategy. The National Mission for Enhanced Energy Efficiency is ideally placed to conduct this study.⁴⁸ Coal remains a KRA for India's short to middle-term strategy. Its access and utilisation should be leveraged with regulatory clearances, improved labour productivity, increased coal production, and enhanced efficiency of

48 <https://moef.gov.in/wp-content/uploads/2018/01/Mission-SAPCC-NMEEE.pdf>

distribution. Hydrocarbon Exploration Licensing Policy⁴⁹ and India Energy Security Scenarios 2047,⁵⁰ and all other such initiatives must be exploited alongside strategic augmentation of refining, distribution, and reserves. Energy security will need balancing of internal imperatives of sustainable internal sourcing and distribution, and diverse external sourcing and assured supply. Nuclear energy will have to be included in the energy basket as well so as to leverage all options. The limited damage and downstream effects post the Fukushima disaster, have made many nations re-engage with the nuclear energy option, as must India.⁵¹ Renewable energy commitments of India must be a mid to long-term strategy which will need to be balanced by a parallel short-to mid-term energy-diplomacy strategy to meet India's long-term interests.⁵² India needs to ensure long-term planning to ensure universal energy access and meet its commitment under Paris Agreement to ensure sustainable and inclusive growth.

Health Security. While public health is closely linked with food, water and environmental security, it is also a key aspect of national security. The vulnerability to pandemics has shown no discrimination between developed, developing, and under-developed nations. It has brought to the fore the threat basket of a state and its people, which today ranges from non-communicable diseases, pandemics, increasing anti-microbial resistance, pollution, climate change, and the fallouts of human conflicts. Zoonosis transmitted from animals, mutations of highly virulent and infective viruses, the inability of vaccines to keep pace with mutations, and growing resistance to drugs are serious future challenges for a highly populous India. This is especially serious since non-communicable diseases are increasingly afflicting the younger population, at younger age profiles. This automatically has an enormous impact on one's productive life, leading to economic losses as health expenditure takes up a significant portion of family earnings. Rural public health cover and access remain inadequate, both in infrastructure and health workforce-wise, as it is skewed in favour of urban spaces and centres. Public health coverage and safety nets are still inadequate and lead to increased out-of-pocket expenditure.

India's handling of the Covid 19 pandemic has in effect rejuvenated the

49 <https://policy.asiapacificenergy.org/node/3665>

50 <https://www.india.gov.in/website-india-energy-security-scenarios-2047>

51 <https://www.iaea.org/newscenter/news/nuclear-power-10-years-after-fukushima-the-long-road-back>

52 <https://www.india.gov.in/topics/power-energy/renewable-energy>

health sector in many ways. While it was pandemic focussed, the outreach and initiatives need to be extended to all other areas of public health as well.⁵³ Health security has to be seen from a larger perspective of a healthy productive population, which has easy and affordable access to advanced Medicare and medicines combined with a robust safety net of a reliable health insurance system. The existing capacities need to be built up rapidly to cover the large population and its wide geographical spread. All health programs and policies will have to be looked at with a changed outlook from filling the gaps to meeting national requirements towards developing an *excess capacity* to enable international access to a robust medical system. India after all is no stranger to medical tourism. A public-private partnership model for medical infra development, pooling of all medical resources, and expanding the medical human resource base of doctors and health workers, are imperatives. Population management is another area that India will have to look at from a long-term perspective. Given India's pharma-manufacturing base, it needs to strengthen its research medical research, development, and manufacturing capacity to become the international hub for affordable pharma products. Nutritious food and clean drinking water are fundamental to robust individual health, and all three are inexorably intertwined and interdependent on the environment, and therefore will all need an overarching bespoke strategy that includes environmental security.

Environmental Security. Deep interconnection of the environment with security is an aspect that has only recently been appreciated due to the increasing climate change-related natural disasters. It is an issue of serious concern to us being one of the fastest growing economies of the world. While India has put climate change at the centre of its environmental policies, the road ahead is long and arduous.⁵⁴ The inevitable rapid urbanization and economic growth present challenges of rising consumption and demand for energy, increasing greenhouse gas emissions, and the consequent impact on our natural resources of land, water, and natural biodiversity. Our environment has deteriorated significantly over the last six decades with a rapid decline in natural resources and a severe increase in pollution levels. Depletion of forest cover, population rise, rapid urbanisation, increased vehicular emissions, use of hazardous chemicals, poor effluent and toxic waste management, etc., all have an enormous negative impact on

53 <https://www.india.gov.in/spotlight/ayushman-bharat-national-health-protection-mission>

54 <https://economictimes.indiatimes.com/news/india/india-put-climate-change-at-the-centre-of-its-environmental-policies-in-2021/articleshow/88542444.cms?from=mdr>

environmental health and security. Like the destruction of the forests silts the rivers, causes soil erosion, disrupts watersheds, emits carbon dioxide, and destroys biodiversity, similarly, each of the negative aspects has its own series of serious negative knock-on effects.

