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NATIONAL DEFENCE COLLEGE

The National Defence College (NDC) was inaugurated on April 27, 1960 by Pandit Jawaharlal Nehru, the first prime minister of independent India. NDC is a pioneering institute of its type in Asia. The role of the college has changed with times since 1959, when the President of India sanctioned "the setting up of a National Defence College for providing instruction to senior service and civil service officers in the wider aspects of higher direction and strategy of warfare". Today, NDC continues to provide future decision-makers with necessary competencies for filling senior positions within national security structures and associated organs of statecraft.

Kuutneeti in the Arthashastra refers to strategy and diplomacy.

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National Defence College

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SLIRA

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Mailing address

Editor, NDC Journal
National Defence College
6, Tees January Marg
New Delhi (INDIA) 110011
Telephone No. : +91-11-23011065
Fax No. : +91-11-23013429
E-Mail : ndcjournal.kuutneeti@gmail.com
Website : www.ndc.nic.in

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Commandant's Reflections

The year 2020 was awaited with much anticipation by the NDC as it marks sixty years of commitment, dedication and contribution to the nation, as an institution of excellence and learning on national security and strategy. The global pandemic also chose to visit this year, spreading chaos and threatening the lives and well-being of the humankind. It created wide spread pressure on all the countries desperately battling the pandemic, with its knock-on effects of immense strain on health systems and economies, along with the direct impact on the lives and livelihoods of billions. But amidst all this uncertainty and vulnerability, nations have demonstrated tremendous resilience, adaptability and indomitable courage, to fight this scourge. I am certain that mankind will overcome this adversity, like it always has through history.

This year at the College has been like no other. In the face of the threat of the virus, the lockdown and the associated challenges, NDC was quick to adapt and innovate to ensure it was business as usual for the current course. At the same time, much hard work has gone into enhancing the strategy-focus of the curriculum, making the course more contemporary and academically robust, introducing agile strategic analysis tasks, and improving qualitative strategic analysis and writing skills. *Kuutneeti,* the new avatar of the NDC Journal, is a part of this endeavour. It seeks to share perspectives on national and international security with leaders, policy makers, practitioners, analysts of the strategic community and academia. To underscore India's enduring strategic culture, strands of Kautilyan statecraft and strategy run through the curriculum, and we hope the newly titled journal will be the harbinger of greater contribution by the College, to the realm of strategic writing.

Kuutneeti will essentially be an online journal with a limited print edition for the course members. Its new look, restructured content and layout, and greater academic rigour is an outcome of long collegiate

discussions and is driven by a dedicated editorial team. And to them must go the credit for this inaugural edition. May the journal thrive and grow, both in credibility and stature as it continues to propagate the College motto—Wisdom is Strength.

Air Marshal **D Choudhury**

From the Editor's Desk

It is wonderful to be back as the Editor of *Kuutneeti* the NDC Journal in the 60th year of the National Defence College's existence. As the vanguard of intellectual development within India's national security ecosystem, the journal is meant to be a robust intellectual platform for course participants, faculty, alumni and Subject Matter Experts (SMEs) to share views on both contemporary and reflective issues of global and national security. Working towards that objective, the journal has been restructured to comprise four distinct sections—*Senior Leaders' Perspectives, Commentaries, Journal Articles* and *Book Reviews.*

The Diamond Jubilee volume comprises a varied offering that reflects the flavour of the complex times that we live in. I am delighted that we have been able to interview General Bipin Rawat, India's Chief of Defence Staff, as part of the *Senior Leaders' Perspectives.* The section also includes a reflective piece on the challenges that the Indian military leadership will face in the future by an ex-commandant of the NDC who was at the helm of affairs during the Golden Jubilee. Unlike in earlier volumes, while the repository for the *Commentaries and Journal Articles* remains the same (Group Papers called IAGs and theses), these have been abridged and edited with due diligence to conform to a standard format that goes with robust journal offerings. Keeping with the flavour of the season, the *Book Reviews* section has a China focus.

As I embarked on this new journey, I have been struck by the diversity and the high quality of research and writing from amongst the course participants, but also recognise that there needs to be greater emphasis on research rigour and writing style. It is important that the ecosystem within the India's armed forces and national security architecture adequately supports high-quality research and writing outside the war college environment. This will go a long way in building intellectual and knowledge capital within all instruments of

national security and government. This is an inescapable imperative if India wants to be a leading power in the years ahead. In conclusion, I would also like to offer my sincere gratitude to the entire editorial team for their support, and all the other members of the 59th and 60th courses who contributed to this volume.

Air Vice Marshal (Dr) **Arjun Subramaniam** (Retd)

NDC Journal

Senior Leaders' Perspectives

General Bipin Rawat, CDS in a candid interaction
with Brigadier Sanjay P Vishwasrao

Interview with General Bipin Rawat, Chief of Defence Staff

Interviewer: Sanjay P Vishwasrao

In this wide-ranging interview conducted on September 16, 2020, by Brigadier Sanjay Vishwasrao, a participant of the 60th NDC, India's first Chief of Defence Staff, General Bipin Rawat discusses several important issues regarding India's national security, synergy, jointness and much more.

SV: *It has now been over six months since you took over as India's first CDS. How has the experience been so far in terms of what you expected and what has happened in these turbulent months?*

CDS: The appointment of the CDS is a result of the Government's resolve to keep up with the changing times and the need for better coordination among the Defence Services to tackle emerging security threats. My principal mandate will be to bring doctrinal coherence, accelerate inter-services synergy, and infuse greater balance in civil-military relations. At the end of the day, all these must result in optimisation of resources for greater combat effectiveness. Yes! The last few months have been turbulent with the Covid-19 Pandemic and all the security challenges on our borders. We have realised that we cannot fight the next war premised on the experiences and structures of the past wars. We must create war winning operational capabilities through Tri-Services integration, innovation and infusion of cutting edge technology along with widespread infrastructure development.

SV: *Improved synergy and integration between the Services themselves and between the Services and other instruments of Statecraft were among the main aspirational outcomes expected from the creation of this post Has it been harder*

Brigadier **Sanjay P Vishwasrao** is an Infantry officer from the Indian Army and is a participant of the 60th NDC Course.

than what you expected? If you were to reflect on the three biggest challenges in this process, what would they be?

CDS: The principal driver for improved synergy and integration in my opinion relates to the contemporary security scenario, widening spectrum of security challenges and resource optimisation. This translates into the ability of the Armed Forces to transform from within and concurrently integrate better with apex decision making mechanisms of national security. While arrangements did exist in terms of representative or advisory functions of the Service Chiefs in apex security mechanisms, the need was to further institutionalise the same factoring the appointment of the CDS, as the Principal Military Advisor to the Raksha Mantri.

The economic and geopolitical disruption caused by the COVID-19 Pandemic and concurrent security challenges on our western and northern borders has forced us to examine how best we can realistically leverage stretched defence budgets to deliver more 'bang for the buck.' We are now looking at exploiting these disruptions as an opportunity to set realistic targets for indigenous developments of defence technologies, systems and platforms by exercising existing linkages with strategic partners and unleashing the power of domestic innovation and talent.

Integration—Through Aggregation is not just a phrase but something I would like to put into practice. In the first year, we will examine and put in place a few new concepts, which would be followed by a year dedicated to trials, test bedding and aligning of structures. The next two years of my tenure should result in the stabilisation of several integrated structures and processes. Jointness and integration within large militaries across the world have taken time to evolve and we should guard against any tendency to rush things.

I think we have an opportunity to experiment with joint functional commands and agencies like Air Defence, Logistics, Space, Cyber and Special Operations, as also for aligning policies on recruitment, training, terms and conditions of service to strengthen national security. While integration is required at all levels starting from functional to complete integration, we understand the need to retain the specialisation of Services within this construct. The unique capabilities of each Service need to be aggregated to fructify Effect Based Operations and there is no debate on the dilution of this issue in an integrated structure. We are therefore moving incrementally in this direction, addressing the sensitivities of each Service and thereby making it an evolutionary process. Resource optimisation,

reducing teeth-to-tail ratios and striving to become leaner and meaner are inescapable imperatives that will have to be at the centre of all restructuring initiatives. At the same time, right-sizing of forces and reshaping efforts need to be balanced by induction of high-tech military systems, force multipliers, creation of requisite infrastructure and creating joint force capabilities.

SV: *How do you see the impact of the COVID-19 on various facets of National Security?*

CDS: The COVID-19 pandemic is having a profound impact on global affairs resulting in erosion of trust between countries and has also complicated matters for the region. Whilst health and economics have been sharply affected, the pandemic has reinforced geopolitical competition and several states are turning towards aggressive diplomacy, economic patriotism and ultra-nationalism. An economic crisis coupled with great uncertainty about the virus and its antidote in the backdrop of a hyper-nationalist sentiment comes with significant downside risks—both economic and security.

The belligerent behaviour that we are witnessing along India's Northern Borders, aggressive diplomacy with mounting interference in internal affairs of states in our neighbourhood, and the unabated Proxy War in Jammu and Kashmir, further widens the trust gap instead of bridging distrust during these trying times. Along with direct threats to the physical integrity of the Indian state, other security concerns like terrorism, cyberattacks and intrusive technology have resulted in an increased hybridisation of threat during these COVID times. The management of these threats along with relentless pandemic relief responsibilities have resulted in an increased role for the security forces in mitigation of threats and maintaining a 'secure environment'. I am confident that India's Armed Forces are prepared for a wide spectrum of challenges and are continuously building capacity and enhancing capability.

SV: *Did the appointment of CDS and Office of DMA make a difference in our crisis management during the recent Ladakh standoff and ongoing COVID-19 pandemic?*

Overall, I think while the pandemic has challenged the system, it has also offered opportunities to reinforce several strengths and mitigate weaknesses. The Armed Forces have also risen to the occasion and provided full support to Centre and the States, in the initial stages of the pandemic. The early

deployment of our assets and resources within the country and in support of our neighbouring countries, enabled all organs of the Government to tackle the situation with dynamic response mechanisms, which prevented fatalities in the early stages. We have constantly encouraged and motivated India's COVID warriors to remain focussed on their mission.

Deterring and defeating aggressors require greater integration of Service capabilities, doctrine and operations across multiple domains. The synergy that we have achieved during the current crisis can largely be attributed to the coordination by the Department of Military Affairs. The jointness and integration on display here is just about the start point and would also serve as the test bed for the new organisational structures and processes that are on the drawing boards to enhance our integrated war fighting capabilities.

SV: *The general feeling is that while the office of CDS has made a difference in expediting procurement cases, it is yet to impact the larger process of future acquisitions and easing the rules of business for the participation of the private sector?*

CDS: One of the principal mandates of the CDS is to ensure a holistic and integrated approach for the augmentation of capabilities aligned to the country's security challenges and military objectives as well as create better synergies in defence acquisitions. To undertake this in a pragmatic manner, a formal process of Integrated Capability Development System (ICADS) has been evolved by DMA. ICADS will usher in mission-oriented capability development and force structuring with greater jointness ensuring optimal utilisation of available resources. The ICADS process will deliver prioritised requirement of capabilities in the form of Integrated Capability Development Plan (ICDP) and the two year roll on Annual Acquisition Plan (AAP). The future acquisitions would therefore be guided by a systematic framework of integrated capability planning processes. To address the emergent security challenges and ever changing security scenario, I have paid attention to the various provisions that would expedite both revenue procurements and capital acquisitions under normal conditions or for emergency purchases that are precipitated during crises.

Plans to harmonise indigenisation initiatives with the procurement plans of the Services will provide a major fillip to the indigenous defence R & D both in the public and the private sectors. Several avenues for participation of public, private sector including MSMEs and Start-ups in design,

development and production of defence hardware through Make I/II/III, IDEX, TDF, Open Competition have been discussed with stakeholders. The results of these conversations have been quite promising and DMA is coordinating with Department of Defence Production and DRDO to realise the overarching objective of the Atmanirbhar Bharat initiative to strive for self-reliance.

SV: *What is the status of the Air Defence Command and is there a plan to integrate Tri-service logistics structures?*

CDS: As the first step towards enhancing integration and jointness between the defence forces, a decision was taken for the creation of an Integrated Air Defence Command or Aero Space Command. A task directive, formulated with inputs of Service HQs has been issued for a Tri-service study group to propose a roadmap for creation of an Integrated Command considering the resources of the Services, their networks and organisation for all contingencies. The study is nearing completion.

In the Indian context, while IAF is responsible for Defence of our 'Aero Space,' all three Services have distinct AD requirements because of their specific nature of operations. Therefore, the Services independently train, procure and equip for their respective AD organisations. However, as the threat emerges from a single domain, an integrated operational approach is essential to optimise integration of equipment, systems, training, maintenance and eliminate overlaps. I am sanguine that a singular Command with clearly articulated roles and charter will enhance op effectiveness.

The process to create an integrated structure for logistics has commenced through a Concept Note and it is presently under the active consideration of the three Service HQs. We have suggested three approaches towards integration. The first is integration by centralisation where provisioning/ procurement and supply are executed by one organisation. The second is a plug-and-play concept, much like the banking system, wherein all users have a common software, common network and a set of common procedures across all Services and stations with common backend for accounting and payments. The third approach envisages the creation of Joint Logistics Nodes at Guwahati, Port Blair and Mumbai. A Joint Logistics platform involving integration, synchronisation and synergy between Services would prove to be far more economical and should result in greater operational effectiveness.

SV: *The NSS has been in the making for some time and in its absence, there has been little strategic guidance for the three Services to further articulate their doctrine and war fighting strategies. Why is it taking so long to put together coherent strategic guidance? How can we be a leading power when we fail to articulate out strategic thoughts?*

CDS: The Government, in April 2018, had setup Defence Planning Committee (DPC) under the Chairmanship of the National Security Adviser to synergise and coordinate inter-ministerial issues related to defence planning. One of the mandates of DPC is to formulate the National Defence Strategy. Currently the DPC is in the process of finalising the NDS.

The Raksha Mantri's Operational Directives also act as the Strategic Defence Planning Guidance (SDPG) for building up of military capabilities. This Operational Directive is updated and reviewed on a periodic basis to provide overarching politico military direction in the extant and emerging security scenarios for the country. The Raksha Mantri's Operational Directives-2020 will be promulgated soon.

SV: *It is widely felt that integration of ISR is still a weak area particularly along the LAC and India is vastly outstripped by the PRC when it comes to 24x7 persistent stare capabilities. This is specifically so in the satellite domain. Such shortfalls are easily made up. Your thoughts on this, with immediate and medium term plans.*

CDS: Let me assure you that ISR issues are uppermost in our priorities and are being systematically addressed to ensure comprehensive coverage over our Areas of Interest. Raising of the Defence Space Agency is progressing well. Our space capabilities will witness momentous change over the next few years with space assets having multiple payloads including advanced SAR and Hyperspectral imaging capability.

SV: *Several analysts are suggesting that it is time for India to deepen its strategic partnership with the US and other global players who are committed to democracy and the freedom of global commons. Till now we are attempting to balance and hedge our strategic options vis-à-vis China. Has the time now come to accept that we need to contain China?*

CDS: Managing an increasingly bipolar world in the wake of a deadly pandemic with a growing power asymmetry between India and China has been a huge challenge. Rather than focusing on balance of power, India's focus needs to be on maintaining a balance of interests and avoid getting into a zero-sum game. We are concurrently adopting a nuanced approach by leveraging and advancing closer engagements with like-minded powers and democratic nations to meet our strategic objectives.Overall, we will continue to adopt a calibrated approach in line with our foreign policy objectives of retaining strategic autonomy.

China's military modernisation has shifted the military balance throughout the Indo-Pacific. On land, China has steadily moved to cement full control over its peripheral territories and restive minorities in Tibet and other provinces, and is off late putting increasing pressure on its border with India. Our relations with Pakistan have always been turbulent. Ceasefire violation on the LOC, proxy war and state-sponsored terrorism are constant irritants. The growing trajectory of the Sino-Pak relationship can lead to collusive support during conflict. There is a strong case for rebalancing our priorities towards technology driven platforms/systems, improving surface communications and underground ALGs storage capacities along the Northern borders.

Whilst India's maritime domain presents opportunities, its immediate threats are continental. This fits into the objective of our adversaries, to tie down India to its land frontiers. Reconciling these competing imperatives and prioritising our capability development strategies between the three Services presents a significant challenge, given that gestation period multiplies the risk exponentially. A case in point is the delay in realising the full potential of the Andaman Nicobar Command and our amphibious capability. Resolving this conundrum is high on my priority.

Our prominent peninsular orientation and flanking island chains overlook strategic sea lanes in the Indian Ocean giving us both security and prosperity. Seas are our primary means of extending connectivity and trade, linking us both with our neighbours and the world at large. The future may witness militarising of key Belt and Road outposts in the Bay of Bengal. Indian Navy remains the principal manifestation of our maritime power and has central role in promoting security in the maritime domain. As such we need to develop concurrent capabilities to ensure Sea Control/Sea Denial in our areas of interest and at the time of our choosing. Enhancing both surface combatants and composite fleet assets to include aviation, submarine, LR and MR Aircraft and ship launched I-JAV and rotary wing is imperative

and form an intrinsic part of our Integrated Capability Development Plan. Similarly, the combat capabilities in Andaman and Nicobar Island group also are being augmented both by basing air and naval assets. Development of military infrastructure through the 10 years' plan has also been put on a fast track. We have also commenced the process for setting up of a Maritime Theatre Command which once established will enable integrated/ joint planning preparation, capability and doctrine development to ensure efficient, optimum and effective response in the maritime domain.

Military cooperation with like-minded countries particularly in defence technology, cyber security and other advanced technology would concurrently continue. India's maritime strategy would continue to focus on the rubric of SAGAR as will our ACT East and Neighbourhood First policies continue to grow.

SV: *In any future limited conflict even across the LAC, air power is likely to play a key role in changing the operational balance. With IAF squadron strength in free fall, how are we planning to ensure at least local parity vis-à-vis the PLAAF over the next decade. There is concern that we seem to feel that a positional strategy of near parity and attrition warfare along the LAC will continue to be the norm.*

CDS: In the current conflict scenarios, superiority in the aerial domain is no longer assessed by simple force on force comparison. It is increasingly the 'Capability' to achieve the required outcomes that determines who has the decisive edge. Budgetary allocations are well known to all. Budget is a reality and we must manage with what is available. Several measures have been instituted and are envisaged to make more resources available for capability enhancement. While balancing the ends with the means, several measures have been either put in place or are being fast tracked to maintain as well as enhance our capability edge over known adversaries.

You are aware that additional SU-30 MKI and MiG 29s are being procured for IAF. Production of LCA is being hastened. Rafales have started arriving. Apache and Chinooks are fully operational and being utilised extensively. Along with the armed version of the ALH which is being inducted, the LCH trials are on fast track; Radars, SAM systems are being relocated and forward positioned to enhance air defence in the concerned areas. Many of these weapon platforms are being made more lethal by arming them with specialist weapons while simultaneously enhancing their numbers.

You will also appreciate that the most significant capability enhancer are the men and women behind the machine and the infrastructure that supports their persistent presence. Synergy in operations and enhancement of operational infrastructure are areas of high priority and substantial resources are being channelled into these. This is not to say that all is as we would like it to be. We could surely do with deeper and more persistent surveillance of our areas of interest in the entire spectrum. I would like to assure you that neither local parity, nor attrition warfare are any longer the norm. Swift, effect based and decisive application of air power will be the key drivers.

Indian Military Leadership for the 2020s

Prakash Menon

Introduction

The COVID-19 pandemic of 2020 has accelerated the ongoing power shifts in the international system. Its reverberations continue to magnify the space for military confrontation and war with the major actors being nuclear powers or those under the nuclear umbrella. For most nations, the economic disruption due to COVID-19 could disrupt and slow down military preparations, while the less affected may seek to exploit the distraction provided by the pandemic. The geopolitical cocktail at the global and regional level is a diabolic mix that is complex and challenging to both political and military leaders. India is struggling to negotiate this geopolitical turbulence and India's military power is gearing up to face tests whose forms can be imagined but remain essentially unpredictable.

The quality of military leadership remains a key factor in determining military effectiveness. Transformational leadership may perhaps be a fashionable descriptor, but dealing with change has eternally subsisted among the myriad challenges faced by military leadership. This essay is therefore focussed only on some challenges that are considered germane to India's military leadership in the 2020s. Specifically, the challenge is to create effective military tool kits backed by joint doctrine and structures in an era of resource constraints; dynamic and expanding threat vectors and the changing character of warfare; technological dependence; sub-optimal civil-military fusion and raising the quality of human capital.

Lieutenant General (Dr) **Prakash Menon** (Retd) is a former Commandant of the NDC during the Golden Jubilee Year (2010).

Managing Threats

Faced with a rising China and wayward Pakistan, India's political and military leaders are also preparing for wars that they would essentially like to deter. Till now, major wars in South Asia have been kept at bay under a nuclear overhang. For nearly a decade, the use of force by both China and Pakistan has been sporadic, restricted and confined to limited geographical space. While China has resorted to Salami Slicing, Pakistan uses terrorism as a foreign-cum military policy tool. The structure of the politico–military relationship with both countries has been one of *Competition-Confrontation-Conflict-Confrontation-Competition*. However, since 2014, competition has worn out with Pakistan and waxed and waned with China. There is also the possibility of a collusive threat. Designing the best and appropriate military tool kits to confront these threats will continue to occupy India's political and military leadership.

Sharpening the effectiveness of the military instrument that must be applied under the nuclear shadow is likely to remain the perennial challenge. It is a challenge that requires relentless traffic along the civil-military axis. It is therefore imperative that an institutionalised and continuous civil-military dialogue with the political leadership be the platform that can result in mutually arriving at an understanding of what political objectives would be required to be achieved through the application of the military instrument. Unfortunately, this has been a weak point and remains so despite the deficiency being recognised.

So far, across governments, only a crisis spurs a temporary bonding of the politico-military vector. The discernible normal trend is to make political promises of providing resources for modernisation, but reverting to holding back on resources once the crisis has passed. Despite recognition of the growing and impending geopolitical turbulence, India's defence budget has been shrinking as a percentage of GDP and CGE but is coupled with the reality that we are, globally, the second largest importers of military hardware. The resource allocation problem has been begging for attention and hopefully will be rectified to some extent due to the recent structural reforms concerning the Armed Forces. The silver lining for better civil-military interaction is the recent creation of the Chief of Defence Staff along with the Department of Military Affairs (DMA) and the post of the Permanent Chairman, Chiefs of Staff. Going forward, the military leadership should utilise the structural reforms and make all attempts to seek guidance despite the lack of a written document through enhanced politico-military interaction. Adopting a pull model to seek political guidance would perhaps pay dividends. The guidance

in terms of policy should pave the way for Integrated and Joint Military Strategy, Operational Directives and Tactical plans.

War and Warfare

Despite widespread political acceptance that nuclear wars cannot be won and should not be fought, the duality born of the nuclear era continues to flourish—one in which, the major role of military power is to prevent war and the other in which some political objectives can be achieved by exploiting the space short of nuclear war with a combination of nuclear threats, limited conventional force application and Operations Less Than War (OLTW).

The greater focus for the search for utility below the level of war is supplementing the perpetual urge to be equipped by state of the art military instruments that form the superstructure and sinews of deterrence. The layer of employable military power in the OLTW environment spans an imagined area that supposedly can identify the limits of the escalation envelope. This is indeed a tall order for the military, as escalation is not a unilateral process. But the armed forces have been grappling with this issue since the advent of the nuclear era and it has defied the intellectual horsepower of several generations of the strategic cognoscenti. Signalling, through joint exercises, aggressive manoeuvres in the air and maritime, cyber-attacks and other actions short of physical contact has remained for the most part the preferred methodology. Utility of full military potential, under the nuclear shadow has remained untested and intractable despite technological claims to the contrary.

Managing Technology and Resource Crunch

The danger now is magnified due to the possibility of the military leadership succumbing to the notion that technology-based approaches provide all answers to problems of future wars, thus disregarding the basic nature of war as a political and human endeavour that is essentially a contest of wills. There is the danger of capture by the illusion that technological superiority will alter the basic nature of war from the realm of uncertainty to certainty. That dominant battlespace knowledge will facilitate the full spectrum dominance and war would not be costly, slow and inefficient. The trend is to make war more rational and calculable, even one that is subject to the power of algorithms. This is not to discount the potential of algorithms but to flag the enduring danger of premature capture by products untested in the battlefield.

History is replete with the inflated promises of technology that has accompanied the advent of technological products. In the tactical arena, all military instruments can be countered though it may achieve success in the introductory phase. The machine gun, tank and air power are prime examples and the American performance in Vietnam, Afghanistan and Iraq provide sufficient evidence. Technology is a force multiplier that must remain a quest in perpetuity. But the military leadership must differentiate between military and strategic success. The former is about defeating enemy forces in battle. But what finally matters is how such success enables enhancing the goals of policy.

Such an outlook can influence the planning, creation of effective military instruments and provide for better prioritisation of various elements of military power. The military leadership must seek the latest technology but should remain conscious that technology is important but albeit not the game changer that it is made out to be. Human agency remains supreme and that fact puts technology as its enabler. With a resource crunch that may last till the mid-2020s, the lurch for state-of-the-art technology will have to be tempered and its deficiency made up through the more powerful tools of better organisational design within and between Services as also in the arena of the civil-military interaction. Innovative doctrines, tactical innovation and deepened inter-service cooperation could provide the pathways to maintain military effectiveness. In the 2020s, toning down the demands of the military for additional resources will remain one of the biggest challenges to India's military leadership.

Human Capital

Material richness embodied in the possession of state-of-the-art military technologies is no substitute for warrior spirit of the armed forces. Always difficult to measure except through performance in adversity, it has been the hallmark of the Indian military, which traces its origins over several millennia as conflict and strife have been endemic to the subcontinent's history. Traditions of valour, courage and honour are the lynchpins of its institutional ethos. Its apolitical character has been a pillar of support to India's democratic framework and has so far withstood the periodic threats to its secular nature.

But the apolitical character of the military cannot and should not be taken for granted, as it is now increasingly exposed to the widespread rise in political consciousness amongst all levels of the populace that is supported and enhanced by the expanded reach of the internet and social media. Two axes of concern are discernible. One that concerns the higher leadership

and the other that impacts the middle level (Colonel and equivalent) and below which includes the rank and file. On both axes of concern there is a need to guard against the propensity to conflate the government with the nation. This could be problematic for the military's apolitical outlook as individual ideological beliefs confront the institutional values of secularism and collective political neutrality.

Safeguarding secularism and pluralism as an institutional value in our Armed Forces should be a key result area for the military leadership considering the historical legacy of the Partition that is reflected in India's communal fault line and always lurks below the surface. The need for the leadership to repeatedly emphasise and practise the dictum that the Armed Forces principally swear by their loyalty to the Constitution is paramount, and it must constantly review the institutional pulse on the issue and take preventive measures.

Democracies across the world have faced periodic challenges when their militaries have been leveraged for internal political activity. India has been no different and calls for deft and tactful intervention by the military leadership based on national interests. Without doubt, this is a huge challenge that demands moral courage and sacrifice as there is likely to be a blurring between legal orders and moral imperatives. But the nature of this challenge is evident and would depend on the individuals holding the baton at that time and in the context of national interest, a gram of moral courage could be worth a ton of personal benefits.

The selection system for the highest-level military leadership follows an arc that is based on political choice amongst an eligible panel. In practice, seniority has been the natural political choice with some exceptions. The onus for shaping the panel for the political leaders to exercise their choice is the responsibility of the military leadership that must spot potential talent, select objectively and act as a sieve for selection to higher ranks. What is missing is a system that also considers promotions based on performance in Joint Service appointments. With the Theatre Command system around the corner, this issue gains importance and must be addressed earliest.

Civil-Military Fusion

Exploitation of land, air, maritime, cyber and space for military purposes demands the growing necessity for civil-military fusion which blurs the traditional notions of military exclusivity. De-segregation of civil and military elements has been expanding in scope and is likely to gain momentum in the future. India has been a laggard with the military-public sector-private

enterprise remaining aloof. This has created silos that have resulted in insufficient interaction and have not been able to synergise its competencies for strengthening national capabilities. The lack of interconnectedness even within the Ministry of Defence should hopefully be addressed to a large extent by the creation of the DMA. However, this necessary step will remain insufficient unless the other departments and the DMA work in close collaboration. The DMA and other departments must be integrated and populated with a rich mix of military and civilian expertise.

