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EDITOR'S NOTE

As the year draws to a close, one can only hope that 2018 will be less trying, more peaceful and the tensions in the world will ease with the realisation that reduced tensions permit progress and well-being. That is written as part of Christmas cheer, but is it a forlorn hope? Time will tell, but we must hope that 2018 will be better than 2017. Be that as it may, we will continue to provide for our readers well thought out and relevant articles on national security.

The lead article in this issue is an examination of our offsets policy by **Dr SN Misra** a former Joint Secretary (JS) (Aerospace) in the Ministry of Defence. He has dealt with the subject for many years and he presents his views clearly and cogently. He examines the policy as it has altered over the years since its first version came into being in 2005. The main purpose was to bolster indigenisation but the policy has not been an unqualified success. In spite of the fact that with the offsets policy, the costs rise by some 10 percent, we have not followed a concerted plan of action, and have, instead, resorted to incremental changes. The recommendations he makes have merit and it is hoped that they will be examined in some detail. A good concept must yield good results.

There have been a number of articles and discussions on the inadvisability or otherwise of adopting an Integrated Theatre Command concept in our country. The Indian Air Force vehemently opposes the concept and with good reason. In another well argued article, **Gp Capt Vivek Kapur** argues that Integrated Commands will seriously undermine the effectiveness of Indian air power. The ranges and attributes of modern-day combat aircraft in our arsenal are way superior to what they were some decades ago. From a given deployment location, they can now be tasked to cover geographical areas of more than one Integrated Command. Also, the numbers

of combat aircraft and, particularly, the force multipliers are very limited and there is no wisdom in sharing poverty. He suggests that instead of continuing to keep the issue alive, our armed forces will do well to recognise that the need of the hour is joint planning and not major organisational changes.

In an interesting and very readable essay, **Ankush Banerjee** discusses organisational decision-making in the armed forces. The essay is embellished with appropriate case studies, some well known but pertinent to the subject, and the author argues that decision-making in the less taxing confines of offices is as important as it is in the melee and far more stressful environment of battle. The reader may not be convinced of the merit of his arguments in the first reading but the essay deserves an incisive examination.

India-Japan relations have seen an upswing of late and **Piyush Ghasiya** discusses the defence ties under the two respective Prime Ministers, namely Shinzo Abe and Narendra Modi. Prime Minister Shinzo Abe's "Free and Open Indo-Pacific Strategy" resonates with our "Act East Policy". Although the "revision of the Constitution" in Japan, that would permit a more robust defence strategy, is some way off, it will be of mutual benefit. As and when that happens, the adoption of the revised Constitution will strengthen our ties more markedly. As it is, the existing "Special Strategic and Global Partnership" is yielding results. Undoubtedly, we are witness to the strengthening of our relationship, and the growing understanding on geopolitical issues, and, hopefully, Japan will address our concerns in our "Make in India" initiative.

Myanmar is of critical importance to us, particularly as we see the deep inroads being made in that country by China. Our support for Aung San Suu Kyi during the period of her house arrest for nearly 20 years was unwavering. However, after the elections in 2015, when her party formed the government, her first overseas visit was to China and not India. Unfortunately, our projects in Myanmar have progressed very slowly and should be given more impetus. **Mohinder Pal Singh** examines the pertinent issues and also makes recommendations on the courses we should adopt.

India has had long and fruitful trade and cultural relations with the countries of the South Caucasus, namely Georgia, Azerbaijan and Georgia, for centuries. **Ngangom Dhrub Tara Singh** traces the long

history of our relationship with these countries, their geopolitical importance, and, hence, the need for India to seek opportunities for enhanced regional cooperation. Such attempts will be of mutual benefit and should be essayed.

Climate change and the consequent environmental degradation is recognised as a serious non-traditional threat to national and international security. Unfortunately, the ill effects that stare at us in the face are often ignored or given short shrift. The needs of the present tend to score over the demands for the future. **Stuti Banerjee** opines that climate change is the future challenge and unequivocally suggests that the world must take note of the looming perils and adopt measures in all disciplines, including the military sphere, to assuage the problem. A composite strategy should be formulated and adopted. Some statistics quoted by her and the dangers we are likely to face make compelling reading.

It is now just over 50 years since the Naxalbari uprising and **Suparna Banerjee** takes a look at what caused it, the manner in which the movement has gained ground, the divisions that have occurred and the politics involved. The author does not hold back in giving frank opinions even though some of them transcend the esoteric realm. A readable article.

In our book review section, two books have been reviewed by our scholars. **AVM Bahadur** writes on *Strategic Vision-2030: Security and Development of Andaman and Nicobar Islands* jointly written by Air Mshl P K Roy and Cmde Aspi Cawasji. Both these officers have had first-hand experience of serving in the area and the review does justice to their work. In the second review, **Pooja Bhatt** reviews *Wider Horizons: Perspectives on National Security, Strategic Culture, Air Power, Leadership and More* by AVM Arjun Subramaniam. The book is a collection of some 40 articles penned by the author in recent times.

Greetings of the Season and a Happy New Year to all our readers,

Happy reading.



A DECADE OF OFFSETS POLICY: IN RETROSPECT

SN MISRA

The dismantling of the LPQ (Licence Permit Quota) Raj in 1991 was followed by economic liberalisation in the defence manufacturing sector in 2001. The offsets policy (2005) was recommended by the Kelkar Committee in order to leverage big ticket acquisitions in terms of Foreign Direct Investment (FDI), Joint Ventures (JVs), outsourcing and technology transfer from the arms' exporters. The policy has since witnessed several changes, particularly in areas like FDI where 49 percent is now allowed as against 26 percent in 2001; multipliers for Micro, Small and Medium Enterprises (MSMEs), and inclusion of civil aerospace and internal security in its ambit. The paper identifies the impact of the policy in terms of FDI inflow, highlights the critical technology areas that need to be focussed on like "Make-in-India" and the Self-Reliance Index (SRI). It calls for activation of the strategic partnership model, espoused by the Dhirendra Singh Committee (2015), the need to focus on bolstering indigenous research capability and making the offsets policy inclusive of sectors like infrastructure, education and agricultural research. Highlighting the importance of critical technology areas like the Focal Plane Array (FPA) and Active Electronically Scanned Array (AESA), the paper makes a strong case for looking at the Brazilian experience of building the Embraer jet

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aircraft through the offsets policy, as a useful template. A determined political determination will significantly energise the private sector players, Original Equipment Manufacturers (OEMs) and design houses as partners and bolster our Military Industry Complex (MIC) significantly. The “Make in India” campaign would concomitantly receive the requisite fillip in terms of improving our manufacturing footprint to 22 percent of the Gross Domestic Product (GDP) and generate additional employment for 10 million people as per the National Manufacturing Policy, 2011.