Climate change effects pose a direct challenge to the critical aspects of our population - agriculture and food security, water stress and water insecurity, biodiversity, human health, and rising sea levels. Given India's long coastline and the large population centres close to the seas, this is a serious issue as it will not only mean loss of coastal land to erosion and water level rise, it will mean inward move of the coastal population, depletion of arable land due to flooding, increased soil and water salination, and negative impact on our fishing industry. But while India charts its own strategy and the way ahead, the effects of climate change equally impact its neighbouring nations and the larger region. Therefore, the growing threats to environmental security need a collective regional approach. Nepal, Bhutan, and Pakistan are affected by the climate change effects in the Himalayan region, while for Bangladesh, Myanmar, Sri Lanka, and the Maldives, rising sea levels are the larger concern. India has to adopt a two-pronged internal and external strategy, underwritten by regional diplomacy and international cooperation. Multilateral security cooperation on environment and climate change is an area of regional leadership that India is well positioned to take on. It will not only supplement India's internal strategy to mitigate environmental challenges, but it will also enable common strategies while teaming with countries with geographical and environmental similarities. This leadership path in turn will also contribute to regional security, stability, and economic growth while enabling cooperative regional responses.

Strategy of Strategies

Like the era of globalisation had for a period drawn all like-minded nations together, interconnecting them on economy and trade, the international outlook is trending towards a phase in the near future of a more overt 'nation first approach,' increased ascent of middle powers, and a steady drift towards the creation of an alternative international system by China, Russia, Iran and other nations who are increasingly looking for an anti-US led world order. India has carved its own independent foreign policy space which will be difficult to sustain unless we adopt a longer strategic vision and approach. Strategy formulation is not easy, and even more challenging is its implementation given the vast size, diversity, and population of India.

Long-term strategies themselves are fraught with uncertainties and risks, and hence there is an inherent resistance on the part of governments and policymakers to take a long view.

To realise India's ambition of rising to a great power status by the year 2047, however, will not be possible with short-term strategies. For this, the Government has to take a long view of the future. Though in the past the Indian establishment has been reticent to adopt long-term strategies from a security perspective, of late there is a distinct increase in visualising and adopting long-term approaches. Governmental stability and longevity play a vital role in its strategy timelines, and this allows the policymakers greater strategic space for their policies to produce tangible outcomes. This automatically enhances confidence and reduces risk aversion, thus allowing for bolder long-term approaches. But the challenge is that in a geo-strategically volatile international system, adopting long strategy timelines will at best be conservatively limited to low-risk, more-predictable areas within the comfort zones of the establishment. But national security in its current wide-ranging avatar, where security has expanded to include all the critical constituents of national power, can no longer be engaged in individual silos.

An innovative overarching strategy of strategies approach would certainly provide a more comprehensive outlook with a long vision and three-phased strategy timelines. This also needs the individual short, medium, and long-term strategies of each of the verticals of national security to be comprehensively included for prioritisation, resource allocation, and timeline synchronisation. This will not be possible without resorting to a process-driven adoption of a strategy formulation model or models. Marshal's net assessment and McNamara's strategy analysis have served the US over decades to take a larger and longer perspective.⁵⁵ A Net Assessment approach was taken to formulate the 'Long View from Delhi,' which endeavoured to define the Indian grand strategy for foreign policy in 2010.⁵⁶ In India's case, with its large number of strategic institutions and think tanks which are actively involved in their niche areas, it makes sense to leverage them in evolving a strategy of strategies. The possibility

55 Thomas M. Skypek, *Evaluating Military Balances Through the Lens of Net Assessment: History and Application*, *Journal of Military and Strategic Studies*, Volume 12, Issue 2, Winter 2010, https://ciaotest.cc.columbia.edu/journals/jomass/v12i2/f_0021114_17550.pdf

56 Admiral Raja Menon and Rajiv Kumar, *The Long View From Delhi*, Academic Foundation of India, New Delhi, 2010

of creating a *Suraksha Kuutneeti Aayog* to be the apex body of strategic decision-making professionals, specialists, and subject matter experts. This body could start a conversation on India's grand strategic goal of 2047, identify the key areas of security to study its past and likely futures, identify key drivers for each component of national security, prioritise them based on desired future outcomes and develop pro-con scenarios allowing for reasonable unpredictability's. Finally, it could identify appropriate strategies for each field of security, and weave the areas of overlap and synergy into an overarching strategy of strategies, that will enable a multipronged simultaneous approach forwards in policy formulation, implementation, and outcome oversight.