Integrated organisational structures are required to achieve optimum civil-military fusion. The most efficient security structures tasked for policy and strategy evolution are normally the ones that are integrated with multidisciplinary expertise, especially in the civil and military arenas. Such integration has not been optimally achieved because of a host of cultural, social and administrative issues. Integration continues to face resistance. In most security structures at the national level, like National Security Council Secretariat (NSCS), RAW and Departments of MoD, the military component remains segregated. Integrating the military within the plethora of national security organisations is also linked to overcoming problems of equivalencies between civilian appointments and military ranks. This issue has exacerbated with unresolved issues from several pay commissions, and has impeded military personnel integration into civilian structures. Pay, pension and allowances of military personnel are spheres that have continued to be sources of friction with the counterparts of the civilian bureaucracy. The plethora of issues and the fact that quite a few of them are under legal contestation indicate that there is a need for establishing a permanent Military Commission in the MoD to speedily tackle these and prevent them from festering. The composition of the Commission should be multidisciplinary and headed by an elected politician.

In the fields of Cyber and Space, the newly created organisations like the Defence Cyber Agency and the Defence Space Agency must integrate their functioning with the national structures like ISRO, DRDO and the NTRO. Without functional cross fertilisation, the growth and effectiveness of these newly raised organisations will be stymied. A cultural adjustment by the military to effectively function with civil organisations is necessary. An online learning capsule that explains the functioning of Government departments will help. There is also scope to close the gap between the practices of staff procedures and staff work of the military and civil. The Defence Services Staff College should work with the relevant Central Government departments to harmonise the differences.

The establishment of the National Defence College in 1960 reflects the vision of the political leadership for the need for civil-military fusion. But it has not been possible to fully realise the potential of such fusion for reasons that lie outside the portals of the NDC. But within those portals, it is time to expand the participants on the course to also include civil services from neighbouring countries and India's private sector. An across the board increase in the Indian Civil Services, Armed Forces and foreign Armed Forces is also required. It would involve doubling the strength of the participants and will be entirely contingent on the issue of infrastructure support and faculty expertise. A military leadership that can solve the problem of infrastructure support for the NDC, would make a significant contribution to civil-military fusion and strengthen our foreign relations with other nations.

Media

The media will continue to be a double-edged weapon for publicity. The need for strategic communications must not be conflated with the military becoming a regular topic of discussion in the media. Handling the media must be left to nominated spokesman of the organisation concerned. As a rule, the military must not seek recognition through the media for duties performed but let its work speak for itself. For the serving and retired senior military leadership, appearance in the media must be more an exception than a norm.

Conclusion

The challenges of the military leadership in the 2020s would be rooted in endogenous and exogenous factors. In most cases, solutions to both require an interplay between these forces that makes it more difficult to resolve. The apex political leadership must adopt the pull model to extract political guidance and intervention whenever required. The sanctity of the politico-military interaction on most issues are best conducted inside the closed doors of South Block and its public articulation must be mutually decided upon. India's socio-politico and socio-economic landscape is changing. The Armed Forces will inevitably be impacted. The most important challenge for the military leaders in 2020s would be the preservation of the ethos and values of the military. It will not be an easy task and will call for moral fibre that should be met by practising two mottos—of the National Defence Academy—'Service Before Self' and of the National Defence College—'Wisdom is Power.'

NDC Journal

Commentaries

Covid-19
A Counter-Pandemic Strategy for India

Sanjay P Vishwasrao

Introduction

An epidemic is a spread of a disease in a city or country, while a pandemic is declared after the global spread of the disease/virus among many people across continents. Epidemics/pandemics occur due to: birth of a new virus/ new strain of virus that transmits rapidly between humans, social conditions favouring its transmission and social conditions enhancing susceptibility of a society to the virus. Unlike in history, information technology today has a major role to play in responding to a pandemic. Globaldata, a data analytics and consulting firm has reported that cutting-edge technologies are at the forefront of the war against COVID-19: artificial intelligence (AI) and machine learning, diagnosis equipment and software, analytics software, data processing software for administrative paperwork, mobile telephones with global positioning system (GPS) to track patients and chatbots/social media for advisories and for people to connect during a lockdown or self-isolation.[1]

India escaped the HIV epidemic due to several societal norms and low volumes of international travel till the late 2000s. The reality of HIV epidemic in India is not the 21,40,000 people infected, but the low 0.22 percent of population infected. India is ranked 81st in percentage of adult prevalence which is lower than the international average and adult prevalence in USA and France.[2] This has vital lessons for India while combating COVID-19. India's unique culture (*namaste,* joint family), patriotism/nationalism and its social programmes of *Swachh* Bharat, International Day of Yoga (IDY), Digital India Programme (DIP), Make in India (MiI), etc., will help India

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Brigadier **Sanjay P Vishwasrao** is an Infantry officer from the Indian Army and is a participant of 60th NDC Course.

contain the impact of COVID-19 Pandemic. Building upon these will help lower the impact of the current and future pandemics. The success of India's counter polio strategy resulted in WHO declaring India polio-free in 2014- with the last reported cases being in 2011.[3]

Lessons from book 'Tipping Point'

One of the chapters in Malcolm Gladwell's *Tipping Point* (2002) analyses how epidemics spread. He defines 'tipping point' as the point at which a series of small changes become significant enough to cause a larger, more important change. In epidemic prevention, it means that the total number of newly infected persons are less than or equal to the number under treatment.[4] He writes that, 20 of the people do 80 percent of spreading of the virus/ message, and even work in an organisation. He highlights the role of these 20 percent by adding that, character/strength of this 20 percent viruses/infected carriers or messengers dictates virulence of the disease or message. His last point is that, viruses/messages spread when the environment is conducive for them to spread, e.g., Ebola in war-torn parts of Africa and Polio in Pakistan.

Lessons from India's HIV/AIDS Project AVAHAN

Project AVAHAN commenced in 2003 and became the world's largest HIV prevention programme. Six key lessons from the strategy adopted in the project merit serious reflection while preparing India's COVID-19 strategy.[5] Firstly, an Indian plan as per Indian epidemic patterns is the key. Secondly, it incorporated a business approach mixing project managers, health experts and NGOs to implement a scaled design, not scaling up from a test-bed. Thirdly, there was an initial focus on prevention, not on cure. Fourthly, prevention focussed on high risk categories comprising female sex workers and their clients, homosexuals, transgenders, and drug injectors. Fifthly, creating an enabling environment (prevent police harassment, bathing points for truck drivers, etc) encouraged the target population to adopt change. Lastly, self-organisation of communities to encourage buy-in and use of NGOs resulted in community mobilisation.

At the tactical level, there are three critical takeaways from Project AVAHAN. Firstly, the use of peer-led outreach and behavioural change communication to spread messages proved very effective. Secondly, the widespread availability of medical testing and care and promotion of condoms and safe drug injections stymied spread. Lastly, regular monitoring and evaluation at multiple levels helped plan interventions.

Lessons Learnt from the COVID-19 Pandemic till March 2020

Lessons from the initial stages of the current pandemic can also be classified as strategic and tactical (medical and economic aspects kept out of scope). The key strategic lessons are that transmission in a globally connected world is fast as pathogens do not respect geo-political boundaries. But, strategic autonomy and nationalism/patriotism which makes nation inward looking reduces this threat. Contours of the pandemic in Italy validate this. Italy's loss of strategic autonomy in the run-up to the pandemic is best conveyed by these two reports in The Diplomat.

March 20, 2020: *"China has plans for Italy: it is interested in Italy's ports and infrastructure along the Belt and Road Initiative."*[6]

On June 9, 2020: *"A recent report of the Italian parliamentary committee for security (Copasir) has certified the existence of a massive "infodemic" during the COVID-19 crisis, and more specifically the role of Russian and Chinese propaganda in the country. Italy has been one of the main targets of Beijing, with specifically tailored messages meant for Italian audiences."*[7]

A compounding factor is the inaction of governments and societies to prevent animal to human transfer of viruses[8] (i.e. 'One Health'[9]). There is enough evidence to suggest that the delay in China informing WHO,[10] and WHO in (turn) declaring a pandemic on January 30, 2020, led to its spread outside China.[11] Similarly, the delay of one week (January 02–09, 2020) in sharing genetic information of the virus by China delayed global collaboration in isolating the virus and finding an anti-virus.[12] Since the world cannot be un-flattened or de-coupled,[13] transport entry/exit points need be strengthened to include medical tests (pragmatic protective globalisation like post 9/11).[14] And finally, global cooperation to forecast and defend against the next epidemic/disaster needs to improve.

The key tactical lesson on flattening the pandemic curve is that unlike HIV, COVID-19 has higher infection rates in states/UTs which are more prosperous and/or have greater economic/religious/tourist connectivity with the world. As in the case of for HIV, there is a need for an indigenous counter-pandemic strategy. The other lessons are the need of a mix of individual, social, governmental, business and NGO health tools/methods and early preventive actions. As COVID-19 spreads by mingling of people,[15] the recommended protective measures to delay and reduce the peak are as follows: restrictions must be considered on international and local travel, and mass gatherings and congregations. Citizens must be encouraged to enhance personal and environmental hygiene; use '*namaste*,' social distancing, self-isolation, self and/or forced quarantine, protect the elderly/sick, and help the

needy survive the lockdown. All these are part of our unique civilizational culture and have been institutionalized by *Swachh* Bharat, IDY and DIP. This unique Indian strategy also needs to cater for the *Chalta Hai (could not care less)* attitude that may result in leakages in self-isolation, quarantine and other enforcement strategies rolled out by the government. This attitude could further fuel the pandemic in a densely-populated country like India.

Recommended Strategy for COVID-19 Counter-Pandemic

A strategy which has the potential to counter the spread of the pandemic and finally overcome it has three pillars. First, it must make the social environment unfriendly for the transmission of COVID-19 Virus and friendly for its early detection, isolation, tracking and treatment. It will require small, repeated and progressive repairs/changes in the social environment to make it unfriendly for the spread of the virus [work/study-from-home, strict community policing, direct benefit transfer (DBT), etc.]. Second, the 20 percent carriers must be identified, isolated and treated early and the 20 percent warriors (health workers, police and armed forces in aid to civil authority) need to be empowered to ensure this with due personal protection. Third, the correct messages, messengers and media must be used repeatedly in catchy ways to spread counter-pandemic messages so that, people voluntarily take actions as required, e.g. change in social conduct, beliefs and ignorance, and having a positive attitude during the lockdown/quarantine.

In Stage 1 of this strategy, we need to focus on preventing the spread through overseas travellers/foreigners. It should include use of DIP to identify, track/trace, isolate and monitor cases and their transmission. Indians arriving/brought back from other countries must be kept in mandatory isolation and thereafter tracked using DIP, as necessary. Social reporting of defaulters needs to be encouraged.

Stage 2 should simultaneously aim to prevent/delay community spread. Spread to poor citizens living in congested unhygienic urban localities has to be denied/delayed. This is the key to success. In case these areas report infections, they will need special focus to prevent becoming super spreaders.

These two tipping points should be attacked simultaneously; the negative one denied/delayed and the positive one hastened. We must get to the epidemiologist gold ring (70-80 percent 'herd' immunity due to personal immunity and development of a vaccine) with minimum turbulence.[16] This gains importance due to our larger population and poor hygiene and sanitation.

Some ways to delay the negative tipping point are listed. First, implement a scaled design with synergy between Central and State Governments (health is a state subject), enforcement agencies, businesses, NGOs and people/group-cum-individual participation. The rule to follow is *'better wrong and now, than correct and late'*. Second, counter social/religious beliefs and traditions that can lead to community transmission (festivals, mass prayers) and encourage those that deny such an environment (*namaste,* joint family, donations, social service). Third, impose curfews or periodic enforced lockdowns to prevent locality-locality, city-city, city-village and state-state spread. Fourth, create an economic and social environment that will support lockdown and physical distancing using DIP, IDY, Jan Dhan-Aadhaar-Mobile telephone (JAM) Trinity, DBT, ePathshala, SWAYAM, study-from-home, etc. Bottlenecks of no-pay-forced migration of daily wagers back to villages, slow broadband and non-availability of computers or smartphones preventing work/study-from-home, etc., need early resolution. Fifth and lastly, urban population hubs hold the key to controlling the negative tipping point due to difficulties in physical distancing and isolation, and problems of poverty, illiteracy and ignorance. Identification of employment pattern (working for 20 percent carriers) and compulsory testing may be needed for this segment. This may be the weakest link in the counter-pandemic chain.

Ways to hasten the positive tipping point, i.e. increasing number of people protected/treated than those infected per day/week/month, are more challenging. First, the government needs to create hygienic and comfortable quarantine facilities in all cities/district headquarters for easy access and to encourage self-admissions. These could be free or paid to cater to all categories of citizens. Second, it must be ensured that medical testing using MiI kits assisted by subsidies/tax relief using DBT and Ayushman Bharat Pradhan Mantri Jan Arogya Yojna (PMJAY) via JAM are easily available. Third, ensure the availability of easy and cheap access to protective gear for various segments/categories of citizens, carriers and warriors. Government offices, businesses, social groups and NGOs can play a role in their supply and distribution. GPS tracking by a DIP app may help. Fourth, an economic package to businesses, NGOs and individuals to support social distancing, self-isolation and curfew must be rolled out. Lastly, encourage those who can afford to support daily wagers/poor with donations in cash, rations, protective gear and medical tests cum care.

The road to recovery would be full of obstacles due to a high population density. The government must encourage DIP (National Knowledge Network, MeghRaj Cloud) assisted MiI anti-virus solutions for cheap availability of

vaccine and related equipment. Unique alternative Indian solutions (yoga/Ayurveda) need to be encouraged while also changing context of '*chalta hai*'. Enforcing traffic, curfew and municipal hygiene disciplines will eventually help improve taxation discipline and build patriotic/nationalist ideological unity.

Social distancing, isolation, tracking infected people, improving traffic, hygiene, curfew and taxation disciplines are all heavily reliant on IT. This will put additional pressure on each of the nine pillars of DIP. Ministry of Electronics & Information Technology (MeiTy) needs to respond with alacrity and agility to empower the Ministry of Health and Family Welfare in collecting, interpreting and exploiting data of DIP apps, travel and health histories, etc., as inputs in improving the counter strategy for the pandemic and development of a vaccine.

Long-term Strategic Issues

India cannot pandemic-proof itself. But, maintaining strategic autonomy in key sectors (from China)—a lesson also of the Asian Financial Crisis of 1997—has got reemphasised during the COVID-19 Pandemic (and the stand-off on the Line of Actual Control). In so far as Pakistan is concerned, with 1/6th the population (213 million) and ½ the population density (287 vs 455 per sq kms), Pakistan had 780 COVID-19 cases (India had 396) as on 22 March 2020.[17] (This has risen to 213,470 cases and 4,395 deaths in Pakistan[18] and 5,85,000 cases and 17,400 deaths in India on 01/02 July 2020).[19]. The Government of India order to the High Commission of Pakistan in New Delhi to reduce its strength by 50 percent (and reciprocal reduction of own manpower in Islamabad) of June 24, 2020 may be seen in this light. Internationally, India may take the lead in promoting 'One Health Concept' and in discouraging food-slaughter of wild animals. India should also build an international consensus for real-time collaboration to predict a new virus/pandemic and to develop a counter strategy and vaccine for it.

Internally, the Government must evaluate the contribution of *Swachh* Bharat, Ayurveda, IDY, DIP and MiI and make necessary interventions to further strengthen these initiatives. Physical distancing and curfew have reduced air pollution[20] (air quality index did not drastically improve[21]) and improved social cohesion. New norms of work/study-from-home and use of DIP may be monitored-evaluated to strengthen these new environment friendly and patriotic/nationalist social and business norms.

Politicisation of illiteracy, ignorance and dogma may have adversely impacted India's preparedness and response to COVID-19 Pandemic which

requires social cohesion. Possible contradictions in political/religious beliefs which negatively impact India's national security may also need to be resolved at the earliest. The COVID-19 Pandemic has shown how the conflict between nature and humans can lead to completely unforeseen consequences and misery for humankind. It has also shown how interconnected our world is- yet how national characteristics of culture, demographics, politics and economics make each nation, and its relations with other nations unique.

India's learnings from its HIV counter-epidemic hold important lessons for combating the COVID-19 pandemic. India's indigenous COVID-19 Counter-Pandemic Strategy should aim to reduce the number of infected and increase the number of isolated/treated patients on a daily/weekly/monthly basis. It should also isolate India from foreign carriers and focus on affluent carriers with foreign travel history and their family/staff, and health workers/enforcers to prevent spread to susceptible areas. The key to defeating a pandemic is working out a good strategy, just as it is for a war.

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A Post-Pandemic World Order

R. Amar

Introduction

The world is at a historic inflection point. Barely two decades into the 21st century, the world stands ravaged by an invisible enemy, a microbe of the size of 120-160 nm[1] in diameter called the SARS-CoV-2, responsible for the Covid-19 pandemic. At the time of writing this paper, there are over 23.58 million active Covid-19 cases globally and over 8 million fatalities![2] Nations have shut borders, nearly half the world population is in an unprecedented lockdown, markets both local and international stand closed and there is painful absence of coordinated global response to fight the pandemic. The world order appears to have cracked and has given place to the term 'post-Covid world order,' which probably is the most searched term on Google (produces 145,00,00,000 search results in fraction of a second).

World Order 1950–2020

In the aftermath of World War II, by around 1950, the world saw emergence of two blocs around the Soviet Union (USSR) and the United States (US). This period between 1950 and 1990 was an era of classic '*Bipolarity*' with the US and the USSR being the two powerful opposing poles. The striking feature of this Bipolar system was that the most of the world's economic might, military and technological power and cultural influences were held between these two poles and emergence of major security alliances like the NATO, which was the US-led block of western countries, and the Warsaw Pact, a USSR-led Communist block of countries.

The Unipolar Era commenced in 1990s with the collapse of the Berlin Wall & the USSR in 1990s. The US emerged as the sole superpower with unmatched military, technological and economic dominance. These events

Brigadier **R. Amar** is an Infantry officer from the Indian Army and is a participant of the 60th NDC Course.

probably prompted Charles Krauthammer, a Pulitzer Prize winner, to develop the theory of The Unipolar Moment. Krauthammer, while articulating The Unipolar Moment, suggested, "The true geopolitical structure of the post-Cold War world . . . [is] a single pole of world power that consists of the United States at the apex of the industrial West. Perhaps it is more accurate to say the United States and behind it the West."[3] Meanwhile in 1992, Francis Fukuyama predicted rise of liberal democracies throughout the world in his book, *The End of History and the Last Man.* Fukuyama proposed "universalization of Western liberal democracy as the final form of human government."[4]

The first two decades of the current century (2001-till date) have been marked by multipolarity and American retrenchment. Not only did the WTC Terror Strikes (September 2001) in US delivered a major geopolitical shock to the world but it was in a way a severe dent to the US sense of invincibility of the American continent. During this period, the world witnessed the Arab Spring and its unintended consequences, the rise and fall of ISIS, Russian interventionism in Georgia, annexation of Crimea, the Global Financial Crisis of 2008, the power play in Syria, China's hegemony in South and East China Sea and Britain's exit of the EU. In most cases, it was noticed that US probably couldn't influence the behaviour of states as it could in the Unipolar/Bipolar Era. It seems that John Mearsheimer's 2001 prediction of "Multipolar System"[5] turned out to be true as global events have unfolded over the last two decades till the Coronavirus struck.

Post-Covid World Order

The Hegemonic Stability Theory (HST) propounded by Stephen Krasner, George Modelski and others has often been used to describe the Pre-Covid World. "The theory was developed in the 1970s to explain the Pax Britannica and the Pax Americana."[6] The HST posits, "that an open or 'liberal' international economic order requires the existence of a hegemonic or dominant power, retains wide support in the field and beyond."[7] While there are several criticisms of this theory , the fact remains that prior to the Covid-19 pandemic, till the presidential election in the US when Trump came to power, the US was the sole hegemon in the world with huge economic heft, unmatched technological dominance, unrivalled global power projection capabilities and the American Soft Power only added more weight to the US dominance in the world affairs. However, in a post-Covid world, the US leadership of the world appears to be under serious doubt.

There are several pointers to the fact that America appears to have gone into a shell. Under President Trump's America First policy, the US

has deserted much of its global commitments and responsibilities, exited from international treaties, erected walls, shut down markets, closed borders and put a temporary stop to immigrations—the very foundation of the US unbridled economic growth, technological dominance and unmatched power.

Over the past decade, China and Russia have increasingly employed 'Sharp Power' to grab geopolitical influence across the globe with the US watching it almost helplessly. "Sharp Power is an approach to international affairs that typically involves efforts at censorship, or the use of manipulation to sap the integrity of independent institutions."[8] Be it through the establishment of 'Alternative International Payment Systems' or coercion through 'Debt Trap Diplomacy,' be it aggressive use of 'Social Media' to influence elections or be it 'Cyber Espionage' states like China and Russia have employed a diverse toolkit to grab geopolitical influence at the cost of US interests and have emerged as the 'Neo-Revisionist' powers.

The Coronavirus pandemic has hit the world with an unprecedented ferocity, and it will fundamentally alter the world order. The views on how this pandemic will change the shape of international order are as divided as they were post the collapse of USSR in 1990s or in aftermath of the WTC terror strikes in 2001. Batting for the Globalists, at one end of the spectrum is the eminent Henry Kissinger, who has argued empathetically for global cooperation and says, "No country, not even the U.S., can in a purely national effort overcome the virus. Addressing the necessities of the moment must ultimately be coupled with a global collaborative vision and program. If we cannot do both in tandem, we will face the worst of each."[9]

On the other hand, are the neo-realists like Kishore Mahbubani, who predict a China-led world and argues that "the West's incompetent response to the pandemic will hasten the power-shift to the east," and that "A China-led order could turn out to be a more 'democratic' order."[10]

Is This the End of Globalisation?

On the economic front, the Covid-19 pandemic has delivered a "Dual Shock" to the world economy—on both the demand as well as supply side of the equation. As the virus spread across the globe, it not only infected humans but also their livelihoods as also the economy of the region/countries in which they live. Country after country went into total lockdown, markets were shut and so were borders. Neither the labour nor the capital could flow freely. Because of the lockdowns, global economic institutions have estimated losses to between 5.8 trillion USD to 8.8 trillion USD or approximately 6.6 percent to 9.7 percent of the

global GDP and nearly 500 million[11] people would be left jobless. This has perhaps been the steepest contraction in world's economy since the Great Depression. The world has awakened to over reliance on China-dominated supply chains. The Covid pandemic has demonstrated the fragility of supply chains and vulnerabilities of an asymmetrical economic dependence just to reap extra profits. Noted economist Philippe Legrain has observed, "The coronavirus crisis has highlighted the downsides of extensive international integration while fanning fears of foreigners and providing legitimacy for national restrictions on global trade and flows of people."[12]

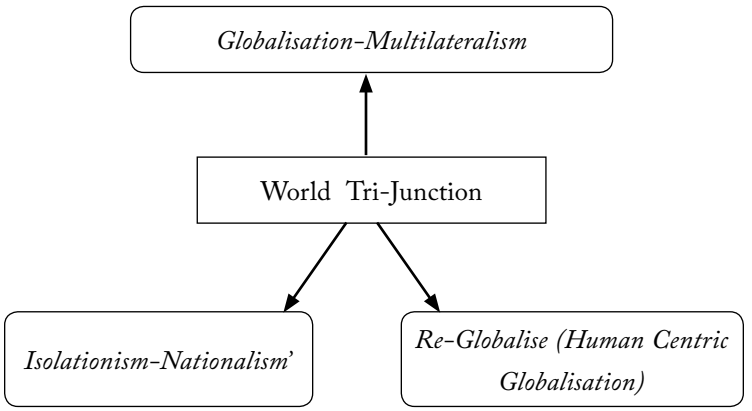
Even prior to the pandemic, globalisation was under stress led by the US. The US President Trump while speaking at the UN General Assembly in 2018 declared, "We reject the ideology of globalism" in favour of the "ideology of patriotism." There has been no coordinated globalised response to the pandemic thus far and the clamour for 'Nationalism & Supply Chain Diversification' is growing every day. Henry Kissinger while writing for the *Wall Street Journal*, in May 2020, opines that "the pandemic has prompted an anachronism, a revival of the walled city in an age when prosperity depends on global trade and movement of people,"[13] and he is spot on. Shannon K. O'Neil, writing for the Foreign Policy, argues that COVID-19 has seriously undermined the basic tenets of globalisation[14] and he predicts a diversification of complex supply chains.

Globalisation appears to retreat with an eminent US-China trade de-coupling, and several countries like Japan and multinational corporations beginning to relocate their factories from China to other regions. The result could be a dramatic new stage in global capitalism, in which supply chains are brought closer to home and filled with redundancies to protect against future disruption.[15] There are increasing possibilities of world becoming even more impoverished, rise of eco-nationalism, and a significant push back internationally on the China Centric Globalisation. The world will certainly reset the way it trades post-Covid.

What will be the Shape of Future?

The world is at a Tri Junction. The choices are either to continue with Globalisation-Multilateralism or retreat into 'Isolationism-Nationalism' a geo-economic model prior to WW II era or to Re-Globalise!

A LIKELY 21ST CENTURY GLOBAL ORDER[16]



Whatever the choices are made, they involve same state and global actors, but the real shift will be dictated by the domestic perception and election politics.

Post-Pandemic Economic Order

The Covid-19 pandemic has laid bare the ugly effects of hyper-globalisation model and it can be argued that hyper-globalisation is no more the way ahead. The choices necessarily remain between Isolationism' or Re-Globalise (Human-Centric Globalisation). Re-Globalisation will essentially involve a reshuffling of supply chains and a partial reduction in the concentration of capacity inside China.[17]

A survey involving Indian and foreign research scholars at the illustrious National Defence College, New Delhi, conducted for this paper on the post-Covid world order has thrown up an interesting visualisation of the coming international order. Some key highlights of the survey are enumerated as follows:

- Over 90 percent of respondents agreed that China's rise will now be contested more strongly by both the EU and the US than ever before.
- Nearly 62 percent of respondents believe the post-Covid world order will NOT be a China-centric order.
- The house was almost equally divided on the probability of growing nationalism and a unipolar world with the US being the only preeminent global power.
- Almost 52 percent disagreed with the possibility of emergence of a Bi-Polar World with US and EU as one pole and China and Russia as the other pole. Twenty-eight percent agreed with this possibility and remaining were not certain.

- Sixty-one percent of the respondents agreed with the proposition that the post-Covid world order will be an interplay of highly diffused power across multiple Domains.

Post-Pandemic World Order: 'Unipolar-Multipolar System'

America appears to have retrenched. About the pecking order of International relations, it could be a more like a three-layered pyramid. Such a system will have a Hard Power Unipolarity, with the US on top of the pyramid retaining unmatched military power albeit with a limited ability to influence the behaviour of other states on its own. In the second rung will be a tier of Economic Multipolarity with economies like the US, China, Brazil, India, Japan and Russia jostling for space.

At the bottom of the pyramid will be the realm of failed states, non-state actors, terror organisations, cyber criminals and non-traditional security threats like those of pandemics and climate change. It is here that the power will be distributed and diffused, and polarity cannot exist. Samuel P. Huntington calls such a system a Strange Hybrid, "A Uni-Multipolar System with one superpower and several major powers, the settlement of key international issues requires action by the single superpower but always with some combination of other major states."[18] It will be a world of complex relationships. The problem of leadership in such a world is how to get everyone into the act and still get action.[19]

Conclusion

This Covid-19 pandemic has delivered a seismic jolt to the US-dominated multilateral liberal world order. In its wake, the global economy lies in tatters, nationalism is rising and so is trade protectionism. With the US retrenching; geopolitical tensions between US and China at an all-time high; the EU divided, Russia and Saudi Arabia mired in an oil price war; the pandemic still out of control; the UN probably no longer relevant; and China aggressively seeking expansionism in South China Sea, flagrantly violating the autonomy of Hong Kong, unleashing brutal violence across the LAC with India, imposing a new repressive security law in Hong Kong in brazen violation of a bilateral treaty with UK. The international order has cracked and the world is going to be more complex than ever before.

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Dual Use Potential of Civil Airport Projects in India

Pawan Kumar

Background

A well-developed network of airports not only enables the growth of the domestic economy, but also facilitates military and paramilitary operations during exigencies such as war, internal disturbances, natural disasters, epidemics or pandemics, like the present Covid-19 crisis. Developed nations like the US and Australia have a concept of 'Joint Airport' development that emphasize 'dual use' (for civil and military purposes). Despite the government having recently announced that it intends to build 100 airports by 2024, there is no formal system of joint development of airports in India.[1] Although this may be a political statement, especially the timeline, the fact remains that the number of Indian airports are expected to grow significantly. A case in point is the commencement of the development of strategically important airstrips in remote locations in the newly crafted union territories of J&K and Ladakh.