INTRODUCTION

India shifted its policy stance from socialism to the market mechanism in 1991 by dismantling the LPQ Raj. The defence production sector, however, took a decade more to unveil the contours of liberalisation. In 2001, it permitted 100 percent private sector participation in defence production and 26 percent FDI from foreign companies. Despite this, the private sector was treated as an adversary and not as an ally by the Defence Public Sector Enterprises (DPSUs) and Ordnance Factories (OFs). The credit for sowing the seeds of Public Private Partnership (PPP) goes to Dr. Vijay Kelkar who, in 2005, recommended the introduction of an offsets policy to bolster indigenous manufacturing capability. This policy, which is in vogue in 130 countries, aims at leveraging big ticket acquisitions to entice the OEMs to (a) outsource orders to the importing country; (b) boost their export footprint; (c) encourage FDI inflow; and (d) transfer key technology.

The Defence Procurement Procedure (DPP) (2005) included the “offsets policy” as per which requisition above Rs.300 crore would warrant direct offsets in areas like FDI, JVs, co-production and for outsourcing. The policy has been modified several times since then. The FDI policy, in particular, has been significantly liberalised after the National Democratic Alliance (NDA) government took charge in 2014. Presently, the FDI limit has been put at 49 percent and 100 percent for acquiring key technology and “modern systems” after due approval.

This paper looks into three critical aspects: (a) overview of the offsets policy during 2005-16; (b) its impact on bolstering indigenous defence manufacturing capability; and (c) the challenges and prospects that lie ahead of us.

OFFSETS POLICY OVER THE YEARS

The literature on the subject has been rather thin, with a collection of articles edited by Stephen Martin (1996), recounting the experience of several countries. Subsequently, several articles by T Mathew¹ R Mathew² and Behera^{3 4} and a pioneering book by the author⁵ have been added to the literature. The focus of economists on this seductive public policy, has been on four areas viz. its impact on overall cost reduction; general economic development, ability to generate additional employment and quality of technology transfer.

The overwhelming evidence has been that implementing the offsets policy entails an additional cost of 3-10 percent of the contract value. The benefit is limited to the indigenous arms industry and does not contribute to general economic development. The job opportunities are extremely limited (Skons)⁶ and generally helpful to the Small and Medium Enterprises (SMEs). Technology transfer is generally of a low quality nature (Hartley).⁷

However, the development of the Embraer aircraft by Brazil has been the clearest example of a successful offsets policy through which Brazil has become a world leader in the regional jet market. Parlo Breman⁸ brings out how massive government interest and subsidy helped to forge synergy between military and civil technology to make the offsets policy a real success in Brazil. On the other hand, Baskaran⁹ brings out how India's experience of technology transfer

1. T. Mathew, "Essential Elements of India's Defence Offset Policy: A Critique," *Journal of Defence Studies*, vol 3, issue 1, 2009, pp. 1-17.
2. R. Matthews, *Defence Offsets: Policy Versus Pragmatism* (London: Routledge, 2004), pp. 92-104.
3. L.K. Behera, "Indian Defence Offset Policy: An Impact Analysis," *Journal of Defence Studies*, vol 9, issue 4, 2015, pp. 111-132.
4. L.K. Behera, "India's Defence Offset Policy," *Strategic Analysis*, vol. 33, no. 2, March 2009, pp. 242-253.
5. S.N. Misra, *Impact of Defence Offsets on Military Industry Capability and Self-Reliance: The Road Ahead* (New Delhi: KW Publishers Pvt Ltd, 2012), pp. 119-160.
6. E. Skons, *Evaluating Defence Offsets: The Experience in Finland & Sweden*, *Arms Trade & Economic Development* (London: Routledge, 2004), pp. 149-165.
7. K. Hartley, "UK Firms Experience and Perception of Defence Offsets: Survey Results," *Defence & Peace Economics*, vol. 6, 1995, pp. 123-139.
8. F.S. Perlo, "Offsets and the Development of the Brazilian Arms Industry," in Brauer and Dunne, eds., *Arms Trade and Economic Development* (London: Routledge, 2004), pp. 186.
9. A. Baskaran, *The Role of Offsets in Indian Defence Procurement Policy* (London: Routledge, 2004), pp. 217-232.

in areas like fighter aircraft (1960s), frigates and tanks has built substantial indigenous military industry capability without “failing to close the technology gap”. The dependence on OEMs for even upgrades is perennial.

Since 2005, the offsets policy has been significantly amended to include areas like (a) civil aerospace and internal security; (b) providing multipliers of 1.5 for investment in MSMEs, and of 3 for high technology areas; (c) inclusion of eligible “services” like Maintenance, Repair and Overhaul (MRO), upgrades, software development; and (d) allowing investment in kind in Transfer of Technology (TOT) through the non-equity route. Most importantly, it now allows the private sector to compete in the production of surveillance vessels like Inshore Patrol Vessels (IPVs) and Offshore Patrol Vessels (OPVs) with the defence shipyards. This has certainly brought in a whiff of fresh air, in terms of timeliness in delivery, cost competitiveness and a level playing field in the shipbuilding sector. However, in the aerospace sector, the private sector players are yet to play a definitive role in the production of helicopters, trainers and transport aircraft.

IMPACT OF OFFSETS POLICY

Six years after the offsets policy, there is cynicism even among acknowledged experts on the subject that the “economic benefits are unproven” (Paul Dunne)¹⁰. John Brauer¹¹ ¹² is of the view that “it is doubtful if relevant technology will be transferred by the OEMs”. Ron Mathew, drawing on the experience of the UK which allows 100 percent FDI, and China which allowed 51 percent FDI to Embraer, concluded that India’s offsets policy is “overly prescriptive, complex and increasingly confused”.