Conclusion

'*Tejastejasvinamaham*' is a worthy grand strategy ambition for India, and today it is at the crossroad where the goal is visible. But in this complex world and the difficult to predict future, if the Indian state wants to fulfill its 'Raj dharma' to its citizens, to assure them a peaceful, stable, and prosperous future, it has to ensure its security first. It has to free its path of obstacles, prevail over the challenges, and pursue its legitimate goal relentlessly. It will need shedding shibboleths of the past, breaking self-limiting and impeding mindsets, and adopting new strategies and new paradigms. The increasing realism plus global power struggle which has already commenced with the waning of the power of the US and the rise of China, with attempts to create an alternative international system, increase in the conflict of choices for rising middle powers, and the myriad challenges beyond human control – all highlight the imperative for India to chart its own graded interim strategies with a long term vision. It will mean changing and adopting changes in certain key areas of national security and especially the instrument of military power. The persistence of threats on our borders means that while in the short term we need to mitigate and manage them, in the long term we have to resolve them to our advantage. Upgrading our deterrence in the near future and expanding it towards coercive deterrence in the long term to buttress our hard power to secure India's regional and international power, position, and standing. Our nuclear strategy will certainly need to be made future robust and resilient. With the military remaining a vital vertical of national security, it needs to evolve into an inclusive multi-domain multi-dimension instrument from the current single-service single-domain surface-centric approach. Strategy bridges to link the services, the government, the civil domain, and

the citizen are a must for an inclusive way forward.

Investing in key future technologies, research, and development will not only help self-reliance in critical areas but also create an India-centric and India-dependent region, not only in the IOR but the larger Indo-Pacific construct. India has to emerge as a clear stable, secure, mature, and inclusive alternative power to the complex and divisive US and China-centric groupings, with a *'friends with all and enemies with none'* approach. The rising credibility of India's independent 'nation-first' foreign policy, independent thinking, and inclusive approach underscores both its rising stature and respect. India must become the bulwark of an alternative Asian and international security system in the IOR to ensure stability, peace, and cooperative mutual development. This will mean a more energetic and imaginative regional security engagement policy of expanding arcs, pivots, and loci of influence, in order to establish India's regional salience. It will also mean looking at national interest and national security from a larger perspective to include the key elements which directly affect the citizens of the state – food, water, health, energy, and the environment. While each aspect of security will need visionary strategies and implementation timelines, the sheer interconnectedness and interdependence amongst the security verticals necessitate an overarching strategy of strategies to coincide with goals and timelines. To turn this achievable ambition into a reality will need the nation and its citizens to take a long view of where we want to be, create innovative and visionary strategies, and undertake a national commitment to achieve our goals. Though this paper has been primarily focused on proposing a security vision for India as she completes a hundred years of independence in the year 2047, it is in no way a comprehensive document on the subject. It essentially only seeks to draw the attention of the leadership, policymakers, practitioners, and citizens, so that a broad national consensus is formed on a long-term security vision, to enable India to achieve its great power goal.

About the VIVEKANANDA INTERNATIONAL FOUNDATION

The Vivekananda International Foundation is an independent non-partisan institution that conducts research and analysis on domestic and international issues, and offers a platform for dialogue and conflict resolution. Some of India's leading practitioners from the fields of security, military, diplomacy, government, academia and media have come together to generate ideas and stimulate action on national security issues.

The defining feature of VIF lies in its provision of core institutional support which enables the organisation to be flexible in its approach and proactive in changing circumstances, with a long-term focus on India's strategic, developmental and civilisational interests. The VIF aims to channelise fresh insights and decades of experience harnessed from its faculty into fostering actionable ideas for the nation's stakeholders.

Since its inception, VIF has pursued quality research and scholarship and made efforts to highlight issues in governance, and strengthen national security. This is being actualised through numerous activities like seminars, round tables, interactive dialogues, Vimarsh (public discourse), conferences and briefings. The publications of VIF form lasting deliverables of VIF's aspiration to impact on the prevailing discourse on issues concerning India's national interest.



VIVEKANANDA INTERNATIONAL FOUNDATION

3, San Martin Marg, Chanakyapuri, New Delhi – 110021

Phone: +91-11-24121764, 24106698

Email: info@vifindia.org,

Website: <https://www.vifindia.org>

Follow us on [twitter@vifindia](https://twitter.com/vifindia)