India is likely to have about 190 to 200 operational airports by 2040. Its major cities would probably have two airports while Delhi and Mumbai could have three each.[2] The total land requirement is about 150,000 acres with a huge capital investment (not including cost of acquiring land). Going forward, the government intends to make 100 airports in the next 5 years at a cost of Rs 4 lakh crore. Among them, 70 airports will be at new locations while the rest will be expansion of existing airfields to handle commercial flights. Considering that the availability of airports, both during peace and war, is always a constraint for military aircraft, future developments and up-gradations of dual-use airports must be

Air Commodore **Pawan Kumar** is a Flying Branch officer from the Indian Air Force and is a participant of 60th NDC Course.

jointly worked out between Ministry of Defence and Ministry of Civil Aviation to optimise the limited resources.

Occasions for IAF Operations from Civil Airports

The capability to operate from several dispersed airports enhances the overall operational capability of IAF manifold. During hostilities or war several major military airfields may not be available for continuous use following attacks by enemy air power. Hence, there is the need for adequate redundancy with the requisite infrastructure. There may be a requirement to recover a fighter aircraft while returning from an offensive mission across the border with an emergency such as low fuel or if the aircraft has suffered battle damage. In these circumstances, the aircraft must be urgently recovered at the closest airfield, albeit a civilian one. Civil airports closer to the border can be of enormous help in launching offensive missions with greater payload to enhance the radius of action. Force multipliers like mid-air refuellers and the Airborne Warning and Control System (AWACS) may be launched from civil airfields deep inside own territory to maintain surprise. During previous fought military conflicts, there were several occasions when IAF operated from civil airfields including Santa Cruz (Mumbai) and Dum Dum (Kolkata).

Contingencies like terrorist attacks and responding to insurgencies in several parts of the country as dispersed as Nagaland, J&K and Jharkand are an example of the need for multiple staging airfields. There would be a requirement for speedy troop induction and support to civil/paramilitary forces to augment forces or for counter attacks. The Mumbai terrorist attack in November 2008 is one such example where the Mumbai airport had to cater to a surge in the operations of military aircraft without affecting the dense civil air traffic. Several such sensitive regions need to be identified and airports located in these regions should be made capable of hosting military aircraft.

The subcontinent is prone to a variety of natural disasters like earthquakes, floods, landslides and drought across the year. To add to it, often there are calamities like cyclones, Tsunami in the vast coastal region. Invariably, the armed forces are asked to deploy at short notice to assist the National Disaster Relief Force (NDRF) and civil authorities. Humanitarian and Disaster Relief (HADR) missions have therefore become an essential task of armed forces. Generally, HADR missions would involve heavy payload carriage in terms of ration/medicines or evacuation of citizens in distress. This can be optimised by taking off from the nearest possible airfield (civil/military) with minimum required fuel and maximum possible payload.

India shares the region with several small nations like Bangladesh, Myanmar, Maldives, Sri Lanka and Nepal who look to it for HADR support. Under 'Operation Neer' in December 2014, during the water crisis at Maldives, several IAF transport aircraft full of water bottles were routed to Male at a very short notice. 'Operation Maitri' in earthquake-hit Nepal (2015) is another example of such a HADR operation. In the past, there have also been instances of military interventions in our neighbourhood—Operation Cactus n Maldives (1988) and the Indian Peace Keeping Force (IPKF) in Sri Lanka (1987). Civil airports are of immense support during all such contingencies.

National Civil Aviation Policy 2016

The rapid expansion of India's aviation cannot be absorbed by the existing airports infrastructure. The union cabinet approved the National Civil Aviation Policy (NCAP) on June 15, 2016, which stressed the fast-track development of infrastructure in various airports. It is the first time in history that GOI released a comprehensive civil aviation policy to boost the aviation sector.[3] The policy covers 22 areas of civil aviation, with an aim at improving regional connectivity by means of concessions by Central and State Governments. The backbone of NCAP is the Regional Connectivity Scheme (RCS). The RCS aims at reviving the unserved and underserved airstrips and airports. Under the RCS scheme, airstrips/airports will be revived into no-frill airports at an indicative cost of 50 crore to 100 crore. The demand-driven selection of airports for revival will be undertaken in consultation with State governments and Airlines. There will be no airport charges, reduced service tax on tickets and reduced Value Added Tax (VAT) on Aviation Turbine Fuel (ATF). A larger participation of State governments is envisaged in the RCS. The land is to be provided by State government free of cost. In 1994, MoCA had issued Route Dispersal Guidelines (RDG) to promote connectivity to regional and remote places. The policy was revised in 2014. One of the reasons to promote the Remote Air Connectivity (RAC) was to connect the areas of strategic purposes even if the services are financially not viable at present.[4] Areas where such operations are mandated are also significant for military aviation and hence these airports need to be developed jointly for Dual Use. Several airports in the North East and Jammu and Kashmir regions, and all airports in Andaman & Nicobar and Lakshadweep Islands will form part of this chain.

Requirements of IAF for Fighter and Transport operations

IAF operates variety of aircraft, like fighters, transport, helicopters and remotely piloted aircraft (RPA). Helicopters do not require any special facility to operate from civil airports. They can operate from any prepared or semi-prepared surface with adequate surface strength and space to facilitate hover take-off and landing. RPAs require extensive Ground Support Equipment (GSE) and Ground Control Station (GCS) to undertake operations. The IAF's inventory includes supersonic fighters to heavy lift transport and helicopters. Additionally, the IAF also operates Airborne Warning and Control System and mid-air refuellers. As and when required, these aircraft can be deployed at locations away from the parent bases for offensive and defensive air operations. These locations are normally IAF bases and therefore requirements pertaining to operation of fleet/aircraft are well catered for. However, during hostilities and other contingencies, the aviation assets may require deployment at places other than the IAF bases for reasons mentioned earlier. The primary concern would be capability of the airport to facilitate landing/take-off and availability of minimum necessary infrastructure/facilities at these places.

IAF aircraft can operate from most of the surfaces being used by civil aircraft irrespective of dimensions. However, since military aircraft require certain critical infrastructure, viz. parking space, maintenance hangars, flight complex, stringent security systems, weapon storage areas, camouflage and concealment, hardened aircraft shelters, it is opined that during the conceptual/design stage (of an airport) itself, the IAF must be involved to meet the military requirements. To achieve this, a traditional mindset must change where that each airport is not merely a civil airport but a national asset that can be used jointly.

Opportunities and Challenges

IAF has a great opportunity to make us of the airports' infrastructure development under RCS-UDAN scheme. The strategically important regions of interest would be Jammu and Kashmir, Ladakh, Punjab, Rajasthan, Himachal Pradesh, Gujarat, North-Eastern States and Andaman and Nicobar. The Advance Landing Grounds (ALGs) adjoining the borders are short runways in the remote areas and largely surrounded by hills. Some of these ALGs are manned and maintained by the armed forces. Several of them have not been used and maintained and have been encroached by villagers and tribesmen. The ALGs located in J&K, Arunachal Pradesh, Sikkim and other north-eastern States are particularly of strategic importance due to their proximity to the border.

As a case study, the GoI intends to develop several ALGs in Arunachal Pradesh. The poor road connectivity and strategic importance of Arunachal Pradesh has prompted the state government to develop the airstrips into ALGs which can be jointly used for civil and military aviation. In 2009, a MoU was signed between the then State Government and MoD. Under the umbrella of this MoU, development/upgradation of eight ALGs were planned at an estimated cost of Rupees 1000 crore. Eight of these ALGs were then developed at Pasighat, Walong, Along, Ziro, Machuka, Tuting, Tawang and Vijaynagar.[5] All these ALGs have been made fit for operation of helicopters and medium/small transport aircraft. In case of dire emergencies, large military transport aircraft and fighters with short takeoff and landing (STOL) capabilities can also operate from some of these ALGs.

In November 2016, a C-17 Globemaster aircraft successfully landed at the newly developed ALG at Mechuka,[6] located at 6200 feet AMSL with a runway length 4200 ft. Similarly, in August 2016, IAF Su-30 MKI fighters operated from the small runway of Pasighat ALG.[7] The commencement of aviation from these ALGs is not only a boost for local economy and tourism but also a force multiplier for the military and a demonstration of intent to likely adversaries. All the ALGs discussed above have small runways and minimum facilities for aircraft operations. In the next phase of development, the runway length should be increased to facilitate normal operation of medium and large transport aircraft and IAF fighters. A civil airport at Itanagar, the capital city of Arunachal Pradesh is being pursued as a greenfield project by AAI. The requirements of IAF must be catered to in the Itanagar airport project to make it suitable for the operation of military aircraft as well.

Airfields in Jammu and Kashmir

Both Pakistan and China have been occupying Indian territories in Jammu and Kashmir and Ladakh. This long-standing territorial dispute has forced India to maintain a large presence of the armed forces in both these union territories. In these areas, Jammu, Srinagar, Leh and Thoise are possibly the only airfields in the region which can host all IAF aircraft, with Kargil having only limited capability. It is imperative that development of more dual use airports in this region be vigorously pursued. The Civil Aviation ministry, under UDAN 4.0 (on December 03, 2019), has announced commencement of the bidding process for 11 unserved airports in Jammu and Kashmir. This also includes two underserved airports in the Ladakh region[8] with an aim of building robust air connectivity and to boost the tourism industry.

Airports that are available for bidding under this process in the newly formed UTs of J&K and Ladakh are Kargil and Thoise in Ladakh, and Akhnur, Chamb, Chushal, Fukche, Gurez, Jhangar, Miran Sahib, Panzgam, Poonch, Rajouri and Udhampur in Jammu and Kashmir. Considering the strategic significance, it is recommended that the IAF must be a part of the development process from the beginning itself in the selected airports (decided mutually by MoD and MOCA), to facilitate operations by military aircraft as well and put the airports to "dual use".

Path Ahead

As the world's second most populous nation with over 1.35 billion people spread out over a vast geographical expanse, the aviation market in India is currently on a high growth path. In 2019, India became world's fifth leading economy with a GDP of $2.94 trillion, surpassing France and UK, according to the IMF[9]. Its aviation market is the seventh largest with over 187 million passengers and is expected to become the third largest by 2022.[10] The National Civil Aviation Programmes's flagship plan, Regional Connectivity Scheme (RCS/UDAN) is likely to boost this volume and India is likely to emerge amongst the top aviation markets by 2040.

The Indian Air Force (IAF) is an operational and potent arm of the country's armed forces. With its operational edge, it ranks as the 4th largest Air Force in the world. The IAF's primary objective is to protect Indian aerospace by conducting a wide variety of operational missions. Since inception, the IAF has been drawn into four major conflicts with Pakistan on the western border (1948, 1965, 1971 and 1999) and one on the eastern front with China in 1962. Some other operations conducted by the IAF also include Op Meghdoot (Siachen), Operation Pawan (Sri Lanka) and Op Cactus (Maldives). The roles and missions of the IAF involve much more than only engagement with the hostile forces, as it also does participate in various peacekeeping and humanitarian missions. The IAF had provided far-reaching assistance in relief operations during various natural calamities like 1998 Gujarat cyclone, the tsunami (in 2004), floods in 2013 and the latest evacuation during the current Covid pandemic crisis.

As argued earlier, there is an urgent need to optimise civil-military efforts in multiple domains including the aviation sector that has been hit badly by the Covid-19 crisis. In 2019, India's Civil Aviation Minister released the Vision 2040 document. It is, in its present form, an exclusive civil aviation related document. It is recommended that the document be converted to a joint one to facilitate joint operations and saving on precious resources

and effort. Vision 2040 would be only as good as its execution on ground. Therefore, implementation of Vision 2040 demands a rigorous monitoring mechanism under the directions of the central govt. Towards this, a duly empowered Joint (Civil & Military) 'Vision 2040 Program Management Unit' (VPMU) must be established. This should be supported by 'Joint Vision 2040 Task Force' (VTF) for various sub-sectors. It may include senior retired Air Force officials having sufficient experience on the subject as well as for long-term continuity. VTF's tasks including the monthly reports should be communicated to the government and in due course shared with public.

The road to 2040 will not be easy. All the concerned agencies, i.e. the government, civil agencies, the armed forces and industry would need to coordinate and work together to realise the targets laid down in Vision 2040.

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Comprehensive National Power Model
An Indian Perspective

A.R. Sirsirkar

Power and its Dimensions

At the outset, it is important to develop a basic understanding of 'power'. The principal understanding of power stems from the seminal work of Robert Dahl titled *The Concept of Power.*[1] Dahl sees power in terms of 'power over' wherein he feels that 'A's power over 'B,' refers to 'A' getting 'B' to do what 'B' would normally not do. Such an understanding refers to 'A' being able to control or manipulate 'B'. This understanding has now been complemented with another facet namely the 'power to', wherein 'A' and 'B' have the power to do something. This understanding has been propagated by Hannah Arendt in her book 'On Violence.'[2] Thus while 'power over' looks at coercive ways of getting something done, 'power to' engages in a cooperative engagement. It is important to keep in mind though that whichever way power is exercised it allows/facilitates the achievement of a favourable outcome. Thus, the ability to generate and exercise power is critical to contemporary geopolitics.

The rise and decline of many countries and alliances on a global landscape over the last two centuries have been intriguing. So was the intense rivalry of the US and USSR post World War II. This rivalry played out as a hotly contested cold war during which both the countries were at the peak of their powers and felt the necessity to devise methods by which own power could be maintained and increased while that of the rival could be curtailed and diminished. The third and more important reason was the spectacular and abrupt downfall of the USSR at the supposed heights of its power. This catastrophic downfall is supposed to have alarmed Chinese leaders who immediately ordered studies to be undertaken to dissect the reasons for such

Brigadier **A.R. Sirsirkar** is an Indian Army officer from the Army Service Corps and was a participant of the 59th NDC Course.

a downfall and recommend ways by which China, a rising power, could avoid the same in the future.

Understanding Comprehensive National Power (CNP)

The term Comprehensive National Power (CNP) can be attributed to PLA Senior Colonel Huang Shuofeng who is said to have introduced the same in his book *On Comprehensive National Power* published in 1996. This book was the culmination of one of the many studies undertaken by the Chinese on Deng's directions. That said, one of the enduring definitions of *'Zhonghe Guoli'* or CNP was given by Deng Xiaoping himself when he said, "In measuring a country's national power, one must look at it comprehensively and from all sides." Further, CNP refers to the combined overall conditions and strengths of a country in numerous areas. It can be defined as a 'degree of ability to mobilise and utilise strategic resources of a country to realise national objectives.'[3] CNP is also perceived by many to comprise the comprehensive capability of a country to pursue its strategic objectives by taking the necessary actions internationally.[4] The most comprehensive definition of CNP though is as follows: 'CNP is the aggregate power (comprising hard, soft and smart power constituents) of a state and its ability to use its national capacity in the achievement of its national objectives.'[5]

Western Thought and Processes

While the Chinese are credited with the term CNP, several seminal studies have been undertaken in the US and other Western powers on national power and what its principal instruments are. In the initial decades after the second Great War, national power was largely impacted by a 'single variable,' viz. military power. Others saw it in terms of 'economic power' and consequently, Kingsley David described it in terms of 'national income' while Charles Hitch and Roland McKean spoke of power being related to 'Gross National Product or GNP'. It was only post the 1960s that a greater understanding of the subject developed in the form of three major studies.

The Clifford Model (1960) was the first one to come out with an equation on national power but looked at it primarily in terms of nuclear power, heavily influenced as it was by the usage of nuclear weapons at the end of the Second World War. It therefore looked at national power being in terms G = N x (L + P + I + M), where G = National Power, N = Nuclear Capability, L = Size of Land Mass, P = Size and Quality of Population, I = Industrial Base and M = Size of Military. Consequently, it supposedly believed that countries without nuclear weapons wielded no national power!

The William Fuchs Model (1965) looked at national power being affected by three variables namely, Population Size (p), Energy Production (z) and Steel Production (z1). It thus calculated national power (M) using any one of the nine varying formulas $M = p^2z$, $p^3/2z$, p^2zz1…, etc.

The Ray Cline Model (1975) which emerged as the most influential American model on national power is attributed to Ray Cline. Building on earlier studies, he enunciated an equation that perhaps has captured the subject in the most comprehensive manner. Ray Cline's equation on national power is PP = (C + E + M) x (S + W), where PP = Perceived Power, C = Critical Mass (population and territory), E = Economic Capability, M = Military Capability, S = Quality of Strategy and W = Will to Pursue Strategy.[6] While attributing national power to the three quantifiable critical components of population and territory, economic capability and military capability, he for the first time introduced intangible and unquantifiable but extremely important aspects like 'quality of strategy' and 'the will to pursue such a strategy.'

Chinese Thought and Processes

Two holistic studies on the subject undertaken by the Chinese Academy of Social Sciences (CASS) and the Academy of Military Science (AMS) stand out for their clarity and divergent perspectives. The 'Reformist Method' was designed by the Chinese Academy of Social Sciences (CASS), a civilian establishment that worked under Gao Heng, a close associate of Deng Xiaoping. Its studies on CNP was published through a book titled 'Comparative Studies of CNP of the World's Major Nations' in December 1996. The study saw CNP being determined by eight factors, viz. Natural Resources, Economic Activities Capability, Foreign Economic Activities Capability, Science & Technology Capability, Social Development Level, Military Capability, Government Regulation and Control Capability and Foreign Affairs Capability. Each factor in turn was further broken into smaller sub factors to arrive at 64 total indices on which CNP was aggregated. The CASS methodology for CNP calculation was undertaken through two basic stages. In 'Stage 1' a calculation of all 64 indices was undertaken through standard formulae that were based on Robert Cline's and the Japanese comprehensive index calculation method. Post this, in 'Stage 2' different weightages were allotted to factors with total CNP having a weightage of '1' and factors being given weightages in the range of '0.28' (economy being highest) to '0.08' (foreign affairs being lowest). The 'Orthodox Method' was designed by the Academy of

Military Sciences (AMS), a military establishment that undertook similar studies on CNP. CNP is attributed to Senior Colonel Huang Shuofeng of AMS. He subsequently improved his understanding of the subject in his second book on the subject *On the Rise and Fall of Nations* in 2003, which looked to address certain anomalies prevalent in his first enunciation. The AMS method looks at CNP as a system with four sub-systems which can be broken into further sub-sub systems. The four main sub-systems are: 'Material Power or Hard Power' that comprises natural resources, economics, science and technology and national defence; 'Spirit or Soft Power' that comprises politics, foreign affairs, culture and education; 'Coordinated Power' that comprises leadership mechanisms and decision making levels; and finally, the 'Environmental Factors' which are taken to be the restricting conditions such as international environment, natural environment and social environment. The AMS methodology of CNP calculation looks at CNP as a dynamic equation where the CNP is continuously evolving through the equation Yt = F (x1, x1 … Xn; t), where Yt = CNP of a country at a given time, x1, x1 … Xn = factors and t = variable of time. While this above equation gave the CNP of a country, to enable comparison of CNPs of countries, AMS proposed an equation based on Newton's third law of motion :

F = ma: $Y_t = K_t \times (H_t)a \times (S_t)b$, where Y_t = CNP, H_t = Hard Factors – mass of CNP, S_t = Soft Factors – Acceleration of CNP, K_t = Coordinated Coefficient, a = Hard Elasticity Index and b = Soft Elasticity Index.[7]

Shortcomings in Western and Chinese CNP Approaches

From an Indian perspective, both the Western and Chinese approaches to CNP have their shortcomings. The focus of the Western approach is mainly only on hard power with the economic and military dimensions dominating the quantitative analysis. Soft power was hardly included in the calculus till the 1990s. The Chinese models focus mostly on the economic domain followed by the military domain and these form the core of the model. The non-material resources are considered but are given limited consideration only, e.g. economy is given 38 percent weightage while diplomacy only 7 percent. Future sustainability of the model is not catered for. The Chinese CNP models principally focus on strengths and ignore weaknesses. In that sense, both the models are not truly comprehensive and address certain facets of power only. More importantly, none of them address 'what to do' with the CNP that is so achieved.

Key Drivers of a Contemporary Indian CNP Model

An attempt was made under the directions of India's National Security Council Secretariat (NSCS) to evolve a National Security Index (NSI) for India. This model was based on five indices namely, Human Development Index (HDI), Research and Development Index (RDI), GDP Performance Index (GDPPI), Defence Expenditure Index (DEI) and Population Index (PI).[8] Each of these indices was further divided into sub-indices. While the model was a brave effort to look at India's weaknesses, it did suffer from certain shortcomings, like human security was given undue importance; it could not predict India's future power; the efficacy for strategic decision making based on the model was suspect; and it did not consider other important factors such as natural resource, governance, etc. What then could be the determinants of an Indian CNP model that meets the requirements of contemporary times?

The first and essential requirement for working out an Indian CNP model is to find out the determinants of an Indian CNP model. This would be possible if answers to certain essential questions are found. These are: firstly, should the CNP model be a standalone one or one that is able to compare CNPs of other countries too? Second, should it focus on strengths alone or look at weaknesses too? Third, what should the factors be and should their priorities be fixed? Fourth, is there a necessity to address 'what to do' with the CNP so achieved? Fifth, if the CNP model has to work for all countries, how will different countries, developed/developing, be catered for in such a CNP model? Sixth, are national security structures 'means' or 'ways' for if they are 'ways' then they should figure in the strategies and if they are 'means' then they should be included for CNP calculation? And, lastly, are alliances/partnerships to be included in the CNP model (as no other model looks at them as of now) or do they form part of strategies to be adopted and are to be left out?

Chanakya's *Saptanga* CNP Model

While attempting to find answers to the above questions, the Chanakya's *Saptanga* CNP model is instructive. In Book VI of Chanakya's treatise *Arthashastra* titled 'Basis of the Circle,'[9] Chanakya also known as Kautilya, lays out his approach towards CNP. Chanakya's approach towards CNP is known as the *'Saptanga* (*Sapta* = seven and *Anga* = parts) Model'. These seven parts as per Chanakya refer to the seven *'prakritis'* or factors from which the power of a state is derived. These are *'Swamin* – ruler,' *'Amatya* – councillors,' *'Janapada* – territory/resources,' *'Durga* – forts,''*Kosa* – treasury,' *'Bala* – army'

and *'Mitra* – friend/ally.' He then goes onto prioritise these *prakritis* with the *'Swamin'* having the maximum and *'Mitra'* having the least priority. Further, each of the *prakritis* has its own *sampat* (strength) or *vyasana* (weakness) which must be continuously assessed for each *prakriti*. After consideration of these priorities and strengths/weaknesses, a state generates any of the 'three *shaktis'* singularly or in combination. These three *shaktis* are *'Prabhava Shakti'* (hard power), *'Mantra Shakti'* (power to influence/counsel/coerce or soft power) and *'Utsaha Shakti'* (power of the leader to induce and drive other *prakritis*).[10] Out of these three *shaktis*, as per Chanakya, the *'mantra shakti'* is the most important.

However, what is important to note is that, it is an interaction of these three *shaktis* which produces the CNP of a state. Besides all of the above, where Chanakya's model is unique is that, it dwells upon how the CNP so generated should be utilised. Elaborating upon the same it states that, as the global geopolitical system is constantly in a state of flux, the strategies to be utilised in the same also are dynamic. Added to this, at any given time, the state must keep in mind as to whether its *prakritis* are a *sampat/vyasana*. Keeping these internal and global dynamics in mind the state uses a combination of any of the three *shaktis (prabhava/mantra/utsaha)* to adopt one or a combination of six possible strategies called *'Shadgunyas.'* These strategies are: *'Sandhi'* (making peace), *'Vigraha'* (hostilities), *'Asana'* (remaining stationary), *'Yana'* (marching/preparing for war), *'Samshraya'* (seeking protection/coalitions), and *'Dvaidibhava'* (dual policy or collaboration-cum-competition).[11] Chanakya concludes his exposition by stating that the ultimate goal of any state for generation and subsequent utilisation of CNP is always *Yogakshema*, which means peaceful enjoyment of prosperity and welfare of the subject.[12]

Having had a look at Chanakya's *Saptanga* CNP Model, it is apparent that it offers some answers to several questions posed earlier. Chanakya suggests that power must be comparative to offer an understanding of the relative hierarchy of nations at any given time. There is also an attempt to minimise weaknesses and maximise power. An inherent flexibility in its construct factors in global geopolitical flux and the changing internal environment.[13]

Fine Print of Indian Approach

From a national security perspective, the dilemmas facing Indian strategists has always been over 'what to do' with CNP. There has also been a propensity to view the structures of national security as 'ways' rather than 'means,' thereby limiting its decision-making capability. Chanakya suggests that alliances can add 'strength,' but alliances and partnerships rarely find

mention in any CNP models. Should India factor this in while constructing its own CNP model is a moot point considering that the power potential of both its principal adversaries, China and Pakistan, are impacted by their close alliance.

Based on Chanakya's *Saptanga* Model and contemporary Indian strategic thought, the likely attributes of CNP in order of importance, also known as 'Factors' of the Indian CNP model are: Strategic Functioning Capability, Economic Power, Human Potential, Science and Technology Capability, Military Power and Quality of Governance. Each of these 'Factors' have several sub-factors with weightages that allow for a reasonable quantification of the model. There is the flexibility of replacing/adding sub-factors dependent on emergent and contextual realities. It is possible thereafter to assign weightages to each one of these factors that would help arrive at a possible score that can be used in comparison to the CNP of other states.[14]

A Closer Look at Factors

The economic power of any nation in contemporary times is the bedrock on which all other elements of national power are based. It is also an element of hard power that can be used for coercive diplomacy, and hence is one of the principal factors of CNP. An assessment of a country's economic power can be done by measuring several sub-factors such as GDP, foreign trade, parameters of economic strength, availability of natural resources and levels of energy security.

Science and technology capability allows nations to apply the multiplier effect on other factors as it significantly enhances capability. In addition, as the ongoing US-China standoff over 5G technology shows, an access to/denial of technology can significantly change the economic growth trajectory of nations. An assessment of a country's science and technology capability can be done by measuring certain sub-factors which are: 'Number of Patents,' 'Number of Researchers/Million People,' 'Scientific Articles Published/Million People,' 'R&D Funding as percentage of GDP,' 'High Tech Exports as percentage of Overall Exports' and 'Number of Start-ups and their Cost'.

Effectiveness of governance is the common thread that can maintain/derail progress of other factors. A high effectiveness of governance is thus most essential. This would be measured by assessing the following sub-factors: 'Political stability,' 'Effectiveness of Government,' 'Rule of Law,' 'Levels of Corruption,' 'Ease of Doing Business' and 'Accountability to People'.

While earlier CNP models have considered the total population as a factor, it is felt that only a demographic dividend would be of value. A measure of the same can be ascertained from the Human Development Index (HDI) which would be measured from the three sub-indices of health, education and inequality. This factor is of importance to India as it is currently its Achilles heel and is likely to significantly pull down any aggregation of CNP. However, speedy remedial measures would offer India the dual opportunity of prosperity through development and building CNP. Measuring human potential is complex and highly subjective. Health, education, reduction of inequalities, societal and cultural strengths and fault lines, and the collective will of the people are the major sub-factors.

Military power remains the quintessential hard power element and remains an important coercive instrument available to the state. The possession of military power remains essential for ensuring national security, which in turn drives other factors such as economic power. The relative importance of military power can be debated but its necessity has no doubt. Military power would be measured by assessing the following sub-factors: 'Total Strength of Military to include Manpower and Equipment,' 'Defence Expenditure as percentage of GDP,' 'Import of Arms as percentage of Overall Defence Budget,' 'Defence R&D as percentage of Total Defence Budget,' 'Percentage of Defence Spending on Capability Development,' 'Nuclear Capability' and 'Number of Strategic Think Tanks in Top 100.' Chanakya's Model has a lower weightage for military power, which has been reviewed to suit contemporary times.

Leadership is perhaps one of the most important factors, for it gives vision and direction to all other factors. It is also an essential factor that signals the nation's intent to other nations. This would be measured by assessing the following sub factors: 'Strategic Leader—Global Standing and Leadership Quality,' 'Strategic Autonomy,' 'Geopolitical Relevance,' 'Strategic Decision Making Capability—assessed through the 'Availability of National Security Strategy & National Military Strategy' and 'Structures for National Security Decision Making,' 'Foreign Policy Capability—measured through foreign service cadre strength' and 'Strategic Will.' Another important sub factor of this factor is the 'ally' (*Mitra* of Chanakya's Model) which would be assessed through: 'Existing Strategic Partnerships and Alliances', 'Standing and Ability to Influence Decision making in the United Nations General Assembly/United Nations Security Council' and 'Presence in Global/ Multilateral Organisations/Institutions'.