Apart from the academics, acknowledged practitioners of offsets like M/s Lockheed Martin, were of the view that “there is no real appetite within the Indian MoD to change the offset rules such that

10. J.P. Dunne, “Economic Effects of Military Spending in LDCs: A Survey,” *The Peace Dividend*, Amsterdam, North Holland, 1996, pp. 439-464.

11. J. Brauer and J.P. Dunne, “Arms Trade Offsets and Development,” *Africans*, vol. 35, no.1, 2005, pp. 1-16.

12. J. Brauer and J.P. Dunne, “Arms Trade Offsets: What do we Know,” *The Hand Book on the Political Economy of War* (2011), pp. 217-243.

they achieve the goal of increasing indigenous capability of the Indian defence industry” (Philip Gergiaous).¹³

The year 2011 witnessed a spate of new policy initiatives. The DPP-2011, recommended simplification of the procedure of the ‘Make’ category, giving preference to indigenous design and development, involving the private sector in design and development of equipment, and providing separate funding to academics and scientific institutes. The Rama Rao Committee (2011) advocated the creation of a Defence Technology Fund. The Parliamentary Standing Committee (2011) also recommended the creation of a National Design Institute in areas like aerospace, navy and land systems.

Despite such enticing policy postulates, India’s dependence on arms imports continues at a humungous 70 percent, and our design and development capability in the areas of sensors, propulsion and state-of-the-art weapons remain abysmally low. No wonder, India is the largest importer of arms, weapons and platforms globally (Table 1):

Table 1: Main Importers Globally: Trends

Country	Import %
India	14%
South Arabia	7.6%
China	4.7%
UAE	4.6%
Australia	3.6%
Turkey	3.9%
Pakistan	3.3%
USA	2.9%

Source: *SIPRI Year Book* (2016)¹⁴

The impact of the offsets policy on various aspects is as follows:

(a) FDI Inflow

The policy on FDI has been liberalised significantly over the years, with 49 percent in 2014. Beyond this cap, it could be for modern

13. E.mail to the author March 23, 2011.

14. *SIPRI Year Book*, 2016, <http://www.sipri.org/yearbook/2016>. Accessed on May 25, 2017.

systems without elaborating the criteria. On the other hand, the FDI policy has been significantly liberalised in other sectors, and has largely flowed into sectors like the services (18 percent), construction (1.3 percent), telecom (7.1 percent), computer software (5.7 percent) and drugs (5 percent). However, FDI inflow till 2011 for the defence sector has been negligible. The total inflow of FDI to all sectors of the Indian economy and the defence sector in recent years is shown in Table 2.

Table 2: Total FDI Inflow and Inflow into Defence

Year	Total FDI Inflow	Inflow into Defence
2013-14	\$32B	\$8.22 lakh
2014-15	\$45B	\$0.8 lakh
2015-16	\$60B	\$0.95 lakh

Source: Department of Industrial Policy Promotion & Foreign Investment Facilitation Portal, <http://dipp.nic.in/> & <http://www.fifp.gov.in/>

It would, thus, be seen that increase in the FDI cap to 49 percent in 2014 has come a cropper. India has finally adopted the right global model of allowing more than 50 percent FDI into the defence sector for modern systems after due approval. This will, hopefully, entice the OEMs to have a long-term stake to invest in India and nurse India as part of the “global supply chain”. This can also spur them to bring in critical technology, since they will have a major say in the management of the production entity and Intellectual Property Rights (IPRs).

(b) Multipliers

A novel feature of the DPP-2016 has been to afford multipliers of 1.5 to SMEs and 3 to critical technology and to the Defence Research and Development Organisation (DRDO) where there is no restriction. The DPP-2016 brings out some of the areas where a multiplier of 3 can be afforded.

Table 3: Critical Technology Areas

Sl. No.	System/ Sub System	Critical Technology
1.	Gas Turbine Engines	Single Crystal, Special Coaling
2.	Missiles	FPP Seeker
3.	Aeronautics	Stealth, Smart Aero Structure
4.	Naval System	Super Cavitations Technology
5.	Sensors	AESA Radar, RLG, SAAR, Nano Technology
6.	Material	Carbon Fibres
7.	Avionics	Gen III Tubes
8.	Surveillance	UAVs, AESA Radar

Source: Defence Procurement Procedure (DPP) 2016 & Ministry of Defence, GOI, <https://mod.gov.in/>

Dr. APJ Abdul Kalam, as a Special Assistant (SA) to the Raksha Mantri (RM), chairing a committee for improving the Self-Reliance Index (SRI) for India, had identified all the above technology areas, way back in 1992. He had recommended substantial investment in these technology area by having partnerships with reputed Original Equipment Manufacturers (OEMs) and design houses. The committee had expected the SRI to go up from 30 percent (1992) to 70 percent (2005). Sadly, the SRI for India remains glued at 30 percent even now. The Dhirendra Singh Committee (2015) on the strategic partnership model, had hopes that India would achieve SRI of 70 percent by 2022!

(c) Impact on Cost Reduction

As brought out in the introduction, the impact on the cost of the offset provision over 'off the shelf' 'Buy' decision has been around 10 percent. In a study by the author on a contract awarded to M/S Fin Canteri, for an oil tanker, the additional cost was estimated at 15 percent. The Director General (DG) (Acquisition), in an international seminar on defence acquisitions in 2011, had observed that many OEMs were prepared to offer 13-15 percent discount had there been no conditionality of offsets. Be that as it may, the offsets provision does bring in quite a few outsourcing orders to defence PSUs, ordnance factories and the private sector players.

(d) Offsets Contracts

During 2005-12, 12 offsets contracts, with a value of \$1.5 billion, were concluded. Subsequently, 10 more contracts were concluded (during 2013-16) with a value of approximately \$1.5 billion. The experience so far has been that OEMs outsource low end manufacturing and machining jobs to private and public sector companies in India. The offsets limit has now been increased from Rs.300 crore (2005) to Rs.2,000 crore (2016).

One of the major contracts where there could be a major offsets spinoff is the contract for 36 Rafale aircraft with M/S. Dassault of France, with a contract value for Rs. 58,000 crore.¹⁵ Of this, offsets worth close to Rs.22,000 crore are expected to be discharged by Reliance Defence which has formed a JV with Dassault. This would indeed be a major trigger for private sector investment in India in the defence sector. Tatas have also been eyeing the Unmanned Aerial Vehicles (UAV) segment, and Mahindra and Mahindra, armoured vehicles. The offsets policy has fortuitously provided a level playing field to both the private sector and public sector entities to vie for outsourcing arrangements with the OEMs.