Functioning of Indian CNP Model

Having seen the determinants that would be assessed in an Indian CNP model, let us now see how such an Indian CNP model would function. This model would primarily function in two stages, namely 'Stage 1 – Calculation of Basic Value of Factors' and 'Stage 2—Allocation of Weightages.'[15]

In Stage 1, each factor would have a weightage of 100 points and this would be further broken down between sub/sub-sub factors. As a representative example, the breakdown of the value of one sample factor into sub/sub-factor to understand 'Economic Power' is: sub factor 'Dependence on Foreign Trade' with total weightage of 20 broken down into sub-sub factors of 'Foreign Debt to GDP Ratio' given value of 10 and 'Amount of FDI in Economy' given value of 10.[16] Each country would be allotted a value for each sub-sub/sub factor out of the total allotted value points in a comparative manner. These values are of two types quantitative and qualitative. Quantitative values related to various factors can be ascertained from reports of global institutions. Some examples of the same are: 'Economy'—World Development Indicators and World Development Report (World Bank), World Economic Outlook (IMF), Economic Intelligence Unit Report (The Economist) and Trade and Development Report and World Investment Report (UNCTAD); 'Harnessing Human Potential'—Human development Indicators (UNDP); 'Science and Technology'—Knowledge Economy Index (KEI) (World Bank); 'Military'—Sipri Military Expenditure Database (SIPRI) and CIA World Factbook (CIA). On the other hand, qualitative factors would have to be assessed through a collective effort of domain specialists on the subject. Based on such an evaluation a quantitative value of all the factors of each country would be ascertained. This would allow individual countries to develop an understanding of their existing CNP and areas of strengths/weaknesses.

While Stage 1 facilitates working out CNPs of individual countries, it does not address existing anomalies in the geopolitical/geostrategic landscape such as varying levels of economic development, availability of resources, demographic distortions and levels of security. Examples of this are: level of economic development (developed/developing), availability of resources vs demand on the same (small country with large mineral resource, e.g. Saudi Arabia or vice versa and state of security of the country (whether country is in conflict/or at peace). Besides this, each of the 'factors' themselves have varying priorities and significance at any given time and the same needs to be catered for in the model. This required correction is addressed through Stage 2 through allocation of weightages to factors. The recommended

weightages to the factors total CNP value at 100, weightage to Strategic Functioning Capability of 22, to Economic Power of 20, to Human Potential Harnessing of 18, Science & Technology Capability of 15, Military Power of 13 and Quality of Governance of 12. Based on the above allocation of weightages, CNP's would be worked out in relative proportion. For example, for Economic Power, it is possible that the weightages for USA could be 18 out of 20, for China 15 out of 20 and for India could be 10 out of 20. Thus, while allotting weightages, various extant anomalies can be factored in, and a holistic CNP be worked out. Doing so would enable us to rank the countries as per their CNP so generated and ascertain their extant power hierarchy.

Conclusion

The essential nature of the modern nation states is to exercise power in pursuit of national interests. Such power is dependent on the CNP of the state. India needs to cater for the use of non-state actors/proxies by China and Pakistan in its estimate of their CNP.[17] While the CNP provides the means, it is essential that it is gainfully utilised always by the adoption of well thought out ways to shape diverse and multi-domain strategies that are linked to all the factors discussed in the article. All these strategies must engage with one another in a reinforcing cycle, and every nation would do well to continuously review them and apply necessary corrections as and when required. While, India achieves its rightful place in the comity of nations by preferring 'power to' over 'power over,' its CNP should primarily be utilised to realise Chanakya's goal of *'Yogakshema.'* For this, it is essential that the proposed Indian CNP model along with suitable multi-domain strategies be developed at the earliest for the new war of CNPs.[18]

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Leveraging India's Penisular Geography and Sea Power to Counter Chinese Ambitions in the Western Indo-Pacific

Srinivas Kudaravalli

Understanding the Indo-Pacific Construct

The world's economic centre of gravity is shifting eastward to Asia since the last two decades as the interconnectedness of the Indian and Western Pacific Oceans has become increasingly intense, in both the economic and security dimensions. With increasing Chinese maritime influence in the Western Pacific and its growing politico-military assertiveness, which has challenged the US influence in the region, there has been a seamless fusion of the Indian Ocean Region (IOR) and the Western Pacific into a single region that has given rise to the *Indo-Pacific* construct.

In this construct, the Indian Ocean Region (IOR), which essentially is the *Western Indo-Pacific,* is now a strategic focus area of global big power politics. Its abundant energy reserves, rich natural resources, growing importance of its ports and Sea Lines of Communication (SLOCs) and the rise of its littorals into significant regional/global players are all transforming the IOR in many ways. The Indian Ocean countries are now linked to each other and to the rest of the world more closely than ever before. Concurrently, a wide range of non-traditional threats, maritime territorial disputes, weak and failing states in IOR's rim, environmental challenges and more importantly the increasing ambitions of China in this region are posing unparalleled challenges not just for India and the IOR littorals but also for the extra regional powers who have their vested interests. The IOR has been the principal driver of India's maritime strategy till recently. But China's ambitious Maritime Silk Route (MSR) programme and its increasing presence in the IOR now lends it a

Commodore **Srinivas Kudravalli** is an Engineer from the Indian Navy and was a participant of the 59th NDC Course.

position of being India's maritime neighbour, compelling India to shape its approach towards Indo-Pacific based on the new strategic environment.[1]

Responding to the growing heft of the Chinese Navy, i.e. Peoples' Liberation Army Navy (PLAN), the last decade has seen a clear enunciation of counter-strategies for this region by countries like the US, Japan and Australia, which call for a more active role of India in the Indo-Pacific, particularly in the IOR and even extending to the South China Sea area. India, thus far, has been positive but circumspect about expanding its maritime focus from the IOR to the larger Indo-Pacific construct and formally joining the US, Australia and Japan to form a trans-regional maritime grouping called the Quad to contain/balance China's belligerent and coercive maritime expansion. However, China's recent aggressive behaviour across the Line of Actual Control (LAC) has bolstered growing opinion amongst Indian maritime strategists that it must leverage its maritime capability beyond its traditional beat of the IOR into the wider Western Indo-Pacific up to the South China Sea (SCS) in conjunction with the Quad, to relieve the pressure it faces on its northern frontiers. Strategically bound to turbulent continental frontiers in its North, India has remained relatively sea blind in many aspects till the unprecedented rise of China and its forays into the Indian Ocean. Consequently, India's priorities in the maritime domain seem to be finally crystalising over the last decade. This article explores the emerging maritime dynamics in the grossly unbalanced strategic environment of the IOR and the wider Western Indo-Pacific up to the South China Sea. It also examines the opportunities for India to leverage its growing sea power to counterbalance China in the region and recommends suitable strategies for the same.

Turbulence in the IOR

Several developing trends in the IOR have a direct bearing on India being the Net Security Provider in the region. Chief among them are setting up basing and logistics destinations by extra regional powers, including China, to sustain naval operations away from their home shores. The establishment of the MSR as part of the Belt and Road Initiative (BRI) by China and frequent forays into the Indian Ocean by PLAN under the premise of safeguarding its merchantmen is another cause for concern. The collusive support of China in Pakistan's naval modernisation plan and its quest for increasing Maritime Domain Awareness (MDA) around littorals in the IOR is enough to raise some alarm in India.

All indicators point at the IOR and the Western Indo-Pacific emerging as the new pivot in global geopolitics. In simple words, it can be surmised that if

the security of this region gets compromised, economic activities across much of the globe can face moderate to severe derailment. This calls for proactive co-operative engagements between the littorals for peace and stability in the region. China is leveraging this situation to entice the IOR littorals on the premise of infrastructure development using predatory economics. It is, therefore, essential to analyse China's strategic intent to arrive at India's options in the wider Western Indo-Pacific and opportunities for engagement with players other than China in the SCS.

Growing Economic Significance of the IOR

The IOR's importance essentially lies in its vital shipping routes for global maritime trade, the SLOCs and its large energy and natural resources. The region houses over one-third of the world's population, 16.8 percent and 27.9 percent of the world's proven oil and natural gas reserves[2] respectively, abundant natural resources and biodiversity.[3]

The volume of trade carried across this region by more than 100,000 ships annually through vital shipping lanes in the Indian Ocean raises the stakes in the security of this trade. Additionally, half the world's container traffic one-third of its bulk cargo and two-thirds of world's oil shipments pass through this region. The world maritime trade volume touched 11 billion tons in 2018[4] with container traffic through the region's ports increasing continuously. The Persian Gulf is estimated to have 65 percent of world's proven oil reserves.[5] More than half of the world's oil exports and nearly all Asia-Pacific's imports pass through these waters. The US, Europe, Japan, Australia, India, China and many Southeast Asian countries depend on oil from this region in a big way. As more than 80 percent of the world's sea borne trade in oil transits through the seven choke points of the IOR,[6] any disruption in the traffic flow can cause volatility in the prices of oil and commodities.

The IOR is also estimated to contain 80 percent of the world's known gold reserves, almost 98 percent of its diamond reserves, and 60 percent of the global Uranium stocks besides Tin and abundance of seabed minerals. Further, 20 of the strategic raw materials out of the 40 imported by the western countries are mined from this region. The Indian Ocean fisheries are also the third most important in the world, accounting for more than 15 percent of the world's total fish production. Eastern IOR is the fourth largest producing region in the world with 8 percent of the global catch while the Western IOR is the world's sixth largest producing region with 6 percent of the global catch as per 2016 figures.[7]

Security Dimensions & Major Players in the IOR

The IOR is home to rapidly expanding militaries with rising defence expenditures. It is estimated that 42 percent of the world's conflicts are associated with the Indian Ocean countries.[8] According to the Fragile States Index (2013-19), three of the top five fragile states are also located in this region. The maritime security problems in the IOR are linked to failed or weak states largely. Specific challenges are maritime terrorism (e.g., 26/11 Mumbai attacks), piracy and armed robberies particularly off Somalia, Gulf of Aden and Strait of Malacca, smuggling of arms and drugs, illegal trafficking, infiltration, asymmetric threats by non-state actors, illegal migration, Illegal Unreported and Unregulated (IUU) fishing, marine resources security and other environmental threats. These can disrupt the energy security, ISLs and global economy in turn and, therefore, many extra-regional powers continuously deploy their forces in this region and China has joined this bandwagon since 2008.

The volatile situation and China's growing influence and assertiveness in this region have significant implications for the US as its Naval Support Facility at Diego Garcia is a staging area for counter-terrorism efforts in and around the Persian Gulf besides being a potential secondary theatre in the deepening strategic competition with China.[9] This is the most important driver for the US to maintain a continued presence of US forces in the region and building an alliance with India. Increasing tension with Iran in the recent times could also sharpen its focus on this region. Additionally, most of the raw materials used by the US industry are supplied by the Indian Ocean,[10] making the US highly reliant on the security and stability in the IOR.

Japan is a maritime nation and the world's third largest economy. Being a resource deficient country, it is highly dependent on maritime transport for sourcing critical raw materials and export manufactured goods. In the Indo-Pacific expanse, China has territorial disputes with Japan over Senkaku Islands in the East China Sea (ECS) and over the overlapping EEZs. Owing to the strategic advantage these islands and the ECS offer in both economic and military terms, China is aggressively pursuing its agenda and even declared ADIZ in the ECS in 2013.[11] In the Indian Ocean context, Japan's maritime security interests mainly relate to protection of its trade routes and safeguarding its diaspora in the region. Japan imports more than 90 percent of its oil from the Persian Gulf and its trade with the European Union and Africa through the Red Sea route is significantly high. Maritime security is, therefore, critical for Japan's economic security. Thus, to protect its trade flow, IOR would continue to be a focus area in the foreign policy of Japan

for the foreseeable future, while forging an alliance with India helps Japan to counterbalance China.

Australia, which has been edging closer to embracing the IOR (now part of the lndo-Pacific construct) for many years, finally declared in its Defence White Paper 2013 that the Indian Ocean is a key interest area for the country. This interest hinges on two aspects. First, Australia's economy predominantly relies on export of primary resources which necessitates a free and open Indo-Pacific, through which most of its seaborne trade transits. Second, preserving rule-based order is of great relevance to Australia as it is bestowed with the third largest EEZ in the world under the provisions of the United Nations Convention on the Law of the Sea (UNCLOS). Australia's EEZ exceeds its land area making the Blue Economy a vital cog in Australia's growth trajectory. Australia is, therefore, susceptible to disruptions/threat to any of these aspects. The hegemonic actions by China in the SCS and its forays into the IOR, where Cocos Islands are located, has made India a key partner for Australia in its Indo-Pacific strategy.

China's ambitions to gain prominence in this region in its quest of becoming a global power have already upset Asia's geopolitical balance besides seriously threatening the sole superpower status of the US. Coupled with these, PLAN's forays into the IOR and the emergence of Indo-Pacific as the pivot of global economic growth and strategic contention has put the security environment in the western Indo-Pacific at risk given that China's influence in the region will continue to grow. Considering China's growing economic heft and the Communist Party of China's (CPC) resolve to modernise its military, particularly the People's Liberation Army Navy (PLAN), the battle for dominance of the IOR is truly on.

The words of the great American Naval strategist,[12] Admiral Alfred Thayer Mahan thus ring true in the current strategic milieu:

> *Whoever controls the Indian Ocean dominates Asia. The ocean is the key to the seven seas. In the 21st century, the destiny of the world will be decided on its waters.*

Is China Undermining India's Geostrategic Advantage in the IOR?

To achieve its core national interests of the reunification of Taiwan and consolidating the territorial sovereignty of all its disputed territories on its periphery before its centenary in 2049, China began modernising

its military, particularly the PLAN, at a frantic pace over the last 25 years after having secured the economic might through manufacturing. China's strategic imperative in the IOR is, therefore, to protect its SLOCs for transportation of crude oil and other growing energy needs, along with the trade that flows westwards from China. It is relevant to note that about 40 percent of China's oil imports transit through the Strait of Hormuz and around 82 percent of China's oil imports transit through the Malacca Strait,[13] making the Indian Ocean an area of severe discomfort for China. Further, the quest for ensuring uninterrupted movement of its burgeoning trade in an export-driven economy has drawn it to have long term economic and military ties with Srilanka, Pakistan, Bangladesh and Maldives as conduits and markets for the smooth westward flow through the Indo-Pacific waters of its manufactured goods. Gwadar Port of Pakistan, being developed by China as part of China Pakistan Economic Corridor (CPEC) of the Belt and Road Initiative (BRI), the 99-year lease of Hambantota Port developed in Srilanka and a military base in Djibouti are examples of such ties that have a bearing on India. China's efforts to build the Kra Canal to overcome its Malacca dilemma has, however, been in vain with the Thai Government recently rejecting the proposal. Besides these, China also has interests in tapping the vast fishing potential as well mineral resources through deep sea bed mining in the IOR. Due to the growing number of Chinese nationals working in the region on various infrastructure projects and large investments made in the IOR littorals, the China's Defence White Paper 2015 shifted its earlier military Strategy to '*far seas protection*' indicating its intention to enhance its presence in the IOR. Thus, given the current global great power dynamics, China and India are no more just continental neighbours with a longstanding border dispute, but significant maritime adversaries with the latter mounting a serious maritime challenge in the IOR.

In the above backdrop, India's peninsular geography and its strategically located island territories across its East and West Coasts afford an immense advantage to control the SLOCs between the oceans and consequently deter China from opening another front in the maritime domain. The Andaman & Nicobar Islands play a crucial role in monitoring the world's most strategic Malacca Strait,[14] through which the entire energy basket of China sourced from the Persian Gulf transits to its shores.

With a primary goal of economic transformation, India's foreign policy objectives have thus far been concentrated in keeping the region peaceful by increasing regional co-operation. However, China's increasing forays into these waters by expanding its maritime geography are undermining this

very significant advantage that India enjoys in the region. Having already established military support and logistic base, PLAN's assets are showing near continuous presence in the western part of this region and it is only a matter of time before PLAN aircraft carriers venture into this area by 2025 or so, to project power and aim for credible sea control, when the situation so demands.

India's Leverage

Though China has been exhibiting belligerence in the South and East China Seas with its maritime neighbours for over a decade, India has largely remained neutral focusing only on its area of interests up to the Andaman Sea in the East. However, with China influencing its friendly but economically vulnerable partners from among the littorals to gain prominence in the IOR, India is left with no option but to consider leveraging its sea power to safeguard own interests and support some of the Indo-Pacific strategies articulated by the extra regional powers like the US, Japan and Australia to contain the ambitions of China, while concurrently showing utmost resolve and strength on its disputed continental borders.

Whereas the Indian Navy can presently deter China from concurrently venturing into the maritime theatre in the IOR while it tries to needle India on its Himalayan frontiers, much still needs to be done by India in terms of capacity building and keeping pace with the PLAN modernisation. This is essential to leverage India's peninsular geography and the strength of its strategically located island territories to counter China's ambitions in the region.

It is a fact that China can operate from a position of strength East of the Andaman Sea, but India can certainly leverage the superiority of its sea power in the Western Indo-Pacific where China has significant interests. India's security relationships with the IOR littorals has seen a significant improvement over the last two decades, with focus on the Mozambique Channel, the Persian Gulf and the Malacca Straits. Assuming the lead role, Indian Navy is also generating comprehensive Maritime Domain Awareness (MDA) picture for regional and extra regional navies operating in the IOR through its presence and surveillance missions, maintaining surveillance through the White Shipping Agreements, co-ordinated patrols with regional countries and sharing the same through the Information Fusion Centre (IFC-IOR). This will help in closely monitoring the movements of Chinese flagged vessels through vital shipping routes in the IOR, as also closely tracking the PLAN assets operating in the region, and would aid in exercising credible

sea control in the required areas in case of any conflict escalation along the land borders.

Likewise, in the geographic continuum to the IOR, the South China Sea (SCS) matters for India as nearly 30 percent of trade transits through these waters. India, therefore, has consistent co-operative engagements with the navies of the ASEAN members, Japan, Australia and the United States. Further, various logistic exchange agreements facilitate reciprocal and mutual support with the extra regional powers operating in the Indo-Pacific. Consequently, these have facilitated the Indian Navy to sustain its presence well beyond the East of Andaman Sea to safeguard India's maritime interests in the secondary area of interest and demonstrate its power-projection potential. However, sustaining combat operations in the SCS would require significant accretion of capacity and capability to emerge as a doable proposition in future with commensurate budgetary allocation. For the present, flag showing, presence missions and joint exercises with friendly navies can be resorted to in this region.

These current lines of effort of the Indian Navy will facilitate the use of the comprehensive maritime power of the conglomerate of friendly navies in case any conflict escalation by China across the LAC spills over into the maritime domain. This will be vital not only for safeguarding India's trade transiting through the SCS, but also to interdict Chinese shipping routes as a part of maritime trade warfare in the Western Indo-Pacific theatre. The maritime theatre could, therefore, be effectively used for escalatory or de-escalatory measures in a conflict scenario with China.

Conclusion

The Indo-Pacific has gained more prominence over the past few years due to China's heightened politico-military assertiveness that has challenged the rule based world maritime order and the status of the US as the world's principal hegemon. China's belligerent actions and behaviour in the SCS and its growing and diverse interests in the IOR seriously threaten India's regional influence and aspirations. Seen through multiple prisms, China's grand strategy to become a global power by 2050 threatens the existing world order, of which India is a key stabilising element. However, PLAN's formidable presence in the IOR in the foreseeable future is inevitable given China's dependence on energy imports from the IOR, its trade flowing westwards and the consequent need to protect its SLOCs, ambitious BRI infrastructure and its diaspora. Although China's close economic and political ties with IOR littorals may dilute India's influence in the region, it

will be a while before it seriously challenges the Indian Navy in the Western Indo-Pacific. By no means should this lull the Indian Navy into any sense of complacency as this competitive advantage is rapidly eroding with the PLAN recently overtaking the US Navy as the largest navy in the world, numerically.

With the current stand-off across the LAC and China's reluctance to peacefully settle the ongoing boundary dispute, it is prudent that India leverages its strength in the maritime domain in the Western Indo-Pacific to ease off pressure along the land borders. Concurrently, continued emphasis should be laid on the 'Act East Policy' to increase co-operative engagements with the ASEAN and the network of relationships with extra-regional Indian Ocean players such as US, France, Australia, France and Japan. Prioritized and focussed development of Andaman & Nicobar Islands infrastructure to leverage the advantage they offer to India to act as a '*Strategic Eye of the East*' (SEE) is of utmost importance. Thus, sustained international maritime security co-operation combined with a concerted strengthening of the Indian Navy's combat capability that allows it to project maritime power beyond the IOR would make it difficult for China to dominate the region. Empowering naval diplomacy and improving intelligence sharing are essential elements of such a strategy. As the largest democracy in the world, India's strategic location in the IOR coupled with its growing significance in the world affairs, makes it well poised to influence the strategic future of the Western Indo-Pacific not just for the littoral nations, but also for several extra regional powers.

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NDC Journal

Articles

Crisis in Eastern Ladakh
the Big Picture

Manoj Kumar Mathur

One hundred victories in one hundred battles is not the most skilful.
Seizing the enemy without fighting is the most skilful.

—Sun Tzu, 6th century BC[1]

Abstract

China's peaceful rise is long over; it has now started displaying arrogance and belligerence from the East China and South China Seas to its Western land border with India. The Galwan Incident in Eastern Ladakh is a result of this new behaviour. The reasons for the ongoing Chinese aggression can be found in its national characteristics and strategic culture, recent reforms in PLA, and in its leadership. The decisive and courageous action of the Indian Army's soldiers at Galwan on the night of 15/16 June 2020 demonstrated how a tactical operation can lead to strategic deterrence.

Introduction

China and India are ancient civilisations and fast-developing countries which share a long history of friendly exchanges, one war and regular patrol clashes over an unresolved border. Bilateral exchanges began rapidly flourishing in the late 1980s and picked up tempo in 2008. As per some experts, this smooth course was altered on August 05, 2019, when India's Home Minister amended Article 370 in the Parliament, which asserted that Aksai Chin (occupied by China since 1962) an inseparable part of the Indian union territory of Ladakh. This seems to have upset China and considering

Brigadier **Manoj Kumar Mathur** is an Infantry officer from the Indian Army and is a participant of 60th NDC Course.

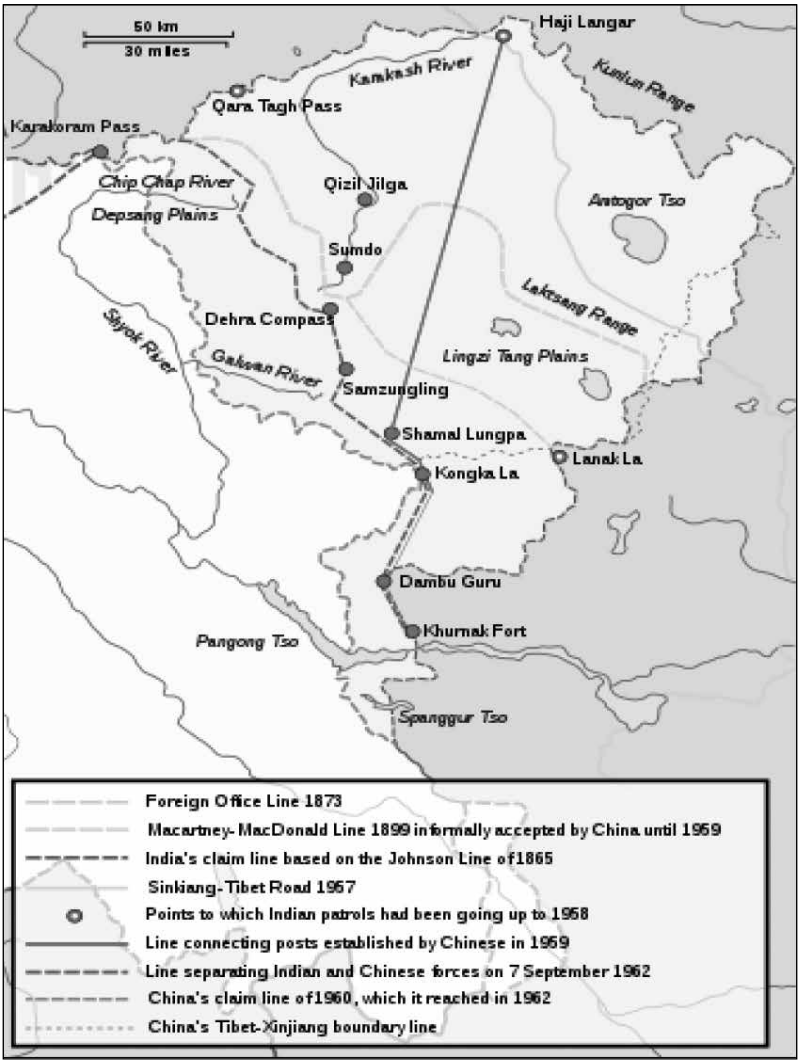
its obsession with security on its periphery, could well be the cause for their recent widespread attempts to change the status quo in Eastern Ladakh.

The two important questions to ponder over upfront as the crisis remains live are: First, What was/is CCP's/Peoples Liberation Army's (PLA) larger aim against India? Second: Has CCP/PLA achieved its aim? The statement by Zhao Lijian, CCP's foreign ministry spokesman of July 03, 2020 has some hints. He said, "India should avoid a strategic miscalculation with regards to China."[2] It is in the backdrop of these complicated manoeuvres on the ground and the larger strategic ramifications that examining geo-strategic aspects of India-China relations becomes essential.

Differing Perceptions of the Border

Turmoil within China, confusion over sovereignty of Tibet, and many other reasons resulted in the British leaving India without clearly demarcating its northern borders. This ambiguity has been historically defined by four varying lines. First, the *Ardagh-Johnson Line (1865)* along the Kūnlún Shān Mountains showing Aksai Chin as part of J&K, India by WH Johnson (Survey General of India). Second, the (British Crown) *Foreign Office Line (1873).* Third, the *McCartney-Macdonald Line (1899),* closer to Karakoram Range, excluding Aksai Chin from India and including Lingzi Tang Plains towards China. The Ardagh-Johnson Line represented the British *'forward school'* which wanted to advance the boundary as forward as possible to defend against Russian Empire's imagined expansion.[3] The Maharajah of J&K maintained a fort at Shahidulla (Xaidulla) 100 km into Tibet from Karakoram Pass, to protect caravans.[4] Hence, this is India's claim line. The fourth line is China's Claim Line of 1960, which it reached in 1962. Following Chinese reluctance to acquiesce to the conservative McCartney-MacDonald Line, the British reverted to the Ardagh-Johnson Line. This was inherited by India in 1947.[5] No official boundary has been negotiated between China and India. India claims the border along the Ardagh-Johnson Line,[6] whereas China probably considers Chinese Claim Line of 1960 as the boundary;[7] a vestige of the 19th century Great Game. Mr Gautam Bambawale rightly explains this: "China's mysterious line never existed, except in the Machiavellian mind of Zhou Enlai." Similarly, there is difference in the perceptions of actual ground alignment of the Line of Actual Control (LAC).

The Four Lines[8]

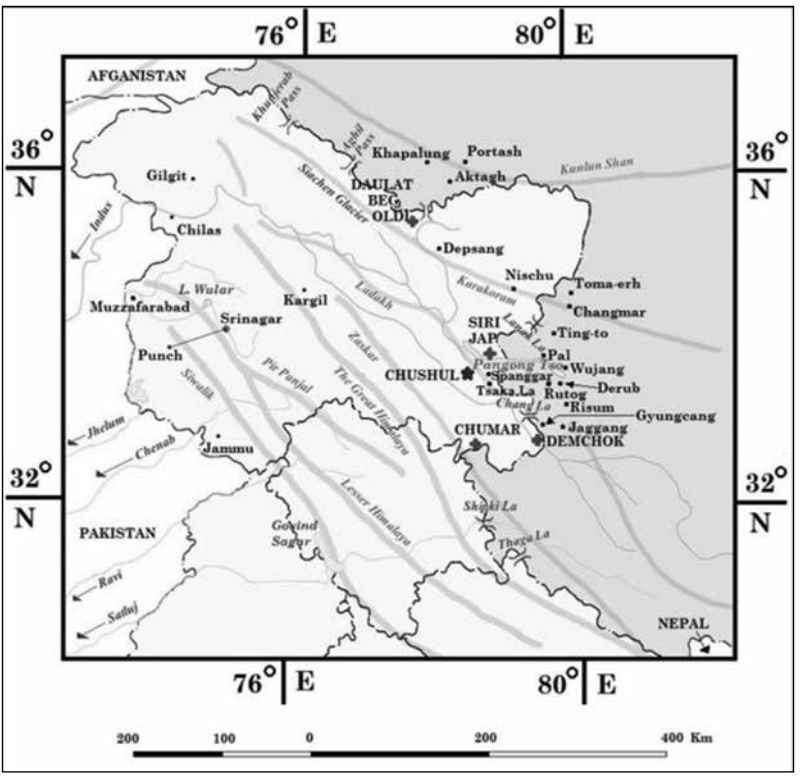


Complications of Geography & Terrain

The boundary in Eastern Ladakh is over 800 km long. Of this, approximately 550 km is in the form of the LAC and balance is International Border. Aksai Chin is nestled between the Karakoram Range (*Black Gravel*) in the West and Kunlun Shan Mountains in the East. Aksai is a Turkic word meaning 'white stone desert' and Chin means 'Pass'.[9] It covers an area of 37,244 sq km. The Karakoram Range culminates at the Great Shyok Bend near the Shyok Village. Ladakh Range emanates from the Karakoram Range

and the Southern extension of the Ladakh Range is called the Kailash Range. The Shyok River (*River of Sorrows*) starts its journey from Rimo Central Glacier, till Shyok Village, where it takes the Great Bend and meets the Nubra River at Diskit and finally flows into Pakistan Occupied J&K. Chip Chap River (Silent River), Raki Nala, Jiwan Nala and Galwan River all flow from East to West and drain into the Shyok River. Hence, the lay of the ground is East to West, favouring the PLA.