CHALLENGES AND PROSPECTS

From a cautious hobble, the offsets policy has become more robust with a liberal FDI policy with the inclusion of multipliers for MSMEs and critical technology, and allowing offsets for the services and synergistic sectors like civil aerospace and internal security. All the same, the mood of the foreign OEMs and design houses to invest on a long-term basis in India is not particularly upbeat. A number of Memorandums of Understandings (MoUs), have been crafted; but in concrete terms, the JV of Reliance Defence with M/S Dassault is the most promising development.

A few concerns would need to be addressed by the government in order to galvanise indigenous military industry capability.

15. Jugal Purohit, "India, France Ink Rafale Deal for 36 Fighter Jets Worth Rs 58,000 Crore," *India Today*, Available at <http://indiatoday.intoday.in/story/rafale-fighter-jet-deal-modi-govt-france-medium-fighter-beyond-visual-range-missile-mig-cabinet-committee-on-security/1/771295.html>. Accessed on May 31, 2017.

(i) Real Level Playing Field to the Private Sector

The 1956 Industrial Policy resolution made the DPSUs and OFs the sole recipients of technology from abroad and nominated them as the production agency. This has constantly disheartened the private sector players, who have built significant sinews over the years to manufacture, integrate, and deliver major weapon systems and platforms in time. The Kelkar Committee (2005) set the tone for Public-Private Partnership (PPP), and the Dhirendra Singh Committee (2015) also triggered a real hope of kick-starting a strategic partnership model. This will enable identification of private sector players who would be at par with Navratna PSUs. The OEMs are generally more keen to partner with such private sector players, given their reputation of being technically fleet-footed, dynamic, and time and cost compliant. The fillip to the MSMEs by the present government through steps such as the Mudra initiative for funding, Income Tax (IT) relief for the sector in the last budget, and allowing a multiplier of 1.5, are in sync with best global practices. The MSMEs, indeed, play a critical supportive role for the big manufacturing hubs. The government must ensure that the strategic partnership model is taken to its logical conclusion. The RM has already promised that the SP model would be tried out for single engine fighter aircraft based on the Dr. V. K. Atre Committee Report for selecting the strategic partner.

(ii) Bolstering Indigenous Research Capability

The record of DRDO for delivering critical platforms like the Light Combat Aircraft (LCA) and Main Battle Tank (MBT) has not been edifying. The failure of the Kaveri engine for powering the LCA has been a major setback in our 'propulsion' programme. The 'Make' procedure envisages providing 90 percent funding to a private entity which makes a successful prototype. This has so far come a cropper. The major 'Make' programme for communication link-up to the unit level in the field areas is still embroiled in the tussle between the private and public sectors. The suggestion for creating the National Institute for Design is yet to be operationalised. The major private sector players spend hardly any money on research. The design capability of Navratna PSUs like Hindustan Aeronautics

Limited (HAL) and Bharat Electronics Limited (BEL) is wafer thin. The navy has some design capability; but not in state-of-the-art areas like nuclear submarines.

The government has acceded to the Rama Rao Committee's recommendation for creating a Defence Technology Fund. But the fund allocation is only Rs.100 crore. Such tokenism will not help Research and Development (R&D) in a substantive way. The overall allocation to R&D is only 0.8 percent as against 2.2-3.5 percent spent by the developed countries, as the following table would show.

Table 4: Major R&D Spenders in the World Vis-à-vis India

Country	2012		2013*	
	GERD (PPP US\$ Billion)	R&D as % of GDP	GERD (PPP US\$ Billion)	R&D as % of GDP
US	418.6	2.68	423.7	2.66
Japan	159.9	3.48	161.8	3.48
Germany	90.9	2.87	91.1	2.85
South Korea	55.8	3.45	57.8	3.45
France	50.4	2.24	50.6	2.24
India	40.3	0.85	45.2	0.90

Note*: Figures for 2013 are forecast; GERD: Gross Expenditure on R&D.

Source: Battelle and R&D Magazine, 2013 Global R&D Funding Forecast, December 2012.

There is also a need to set up a National Institute for Design on aeronautics, naval and land systems. India can ill afford to be an assembler of critical sub-systems imported from abroad. It must ink partnerships with major design houses for bolstering the indigenous design capability.

(iii) Including Indirect Offsets and Civil Shipbuilding Sector

It is important that the offsets policy allows indirect offsets in its ambit. It would help investment in sectors like education, health and infrastructure. Countries like Germany, South Korea, Brazil, Australia, Turkey, Spain, Poland, Israel and Canada profit substantially from indirect offsets. There is a contrarian viewpoint that inclusion of indirect offsets would reduce a focussed approach to bolster defence related production capability. But the National Manufacturing Policy (NMP) clearly underscores the need to look at the national

manufacturing investment zone policy and defence manufacturing in tandem. The “Make-in-India” initiative has fortunately brought in defence manufacturing as a part of the national manufacturing momentum. The policy-makers in defence, who have looked at defence manufacturing as a watertight compartment, must realise the imperative to work with synergistic sectors like aerospace and shipbuilding, and harness the spinoffs from dual use technology items.

It is unfortunate that the civil shipbuilding segment has not been made part of the synergistic sectors, unlike aerospace. During the 10th Plan, a subsidy scheme was introduced for the shipbuilding sector as per which 30 percent subsidy was being given for export orders. This increased India’s global share for 0.2 percent in 2002 to 1.3 percent in 2007. This scheme was withdrawn in 2007, plummeting exports to 0.01 percent, while countries like South Korea and China are out there competing with their Western counterparts. The government needs to revisit its policy on the shipbuilding sector so that it regains its momentum. The offsets policy, by including both the civil and military shipbuilding segments, can galvanise its potential.