Geography and Terrain[10]



The Durbuk-Shyok-Daulat Beg Oldie (D-S-DBO) Road is the lifeline connecting Daulat Beg Oldie (DBO) to Leh. DBO has an advance landing ground; highest in the world (16,614 feet). Further North lies the Karakoram Pass (18,176 ft), which is India's Northern-most pass. The D-S-DBO road is connected by a number of bridges en route leading from *Morgo (Gateway to Hell)* onto *Depsang Plains* at an altitude of *15,000 ft*, which is an open piece of land, albeit in a *Super High Altitude*. PLA on the other side can build-up from Western Highway (G219) towards Depsang Plains (972 kmwide

flatland at 15,000 ft) with ease. Hence, Depsang Plains emerge as a potential mechanised warfare battlefield. In 1963, Pakistan handed over 5,800 sq km of Shaksgam Valley (*dried up heap of pebbles*) to China without India's consent or that of local inhabitants. This Chinese occupation of Shaksgam Valley came in the wake of Pakistan and China forming a strategic alliance to counter their economic and political adversaries.[11] The Karakoram Highway through the Shaksgam Valley now facilitates the China Pakistan Economic Corridor (CPEC) by connecting China to Pakistan's Gwadar Port on the Arabian Sea.[12]

Current Impasse

The foundation for the management of the LAC in Eastern Ladakh, thus far, was as per the protocols and confidence building measures (CBMs) in the four formal agreements of 1993, 1996, 2005 and 2013. In his book *China's India War*, Bertin Lintner has elucidated that India's Forward Policy of the 1960s was not the real cause of the 1962 war. Similarly, non-operationalisation of Article 370 and infrastructure developments in Eastern Ladakh are not the reasons for the current impasse. It is a PLA ruse, yet again. PLA started track construction to Patrolling Point 14 in the Galwan Valley in winter 2019. This directs to exploiting India's Covid-19 pandemic weakness. Apropos, PLA's belligerent action appears to follow the idea of *"Loot a burning house"* (趁火打劫 / 趁火打劫, *Chèn huǒ dǎ jié*); one of the *'36 Stratagems'*.[13] It suggests attacking the enemy when at its weakest and without mercy, so as to annihilate it to prevent future troubles. The barbaric hand-to-hand clash of 15/16 June 2020 in Galwan Valley resulted in 20 Indian soldiers, including a commanding officer, attaining martyrdom. The PLA is reported to have suffered between 42-150 fatalities. PLA like a Shanghai street gang armed with spiked iron rods, knuckle-dusters, etc., and with reserves in tactical depth had come well prepared. Yet, this area had not seen a border dispute earlier and did not witness a single bullet/shell/bomb being fired. This is a certain shift in China's behaviour and PLA tactics. PLA while upping the ante from push and shove of Doklam (2017) to clubs kept the engagement below two thresholds—Nathu La/Cho La incident of 1967 and nuclear.

Charles Clover and Sherry Fei Ju noted a major shift in depiction of PLA in Chinese films; as a global military superpower. The shift started, they say, with *Wolf Warrior* in 2015, *Sky Hunter* in 2017 and *Operation Red Sea* in 2018. Apropos, Chinese diplomats now respond to diplomatic tussles with verbal aggression akin to *Wolf Warrior diplomacy*, as Gideon Rachman recently

noted.[14] One of the *36 Stratagems* propagates, *"Disturb the water and catch a fish"* (渾水摸魚 / 浑水摸鱼, *Hùn shuǐ mō yú*). It means; create confusion and exploit it to further one's own goals.[15] It appears China is using this against India by not agreeing to status quo ante on the LAC (until August 2020). A parallel can be drawn with the March 02, 1969, border skirmish across the frozen Ussuri River between Soviet Border Guards and the PLA. This involved fist fights, use of clubs and sticks, and stabbing/bayoneting in the head, chest, and neck. Dmitri Ryabushkin's report on this skirmish includes: *"As to Chinese losses, information about them is very discrepant. Chinese officials hide the true figures …"*[16] Fifty-one years later, this pattern re-emerged in Galwan.

The Galwan River is named after Ghulam Rasool Galwan (Galwan in Kashmiri dialect means 'Strong Man') who guided Sir Francis Young Husband and several other explorers in the late 19th and early 20th centuries as they made extensive forays into Ladakh and Aksai Chin.[17] Galwan, while writing his book *Servant of Sahib*'a 100 years earlier, may not have imagined that Galwan Valley would witness a *Black Swan Event*[18] of brutal violence on 15/16 June 2020.

Understanding China's Strategic Smokescreen

Peaceful Rise?

The start point for deciphering current trends in Chinese strategic behaviour goes back to the early 1980s and gained momentum in 2003 when Zeng Bijan in Boao Forum-2003 coined the Term, *'Peaceful rise of China'*. Zheng later was Chairman of the China Reform Forum, a Beijing-based think tank working on domestic and international issues.[19] He has authored *China's Peaceful Rise* and *Great Power Status*. He claims that throughout history, China has never pursued hegemony like other great powers. Coupled with the potential of an *Emerging Asian Century,* there emerged a clear and present danger to the eclipse of Western hegemony. By abandoning this approach in his reckless pursuit of hegemony, Xi Jinping may just have buried the idea of an Asian Century. A conflict between Asia's two major powers—a rising China and an emerging India—seems to indicate trouble for a continent brimming with promise and potential. Will the Galwan Incident act as a reversal in Asia's fortunes and offer a window for a continued Western dominance of global affairs because Asia did not have a combined vision for the future?

Sun Tzu plus Realpolitik, not Confucius

China's Strategic Culture is its strategic behaviour impacted by culturally shaped organisations, procedures and weapons.[20] Colin Gray in *Comparative Strategic Culture* (1984) concluded that understanding of strategic culture of others may improve our understanding of their enduring policy motivations and meaning of their events.[21] The impact of culture is central to understanding China's military and security affairs—why, where and against whom China may use force. It can also help understand how China perceives strategic traditions of other nations and uses assumptions of this study to formulate threat assessments. Chinese Communist Party (CCP) has made concerted propaganda efforts to sell the idea that China's international relations are heavily influenced by an ancient and enduring civilisation.[22] While China follows the writings of the Chinese military strategist Sun Tzu, it has convinced the world that Confucian thought has influenced it more, leading to its non-expansionist and defensive-oriented strategic culture.[23]

A few important strands which define China's strategic culture and behaviour are discussed below. The first is surprise and deception. This can be traced back to Sun Tzu and includes psychological warfare which seeks to undermine the enemy's ability to conduct operations.[24] The second strand is minimum force, if violence is necessary. Its idea of Limited War was visible in the 1962 India China War and the 1979 China Vietnam War. The third strand is the centrality of the armed forces in society and in national security planning.[25] The final strand is the perception that threats to China's national security are very real, and domestic threats are as dangerous as foreign threats. National unification has been a traditional core strategic cultural value of the CCP.[26] Together, these have resulted in a Chinese strategic culture blending Sun Tzu's thought and realpolitik.[27]

Chinese Leadership & Strategy

Xi Jinping's Overreach

A study of the psyche of Xi Jinping—son of the Yellow Earth, crusader against corruption—may most likely conclude that he has been corrupted by power. CCP created a cult personality of Xi naming him 'Xi Dada' (Uncle or Papa Xi).[28] On 25 December 2019, the politburo officially named Xi as *"People's Leader"* (人民领袖; *rénmín lǐngxiù*), a title held previously only by Mao.[29] Xi also released '*Xi Thought*', i.e. socialism with Chinese characteristics, a term coined by Deng Xiaoping. The smartphone application for teaching '*Xi Jinping Thought*' has become the most popular application

in China led by CCP's campaign calling on its cadres to immerse in it every day.[30]

The *Art of War* by Sun Tzu (5th century BC) covers many aspects of warfare. Its key thought is about winning a war without fighting. Mao Zedong is said to have been inspired by this idea. Similarly, Deng Xiaoping thought the best way for China to rise was, *"Hide your capacities and bide your time."* However Xi, particularly in 2020, appears to have thrown this book out of the window. In spite of receiving military training from 1979 to 1982 and serving as secretary to secretary general of the CMC, he has floundered while dealing with China's adversaries/competitors. Contrary to Sun Tzu's advice, Xi has picked up cudgels with most nations at the same time, with the exception of the 'iron friend' Pakistan, and of lately Nepal.[31] Xi may be inspired by the 36 Stratagem idea of, *"Take the opportunity to pilfer a goat"* (顺手牵羊 / 順手牽羊, *Shùn shǒu qiān yáng*). It means while carrying out one's plans, be flexible enough to take advantage of any opportunity that presents itself, however small, and avail oneself of any profit, however slight.[32]

Xi's overreach has resulted in some rumblings of dissent among academics[33] and some younger leaders in the CCP as they question his ability to emerge as the strongman of the Middle Kingdom. His self-centred and selfish approach to secure Chinese supremacy in Asia by riding rough-shod over other sovereign nations may well derail the Chinese juggernaut. In any case, India will contest this rise as it propagates its own philosophical construct of *'Vasudhaiva Kutumbakam'* (the whole world as one family), an inclusive strategy that is perhaps not subscribed to by Xi. Instead, he has demonstrated a self-centred and myopic approach in his push for China to achieve its global ambitions, an approach that seems to be backfiring.

Some factors behind China's aggression in Galwan resonate with the ones that drove China to attack India in 1962. It was clear to Mao that the Great Leap Forward were a disastrous failure, and he needed an external threat in being to distract the attention of a disgruntled domestic population. While Xi may not be in a similar spot, he does face rumblings of internal dissent following a slowdown in the economy, declining growth rates, joblessness, protests in Hong Kong and global censure over the irresponsible handling of the Covid-19 pandemic. What better way to deflect attention from internal crises and stir up nationalistic emotions over issues of territorial sovereignty.[34]

China's Centenary Goals

2020 is an important year in China's reform plans as several key goals, all seemingly unrelated, are pegged to this date. CCP has pledged

that by 2020, China will be a "moderately well-off society," i.e., per capita income in China will be double the 2010 figure. China will also attempt to double its current GDP in that same timeframe. This is supposed to help China establish its international image and build its soft power.[35] By 2020, CCP leaders say, China will achieve a 60 percent urbanisation rate; complete construction of the Chinese space station; become an internet power house; place a cap on coal energy and transition to clean energy; and even have its third domestically built aircraft carrier.

These goals are benchmarks of China becoming a prosperous, powerful, modern country by the 100th anniversary of the foundation of the CCP in 2021. In 2020 the CCP wants to have a handful of concrete gains to show to the people. Xi has linked these goals to the catchy slogan of "Chinese dream." By 2049—100th anniversary of the foundation of the People's Republic of China (PRC)—CCP has pledged to make China a "modern socialist country that is prosperous, strong, democratic, culturally advanced and harmonious." In Xi's speeches, the "two centenary goals" are often paired with the "Chinese dream" or the "great rejuvenation of the Chinese nation" as twin aspirations. Probably Xi will not be around to see a post Covid-19 China struggling to achieve these centenary goals.

Chinese Game plan in Ladakh

Abandoning Weiqi

The thin 'red' line between smart power and subtle power (as defined by Gian Luca Atzori) has an explanation to happenings in Eastern Ladakh. So does Game Theory. Let's compare Chess, the Indian origin board game, with *weiqi,* the Chinese origin board game. If chess is about decisive battle, *weiqi* is about a protracted campaign.[36] In chess, power is centralised and arises from the occupation of the centre of the board. On the other hand, in *weiqi,* power is decentralised and flows from the periphery. Chess is individualist and hierarchical; the six pieces have different values and the king is the most important. But, weiqi is more collectivist; all pieces have the same value and the game is about diminishing and destroying the opponent's influence by increasing own influence. In fact, if the nature of chess is hard power, the nature of *weiqi* is soft power. *Wieqi's* strategies focus on indirect encirclement as compared to direct confrontation in chess. However, China's actions in Eastern Ladakh have been contrary to *Wieqi's* indirect confrontation. They highlight a more direct style of geopolitics and muscular nationalism.

Applying Military Reform

The PLA's military transformation is the most significant geo-strategic development of the 21st century. It is also known as the Goldwater-Nichols moment of China.[37] On December 2015, President Xi Jinping, Chairman of the Central Military Commission (CMC), inaugurated three new PLA 'units' or 'services', namely, the PLA Land Army, the PLA Rocket Force and the PLA Strategic Support Force. Xi said, "It was an important decision to realise the Chinese Dream and the Dream of a Strong Military, and a strategic initiative to build a modern military power system with Chinese characteristics." The PLA is at the threshold of achieving its interim modernisation goals of informatised and integrated joint operations by 2021,[38] the centenary of the CCP's founding. It is quite likely that the events of Eastern Ladakh of May-June 2020 are part of a larger test bed. This could be used to justify the ever-burgeoning PLA Budget.

The PLA is CCP's army and not the nation's army. The CCP exercises control over PLA through the institution of the political commissar. Though a uniformed officer, he is the CCP's man, responsible for ideological indoctrination of PLA's soldiers, airmen and sailors. He carries more clout than the officers directly in command of units. Rogue behaviour at Galwan of 15/16 June 2020 can partly be ascribed to such commissars. After the Galwan Incident and happenings in China, political commissars are likely to have a tough time keeping the PLA motivated and ideologically in line.

Unanswered Questions

The Ladakh Standoff has several unanswered questions. Why did PLA transgress India's understanding of LAC? Why is it taking so long to resolve the issue? What were CCP's demands? Was the incident triggered by local PLA commanders, or was it endorsed by CMC/CCP? What is the impact of India's economic counter measures (banning of smart-phone applications) on CCP, PLA and China? Is Nepal's recent defiance against India linked to CCP? If CCP was so concerned about its 'peaceful rise' why did regular troops of PLA (not the Border Guarding troops) participate in the stand-off? Why did the Chinese media underplay the incident, including fatalities of PLA? Will India's reaction on the South Bank of Pangong Tso lead to a limited or localised conflict, or will it act as catalyst for de-escalation and disengagement? Will such an incident recur? Has this stand-off permanently harmed India-China relations? The list of questions is endless. . . .

The CCP, PLA and Chinese people are not easy to understand. Out of land borders with 14 nations, CCP has unresolved borders with only

two nations—India and Bhutan. In the past, CCP has claimed entire Arunachal Pradesh and objected to development activities and VIP visits to the state, refused visas to military officers serving in J&K, issued stapled visas to residents of J&K, etc. In short, they have kept the Indian government continually under pressure. This coercive diplomacy by CCP needs to be factored into India's future engagements with China.[39] Xi Jinping in 2020 is likely to continue to tie down India to the Eurasian Rimland and to out-manoeuvre and isolate India so to prevent its growth as a regional power.

Dissuasion, Deterrence and Compellence

As elucidated by Senior Colonels Qiao Lang and Wang Xiangsui, in Unrestricted Warfare, the Chinese believe that wars of the future will be fought and won in arenas beyond conventional battlefields. The world needs to take cognisance of these new methods of statecraft and interstate wars, and re-define the rules of engagement against a belligerent China. These should persuade, dissuade, deter and compel China to follow the international rule of law and an abiding respect for the Global Commons. As part PLA's military reforms, its new organisation, processes, and joint command system was to be in place by 2020.[40] India will need to close the military asymmetry with China by a defence budget which helps create a *Basket of Capabilities*, rather than focus at percentage of GDP. The present focus and organisational capability is counter terror/Pakistan oriented. A new headquarter of the Army and affiliated headquarter of the Air Force need to be created to sharpen the focus on China. India also needs to build trans LAC capabilities to interdict the massive PLA logistics chain in support of an offensive in the high-altitude terrain. Fresh asymmetric operational strategies would have to be evolved to counter PLA's Strategic Support Force (PLASSF) and PLA Rocket Force (PLARF), which have limited employability in a Himalayan desert war at altitudes of 17,000-21,000 ft. Concurrently, there would also be a need to evolve a combined-arms concept that seeks to cause maximum attrition to the PLA's combat power on land and create sufficient pressure in the maritime space using collaborative strategies.

Possible Indian Counter-Strategies

Can the Indian elephant out-manoeuvre the Chinese dragon, or if not, can it at least hold ground and not have to operate on the back foot in multiple domains. The key to this is to be clear about its own core interests and hard-earned areas of influence; demonstrate an intent to protect these interests and areas of influence; and lastly, to ensure that the capacities and

capabilities required to convert intent into demonstrated actions is available to operational practitioners in multiple domains (diplomacy, military, technology, etc).

China is deeply insecure about its global image and reputation. It desperately wants to be respected rather than feared. Its actions, however, have not matched this aspiration after the events of Tiananmen. This global fear of China has intensified since the Covid-19 pandemic.[41] China venting about the internal backlash, global isolation and falling apart of *'One Country, Two Systems'* in Hong Kong and Taiwan, are examples of its insecurities and not of its assertiveness.[42] This is an opportunity that needs to be exploited without any tentativeness by India.

India may have to shed extreme strategic caution and dependence on multilateralism. Enunciation of a National Security Strategy with well-defined national interests and red lines is a necessity. This strategy must juggle the demands of attrition warfare in the high Himalayas, or international collaboration led/Indian Navy imposed manoeuvre in the Indo Pacific. Until India's Armed Forces are able to deter CCP/PLA on its own, India may have to depend on collaborative deterrence and compellence.[43] Robert Kaplan in his book *The Revenge of Geography* puts forth, "Geography does not determine individual character, but it does matter." India's destiny stands tied to it capacity and capability to deter and compel CCP's/PLA's belligerence not only along the Northern Borders, but across the entire spectrum of warfare.

Conclusion

Prior to the occupation of heights overlooking Moldo Garrison, Spanggur Gap and the heights on Finger 3 by crack Indian troops as a quid-pro-quo and pre-emptive action on 30/31 August 2020, India's CDS, General Bipin Rawat was unambiguous in his statements that India would exercise military options in case the PLA did not honour the commitments to disengage that it made after earlier talks.[44] Though India's proactive-defensive actions have not precipitated an escalatory response from the PLA, the India-China border is likely to remain incredibly tense. The Indian Army must be prepared for a long and tough winter as Indian and Chinese troops will attempt to preserve their gains in Ladakh while talks continue at the diplomatic and military levels.[45] "*Tam Marte Quam Minerva*" is a Sanskrit quote, which means "*To War with wisdom.*" Hopefully, the strategic leadership on both sides understands the perils of war and prosecutes it only when all options short of war are exhausted.

A high-altitude conflict is not desirable, nor is the transgression fait accompli acceptable from an Indian perspective. Realistically, a return to status quo ante is also highly unlikely considering the time and effort invested by the PLA to mount the operation. The world is watching this crisis and its trajectory will be instructive in determining several key elements of regional and global leadership. Inter-alia, should the Indian Armed Forces be pushed into a war, it is important for its leadership to relate it to the border skirmish at Nathu La in1967 and the coercive deterrence it exercised during Operation Falcon in 1986/87, rather than look back at operational scenarios from 1962. It will be a complex problem to solve and will demand great skills from the politico-military-diplomatic structures on both sides.

The great game of strategic competition in the domains of economics, military and technology will continue.[46] For India, reaching equilibrium with China is not going to be easy. External Affairs Minister Shri S Jaishankar recently said, "The state of the border and the future of our ties with China cannot be separated, that is the reality."[47] In fact, it will require an alteration in India's strategic DNA.

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"Pride and Prejudice" The India-United States Strategic Convergence and the Rise of Hegemonic China

Paul F. Meagher

Abstract

With the rise of China and its deliberate and systematic policy of becoming Asia's principal hegemon, a convergence of strategic interests should logically pull India and the United States into a close military and strategic partnership. However, the "pride" of unfettered autonomy puts India at risk of geographic and economic isolation by China. Likewise, the United States' irrational "prejudice" against a perceived ungrateful world undermines the very international system that permitted greatness of US. This article looks at possibilities for both countries to overcome their "pride" and "prejudice" and work in concert to restore a rule-of-law based liberal international order in the Indo-Pacific Region.

India-US Strategic Relations

India and the United States did not have a relationship, as such, until the Independence Movement finally caused a weary, jaded and distracted Great Britain to accede to the independence of India and its partition in 1947. Independence brought India, as well as a hostile sibling of Pakistan, into a tense and riven post-World War II/early Cold War arena of great power rivalries. India, having its policy dictated for so long, was loath to be drawn into a great power camp,[1] and immediately declared its "non-aligned" status. The United States, after a hard-won war against fascism and the architect of

Colonel **Paul F. Meagher** is an officer from the United States Marine Corps and is a participant of 60th NDC Course.

an international system designed to keep the peace, saw communism as the greatest threat to that peace and was obsessive about confronting it. While their common devotion to secular, democratic governance could have made the two democracies effective partners in South Asia, US-Indian relations were defined by mutual mistrust and misapprehensions for most of the post-war 20th century, which would not end until the collapse of the Soviet Union.[2]

India's stated strategic priorities upon independence were understandable for a post-colonial government, but were frankly naïve for the time and the geopolitical conditions. Prime Minister Nehru, in a note to the Indian Ambassador to China wrote:

> Our general policy is to avoid entanglement in power politics and not join any group of powers as against any other group.…We must be friendly to both (Soviet and Anglo-American blocs) yet not join either.… This makes our path difficult and we may well be suspected of leaning towards the other.…[3]

In practice, while India claimed to be "non-aligned," in several practical ways, she tilted distinctly towards the Soviet Union. While not ideologically disposed to communist doctrine, the early administrations of India were committed to a socialist model of economic development, which American foreign policy analysts largely equated with communism.[4] The United States gauged the countries of South Asia through a lens of communism containment. India, by rejecting the support of the western alliance system while her rival Pakistan had not, found herself pushed away from the United States and into a warmer relationship with the Soviets. The US–India relationship reached a low point during the Nixon administration, during which he enthusiastically provided unqualified military support to Pakistan and considered Prime Minister Indira Gandhi a "stooge" of the Soviets.[5] This seemed a justified conclusion after the 1971 India-Soviet Union Treaty of Peace, Friendship and Cooperation, which included security guarantees upon an attack on India.[6]

As the 1980s showed the first sustained cracks in the communist bloc, the United States' obsession with communism containment began to wane. Additionally, while the United States under Nixon had begun a courtship of China to draw the communist nation out of the Soviet camp, it began to appreciate that India could provide a regional balance. Starting in 1982 and throughout the Reagan presidency, a significant breakthrough was achieved. The United States came to recognize that "non-aligned" need not equate to

"Pro-Soviet," and that respectful cooperation and assistance in economic, scientific and technical development in India could coax India further out of the Soviet fold.[7]

The collapse of the Soviet Union in 1989 permitted a revitalised relationship, as the US hang-ups over "non-alignment" were obviated. US concerns about Indian socialism found a resolution through other means. Following a range of economic liberalisation measures, India became even more attractive to the eye of the capitalist America: a trading partner of tremendous opportunity.[8] But while the socialist economy was no longer an ideological impediment to closer relations, the backward and sluggish economy did not inspire US confidence in India as a regional partner.[9]

By the early 21st century, after a frosty and tumultuous Cold War period, India and the United States were primed to have a relationship based on mutual respect and cooperation. They shared concerns about foreign-sponsored terrorism and the political outcome in war-torn Afghanistan.[10] A Defence Technology and Trade Initiative (DTTI) was signed in 2002, and was followed by various strategic partnership frameworks in 2004, 2005 and 2007. Joint Strategic Dialog meetings were held annually from 2010-2014 to discuss a range of security issues, including defence, climate change, education, trade and technology transfers.[11] However, while Indian-US relations are no longer defined by misaligned priorities, the new relationship has not yet been tested by an existential and common threat. That threat has now arisen with a resurgent, hegemonic China.

The Rise of Hegemonic China

China had been, for most of its history, the greatest power of Asia. The "Middle Kingdom" whose rulers derived a "Mandate from Heaven" was derailed from its greatness by a "century of humiliation" of European and Japanese domination.[12] After being coaxed back into the international system by the Nixon administration, China enacted a series of economic reforms and rediscovered a long-suppressed confidence to again take centre stage in Asian affairs. While China had greatly benefited from the international financial system developed and maintained by the West, to ensure continued growth and regional dominance, China began to seek to change the international order to suit its own needs.[13] It is actively seeking to accomplish this by smothering the influence of the only two regional powers capable of contesting the Indo-Pacific: The United States and India, and is enacting detailed, decades-long strategies to achieve regional hegemony.[14]

Engaging the American Threat: 'Yankee Go Home'

The greater challenge for Chinese regional hegemony is the United States. A lynchpin of American security in the region has been the numerous bi-lateral security agreements and treaties, often linked with lucrative trade relations to provide both security and financial incentives to partnered states. China has long perceived the series of US-Asian alliances and partnerships as an attempt to "constrain" Chinese growth.[15] For this reason, China has and continues to attempt to erode the US-Asian alliance systems by raising doubts of the American ability to continue to project power so far from the United States, and to provide economic and security incentives to Asian states to switch to China as their guarantor of security and stability.[16] If the regional dominance of China appears inevitable, worried Asian states are far more likely to begin to distance themselves from a waning America.

China also projects the inevitability of the physical departure of the United States by constant messaging of strength.[17] The most clear manifestation of this is China's claim to territorial sovereignty over the entirety of the "9-Dash Line," a region of the South China Sea extending 2000 km from the Chinese mainland but within only a few hundred kilometres of the shores of the Philippines, Vietnam, Malaysia, Indonesia and Brunei. China has been uncompromising on their assertion of sovereignty, and has taken steady and deliberate incremental steps to establish sovereignty to create "facts on the ground," not easily dismissed. China has also aggressively harassed the US warships conducting Freedom of Navigation exercises, defying the centuries-old "rules of the road" for open water navigation. As a major escalation, China declared an Aircraft Defence Identification Zone (ADIZ) in the East China Sea, including airspace over islands claimed and occupied by Japan.[18] While the ADIZ is not recognised by the United States or regional powers, China's clear intent is to assert sovereignty over all claimed territory always and through all mediums.

Engaging the Indian Threat: A 'String of Pearls,' or a Garrotte?

It was not inevitable that China and India had to become rivals in Asia. However, China's seizure of Tibet in 1950 removed the buffer zone between the two and created a disputed border. China perceives India as key to any US successful efforts to "pivot" to the Pacific, and as such, has been actively working to separate and isolate the United States and India.[19] To ensure this, China is completing the encirclement of India by land and by sea, with a series of beholden client states and naval superiority.[20]

To fix India's longest land border, China has recruited and groomed Pakistan as a *de facto* client state for at least the last 50 years. Pakistan has been a key recipient of Chinese infrastructure development, through the China Pakistan Economic Corridor (CPEC), a segment of the 'Belt and Road Initiative' (BRI), which will connect the Pakistani port of Gwadar to China. The anticipated flow of fuel oil through Pakistan would permit Chinese fuel supplies to bypass the Indian Ocean SLOCs, in the event they were threatened by the Indian Navy. The port of Gwadar is also a dual-use port facility, constructed by China, capable of sustaining a considerable portion of the PLA Navy.[21] As an asymmetric measure, it remains in China's interest to prevent any resolution to the status of Kashmir, and with China's economic leverage over Pakistan, it will be able to direct the escalation or reduction of insurgent infiltration, depending on its relations with India.[22]

To ensure Indian Ocean maritime supremacy, the "String of Pearls" is a Chinese strategy of comprehensive influence on countries throughout the region.