(iv) Critical Technology as Thrust Area

There is a need to identify a few critical technology areas that our offsets policy must focus on viz: (a) passive seekers, which are required by all the three Services; (b) AESA radars which are required by both aircraft and frigates, and ring laser gyros which are required for navigation. Carbon fibres comprise another area which is critical for producing composites for all kinds of platforms, particularly the Advanced Light Helicopters (ALHs). In technology transfer, what is germane is the range and depth of technology. Most of the OEMs are extremely chary of sharing critical technology, as has been our experience for the Focal Plane Array (FPA) from M/s Sofradir, France. However, in the case of passive seekers, both French and Israeli companies have of late showed keenness to transfer technology during their discussions with the Ministry of Defence during 2008-10. During the negotiation for the Medium Multi-Role Combat Aircraft (MMRCA), the USA was open to sharing the technology of the AESA radar, provided India bought the F-16/ F-18 fighter aircraft from it.

While many analysts are of the view that offsets do not facilitate entry of state-of-the-art technology into the country, the experiences of Japan and South Korea reveal that significant key technologies were passed on by the USA to them because of their strategic relationship. India could leverage its strategic relationship with countries like the USA, France, Russia and Israel to get key technologies like the AESA, RLG and FPA from these countries.

CONCLUSION

As would be seen from the foregoing, despite significant policy changes in the offsets policy, strategic partnerships of the private sector, bolstering our indigenous R&D capability and including indirect offsets comprise an unfinished agenda. Targeting specific critical technology should be a thrust area. Besides critical technology, dual use technology like lasers, cryptology, nano technology, artificial intelligence and sensors would have a cascading impact on all sectors. Investment in biotechnology, energy, higher education and agricultural research, investment in infrastructure are areas wherein India is seriously lagging behind. Indirect offsets to these sectors would go a long way in bolstering the overall manufacturing and design footprint of India.

The offsets policy is an important policy instrument for defence manufacturing. The private sector players must play a more dynamic role in this exercise. The government should hand-hold them in the matter of transfer of critical technology, and provide tax relief for research activities. Brazil's successful experiment with the Embraer aircraft, where massive government support was provided in terms of galvanising the scientific pool of the country and providing subsidy for research, should be a useful template for India to emulate. The mosaic of the offsets policy must be widened to include indirect offsets. Through determined political will, this policy could be the facilitator in India's attempt to achieve higher self-reliance in the defence manufacturing sector and put the "Make-in-India" campaign on the right track.

IMPLICATIONS OF PIECEMEAL DISTRIBUTION OF IAF ASSETS

VIVEK KAPUR

INTRODUCTION

The world over, military forces have been formed on the basis of the three environments of operation available for man to wage war. In the earliest times, man lived and fought only on land and so formed armies for the exercise of military power on land. Later, after mastering the techniques of operating on water, navies were formed to exercise military force on, and through, the water medium. A little over a century ago, mankind mastered heavier than air flight and began to exploit this new medium of operation for military purposes. Following the earlier experience with the water environment, air-faring nations formed air forces for the specific purpose of exploiting the air medium effectively. A few countries experimented with their military air arms being initially placed under their land armies as a new specialisation, much like the artillery was earlier. A few notable examples are those of the USA's US Army Air Force (USAAF)¹ and the British Royal Flying Corps (RFC).² As aviation technology

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1. "USASC-USAAS-USAAC-USAAF-USAF Military Aircraft Serial Numbers--1908 to Present", joebaughner.com, http://www.joebaughner.com/usaf_serials/usafserials.html. Accessed on October 16, 2017.
2. "The Royal Flying Corps 1914-18", <http://www.airwar1.org.uk/>, airwar1.org.uk. Accessed on October 17, 2017.

matured, it became evident that optimal utilisation of this new form of military force required an independent organisation and the US and Britain formed the US Air Force (USAF)³ and Royal Air Force (RAF)⁴ respectively. Today, all countries field independent air forces. Of these, at least one, the People's Liberation Army Air Force (PLAAF), China's air force, still carries its old name despite being an independent military arm. The Indian Air Force (IAF) was formed as an independent air arm from its inception in 1932, based on the British experience with the RFC and RAF. Since then, the IAF has matured to field cutting edge military capabilities available for deployment in the nation's defence and security.

Of late, there has been an increasing clamour to divide the IAF into penny packets through assigning specific squadrons to specific to-be-formed Integrated Theatre Commands (ITCs).⁵ Such a decision is fraught with problems on multiple counts. Without going into the merits and demerits of ITCs, this article brings out some peculiarities of air force technology and operations to point out the implications of dividing the IAF into penny packets.

IAF EQUIPMENT LIMITATIONS FROM 1950s TO END OF 1980s

The IAF, till about three decades ago, had relatively old equipment comprising low Radius of Action (RoA) aircraft such as the MiG-21 variants (MiG-21FL/M/MF/Bis), Sukhoi (Su)-7BMK, Gnat, Marut⁶, and Ajeet, and Hunter fighter bombers. These fighter / fighter bomber aircraft had a real world tactical mission RoA of not more than a couple of 100 km at most. Thus, once deployed to a certain geographical area, these were constrained by their own limitations to operate in that area alone. For instance, a MiG-21 or Gnat / Ajeet squadron deployed in Punjab would be able to operate only in Punjab and would be unable to carry out missions

3. n.1.

4. n.2.

5. Harsh V. Pant, "Why India's Military Needs to Move to Theatre Commands Now", ORF, February 2017, <http://www.orfonline.org/research/why-indias-military-needs-to-move-to-theatre-commands-now/>. Accessed on October 17, 2017.