> China is building strategic relationships along the sea lanes from the Middle East to the South China Sea in ways that suggest defensive and offensive positioning to protect China's energy interests, but also to serve broad security objectives.[23]

The individual assets and resources developed by China for their commercial and/or military use are the "pearls." The "pearls" include, at least, a military port facility in Djibouti, the Pakistani deep water port of Gwadar, the Bangladeshi port facility of Chittagong, the Myanmar Kyauk Pyu port in the Bay of Bengal, the Sri Lankan port of Hambantota, and an uninhabited island of the Maldives, with military infrastructure and air fields already under construction.[24] While China touts the economic and infrastructure development of these projects, it may be credibly argued that most or all are at least 'dual-use' projects, and that Chinese People's Liberation Army (PLA) air and naval access is part of the coercive price for doing business. Examining these "pearls" on a map, and including the militarized islands in the South China Sea, it is clear that China has staked out maritime "choke points" in fine Mahanian style.[25]

Another aspect of the "string of pearls" affecting both India and the United States is the economic coercion that accompanies accepting Chinese infrastructure. While China claims that the BRI will bring economic prosperity to all, in practice, it creates "debt traps" for partnered countries.

Overwhelming Chinese debts have already placed Bangladesh, Sri Lanka, Maldives, Thailand and the Philippines in a compromised position with China, who are now ill-positioned to object to military coercion.[26] China has projected a confident message of inevitability, and by shrewdness, deception and ruthlessness, has made considerable progress in isolating India politically, geographically and economically from its near neighbourhood.

The rise of a hegemonic China has, for the first time, forced the strategic interests of the United States and India into close alignment. Without a robust network of regional alliances, the United States cannot confidently protect the 'first island chain' from Japan to Guam. India cannot respond to the asymmetric pressures on the land borders simultaneous with a forward-deployed PLA Navy, operating out of regional bases and covering maritime choke points at their discretion. India and the United States are ideally suited to a robust military partnership, but it will require each to overcome serious "neurosis" in their strategic thinking, which will be described in the next two chapters.

"Pride"—India's Non-Alignment & Strategic Autonomy

India, born into a bi-polar world with the legacy of colonial repression, made the rational choice to not be dragged into the Cold War conflict by adopting a policy of non-alignment. While arguably appropriate for the time, India's economy and regional clout have now grown vastly since 1947, and India is now looking out on the wider world to assert a position of regional leadership. However, a review of much of the Indian strategic thought suggests that it remains committed in-practice to a non-alignment mind-set: Engage with the world and international organisations, but commit to nothing that limits political flexibility or restrains options. While Indian policy makers and planners recognise that China is treating them as a rival for power, India is not engaging the threat of encirclement seriously. The "pride" of autonomy puts India at risk of geographic and economic isolation by hegemonic China.

For India, non-alignment had a philosophical underpinning that rejected the 'zero-sum game' of *realpolitik*, advocating mutual respect, peaceful coexistence and common development.[27] Advocates for non-alignment insisted that it was not mere "neutrality," which permitted cynical amorality in advance of national interests, but rather permitted unfettered decision making, inoffensive and non-belligerent relations with all other states, permitting the best outcomes consistent with the interests of India as well as the international community.[28] While the non-alignment policy was born

in the context of bi-polar great power competition, the end of the Cold War has not dulled the attractiveness of the policy. Non-alignment movement principles continue to inform Indian foreign policy into the present day.[29]

Much of India's strategic thinking has been informed by a 2012 paper from an independent group of senior Indian analysts and policy makers. "NonAlignment 2.0" offers a term, "Strategic Autonomy," as an update to the principles of non-alignment, channelling them into recommendations for India's current foreign and defence policies. The main concept of Strategic Autonomy remains consistent with non-alignment: achieve a situation in which "no other state is in a position to exercise undue influence on us—or make us act against our better judgment and will."[30] On the face of it, this sounds perfectly reasonable, as ALL states make decisions in their own best interests. But NonAlignment 2.0 takes the concept beyond that logical point, suggesting that strategic autonomy be retained beyond reasonable and foreseeable risks to national security.

The original non-alignment movement required an inoffensive foreign policy, and at its heart, Strategic Autonomy entails resistance to forming commitments with other states. In a 2019 round table discussion of Strategic Autonomy hosted by the Centre for Joint Warfare Studies, the panel proudly discussed India having "23 strategic partners" but no alliances.[31] While such a policy may liberate India's strategic options, it is fair to ask what India's "partnerships" actually entail. In a 2019 analysis of India's multipolar commitments, it was observed that:

> As India's economic and political clout grows, so too will its diplomacy aims and requirements. Despite the ideas supporting strategic autonomy, it may become harder than ever for New Delhi to remain neutral in international politics. While not taking sides in conflicts has served Indian foreign policy well until today, such fence-sitting is contrary to India's vision of becoming an economic and political heavyweight in the international arena.[32]

The concept of Strategic Autonomy is not tenable for a state with pretension to regional leadership. Becoming a great power requires upsetting other powers.

Arguably, India has not let a strategic autonomy policy prevent assertive policy in its self-interest. India made a vigorous response to the Pakistani incursion and border aggression in 2019 and took a firm stance against China in the 2019 Doklam incident. Successive Indian administrations have made

greater regional outreach, including the 1991 economically focused "Look East" initiative and the 2014 "Act East" initiative of Prime Minister Modi, which includes security concerns and closer cooperation with Japan, Vietnam and South Korea.[33] Additionally, the Indian Navy has increased the scale and pace of multi-lateral engagements.[34] There is also discussion that India's participation in the "Quad," a four-part maritime security institution with Japan, Australia and the United States, demonstrates India's seriousness about engaging China in the Indian Ocean littorals.[35] However, further analysis suggests that actual policy, based on a non-committal strategic autonomy mind-set, does not appreciate the Chinese encirclement threat seriously. Two successive Chiefs of Naval Staff have declined for India to participate militarily in "the Quad," citing Russia's concerns with a militarised Indian Ocean.[36] The stated reasons for not undertaking a maritime partnership for national security: to maintain an inoffensive foreign policy, is clearly a legacy of "non-alignment."

In practice, India has dragged its feet in forming a more meaningful strategic partnership with the United States. The United States made India a Major Defense Partner (MDP) in 2016, a designation that should have accelerated agreements and collaboration on a range of defence issues.[37] However, India has undertaken little activity to fully define and operationalise the MDP. After three years, there is concern that while India may approve the idea of partnership, any actual agreement which includes burden-sharing makes India uncomfortable.[38] Indian strategic planners have also cited lingering concerns about a partnership with the United States: that it could never be a partnership "of equals," and India would lose independence as a junior partner.[39] While recent Indian strategic thought is replete with statements of the need for a partnership with the United States to provide an effective maritime response to Chinese action, in actual behaviour, India retains the aloofness of non-alignment.

While it remains appropriate for India, like any state, to make strategic decisions in her own best interest, the legacy of non-alignment and an "inoffensive" foreign policy which entails no commitments is ineffective in great power competition. India is becoming a great power, but has not appreciated that its conduct in the Great Game must change, from an aloof bystander to an active player. The United States has offered a meaningful hand to get in the game. India has rhetorically agreed, but out of the pride of autonomy, languidly dawdles.

"Prejudice"—United States & Neo-Isolationism

The United States is dealing with its own strategic anxiety. After decades of Cold War confrontations and more of unipolar defence of the liberal international system, the United States is visibly weary and embittered by the toil and expense, and inclined to withdraw from global leadership. If this trend is not reversed, the rules-based global international system will devolve into raw power, spheres of influence and regional hegemony. Neo-isolationism would not be in the United States' best interest.

The current international order was intended to create a forum for collaboration and dispute resolution through the United Nations Charter and array of international organisations. Within that system, states retain sovereignty and respect non-intervention, but cede a degree of autonomy to ensure international security and the basic human rights for their citizens. The United States invested heavily in alliance systems and international organisations, not only as part of a containment strategy against communism, but also to enable post-war reconstruction, stable governance and the development of liberal institutions. With the end of the Cold War, the international system of collective response to egregious human rights violations was tested: the break-up of Yugoslavia from 1989-92, the 1991 Iraqi invasion of Kuwait and the Rwandan genocide of 1994 all tested the international commitment to collective action under a United Nations based system. While some states invested in the system more than others, the United States also began to receive criticism for alleged 'interventionism' and 'neo-colonialism.'[40] This criticism and lack of interest in other states to protect the international order began the slow erosion of the US incentive to be the primary defender of the system.

Evidence of American fatigue is prevalent. In Afghanistan, after almost 20 years of conflict, the "peace deal" with the Taliban announced in February 2020, which includes no human rights protections or power-sharing with the secular government has been mutely accepted.[41] The "global war on terror" has not measurably improved American's standards of living or personal safety. Polling indicates that the American public's optimism of the role of the United States in the world has been badly shaken.[42] Allies and partners who are perceived to exploit the US investment in global security for their own benefit have been derided as "free-riders" on the backs of US taxpayers. This, coupled with a general disillusionment of the economic effects of globalism, has caused a plurality of Americans to look inward, with Donald J. Trump riding an "America First" platform of global apathy into the White House.[43] Indeed, the Trump administration is unapologetic in its efforts to reshape

American strategy in a way that devalues partnerships and investment in the rules-based international system.[44]

An unfortunate result of the "America First" platform has been the corrosion of standing alliances and partnerships. NATO, a security system that has maintained international peace in Europe for over 70 years and permitted the development of the United States' largest and most profitable trading partner, remains under attack for failing to match United States' military expenditures.[45] The United States' withdrawal from the terms of the 2016 Paris Climate Agreement was based on the position that it was economically "unfair" to the United States. Similarly, the Trans-Pacific Partnership (TPP) for free trade provided an opportunity for greater US economic engagement with the Pacific Rim, but again the United States withdrew after signature for economically protectionist reasons.[46] China, exploiting the opportunity, has used the US withdrawal from the TPP to actively corrode US relations and alliances in the Pacific.[47]

The current US administration is even 'transactional' with adversaries, initially refusing to directly confront China on their secretive, irresponsible and dangerous COVID 19 response, for fear of negative economic fallout.[48] There is no cause to wonder that both long-standing partners and potential allies are sceptical of US commitments to collective action. China, by no additional effort, has scored a strategic windfall from the US neo-isolationist policies, quickly stepping into the gap left behind with the withdrawal of US leadership.

United States messaging, especially from the Department of Defense, is not consistent with the US policy. The National Security Strategy and National Defense Strategy both cite cultivation of regional allies and partnerships, especially India, as essential to United States' interests in the Indo-Pacific region. The administration of Prime Minister Modi has also highlighted the need for a close relationship between the countries, even calling the US and India "natural allies."[49] Rhetoric from the US administration also cites this positive relationship, but in practice, the Trump administration relations with India are transactional and protectionist. As articulated by the Indian Observer Research Foundation,

> (US foreign policy) "seems keen to zero in on an arbitrary chosen economic metric, fixate on it, and no strategic concern or history or alliance strength can compensate." "With respect to India, the Trump administration may link security and defence interoperability matters with the inconsistencies in the countries' bilateral relationships vis-à-vis trade and immigration matters."[50]

To that effect, the Trump administration has imposed steel and aluminium tariffs on Indian exports, inviting retaliatory Indian tariffs on US products,[51] and has restricted the approval of H1-B and H-4 visas for Indian nationals, to limit the flow of entrepreneurial talent to the US economy and academic institutions.[52]

United States' neo-isolationism and fatigue from international engagement is born from the perception that the United State made a serious and good-faith effort to support and nurture an international system, at great cost, for a world that was willing to exploit the benefits of the system, but not make their own commensurate investment. The US has abandoned a long standing, proven system of alliances and partnerships and replaced it with an inexplicable incoherence, which has deeply shaken the confidence of any who would partner with it.[53] As it currently stands, the United States irrational "prejudice" against an ungrateful world of supposed free–riders is undermining the very system that permitted US greatness.

US and India—Natural Allies of the 21st Century

India's Strategic Response

For India, an essential first step is to develop a more robust contemporary strategic culture. It needs to take deliberate, considered steps of how to assert regional leadership.[54] The Office of the Prime Minister should immediately develop a framework for a National Security Strategy, to be the basis for the Ministry of Defence and service chiefs to develop a National Defence Strategy. This National Security Strategy may be informed by principles of "Strategic Autonomy," with the understanding that great powers cannot choose their adversaries: their adversaries make that choice.[55]

Next, India needs to accept the consensus of strategic analysis that forming robust regional partnerships, with a military component, is essential to countering the Chinese threat. This requires swallowing a degree of pride and accepting the hand of partnership from the United States.

Third, India must recognise that if it is not the regional leader of independent states, China will become the leader of coerced client states. Countries of the region are deeply wary of China's intentions, and will follow a leader that offers development under a rules-based system.[56] India's assertion of leadership must include jettisoning the fear of alienating China. This fear is a major cause of strategic paralysis.[57] India must fully embrace the concept of a militarised "Quad" relationship with the United States, Japan and Australia. India should be fully and formally engaged in the US Indo-

Pacific theatre, and provide a senior liaison officer to USINDOPACOM Headquarters in Hawaii.[58] India and the United States must finally codify the details, expectations and obligations related to India's designation as a Major Defence Partner, signalling a firm commitment to common principles of regional security. Along those same lines, India needs to recognise that Russia will not come to India's assistance in any contest in the Indian Ocean. Russia shares China's intent to erode the liberal world order to their own benefit, and their "concern" about a militarised Quad is not the advice of a friend, but a cynical and opportunist manipulation.

As part of a holistic defence strategy, India needs to consider and develop countermeasures on all fronts in which China applies pressure, whether militarily or asymmetrical.[59] This includes information operations to foment unrest in Chinese-occupied areas along the Line of Actual Control, international pressure to condemn Chinese human rights violations, and develop measures in concert with the United States and Europe to ease the "debt traps" which have befallen the nations which have become hostages in the Chinese "string of pearls."

Finally, and most importantly, India needs to invest in the IDEA of a reformed and strengthened international system. The liberal international system is not 'fated' to die: the principles upon which it arose: sovereignty, political independence, non-intervention and mechanisms to channel great power competition through multinational forums, are more necessary now then they have ever been. India should insist that the United States share its commitment to an international system that is devoted to more than American primacy.

Responding to the Threat: The United States and Real Greatness

For its part, the United States needs to recognise that it achieved and retained great power status because of its ability to grow and develop a liberal international system. It has permitted itself to become exhausted, by not spreading the load of responsibility for an international system that benefits all nations that operate within its constraints. Now, faced with an adversary that does not want to reform the system but rather to locally supplant it, the United States must quickly re-convince the world that it is a viable and valuable partner, committed to protecting an international system that is more fair and equitable. This is not an easy challenge.

The Cold War period of 1945-89 was characterised by "Bi-Polarity." 1989 to roughly 2008 was a moment of United States "Unipolarity," and development of American hubris and fatigue, with 2008 to the present as

a form of "Multi-polarity," which includes rising states chafing under an international system they did not develop.[60] With the multitude of truly global challenges, the United States must endorse and enable a new phase of "Bound Multi-polarity," which continues a liberal international system that recognises the legitimate interests of developing powers to have a stake in their own futures. To RESTORE its alliance systems, the United States must REFORM its alliance systems, with recalibrated expectations and responsibilities.[61]

Along these lines, the United States must demonstrate a re-commitment to the benefits of globalism. The "American First" mantra and the prejudice behind it must be exhumed from United States policy. A recommitment to hard-fought international accords, including the Transpacific Partnership and Paris Climate Agreement would be first steps welcomed by hesitant allies.[62] By adhering to international law and a demonstrating a willingness to be bound by it, the United States has the best chance of keeping China bound within the same laws and encourage China and regional states to continue to use international dispute mechanisms.

Regarding India, the United States must abandon the purely 'transactional' diplomacy employed by the current administration. There is no winner in a contest between "Make in India" and "America First."[63] To enable the developing and less-capable partner, the United States should strongly encourage the economic growth and domestic manufacturing in India, especially to develop India's domestic defence industrial base. The United States has already identified India as the "lynchpin" in the defence strategy for Asia, it is time to fully invest in the partnership and recognise India as the natural leader of a coalition of Asian democracies.[64]

A Way Ahead

This is not the world of 1947, and India and the United States cannot rely on outdated assumptions and paradigms. The failure of each country to adjust policies appropriate for the times seems to have induced an element of strategic hubris. India's lethargy could be attributed to "pride" that prevents it from moving closer to the US for fear of having its policy dictated by the latter. The United States policy is dangerously incoherent, due to "prejudice" against a world that it considered ungrateful 'free-riders,' exploiting its efforts. Both now watch a rising and aggressive power, which has shrewdly and ruthlessly advanced a policy to the detriment of both. Both states require sober, internal assessments of their strategic positions. India and the United States have immediate, converging interests to blunt the advance of a hegemonic China.

They need to quickly take their partnership to a new level of trust, synergy and interoperability based on mutual respect and common purpose to remain great powers through the 21st century.

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Economic Cooperation in South Asia
A New Sub-Regional Approach

Abu Syed Mohammod Bakir

Abstract

As one of the least integrated regions of the world and one that has struggled to achieve economic viability in the past, South Asia has suffered greatly from the lack of a productive regional initiative. To fill the vacuum left by failing regional initiatives, the creation of a new sub-regional forum for economic cooperation consisting of Bangladesh, India and Myanmar (BIM) is considered essential to focus on overcoming concurrent regional challenges to development and look for profitable areas of partnership.

Introduction

Over the years, there has been a growing debate in South Asia on the performance of existing initiatives for regional cooperation in bringing about national development. South Asian economies, previously some of the most underdeveloped economies, have experienced rapid economic growth over the past decades. However, it has been a unique case where growth has outpaced constraints with the help of global trade, remittances, aid and social development. The role of regional platforms in bringing about development through economic cooperation has been insubstantial, particularly with the failure of SAARC since 1989.[1] Regional platforms have been plagued by a wide array of issues that have adversely impacted any attempts to further regional economic cooperation. Therefore, this article, proposes a sub-region consisting of Bangladesh, India and Myanmar (BIM) to explore possible opportunities of bilateral and multilateral partnerships. It also analyses the performance of existing regional platforms, identifies development-oriented

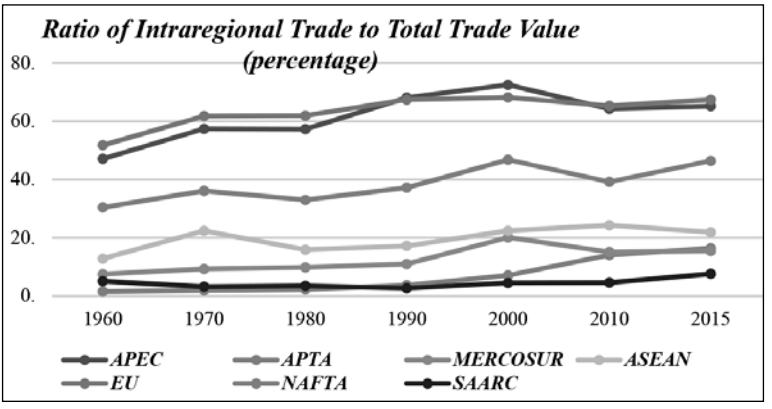
Brigadier General **Abu Syed Mohammod Bakir** is an officer from the Bangladesh Army and is a participant of 60th NDC Course.

challenges that need to be addressed and zeroes-in on possible areas of bilateral and multilateral economic cooperation.

A localised version of regionalism with less formal arrangements and procedures with limited objectives,[2] sub-regional economic cooperation aims to tether common interests putting aside differences and taking initiatives that amplify national development. It has a considerably better chance of success since the players involved are few and there is less likelihood of conflict of interest. The fact that the three countries share borders and face similar challenges in managing China on multiple fronts offers further convergence for cooperation.

Existing Regional Initiatives—Endeavours in Vain

Since its inception, SAARC's performance in promoting regional integration and economic cooperation has been questionable. Intra-regional trade volume has remained low compared to other regional initiatives, as indicated by WB and UNCTAD data.[3]



Source: Researcher's Construct (based on data from WB and UNCTAD)

A persisting trust deficit, particularly the fact that India is viewed as a 'local hegemon' by member states,[4] as well continuous Indo-Pak tensions, is the main issue. As the SAARC charter prohibits the discussion of contentious bilateral issues, such issues have prevailed at SAARC's expense. As a result, there have been frequent postponements of summits, with 10 summits postponed till date and no summit since 2014. In addition, despite giving rise to SAFTA, SAARC has failed to break the protectionist notion of economies as 'sensitive lists' and other NTBs greatly hinder trade.

The Bangladesh, China, India and Myanmar Economic Corridor (BCIM-EC) has also failed to yield much output, primarily due to 'security

tensions and trust deficit' between India and China, the former of whose reluctance in materialising the BCIM corridor is also attributed to the fact that it hasn't developed its own internal transport networks in the NER.[5] It has also been argued that BCIM-EC needs to be evaluated not merely considering the operational aspects, but in a 'larger societal context' as well. There also exist several dilemmas regarding the centralisation of BCIM, as well as the tension between regionalism and sub-regionalism in the BCIM.

Though started with a plenty of hope in 1997, Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) has been crippled by lack of sustained interest, as well as lack of convergence of individual interests. These have stemmed from widely varying economic profiles, political deadlocks, institutional weakness, insufficient funding and manpower and uncertainty on how to go about engagements with stakeholder institutions. In addition, BIMSTEC suffers from a lack of effective road and rail connectivity and lengthy customs and clearance proceedings, which significantly impede trade.

Adopted at the 1997 SAARC summit with great expectations, South Asia Subregional Economic Cooperation (SASEC) hasn't been nearly as effective as conceived due to trust deficits, lack of convergence of interest, and sluggish implementation. Only in recent times has it yielded some output, and these projects are long-term and whether or not they will yield output is uncertain. As of now, it has not succeeded in fulfilling its goals to much effect.

Geo-political and Geo-Economic Realities in the BIM Sub-Region

With the concurrent economic rise by China and India following their reforms in the 1980 and 1990 respectively, the expanding interest of the two emerging powers in the same neigbourhood began to clash.[6] Over the last two decades, the economic performance of a few sub-regional economies in South Asia like that of Bangladesh has caught the attention of the world. The World Bank has invested heavily in South Asian economies and is currently undertaking projects for infrastructural development in Bangladesh and India. To a certain extent, ADB is also working along the same lines. China has also invested increasingly in the region, particularly in Myanmar and Bangladesh. The US is also a significant source of FDI in the sub region, particularly to India and Bangladesh, and has supported Myanmar through OPIC (Overseas Private Investment Corporation). For Japan, "Bangladesh is a fertile plain for Japanese investment," said Hitoshi Hirata, country chief of JICA in Bangladesh.[7] Apart from drawing significant amounts of FDI and

rapid economic growth, sub-regional economies have also developed bilateral economic relations among themselves.

Presently, despite strong ties, Bangladesh-India bilateral trade is still well below potential, with bilateral trade potential estimated to be US$ 16.4 billion, but the actual trade figure standing at US$ 9.85 billion.[8] Building cross-border economic corridors will bring security and stability to the border regions, create a more trade-friendly environment in the borders, and create strong production networks, which will not only support Bangladesh's booming industry, but also bring development and economic solvency to India's NER.

On the other hand, India and Myanmar view each other as favoured trade partners. Linking Southeast Asian and South Asian markets, Myanmar enjoys an advantageous geographical position, and is hence an important strategic partner for India. India's chief interests from Myanmar are the acquisition of raw materials, oils and minerals and the NER's access to Myanmar's seaports, while India offers access to a competitive South Asian market.

Between Bangladesh and Myanmar, despite improved relations, there is still a lot of room for formal and informal engagement. Myanmar's products will find demand in Bangladesh's markets, and tapping Myanmar's abundant untapped natural resources can benefit Bangladesh immensely. Increased Economic engagement between Myanmar and Bangladesh will also work as a confidence-building measure for resolving transnational security issues. Potentials of transport connectivity and maritime partnerships hold the promise of access to ASEAN markets for Bangladesh and the unexplored resources of the Bay of Bengal for both countries.

Challenges to Economic Cooperation and National Development

Tariffs & Regulations

With intra-regional trade accounting for only about 5 percent of the total trade value of the region,[9] South Asia is plagued by various challenges to economic cooperation and development. According to the World Bank, intra-regional trade could increase from US$ 23 billion to US$ 67 billion given that such challenges are overcome.[10] According to the World Bank, the average tariff in South Asia (13.6 percent) is more than double the world average (6.3 percent),[11] which was even higher prior to SAFTA. Each country operates SAFTA 'sensitive lists', with nearly 46 percent of Bangladesh's imports and 39 percent of India's imports falling under other countries' sensitive lists,[12] in addition to high para tariffs.

In addition to tariffs, there exist a large number of Non-Tariff Barriers (NTBs) that obstruct trade in the sub-region. Bangladesh's main export products falling under India's sensitive lists,[13] Phyto-sanitary and sanitary standards, Bangladesh's items not receiving 'national treatment'[14] from India, lack of harmonisation of product standards and imposition of ADDs (Anti-Dumping Duties) results in higher costs of trade, significantly hampering intra-regional trade[15]. To give an instance, like lead-acid battery, India slapped ADD on Hydrogen peroxide, jute goods and fishing net of which the jute goods have hurt Bangladesh the most.[16]

Due to the presence of barriers to formal trade, informal trade and smuggling has prevailed in the sub-region. Estimates placed Bangladesh-India informal trade volume at US$ 500 million back in 2003,[17] mostly taking place at the Bangladesh-India and the Myanmar-Bangladeshland borders. Due to currency exchange issues and only 22 items eligible for export under the FTA between India and Myanmar,[18] a large volume of informal trade and barter has emerged at the Indo-Myanmar border.

Any initiative in this part of the world has been hampered by political deadlocks and bilateral strains. It is believed that "bureaucratic 'red-tapeism' is the scourge of 'ease of doing business' in India, with laws and slow-moving government machineries."[19] Despite slowly creeping forward, a dismal situation prevails in Bangladesh and Myanmar, as the countries rank 168th and 165th, respectively, in the ease of doing business, according to a World Bank Report, 2019.

Inflows of investment in South Asia have been limited by small individual markets, high costs of business, lack of corresponding frameworks regarding infrastructure and competition, absence of dependable infrastructure services at fair prices, financial limitations, and market-specific constraints. The lack of harmonisation of regulatory procedures has prevented FDI inflows reaching full potential. For example, FDI in Mexico increased three-fold from 1.1 percent of GDP in 1980-85 to 3.0 percent of GDP in 1994-2001 after NAFTA.[20]

Infrastructure Challenges

Infrastructural challenges comprise not only inadequate border infrastructure and logistics, but also energy security issues, as power availability at key border regions is becoming crucial, and ICT development issues, as ICT would play a crucial role in streamlining trade processes in the future.

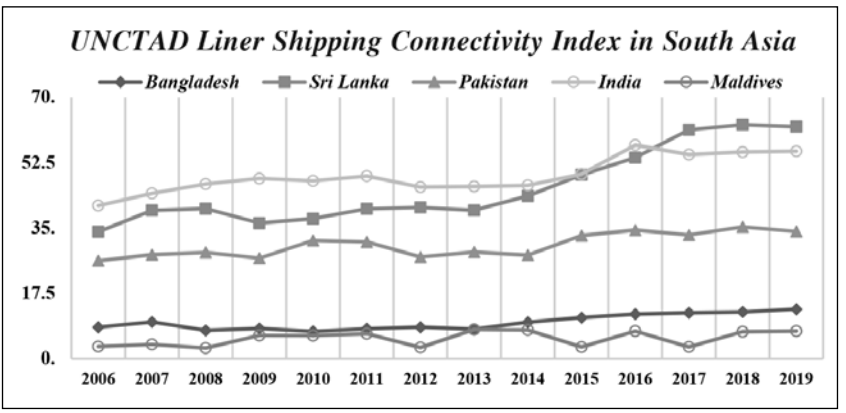
The present state of border infrastructure in all three countries leaves much to be desired, with World Bank estimating that investments in

infrastructure worth US$ 2.5 trillion will be required in the next decade.[21] The poor state of roads and railroads, lack of electricity supply at key points in the border, a limited number of LCSs and their lack of infrastructure, absence of homogeneous standards and certification, excessive data requirements, time-consuming manual transactions, excessive physical inspections, a lack of banking infrastructure and regulatory procedures increase the costs of trade manifold and make hassle-free trade a rarity.

Rapid economic growth and development have been faced by energy security issues, within adequate power supply, depleting gas supply and price hikes. For instance, in 2009-10, with gas reserves running out in Bangladesh, the government adopted a rescue strategy by importing oil to fuel power plants. There has been tremendous economic fallout, as the oil import bill increased from Tk 16,789 crore in 2009-10 to Tk 38,036 crore in 2011-12.[22]

The ICT sector, crucial for the transition into knowledge economies, is largely nascent in Bangladesh and Myanmar. This incipient ICT sector faces teething, including the absence of a long-term national strategy, lack of expertise and training facilities and underdeveloped ICT infrastructure, as well as smaller markets.