6. "HAL HF-24 Marut (Spirit of the Tempest) Supersonic Fighter-Bomber Aircraft", *militaryfactory.com*, https://www.militaryfactory.com/aircraft/detail.asp?aircraft_id=366. Accessed on October 18, 2017.

in Rajasthan or in the east or north due to RoA limitations. These old aircraft had a very limited useful payload as well. These aircraft were able to carry only about 2,000 kg of free fall bombs and / or unguided rockets at most on external under-wing and under-fuselage weapon stations, in addition to typically one or two internal 23 mm / 30 mm cannons.⁷ The limited useful weapon load and very limited RoA meant that a squadron of such aircraft, once deployed in a certain area was constrained to operate in that area alone. This is why most air forces deployed parts of squadrons in the form of detachments at forward (closer to the borders) located airfields to gather the needed air firepower for planned operations in the border area of expected war along the borders. In such an equipment-performance scenario, it was theoretically possible to designate certain air force aircraft as 'tied' to some land formations operating in that geographical region. These aircraft could, in any case, not be used in other widely separated regions without carrying out redeployment. Redeployment could be expected to take anywhere up to 24 to 48 hours, during which time the assets could be temporarily non-operational for combat use. As far back as the 1971 India-Pakistan War, the IAF's MiG-21, Hunter, Gnat, Su-7 and Marut fighter aircraft were deployed in one geographical area as per the War Plans and operated in that area only. On the other hand, the only offensive aircraft with a large RoA then in service, the Canberra light bombers, operated from their bases in central India against targets in both the erstwhile East Pakistan and West Pakistan. Missions by day were flown in the erstwhile East Pakistan, and by night in the better defended air space of West Pakistan.⁸ Thus, these longer RoA aircraft were not deployed in one specific region but utilised in both the Eastern and Western Theatres through the IAF exercising central control on them and tasking them in widely different geographical areas as per need. At that time, the IAF did not have any other long RoA combat assets. In the 1960s and 1970s, given the technology available, the

7. "Mikoyan-Gurevich MiG-21 (Fishbed) Single-Seat Supersonic Fighter Aircraft", *militaryfactory.com*, https://www.militaryfactory.com/aircraft/detail.asp?aircraft_id=68. Accessed on October 18, 2017.

8. K Sree Kumar, "No.5 Squadron", *Bharat Rakshak*, June 17, 2017, <http://www.bharat-rakshak.com/IAF/Units/Squadrons/5-Squadron.html>. Accessed on October 18, 2017.

distribution of fighter/ fighter-bomber aircraft into Integrated Theatre Commands (ITC) on a permanent basis could have been feasible because such aircraft did not have the capability to be used in other widely separated battle areas on an hour by hour / or mission by mission basis anyway.

CURRENT AND PLANNED CAPABILITIES OF IAF

From the later 1980s, this situation started to change. In the normal course of reequipping and modernisation, the IAF acquired longer RoA aircraft such as the Jaguar, MiG-23BN, MiG-27, MiG-29, MiG-29UPG, Mirage-2000H and Mirage-2000H upgrade. It also acquired modern heavy transport assets such as the Il-76MD. The process of modernisation has continued to the stage when the C-130 "Hercules", C-17 "Globemaster-III", and Su-30MKI have been inducted and the Rafale is expected to begin induction shortly.⁹ These new inductions have some noteworthy differences from the earlier fighters that served the IAF. Newer fighters such as the Mirage-2000H, Su-30MKI, MiG-29UPG, and the soon to be inducted Rafale have an ability to carry a wider mix of more weapons, going up to as much as 8,000kg¹⁰ and almost 9,500 kg¹¹ of weapons payloads on the Su-30MKI and Rafale respectively. The RoA of these fighters is also much more than that of the earlier aircraft. For instance, the Su-30MKI has a RoA of as much as 1,500 km¹² on internal fuel alone, while the Rafale has a RoA of as much as 1,800+ km¹³ in some attack configurations. Thus, these modern fighters that may be located in one geographical region have the ability to carry out very effective operations in widely displaced geographical regions as well. A modern fighter aircraft located along the western borders has the

9. "Our Strength: The Indian Air Force Today", <http://www.indianairforce.nic.in/>, Indianairforce.nic.in. Accessed on October 18, 2017.

10. "Su-30MKI", http://www.deagel.com/Combat-Aircraft/Su-30MKI_a000320007.aspx, Deagel.com. Accessed on October 18, 2017.

11. "Specifications and Performance Data", *Dassault-aviation.com*, <https://www.dassault-aviation.com/en/defense/rafale/specifications-and-performance-data/>. Accessed on October 18, 2017.

12. "Su-30 Flanker (Sukhoi)", <https://www.globalsecurity.org/military/world/india/su-30.htm>, *Globalsecurity.org*, Accessed on October 18, 2017.

13. "Dassault Rafale Multirole 4th Generation Fighter Aircraft", https://www.militaryfactory.com/aircraft/detail.asp?aircraft_id=60. *Militaryfactory.com*, Accessed on October 18, 2017.

ability – in terms of having more than adequate numbers and types of weapons on board and also with RoA available to operate in widely separated regions in quick succession– to also execute an operational mission along the eastern borders as well. Moreover, a modern fighter may execute multiple missions and roles such as Battlefield Air Strike (BAS), Battlefield Air Interdiction (BAI), Offensive Counter Air (OCA), Air Interdiction (AI), and Defensive Counter Air (DCA) in a single mission. This capability is known as omni-role capability. These modern fighters are very capable in the mix of missions that they can execute while also having large RoAs. These advancements come at a high cost. The cost of the Rafale, as reported in the print media, is about \$ 247 million,¹⁴ which includes the aircraft and two weapons – the SCALP standoff attack missile¹⁵ and the Meteor Beyond Visual Range (BVR) Air-to-Air Missile (AAM). The implication of this high cost is that larger numbers of these advanced aircraft may not be affordable. Against the IAF's projected requirement of 126 Rafale fighters, the government has agreed to buy, and placed orders for, a mere 36.¹⁶

The high capability and cost of modern fighters has some serious implications. These very capable aircraft require to be used optimally in view of their being a costly and potent national asset. Modern fighters have the capability to operate in multiple geographical regions from one fixed location. Thus, in a situation of a drastically reduced number of aircraft, it is very important to make the best use of the available aircraft. These need to be utilised to best effect by tasking them in multiple regions where military operations are in progress or where targets designated for destruction exist. Thus, typically, in its first mission of, say, a 24-hour period, a modern fighter could be tasked to deliver ordnance on an AI target, say, across the western borders, and on the return leg of this mission, it may execute OCA

14. "IAF gets Rafale Edge: India, France Sign Deal for 36 Fighter Jets", *The Times of India*, September 23, 2016, <https://timesofindia.indiatimes.com/india/IAF-gets-Rafale-edge-India-France-sign-deal-for-36-fighter-jets/articleshow/54478489.cms>. Accessed on October 18, 2017.

15. Smriti Jain, "Rafale Deal Signed: How the Fighter Jets will Add Greatly to IAF's Firepower Against Pakistan and China", *Financial Express*, September 20, 2016, <http://www.financialexpress.com/india-news/rafale-deal-signed-how-the-fighter-jets-will-add-greatly-to-iafs-firepower-against-pakistan-and-china/388914/>. Accessed on October 18, 2017.

16. n.14.

and DCA also. In the very next mission (within the 24-hour period), it may be tasked to carry out BAI and OCA along the northern borders. In this manner, the inadequacy of numbers can be addressed to some extent. Thus, as far as the enemy is concerned, he faces potent fighters addressing his targets in adequate numbers to cause him great injury despite his intelligence sources having informed him that the blue forces do not possess more than a certain number of the aircraft that he often sees in the sky along multiple fronts in the war. Of course, execution of such a high operational tempo requires high standards of serviceability and Quick Turn Round Servicing (TRS) timings between missions. Professional air forces train very hard to achieve these two attributes. The implications of artificially forcing such versatile assets to operate in one ITC against one set of targets would be a gross waste of expensive national resources and an excellent way to lose a war.

There are other assets that are classified as combat support assets. These do not directly deliver weapons at targets but facilitate the effective utilisation of combat assets. A few of these are the Flight Refuelling Aircraft (FRA) (such as India's Il-78 FRA), Phalcon Airborne Warning and Control System (AWACS), Embraer-based Airborne Early Warning and Control (AEW&C), and specialised heavy lift and very heavy airlift aircraft (C-130, and C-17 respectively).¹⁷ These very specialised aircraft are usually centrally controlled from Air Headquarters (HQ) for the simple reason that these are very expensive machines and, hence, only a few can be inducted into service. For achieving the highest utilisation-benefit ratio from the limited number of these specialised aircraft – that can make air operations extremely effective – care has to be taken to plan for their optimal utilisation.

From the above paragraphs, it becomes abundantly clear that it would be a fatal mistake to carve potent and expensive air assets into penny packets and distribute them amongst local commanders for the exclusive use by their (Theatre) Command alone. Moreover, given the changing and quick paced nature of modern warfare, there is no guarantee that the penny packet of resources at the disposal

17. "Our Strength The Indian Air Force Today", <http://www.indianairforce.nic.in/>, Indianairforce.nic.in. Accessed on October 18, 2017.

of a theatre commander will prove adequate for the tasks in his area of responsibility. The reality that the enemy will have his own plans and counters to the blue forces' actions makes it impossible to pre-determine the number of aircraft required. Air forces have realised this truism for decades and, hence, build flexibility into their deployment and war-time utilisation plans.

It may be possible to distribute air assets into specific geographical areas on a semi-permanent to permanent basis provided the total requirement of air assets for execution of a myriad tasks is ensured. In such a scenario, each geographical area (i.e. Theatre Command) would not have the flexibility of calling for support and surge build-up of air assets from other similar geographical areas as each would be committed/likely to be committed similarly. Hence, there is a possibility that commanders would err on the higher side (for safety) while projecting their demands for air assets. Such a situation in a two-front, or a two and a half front war scenario, would require that the original pie that is to be divided would perforce have to be much larger. On a conservative estimate, the IAF would require to be between three to four times larger than it is today for this to be done (to the satisfaction of the theatre commanders). Such large numbers of aircraft are unlikely to be available in the foreseeable future. Even if sanctioned, this massive expansion of the IAF would raise expenditure to prohibitive levels. Hence, the call of the hour is not the division of the country's combat and combat support air assets into unviable penny packets, but to work towards more effective utilisation of these assets.

In case the very capable, limited in number, and very expensive IAF assets are divided into exclusive penny packets through dispersal into geographically well separated independent command structures, it may be impossible to put together the required capabilities in the required time and space to achieve the desired results in various scenarios.

CHANGING GEOPOLITICAL SITUATION AROUND INDIA

Till recently, India faced Pakistan along its western borders and China along the northern and northeastern borders as the main threats to security. Bangladesh in the east and Myanmar were not

seen to present a significant security threat. The worst case scenario in earlier years had been a two-front war wherein during a border conflict with China, Pakistan also initiated hostilities, forcing India to simultaneously fight China along the northern/northeastern borders and Pakistan along the western borders. Recent events appear to be changing this situation for the worse.

In the year 2013, the People's Republic of China's (PRC's) leader, President Xi Jinping started to float his concept of the One Belt One Road (OBOR)¹⁸. OBOR was touted to be a massive infrastructure development project spanning a series of roads and railway lines from China in the East till Western Europe in the West.¹⁹ Along its length, this OBOR project was to have multiple communication orientations branching off from the main East-West oriented OBOR main artery.²⁰ The maritime component of OBOR was to have a series of newly developed ports to facilitate maritime trade in a similar East-West orientation. The progress till date of this OBOR project is an eye-opener. China declared that the China-Pakistan Economic Corridor (CPEC) – running from Kashgar in Xinjiang province (north of Jammu and Kashmir state) till Gwadar port in Balochistan – was the flagship project of OBOR. The CPEC has an orientation that requires it to pass through Gilgit-Baltistan, which is Indian territory illegally occupied by Pakistan since 1947-48. China is building considerable infrastructure along the CPEC at a fairly high cost. The investments in Pakistan linked to the CPEC include the construction of up to five dams in the Indus River Cascade which begins from Skardu in Gilgit-Baltistan and runs through Khyber Pakhtunkhwa and has the potential to generate up to 40,000 MW of electricity. The cost has,

18. "President Xi Jinping Delivers Important Speech and Proposes to Build a Silk Road Economic Belt with Central Asian Countries", Fmprc.gov.cn, http://www.fmprc.gov.cn/mfa_eng/topics_665678/xjpfwzysiesgjtfhshzzfh_665686/t1076334.shtml. Accessed on May 12, 2017.
19. Dinesh Unnikrishnan, "China Silk Road Plan: Why OBOR is Much More than an Economic Challenge for Narendra Modi", *First Post*, May 15, 2017, <http://www.firstpost.com/business/india-skips-belt-road-forum-obor-meet-chinese-project-is-more-than-an-economic-challenge-for-narendra-modi-3445540.html>. Accessed on May 15, 2017.
20. Sophia Yan, "Beijing's Plan to Invest Billions Abroad Helps Chinese Companies, says Firm's Chairman", *CNBC*, May 14, 2017, <http://www.cnbc.com/2017/05/14/one-belt-one-road-how-beijings-plan-to-invest-billions-abroad-helps-chinese-companies.html>, Accessed on May 15, 2017.