Largely fractured by the partition of the subcontinent and its conflict-ridden political consequences, there is still tremendous potential for improving transport networks for economic growth in the region. Over the years, the dominant form of intra-regional trade transport has been shipping, except for in the case of Bangladesh-India trade, which has followed the land route. Despite links being established between major coastal ports, shipping connectivity has remained low due to low volumes and higher shipping costs, according to data from UNCTAD:[23]



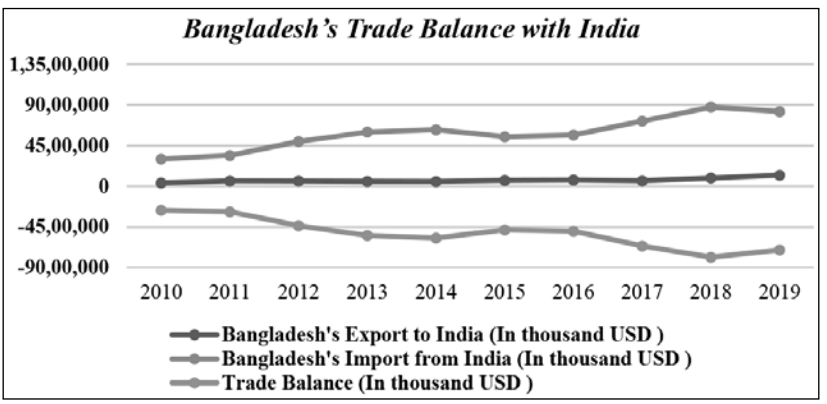
Source: Researcher's Construct (based on beginning of year figures for UNCTAD's Statistics)

Land connectivity too has remained largely underdeveloped in the sub-region, owing to the absence of an integrated transport system. Logistics costs are very high and ranges between 13-14 percent of GDP, compared to 8 percent in USA.[24] The poor condition and inadequate coverage of the road networks, notably in the NER, lack of rail networks, as well as a lack safety and modern technology, and 'missing links', such as those in the Trans-Asian Railways (TAR), are the main challenges for land connectivity.

Despite significant progress in air connectivity over the past decade, there has been a lack of complete liberalisation of the air transport industry, lack of direct connectivity between capitals and key cities in the sub-region, such as between Dhaka and Mandalay, which are still issues that need to be addressed.

Trade Deficits & Entry of China

Long-term trade deficits are another key obstacle, with a long-term impact on economic growth, associated with employment reduction, possible economic colonisation, and even budget deficits, according to the 'twin deficit hypothesis.'[25] Bangladesh has had a long-standing trade deficit with India, which has been increasing exponentially in recent years, according to data from International Trade Centre, Bangladesh Bank and Export Promotion Bureau Bangladesh:[26]



Source: Researcher's Construct (based on data from International Trade Centre, Bangladesh Bank and Export Promotion Bureau)

Tariff and non-tariff barriers and an overvalued taka-rupee exchange rate are the principal reasons for the persisting trade deficit. A similar trade deficit is also starting to develop between India and Myanmar.

The entry of China into the South Asian stage has brought a great deal of risk as well as opportunity. The regional experience of smaller South Asian and Southeast Asian nations in their economic engagement with China has been mixed. A case in point is the backlash and consequences of Chinese investment in countries such as in Malaysia, Indonesia, Sri Lanka and Maldives. Chinese FDI to Bangladesh has increased rapidly in recent years, amounting to US$ 1.16 billion in 2019, double the amount in 2018.[27] China is also the second largest source of FDI in Myanmar and its largest trade partner.[28] While this has led China's critics to accuse it of 'checkbook diplomacy,' China has also been gradually increasing its influence in regional affairs building closer ties with Bhutan, Nepal, Bangladesh and Myanmar. China's involvement in the Rohingya crisis and disputes with India at the Ladakh border have been held as an example by many critics of China's hegemonic intentions in South Asia.

Prospects of Sub-Regional Economic Cooperation (SREC)

IT & Oil

Apart from resolving challenges to economic cooperation and development, there also exist several other areas where bilateral cooperation will be of great benefit. India, being an IT powerhouse, could set up capital funds in a joint venture with Bangladesh, which has long held the desire of becoming a 'Digital Bangladesh,' with objectives of network development, human resource development and exchange of expertise. India's top tech companies like TCS, Infosys, HCL Technologies and Wipro Limited must step forward to create possible joint ventures for mutual benefit. Indian investment in the service sector and infrastructure of Bangladesh's ICT sector will be an invaluable proposition.

The offshore blocks of Bangladesh and Myanmar could potentially have large oil and gas reserves. BAPEX, a state-owned company in Bangladesh for exploration of oil and gas resources, and Indian ONGC together could supply technical and financial expertise to Myanmar for exploring offshore oil and gas resources as a joint venture, which could eventually include maritime research. Bangladesh's energy needs could also be met by Myanmar's plentiful reserves of oil and gas, with the state-owned MOGE having untapped reserves amounting to 11-23 trillion cu ft of gas and about 83 million barrels of oil.[29] Similarly, there are several possible areas for multilateral cooperation between Bangladesh-India-Myanmar, which will be greatly profitable for all three member states.

Connectivity & Maritime Aspects

A sub-regional partnership for transport connectivity, with an integrated approach combining road, railway, sea, air and inland water transport, could be undertaken, as opined by the experts. Implementation of the WB's US$ 107 million road linkage project and resolving political deadlocks should be prioritised. In the shadow of the above partnership, an initiative for infrastructure development may be taken as infrastructure development will be a common interest for transport connectivity. Developing railroads and roads to expressway standards, with higher axle-load limits, should be top priorities. As China's growing strategic clout develops in Bangladesh and Myanmar, the tri-national development, led by India, should be coherently approached for a balanced and integrated sub-region to diffuse Chinese footprints in its strategic backyard.[30]

Maritime cooperation is a possible initiative for developing the Bay of Bengal blue economy and developing economic ties between BIM. Following the conclusion of the UN verdict regarding the dispute of maritime boundary between Bangladesh and India, India has ratified six agreements regarding maritime cooperation, including MoUs regarding passenger and cruise services on lines of protocol, fairway expansion, navigation cooperation, counter-terrorism exercises, an SOP regarding coastal shipping agreement, an MoU on the blue economy and joint patrolling of waters. Such agreements, if extended to Myanmar, are likely to play a vital role in advancing maritime trade amongst BIM and opening up new opportunities for maritime exploration.

Energy & India's NER

Given the scarcity of energy sources and depletion over time, there is a growing necessity of energy cooperation in the sub-region. Bangladesh is intent on renegotiating the MBI pipeline project, shelved in 2005 due to funding issues, which is essential for the economic development of the NER and Bangladesh. With Myanmar onboard, Delhi and Dhaka should work together to draw gas through pipeline or in LNG overland and via seaports. For instance, the IOCL has proposed to build LPG bottling plant in a joint venture with BPC, (Bangladesh Petroleum Corporations), and LNG terminal in another joint venture with state-run Petrobangla.[31] In continuation, BPC and IOCL signed an agreement to jointly build an LPG terminal in Chittagong in 2016.[32] Agreements regarding energy have been signed between Bangladesh and companies based in India, such as ONGC. Bangladesh has also shown interest in gas imports from Myanmar and has proposed the establishment of a shared power plant in Chittagong,

to which Myanmar has sent positive gestures. Currently, studies are being conducted regarding the viability of importing gas from Myanmar's Chin state bordering Bangladesh's Chittagong Hill Tracts (CHT).

Apart from giving rise to bilateral and multilateral partnerships, SREC will be mutually beneficial for all three member states as there exist a lot of areas of converging interest between them. However, to work on those areas, certain issues must first be addressed.

India's north-eastern region (NER) holds immense economic potential, with plentiful farm produce, aided by demographic dividend and availability of skilled manpower,[33] which is of great demand for processed food industries in Bangladesh. However, there has been emphasis on the necessity of reorganising the supply base in the NER to meet changing demands, as well as the role of women in the workforce.[34] Improving connectivity and building cross-border value chains is going to be mutually profitable for BIM. However, recent consultation by the WB with multiple stakeholders has identified varying product standards, poor quality of infrastructure and the lack of connectivity and logistics as hindrances to value chains and sectors in the NER. The Bay of Bengal accounts for nearly 90 percent of Indo-Myanmar trade, the land-border for 1 percent and air route for approximately 9 percent. This highlights the requirement of a focused approach to improve border trade.[35] For long, India-Myanmar border trade has been low due to restrictive border-trade policy frameworks wherein trade was permitted only in a limited number of locally produced items through a system of barter. However, two important policy changes, a shift from "Barter Trade to Normal Trade" and from "Border Trade to Normal Trade" were introduced by India in December 2015.[36] The implementation of such policy changes is vital for maximising border trade.

Way Forward

Driven by China's growing interest in the region and the necessity of sustainable economic growth, the BIM countries have converging interests for cooperation. Economic interests should be prioritised over political issues, such as the Rohingya issue. Convergence can be reached by bridging the gaps of interests through sustained engagement. Economic cooperation at bilateral and multilateral levels in the proposed sub-region is of paramount importance for implementing the agenda of economic integration. Regional initiatives have seldom been successful due to trust deficits, lack of convergence in national interests and lack of bureaucratic support. Hence, a host of challenges continue to prevent economic cooperation and development reaching their full potential.

Sub-regional partnerships are not only the panacea to resolving such issues, but also bring the chance of profitable bilateral and multilateral partnerships. The key challenges to furthering such initiatives are highlighted as follows:

- Diplomatic engagement and the prioritisation of economic interests over political ones is difficult but an imperative for successful and sustainable partnerships.
- A development-oriented agenda, increased trade facilitation, investment liberalization, cross-border financing, and investments in cross-border trade are crucial for improving the state of trade and investment.
- For greater connectivity, developing logistics infrastructure, building highways between key cities, efficient transit at key points, direct air routes between important cities and robust institutional frameworks are instrumental.
- Improved border, road and banking infrastructure, better transit facilities, access to electricity, more efficient seaports, land ports and LCSs, homogenous and simpler border crossing procedures, SEZs (Special Economic Zones) and wider role of international organisations, such as WB, are pivotal to advance infrastructure development.
- To overcome logistics-oriented challenges, improved cross-border production networks, use of ICT in trade, standard operational procedures, risk management systems, authorised economic operator programmes, paperless trade and less frequent physical inspections are a must.
- Lower tariffs and non-tariff barriers, a steady supply base of raw materials, healthy and capable business environment, and dispute settlement mechanism are imperative to promote economic growth and interdependence.
- Common trade standards, coinciding cross-border customs, firm cross-border production networks, observation of trade facilitation at a government level via a joint task force committee and endeavours to cope with supply-chain bottlenecks and address trade facilitation issues via FTAs is the way to go for multilateral and bilateral economic cooperation.

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‘Clean Revolution’
The Global Renewable Energy Transformation and the Geopolitics of the Indian Ocean Region

Arjun Dev Nair

Abstract

Technological advances and falling costs have made renewables grow faster than any other energy source in recent years. Current energy trends and industry forecasts point in the same direction—a rapid rise of renewables and a short-term peak for fossil fuels followed by its long-term decline. Despite difficulties, the energy transformation has the potential to promote sustainable development across the IOR by enhancing energy independence, mitigating climate change, combating air pollution, reducing energy related conflicts and promoting economic growth.

Background

Fossil fuels have dominated the global energy landscape ever since the dawn of the Industrial Revolution in the late 19th century, when rapid industrialisation and urbanisation saw traditional biomass being displaced, first by coal and then by oil, as the primary source of global energy. The turn of the 21st century has similarly seen a fundamental energy transition away from fossil fuels and towards cleaner sources of energy, particularly renewables. This shift has been driven by newer technologies, declining renewable costs, response to global warming and desire to reduce import dependencies. New innovations in heat pumps and electric batteries are

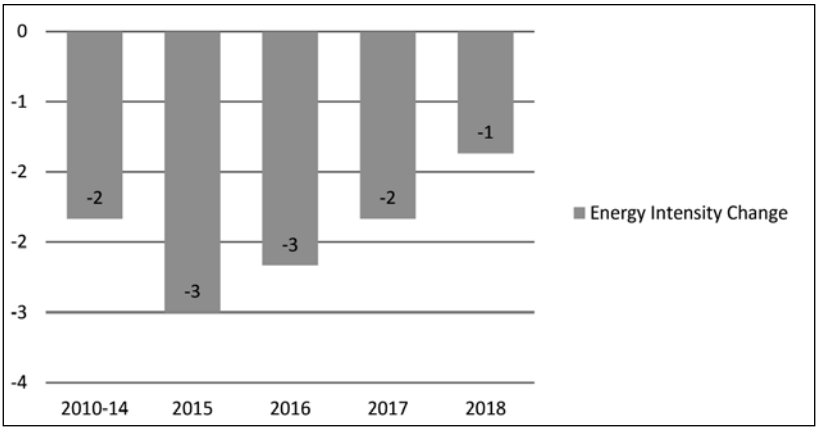
Commodore **Arjun Dev Nair** is an officer from the Executive branch of the Indian Navy and was a participant of the 59th NDC Course.

extending the energy transition beyond the power sector and into the harder-to-transform transportation and industrial sectors as well.[1] Just as fossil fuels had a profound impact on the geopolitics of the twentieth century,[2] the transition to 'clean energy' is likely to impact inter-state relations, geo-economics and the relative influence of countries in the international system.

Characteristics of the Energy Transition

Driven by declining costs, renewables are indisputably the fastest growing energy fuel worldwide and have spurred a new energy transition.[3] The energy transition is marked by three distinct characteristics. These are energy efficiency, an upsurge in renewable energy (RE) options and the pace of electrification. Recent trends in energy efficiency have reduced annual growth rates to 1 percent from 3 percent in the last century, which enables economic growth with lower energy inputs.[4] Global primary energy intensity[5] figures have consistently reduced since 2010, indicative of improved energy efficiency (Fig. 1.1).

Fig. 1: Global Energy Intensity Change 2010-18

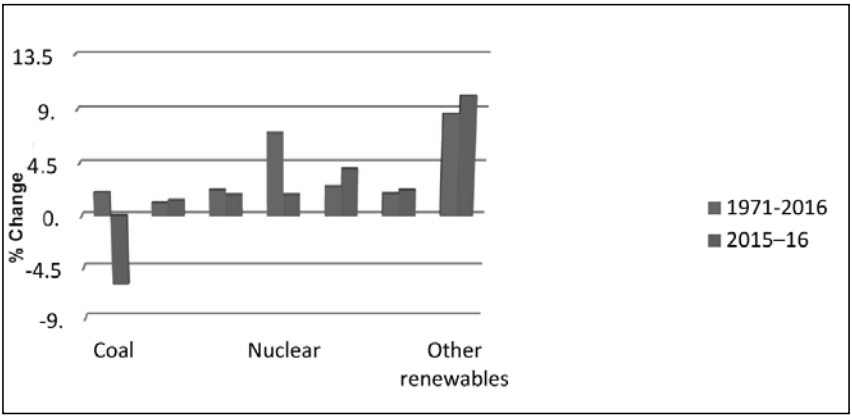


Source: Chart by the author based on data from IEA *Global Energy & CO2 Status Report 2018*[6]

Over the last decade, more new power generation capacity has been added by RE than any conventional source of energy.[7] Besides declining costs, the rapid expansion of renewables has been made possible by key enablers such as technological breakthroughs,[8] support for decarbonisation by governments, civil society and corporates[9] as well as development of

'smart cities' with sustainable energy schemes incorporated at the planning stage.[10] New capacity added by solar power in 2018 was more than coal, gas, and nuclear plants combined[11] and renewables have grown faster in a single year (2015-16) than in the entire period from 1971-2016.[12]

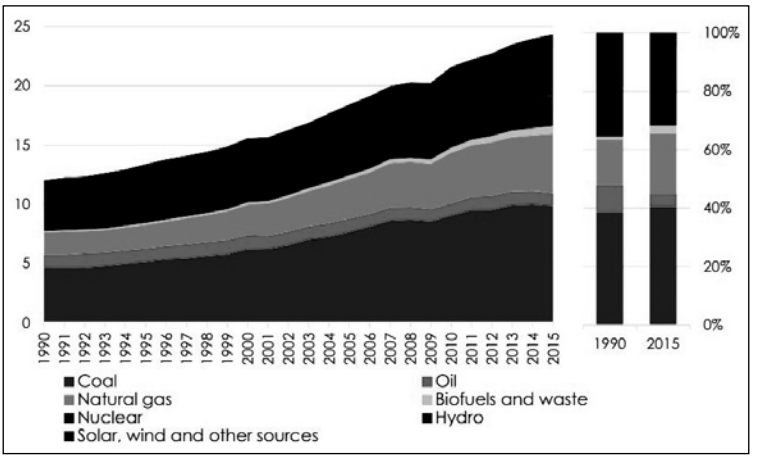
Fig. 2: Annual Average Change in Energy Supply by Fuel



Source: Chart by the author based on IEA data (World Energy Balances 2018)[13]

"Geopolitics will be driven by electrified systems. If the oil economy dominated global politics in the last century, in the days ahead electrified economies and systems will rule."[14] Since 2016, there has been greater investment in the power sector than in the oil and gas sectors, which is another reflection of the ongoing electrification of the world's economy.[15] Electricity has grown two-thirds faster than energy consumption as a whole since 2000[16] and as the chart ahead shows, this electrification is increasingly being driven by renewables that currently constitute 25 percent of global electricity production.

Fig. 3: World Electricity Generation by Source 1990-2015



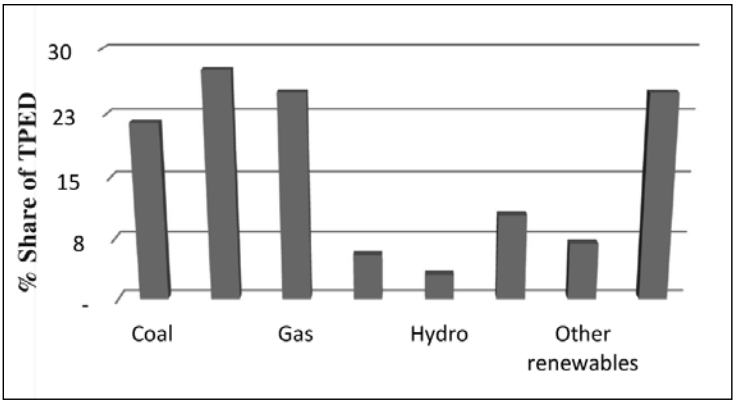
Source: UN Energy Statistics Pocketbook 2018[17]

Energy Prediction Scenarios

This article has considered the projections of two intergovernmental agencies; the *IEA World Energy Outlook* (WEO) 2018 and the IRENA *Global Energy Transition* 2018; as well as three corporate reports—*McKinsey Energy Insights* 2019, Exxon-Mobil *Outlook for Energy* 2018 and BP Energy Outlook 2019.

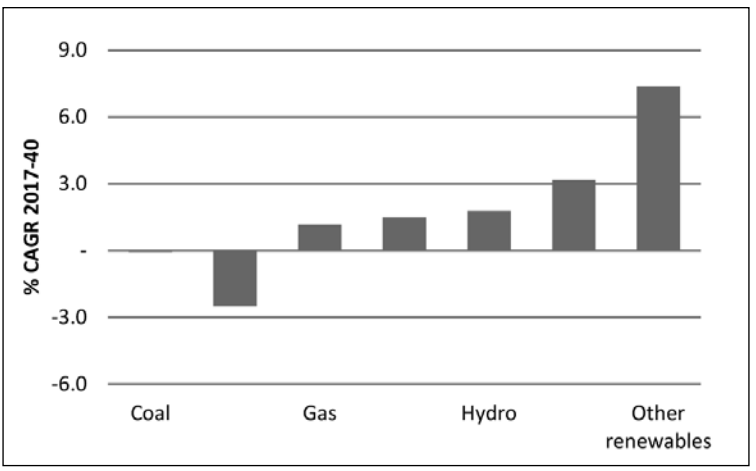
World Energy Outlook 2018, the International Energy Agency's flagship publication, covers worldwide energy trends upto 2040 and the New Policies Scenario (NPS) is the Agency's central scenario.[18]
This scenario reviews the impact of announced policies, as expressed in official pronouncements and plans, including the Nationally Determined Contributions (NDCs) of the Paris Agreement. The NPS projects that global demand for energy will rise by 25 percent in 2040 with a rapid rise in the share of renewables, mostly in the electricity sector, displacing coal and to a lesser extent oil. Non fossil fuels are projected to grow annually at 12 percent and increase to 25 percent of *Total Primary Energy Demand* (TPED) by 2040. India is the largest source of energy growth, with its energy demand doubling by 2040 and developing economies in Asia expected to account for 40 percent of global demand (refer note 18).

Fig. 4: Projected Global Share of TPED, 2040



As per the NPS, electricity's share in global final consumption will be 25 percent by 2040, up from 19 percent today, with developing economies being predicted to provide nearly 90 percent of this growth in electricity demand. Non fossil fuels are expected to corner 42 percent of the power sector by 2040, growing rapidly at 14 percent year on year. Electricity (40 percent) and gas (around 30 percent) corner an increasing share of overall end-use consumption at the expense of coal and oil.

Fig. 5: Projected Annual Growth Rates in Electricity 2017-40

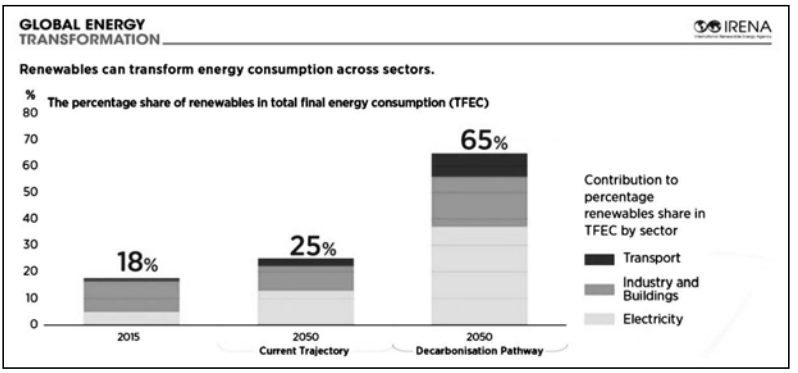


Source: Charts by Author based on IEA, World Energy Outlook 2018 data[19]

The IRENA GET 2018 assesses future energy consumption in two scenarios: the *Reference Case*, which is the 'business as usual' model and the

ReMAP Case, which analyses the deployment of renewable energy allied to energy efficiency with the goal of limiting global temperature rise to below 2°C above pre-industrial levels by 2100 (with a 66 percent probability).

Fig. 6: Global Energy Transformation



Source: IRENA, *Global Energy Transition 2018*, *A Roadmap to 2050*

The IRENA Reference Case or business as usual model sees renewable energy peaking at 25 percent of total final energy consumption (TFEC) by 2050. However, if countries are serious about maintaining their commitments to the Paris Agreement and SDGs, then the ReMAP Case is a disruptive pathway that would see the percentage share of renewables rising to 65 percent of TFEC by 2050, which is two and a half times its contribution to overall renewable energy consumption today. The increasing electrification of energy is reflected in the ReMAP Case by the share of renewable energy in the power sector growing from 25 percent in 2017 to 85 percent by 2050, mainly through solar and wind power accretions.

Insights from Industry

The McKinsey *Energy Insights* 2019 and Exxon-Mobil *Outlook for Energy* 2018 provide industry insight into the future of the global energy transition. Unexpectedly, the industry majors are more bullish about the growth of renewables than the intergovernmental agency IEA in its WEO NPS scenario. McKinsey[20] expects primary energy demand to plateau by 2035 with electricity consumption growing two-fold by 2050 and renewables providing half of total power generation by that time. Oil demand is predicted to peak in the early 2030s with natural gas the only fossil fuel expected to grow beyond 2035. Exxon Mobil[21] predicts that growth in China and

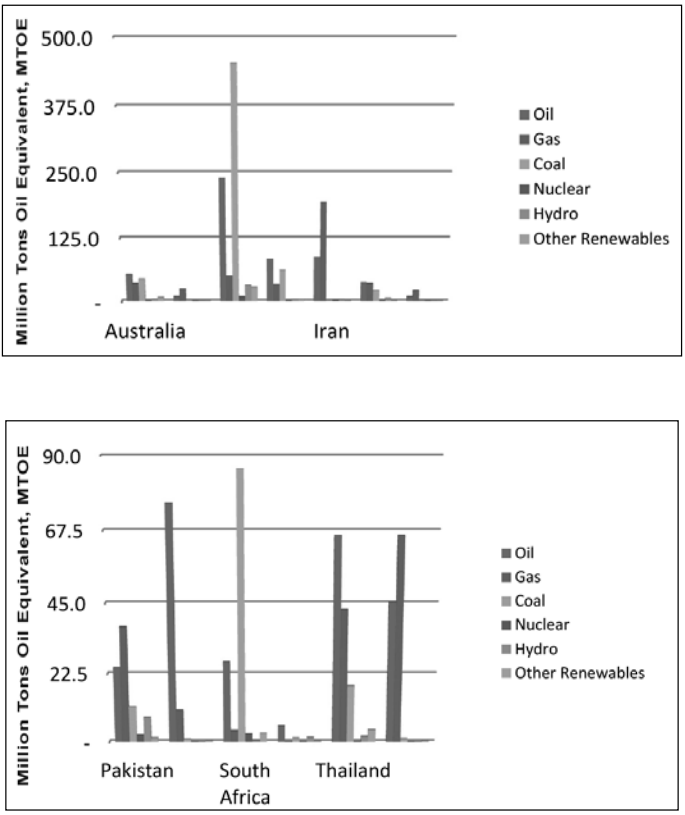
India would drive global energy demand up by 25 percent, with electricity demand expected to increase by 60 percent by 2040, led by doubling of power demand in non-OECD countries. Solar and wind energy share of energy production is expected to rapidly expand, contributing close to 40 percent of new demand growth in conjunction with nuclear. Oil is expected to peak by 2030, but will remain relevant due to continued usage by transportation and petrochemical industries. Natural Gas is expected to grow rapidly, reaching 25 percent of all demand by 2040.

BP Energy Outlook 2019[22] foresees runaway electrification of energy supplies with around 75 percent of the growth of primary energy expected in the power sector. Renewable energy is projected to become the largest source of power globally by 2040, becoming the fastest growing segment of energy supplies and providing 50 percent of the growth in global energy supplies. Demand for oil and other liquid fuels is expected to peak by 2030, whilst natural gas is anticipated to grow robustly. Coal supplies are expected to stabilise at current levels, with growth in India and SE Asia balanced by declining demand in China and the developed world. BP also anticipates the number of electric vehicles to increase to around 25 percent by 2040, supported by demand for fully autonomous cars and shared-mobility services.

Impact on Energy Geopolitics

In recent times, economies of the GCC have contracted due to declining fossil fuel revenues. The energy transition could have two possible geopolitical effects on producer countries in the IOR. The first is that 'Rentier' states[23] will be forced to diversify their economies and strengthen their private sector to provide gainful and sustainable employment for their populations. Second, the decline in fossil fuel revenues, if not accompanied by internal reforms, could have adverse implications for political stability. Deployment of renewables would significantly enhance energy security and energy access for fossil fuel importing countries. It is no wonder that many of the countries to date that have announced ambitious plans for deployment of renewables, including China, India, Morocco, Chile and Jordan are huge energy importers. The predominance of fossil fuels within total primary energy consumption of major IOR economies can be seen in Fig. 1.7.

Fig. 7: IOR Total Primary Energy Consumption By Fuel, 2018



Source: Charts by the author based on data from BP *Statistical Review of World Energy 2019* (n. 22)

Oil embargoes and sanctions have been repeatedly used in the past as instruments of coercion. In 1973, the OPEC oil embargo in the aftermath of the Arab-Israeli conflict wreaked havoc with the world economy. Similarly, the USA has repeatedly imposed sanctions on Iranian sale of oil to deny it valuable foreign exchange revenues. However, renewable energy is available in most countries unlike fossil fuels and can thus be termed a 'flow'—readily available, permanent by nature and difficult to disrupt—whereas traditional fossil fuels are labeled as 'stocks' with restricted availability, finite supplies and geographic concentration.[24] Thus, the production of indigenous renewable energy will strengthen the energy security of countries in the IOR.

Transit routes carrying energy trade are also often the source of competition. Iran has repeatedly threatened to close the Straits of Hormuz to international shipping whenever tensions have risen in the Persian Gulf.[25] The energy transition is expected to witness a change in

these energy trade routes, with consequent impact on the geopolitical map of the region. With renewable energy dispersed and available at most locations, maritime focal points such as the Straits of Hormuz or Malacca will become less relevant for energy interdiction. Some maritime trade routes in the IOR will therefore lose importance, while other shipping lanes would grow in significance.

The transition to clean energy could result in potential competition across the IOR with respect to renewable energy infrastructure. In 2017, the largest investors in renewable energy were China (a massive US$ 126.6 billion) and the EU (US$ 40.9 billion), with the US a close third (US$ 40.5 billion). India was up 14 percent at US$ 10.9 billion.[26] China's Belt and Road Initiative (BRI) has already shown how infrastructure investments can be utilised for geopolitical leverage in the IOR and China's proposal for a wind and solar-powered global electrical grid from the North Pole to the Equator by 2050, the "Global Energy Interconnection," is another ambitious long-term vision for infrastructure hegemony.[27] It is no wonder that the International Renewable Energy Agency (IRENA) stated in its report on Renewable Energy in 2019, "China's infrastructure diplomacy could be as important to the 21st century geopolitics as the protection of sea lanes in the Indian Ocean was to the hegemony of the United States in the 20th century."[28]

Energy Diplomacy

As energy sources diversify away from fossil fuels, the Organisation of the Petroleum Exporting Countries' (OPEC) hold over energy prices is likely to weaken.[29] Dispersion of energy 'power centres' could accelerate the shift towards a 'multipolar' world order. As economies transition away from oil, trade relations between the IOR states may evolve significantly since bilateral ties between exporter and importer countries are currently dominated by fossil fuels to the detriment of all other trade.

The rise of renewables would also see a subtle shift in energy diplomacy towards sustainable energy alliances. Several new alliances and initiatives have already been mooted and the Paris 2015 climate conference saw the emergence of the International Solar Alliance (ISA),[30] the Global Geothermal Alliance[31] and Mission Innovation.[32] In the words of India's Prime Minister, Shri Narendra Modi, at the inauguration of the ISA, "the ISA will play the role of OPEC in the future."[33] India is banking on ISA and similar sustainable energy initiatives to build a deeper engagement with the developing world across the IOR through energy diplomacy.[34]

Competition for Resources

Rare earth elements (including dysprosium, neodymium, terbium, europium and yttrium) are vital components of renewable energy hardware.[35] China and Russia together have 57 percent of global resources, while the largest remaining country, Australia, holds a mere 2.4 percent of global reserves.[36] Lithium, cobalt and indium are also essentially required for clean energy technologies. The world's largest lithium producers are Australia, Chile, China and Argentina.[37] The global demand for lithium may change rapidly as electric vehicles become cost-competitive with combustion engines. For example, India has reportedly considered plans for a transition to all-electric motor vehicles by 2030.[38] Indium and cobalt are also used extensively in solar panels and batteries, with China holding half of the world's indium and DR Congo supplying more than 50 percent of the world's cobalt.[39]

Given their monetary value and concentration within a few countries of the world, there is a strong likelihood of 'cartelisation' of these crucial clean energy source materials. Although it is extremely unlikely that these cartels would be able to exert the kind of influence that OPEC does over oil, they would still be able to wield considerable geopolitical leverage over the consumer countries. As renewable energy technologies become more widespread, hoarding of 'clean' mineral elements in reserve as well as competition over these resources can be expected and tensions could develop between countries over the transfer of such niche technologies.[40] As Criekemans indicates, "from an external-geopolitical perspective, those countries that today invest in renewable energy sources and technology may become the dominant geopolitical players tomorrow."[41]

Countries that are overly dependent on the income from fossil fuel exports have been observed to be susceptible to a variety of developmental ills, collectively termed as the 'resource curse.'[42] As noted above, the production and sale of those critical source materials utilised in the manufacture of renewable energy machines could earn significant rents for 'clean' mineral-rich countries, and an analysis of the likelihood of a new 'resource curse' impacting the IOR is covered subsequently.

Readiness to Absorb Change

Control of and access to energy resources drives economic power and geopolitical influence. The rapid transition to renewable energy in the next few decades would have a significant impact on the relative power of states and the IOR would be no different. This section attempts to identify the winners and losers of the coming energy transformation in the

Indian Ocean Region based on their 'Readiness,' 'Exposure,' 'Resilience' and 'Potential.' Detailed studies by the World Economic Forum, World Bank and Bloomberg have looked at several indicators to ascertain global readiness to absorb the impact of the clean energy transformation.[43] The analysis by the World Economic Forum assessed 115 countries across the world for their ability to make the energy transition. The transition readiness score of each country was calculated out of 100 based on analysis of six fundamental indicators—Capital and Investment, Regulation and Political commitment, Institutions and Governance, Infrastructure and Innovative business environment, Human capital and Consumer participation and Energy System Structures.[44] The World Bank study includes a measure to assess the capacity of countries to absorb investment in renewable energy based on seven key indicators—Legal frameworks, Planning for Energy Expansion, Regulatory Support for RE, Financial Incentives for RE, Network connections and Use, Counterparty Risk and Carbon Pricing/Monitoring.[45]

A following tabulation of the scores achieved by IOR countries in all three studies provides insights into the readiness of these countries for the energy transition.

Table 1: IOR Energy Transition Assessment

S No	Country	Emerging Markets 2018 Score (Scale of 0-5)		Energy Transition 2019 Score (out of 100)		World Bank RISE 2017 Score (out of 100)		IOR Rank (out of 21)
		Score	Rank (Out of 103)	Score	Rank (Out of 115)	Score	Rank (Out of 133)	
1.	Australia	NR	NR	54	43	77	19	***1***
2.	Bangladesh	1.86	30	43	90	42	82	***13***
3.	India	2.57	02	49	76	87	03	***2***
4.	Indonesia	1.73	46	46	63	54	61	***9***
5.	Iran	NR	NR	33	101	59	48	***10***
6.	Kenya	2.12	16	51	71	56	52	***6***
7.	Madagascar	1.61	61	NR	NR	21	119	***17***
8.	Malaysia	2.09	17	55	31	58	49	***3***

9.	Maldives	NR	NR	NR	NR	24	116	***19***
10.	Mozambique	1.47	69	37	111	25	115	***18***
11.	Myanmar	1.92	28	NR	NR	28	111	***14***
12.	Oman	1.65	53	50	68	14	127	***16***
13.	Pakistan	1.86	31	46	97	55	57	***11***
14.	Singapore	1.58	65	65	13	54	64	***8***
15.	Somalia	1.03	91	NR	NR	02	133	***20***
16.	South Africa	1.75	44	37	114	76	21	***12***
17.	Sri Lanka	1.93	26	45	60	55	59	***7***
18.	Tanzania	1.66	51	47	84	42	83	***15***
19.	Thailand	2.24	10	51	51	47	76	5
20.	UAE	2.05	19	50	67	72	26	***4***
21.	Yemen	NR	NR	NR	NR	20	120	***21***

Note: NR – No Record

Analysis of the country-wise data from all three global reports reveals not unsurprisingly that Australia is the top ranked nation of the IOR in terms of readiness for the energy transition. Except for Myanmar, the countries of South-East Asia are also comparatively well prepared for the energy transition, with Indonesia, Malaysia, Singapore and Thailand all figuring in the top ten rankings in the IOR. India has promulgated ambitious RE targets of 175 GW by 2022[46] and has been identified as the largest energy growth market in the next few decades.[47] Accordingly, India's second ranking in terms of readiness for the energy transition is well earned but makes it an outlier in South Asia, with Bangladesh, Pakistan and Maldives all ranking in the lower half, although Sri Lanka is slightly better placed at seventh rank.

The oil-exporting countries of the Persian Gulf are relatively unprepared for the energy transition with the notable exception of UAE, which aims to achieve 70 percent zero carbon energy by 2050[48] and is ranked at fourth position in the IOR. Kenya is the clear leader in South and East Africa in terms of readiness for the energy transition and is a deserving sixth rank in the IOR. However, the other African countries, including South Africa and Tanzania, are lagging considerably in this regard. In the absence of data on Comoros, Mauritius and Seychelles in any of the above three studies, no inferences can be drawn about these countries readiness for the transition.

Renewables Leadership Potential

Wind, Solar and hydropower

A study of the wind, solar and hydropower potential of the IOR countries would reveal the likely candidates well placed to assume leadership positions in the new energy system. Geothermal and Bioenergy have not been considered since their contribution to overall energy growth is projected to be minimal, even though Africa, Australia and Indonesia in the IOR are well endowed with such resources.[49] Since all the countries of the IOR are littoral and island nations, wind energy is amply available, with only the countries of SE Asia on the Equator being relatively less windswept. The best spots in the IOR with the strong and steady winds required for optimum operation of wind turbines are in South Africa, Somalia, Iran and Australia as well as everywhere offshore except for the 'Doldrums' on either side of the Equator.[50] The countries of the Persian Gulf, Africa and Australia in particular are also well endowed with solar energy, with all the remaining countries falling in the medium to high insonification zone close to the tropics. East Africa and Madagascar, Himalayan South Asia and SE Asian countries have substantial hydropower potential, most of which remains untapped.

Mineral Resources

IOR States rich in critical minerals essential for manufacture of RE technologies would benefit most from the energy transition. The main materials required for clean energy production are shown in Table 3.2.

Table 2: List of 'Clean' Energy Materials[51]

S No	Material	Solar Technology	Wind Technology	Electric Vehicles & Energy Storage
1.	Bauxite & Aluminium	√	√	√
2.	Cadmium	√		
3.	Chromium		√	
4.	Cobalt		√	√
5.	Copper	√	√	√
6.	Galium	√		
7.	Germanium	√		
8.	Graphite			√
9.	Indium	√		

10.	Iron	√	√	√
11.	Lead	√	√	√
12.	Lithium			√
13.	Manganese		√	√
14.	Molybdenum		√	
15.	Nickel	√		√
16.	Rare Earths		√	√
17.	Selenium	√		
18.	Silicon	√		√
19.	Silver	√		
20.	Tellurium	√		
21.	Tin	√		
22.	Titanium			√
23.	Zinc	√	√	

An analysis of the distribution of these source materials across the IOR nations from interactive charts[52] reveals that Australia is one of the top three sources for clean minerals globally, the other two being Latin America and China. Hence, Australia will only grow in importance as a commodities supplier in a clean energy scenario. South Africa is the other IOR country with substantial reserves of many of the clean minerals, with other African countries, notably Tanzania, Mozambique and Madagascar rich in platinum, manganese, bauxite, and chromium. India possesses appreciable reserves of iron ore, steel and titanium, whilst Indonesia and Malaysia possess Bauxite and Nickel.

Clean Energy Innovation

The amount of clean energy manufacturing value added as well as the number of renewable energy patents awarded provide a good measure of a country's capacity for clean energy technological innovation. The Clean Energy Manufacturing Analysis Centre (CEMAC), sponsored by the US Department of Energy, tracks clean energy manufacturing across four clean technology sectors—wind turbine components, solar photovoltaic modules, lithium-ion batteries and light emitting diode (LED) packages.[53] CEMAC has identified 12 countries globally that are primary manufacturing hubs for these four key technologies and amongst IOR countries only India and Malaysia find mention in this list.[54] According to the CEMAC report, Indian domestic manufacturing of wind turbine components and photovoltaic

module end products is promising, but LED or Li-Ion batteries supply chains are non-existent. Malaysia, on the other hand, was found to have better domestic manufacturing capacity for solar photovoltaic modules and LEDs.[55]

In addition to India and Malaysia, Kenya and South Africa have also made rapid strides in enhancing clean energy manufacturing in recent years. South Africa has generated close to 35,000 renewable energy jobs and enforced domestic content legislation, which is aimed at boosting domestic manufacturing of clean technology.[56] In Kenya, energy startup M-KOPA reportedly sold 100,000 solar PV modules in 2016-17 manufactured in Kenya by Solinc East Africa, with plans to source all panels from Kenya.[57]

Data available from the International Renewable Energy Agency (IRENA) shows that only five IOR countries have filed renewable energy patents in their name—Australia (7139), South Africa (1448), India (557), Malaysia (249) and Kenya (1).[58] However, these IOR nations are nowhere near competing with the global leaders, China (90,000 patents) and USA (57,000 patents). This is also reflected in the fact that only India, Australia and South Africa figure in the top 25 countries for global investment in clean technology in 2018, although UAE was also a major investor in 2017 with US$ 6 billion.[59]

Mitigating Conflict

The latest report of the UN's Intergovernmental Panel on Climate Change (IPCC) in 2018 has identified South Asia, South-east Asia and Africa as the worst affected regions of global warming. Floods, cyclones, degradation of marine ecosystems and extreme heatwaves in these regions could trigger humanitarian disasters and associated conflicts.[60] Renewable energy deployment could prevent conflicts arising across the IOR from the troubling socio-political consequences of climate change.

Energy access for the most vulnerable populations is essential for social development. Globally, more than one billion people worldwide are denied access to electricity and close to three billion people cannot access clean cooking fuels.[61] The situation is particularly critical in developing countries of Asia and Arica across the IOR which are beset by energy poverty. Energy poverty has been described by the US military as a "threat multiplier",[62] which instigates cross border migration and internal unrest. Availability of modern sustainable, renewable energy sources could significantly reduce the risk of regional conflict and civil wars in the IOR.

Challenges & Way Forward

It appears clear that the global energy transformation will accelerate creation of a multipolar world order, alter inter-state relations and fundamentally change global economic and social structures. The pace of the energy transformation in the IOR is difficult to predict given the problems of ensuring energy access to vulnerable populations across the region. Hence, affordability rather than availability of renewable technologies would be the predominant factor driving clean energy growth across the region. The current energy trends and industry forecasts all point in the same direction—a rapid rise of renewables and a short-term peak for fossil fuels followed by a long-term decline. The medium to long-term impact of the energy transformation on the IOR is clearly apparent. The influence of those countries that have invested in enhancing renewable energy capacities and inducting relevant technologies will grow. By contrast, states overly dependent on fossil fuel exports will need to diversify their economies and adapt to the energy transition or risk losing influence.

Most the IOR countries would stand to benefit from the energy transformation since it would offer them the opportunity to attain energy independence and reduce costly energy imports. Climate change effects and energy poverty issues could be effectively mitigated thus reducing many drivers for conflict in the region. Developing countries, particularly in Africa, could leverage the energy transition to leapfrog technologies based on fossil fuels and directly meet their growing energy needs through renewables. The expansion of renewable energy also promises to reduce energy related conflicts by 'democratising' the availability of energy and reducing dependency on cartels and monopolies for energy supplies.

Analysis of RE potential, mineral resources, investment and innovation capacities indicate that India, Australia, South Africa, Malaysia, Kenya and UAE are the IOR nations well placed to take the lead in the clean energy transformation across the IOR. The African countries are especially well placed to leapfrog the fossil fuel based developmental model by aggressively pursuing clean energy policies, given that they are also richly endowed with the minerals required to sustain the clean energy transformation

Domestic policies to stimulate local manufacturing in the face of the global glut in supplies from China will be the principle challenge that these nations will need to address.

Despite difficulties, the energy transformation has the potential to promote sustainable development across the region by enhancing energy availability, mitigating climate change, combating air pollution, reducing

energy related conflicts and promoting economic growth. India and other countries of the IOR must develop appropriate foreign and domestic strategies to ensure a smooth transition.

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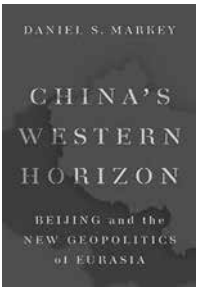


China's Western Horizon: Beijing and the New Geopolitics of Eurasia

Daniel S. Markey
(OUP, 2020, 322 pages, Rs. 2577)

Reviewed by *Mohit Mahendroo*

'*China's Western Horizon: Beijing and the New Geopolitics of Eurasia*' is a 2020 publication by Daniel S. Markey, professor at Johns Hopkins University's School of Advanced International Studies and a South Asia expert who has worked at the Council on Foreign Relations and the US Department of State. In a riveting and deep study, the book assesses China's ambitions, history of relationships along its western horizon. Essentially, it examines the interactive effect of China's role in the geopolitics of Eurasian sub-regions: South Asia, Central Asia and the Middle East.

Viewing continental Eurasia primarily through the US strategic lens, he offers fascinating insights into issues related to the landmass which are of sharp interest and immediate concern to the Indian strategic community. He has contextualized China's economic and geopolitical initiatives with Pakistan, Kazakhstan and Iran, and complemented them with nuanced and insightful commentaries on India, Saudi Arabia and Russia. Clearly indicating that China's quest for greater regional and global leadership under the assertive leadership of President Xi Jinping marks a changed strategic orientation, shedding Deng Xiaoping's 1990 dictum to *"…hide our capacities and bide our time."* The Belt and Road Initiative (BRI) is spotlighted as China's new land, maritime, polar and digital economic belt that extends across a region comprising 4.4 billion people and one-third of the world's GDP. The author highlights the orchestration of all instruments of the state by China, in particular, economic statecraft, to ensure the success of BRI.

Brigadier **Mohit Mahendroo** is an Indian Army officer from the Army Service Corps and is a participant of 60th NDC Course.

The historical perspective on China's trade—spices, porcelain, textiles and tea—with Central and South Asia during the Han and Tang Dynasties is rich, with commentary on the Ming Dynasty's Admiral Zhang He, whose fleet established China as the *"hegemonic power over much of the Indian Ocean world"* between 1368 and 1644 AD. The author weaves an interesting narrative to link relevant historical signposts such as disbandment of the fleet by a weak emperor, ushering the beginning of the end of the Mings, the last Han Dynasty in China. It was replaced in 1636 by the Manchus who established the Qing Dynasty till it ended in 1912 with the establishment of the Republic of China. It was during the Qing that China experienced a series of *"unequal treaties"* imposed on China by Western powers, Russia and Japan, from 1840–1950—the *"century of humiliation,"* which since has been used by the Chinese Communist Party (CCP) to shape China's worldview.

The chapter on *South Asian Conflicts* is engrossing with an account of China's good trade and commercial relations with India and Pakistan. China's strategic partnership with Pakistan is highlighted as a unique relationship that benefits Islamabad vis-à-vis India, while simultaneously providing China with security assurances from Pakistan on terrorism in Xinjiang. Initiatives like the China-Pakistan Economic Corridor (CPEC) are also examined with highlights of domestic rumblings of discord and an insight into the fragility of the Pakistani state, and roles of various vested interest groups including the Pakistan Army. Anecdotes like China's royal treatment in places like the Lahore Airport, with a *"Chinese security desk"* of Pakistan security agencies, to help Chinese visitors that add up to 70,000 workers in Pakistan captures this special relationship. The concluding Net Assessment in the chapter follows an examination of the likelihood of China as a regional stabilizer and validation of the common view that *"the complicated interplay between Chinese actions and regional realities is likely to exacerbate political and economic disputes within Pakistan and heighten tensions between Pakistan and India."*

The section of the book on Central Asia is particularly instructive, noting that China's trade with Central Asia goes back at least 3000 years, though the weight of the discussion remains centred on Kazakhstan. It is logical to appreciate Russian concerns about losing its influence with Kazakhstan, whose oil and gas reserves and partnership with China National Petroleum Corporation (CNPC) provides China with an important source of energy, while 40 percent of Kazakhstan's foreign trade is with China's Xinjiang Province. This trend underscores Putin's inability to reassert control over the whole of Central Asia in the face of expanding Chinese influence. The two sections on South Asia and Central Asia together provide a view on the

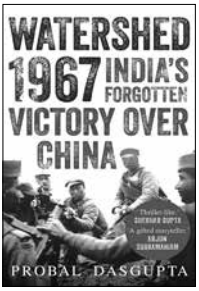
similarity between Indian and Russian concerns and behaviour due to Chinese activities in the respective regions, with specific context of Kazakhstan and Pakistan. China's economic and geopolitical focus on the Middle East is clearly presented with specific reference to Iran and Saudi Arabia, the two competing regional power-centres. China's relationship with Iran is traced over 2000 years to the Han and Tang dynasties. Over 50 percent of China's oil comes from the Middle East, primarily from Iran and Saudi Arabia, and also from Egypt, Turkey, Iraq, the Gulf States and others. China as early as 1986 provided Iran with Silkworm, anti-ship cruise missiles and simultaneously helped with Iran's nascent nuclear programme. China's Huawei and ZTE (Zhongxing Telecommunications Equipment Corporation) provide Iran with significant capabilities. China and Saudi Arabia established diplomatic relations in 1990, immediately after China provided Riyadh with CSS-2 IRBMs, followed by the provision of CSS-5 missiles in 2007. China's deft balancing of both the states contextualizes the width and depth of expanding influence and is instructive in this regard. The concluding section of the book, dealing with US-China competition in Eurasia, is pertinent and compelling. This meticulously researched book posits that Xi Jinping's China will not be satisfied until China achieves a dominant global role, eventually displacing the US and Russia as the world's principal hegemon. China's focus on diplomacy and using its economic tools of statecraft like the AIIB to enhance its global leadership stature represents a significant challenge to the US. It's willingness to participate in military exercises with Russia and other countries, and the establishment of overseas military bases such as the one in Djibouti, may presage intent to establish additional military bases or dual use facilities in other countries for economic, geopolitical and military advantage.

Providing an insight into the Trump and previous administrations' thinking, Markey's narrative notes that the US policy continues to focus on its relationship with allies and partners in the Indo-Pacific region, while maintaining the trans-Atlantic NATO alliance. But the focus clearly is the Indo-Pacific region (and China) to build *"a networked security architecture capable of deterring aggression, maintaining stability, and ensuring free access to common domains."* The author makes the very interesting case that the US does not have these concerns in China's west (continental Eurasia), which his sources say, "*… it's a messy region, full of geopolitical contests.*"

The capstone section of the book dealing with strategic options for the US in continental Eurasia is recommended as mandatory reading for anyone interested in US-China relations. The author succinctly reduces the US' options thus: *Strategic Withdrawal* or benign neglect so as to not spread the

US too thin over distant and less essential territories; *Peaceful Accommodation*, to work constructively in this region with China; *Critical Publicity*, to expose harmful Chinese activities while highlighting the US values and *Selective Competition*, to outdo some of China's economic initiatives by providing viable alternatives for infrastructure financing to prevent states from being susceptible to Chinese economic coercion. For scholars focusing on this region, it would be fascinating to note which of the trajectories the US policy would follow. This review suggests that *Selective Competition* may emerge as the option of choice.

The book is remarkably timely and meticulously documented, with over 100 pages of footnotes. Compellingly, the author's conclusions should be noted by policymakers and scholars alike as an approach framework. He suggests that a fine grained appreciation of the Eurasian theatre would be invaluable in the impending global geopolitical competition of the US with China. Germane to this would be clear grasp of local dynamics described by histories, interests and relationships, to advance USA's specific national interests. The book is exceptional for its interwoven strategic historical and geographical landscape.



Watershed 1967: India's Forgotten Victory over China

Probal Dasgupta

(Juggernaut, 2020, 274 pages, Rs 595)

Reviewed by *Arjun Subramaniam*

Subsumed by the prominent discourse that attributes the current restrained texture of the India-China deterrence model to deft politico-diplomatic manoeuvring, the military dimension has often been consigned to the background. Among other reasons for the lack of awareness of the many face-offs and skirmishes along the Line of Actual Control (LAC), and the border with China across the state of Sikkim, is the lack of archival data and official narratives that are available in the public domain. While there is still some reporting in recent times, the period between 1962 and 1971 continues to lie in the 'grey zone' of public consciousness with regard to the military dimension of the India-China relationship. It is in this context that the first detailed account of two short but-fierce encounters between the Indian Army and the People's Liberation Army (PLA) across two 15000 feet mountain passes in Sikkim, is particularly welcome. Enriching the reading experience is the fact that Probal Dasgupta, the author of *Watershed 1967: India's Forgotten Victory over China*, is an emerging thought leader and an Ex-Indian Army officer who served in the Gorkha Regiment for several years before embarking on a career in consultancy.

Sandwiched between the two India-Pakistan wars of 1965 and 1971, the Nathu La and Cho La fire fights of September 1967 have surprisingly been underplayed even in the Indian military with war colleges rarely discussing their impact and relevance. The narrative weans the reader into first understanding the strategic landscape in the sub-continent during the tumultuous days of the 1965 India-Pakistan War; the twists, turns and intrigue in the progressive

Air Vice Marshal (Dr) **Arjun Subramaniam** (Retd) is the Editor of *Kuutneeti* and author of *India's Wars: A Military History 1947-1971* and *Full Spectrum: India's Wars 1972-2020*. This review was published in *The Hindu* on April 11, 2020.

amalgamation of the kingdom of Sikkim into the Union of India; and the constant Chinese attempts to prevent the accession. Even as Lt Gen Harbaksh Singh was orchestrating India's military revival in the 1965 war with Pakistan, the Chinese played their cards carefully and commenced applying pressure on the Sikkim and Bhutan fronts, something that surely played on the Indian leadership as they negotiated a ceasefire. The constant jostling for ground across the Tibet-Sikkim border including on the desolate Giagong Plateau in north Sikkim at 18,000 feet comes out vividly, and not many know that several Indian soldiers from the Assam Rifles were killed there in an attack by the Chinese in December 1965. This alerted Major General (later lieutenant general) Sagat Singh, the divisional commander of the Gangtok-based 17th Mountain Division, that something was cooking in Mao Zedong's mind about teaching the Indians a lesson again.

Sagat Singh and two battalions of the Indian Army, 2 Grenadiers and 7/11 Gorkha Rifles, occupy pole position in the heart of the narrative. While the former showcased his initiative and aggression by going against the diffident posture demonstrated by his corps commander, and advocated a tough posture against Chinese bullying along the Sikkim watershed, the latter were more than a match when the guns boomed. Dasgupta has a cordite-like feel for battle, and he does not hold back any punches when he writes that the Indian battalions at Nathu La and Cho La almost wilted in the face of the initial Chinese artillery barrage and withering machine gun fire. However, it was excellent leadership at all levels that helped the Grenadier battalion fight back with extremely effective artillery support. The fight at Cho La a few days later was equally fierce, with close quarter combat seeing the Gorkhas get the better of the Chinese who retreated after suffering heavy casualties. While individual acts of gallantry get their due weightage, Dasgupta highlights the larger strategic landscape in which India chose to downplay the impact of the Nathu La and Chola skirmishes in which the Chinese lost almost twice the number of soldiers as compared to the Indians. He argues forcefully that it was the Nathu La and Cho La experiences that set the stage for India's robust responses at Sumdorong Chu in 1986/87, and then again at Doklam in 2017. The book is well-researched, has impactful photographs and maps. It follows an easy-to-read crossover style of writing that would appeal to a wide cross-section of readers. Dasgupta does yeoman service to the broader discipline of military history by bringing into focus the turning point in India-China relations.

Submission Guidelines for Authors

General

Kuutneeti: A Journal of the National Defence College, New Delhi, solicits contributions from course participants, faculty members, alumni and Subject Matter Experts (SME) on the entire panoply of issues directly or indirectly related to global and national security. These could be in the form of Commentaries, Journal Articles and Book Reviews. While commentaries must be 2500-3000 words, it is desirable but not compulsory to have endnotes. Internal IAG Groups must clean up their piece to conform to the style that has been featured in this issue for their commentaries to be published. Journal pieces must be between 4500–5000 words and should be accompanied by an abstract and endnotes. References and bibliography are not required. Course participants and SDS's must note that it takes quite an effort to create an abridged version of an ongoing thesis and the latter must identify potential pieces midway through the thesis process and initiate a dialogue with the editor to ascertain the suitability of the topic for publication should the author be interested. Book reviews should be between 1000–1500 words of a book that has been published in the last two years. Alumni are welcome to submit relevant pieces for publication.

Style

All journal articles must be accompanied by an abstract of 100-150 words. ndsThe word count is not inclusive of the abstract or endnotes. Authors are to use Arial Font (size 12) and select English (UK) MS Word. Anything that has been extracted from a previous work must be cited in endnotes. Endnotes are preferred to footnotes and the citations must conform to the Chicago Manual Style which can be accessed at: https://www.chicagomanualofstyle.org/tools_citationguide/citation-guide-1.html

The full name and address of the author, along with a brief Curriculum Vitae (100 words), should be submitted. The contribution must be submitted by email to ndcjournal.kuutneeti@gmail.com

The Editor retains the right to make alterations and would reach out to the author if the alterations impact the flavour of the article. Should the author have objections to the changes, the article would be dropped.

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6, Tees January Marg
New Delhi 110 011
India
Website: www.ndc.nic.in
E-mail: ndcjournal.kuutneeti@gmail.com

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