however, now gone up to approximately \$ 112 billion.²¹ This comes to about 10 percent of all the money spent on, or committed by China to, OBOR projects. It is projected that Pakistan's debt servicing for the CPEC could reach as high as \$ 6-7 billion per year after about five years from today.²² These figures are very relevant for India in view of the Sri Lanka experience, where China developed Hambantota port. Subsequent to the reconstruction of Hambantota port, Sri Lanka found itself unable to repay the massive loans from China for this project as the port was unable to generate adequate revenue for this purpose. This resulted in Sri Lanka giving China a 99-year lease on Hambantota port.²³ This gives China all rights over the port and the associated infrastructure built by China using Chinese money.²⁴ This effectively gives China ownership over this facility and its surrounding land. For the period of the lease, China could treat this leased region as Chinese territory. Given the very large investments in the CPEC and the huge debt repayment burden on Pakistan in the next few years, it is not unreasonable to expect that a similar situation may develop in Pakistan wherein large tracts of land along the CPEC communication lines are leased by Pakistan to China for long periods in lieu of debt repayment in cash. In such a situation, China could deploy more of its forces on the leased land . If China sees such tracts of land as its own territory, and given the importance being accorded to the CPEC as a flagship project of the OBOR, India may soon find that it faces Chinese military forces along its northern as well as western borders. As the CPEC passes through Gilgit-Baltistan also, such a situation could considerably complicate things for India across the western borders. Already, there are reports of Chinese troops being spotted in Pakistan Occupied Kashmir (POK).²⁵ The Pakistan Army has, on Chinese insistence, formed a 15,000 troops

21. Interaction with Lt Gen SL Narsimhan (Retd), member of NSAB, between 1000h to 1130h on May 17, 2017 at CAPS.

22. Ibid.

23. Dailynews.lk, "Leasing of Hambantota Port: Rationale, Economic Benefits and Way Forward", *Daily News*, January 28, 2017, <http://dailynews.lk/2017/01/28/features/105973/leasing-hambantota-port-rationale-economic-benefits-and-way-forward>. Accessed on May 08, 2017.

24. Ibid.

25. Monika Chansoria, "China Makes its Presence felt in Pak Occupied Kashmir", *Sunday Guardian*, <http://www.sunday-guardian.com/analysis/china-makes-its-presence-felt-in-pak-occupied-kashmir>, Accessed on May 08, 2017.

strong Special Security Division to protect Chinese citizens working on CPEC linked projects in Pakistan.²⁶

In such a dangerous developing situation, it behoves India to consolidate its military power and work on truly effective means to develop synergistic war-fighting abilities while factoring in the newly emerging real world situation of the possibility of having to fight numerically – and, possibly, technologically – superior Chinese forces along the northern as well as western borders. Along the western borders, India could, in such a situation, face a combination of Chinese and Pakistani forces, making war-fighting even more complex. *At a crucial time like this when the geopolitical and military situation in our neighbourhood is changing for the worse so rapidly, it would be foolhardy to embark upon a path of cutting up the potent Indian armed forces into unviable penny packets in the mindless pursuit of copying organisational structures put in place by other countries for their own peculiar security situations.* The correct action and the need of the hour is to accelerate the joint operational networking – amongst other vital modernisation projects of the Indian armed forces – while also working on strengthening the economy.

This is the only feasible path to achieve the desired levels of security for the country. At this juncture, wilfully dismembering the armed forces into unviable penny packets that preclude rapid and flexible concentration of force in different regions could rate as an error of far greater magnitude than all the errors made throughout the period leading up to, and during, the 1962 War.

CONCLUSION

All over the world, military forces were formed for each unique environment of operation such as the land, sea and air environments in order to optimise utilisation of military power in each environment of operation. Just like land and sea forces, air forces have several peculiarities due to the available technology and the utilisation methodologies evolved through hard experience over decades. The importance of unity of air power is a lesson that

26. Raza Khan, "15,000 Troops of Special Security Division to Protect CPEC Projects, Chinese Nationals", *DAWN*, August 12, 2016, <https://www.dawn.com/news/1277182>. Accessed on May 9, 2017.

has been learnt, and relearnt in almost all air operations. Given their high cost, air forces also require centrally controlled direction for optimal utilisation in several geographical areas of interest in very quick succession. The geopolitical environment around India continues to deteriorate given the increasing collusion between China and Pakistan and also the increasing footprint of the Chinese Navy in the Indian Ocean region. In such an increasingly hostile environment, the call of the day is to build up capabilities and to plan jointly for operations that may be required to safeguard national security and national interests. The cutting up of the potent IAF into sub-optimal penny packets, as is being called for in some articles published in journals and newspapers, must be vigorously avoided in the interests of national security. At the same time, attempts to maximise military synergy through joint planning for operations must be increased on a war-footing.

ORGANISATIONAL DECISION-MAKING IN THE ARMED FORCES: CASE STUDY, PERSPECTIVES AND CHALLENGES

ANKUSH BANERJEE

INTRODUCTION

Tactical and policy-level decision-making in the armed forces and larger government institutions adheres to a collaborative paradigm. Inputs from disparate individuals vis-à-vis agencies are sought and deliberated upon, to 'arrive' at the most optimum decision outcome. More precisely, the military decision-making process relies on analyses, inputs and recommendations from various staff echelons, made under the overarching objective of assisting and lending clarity to the commander's intent. The commander and staff normally work in a group/collective environment to plan, synchronise and control/guide various small and large scale operations. The assumption underpinning the entire process is that inputs from all agencies/individuals/are unbiased and attuned to ensure the meeting of command objectives in the best possible way.

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While such a rubric of decision-making model seems, and in most junctures, is, 'fool-proof,' with oversight mechanisms at every level, it is not without its underlying vulnerabilities and 'pressure points'. In the past four decades, studies in the domain of social psychology have precipitated credible evidence, attesting time and again, to the pernicious psychological dynamics which come into play in individual and group decision-making processes.

For instance, Irving Janis in his classic 1972 book, *Victims of Groupthink*¹ attempts to determine why groups, often consisting of individuals with exceptional talent and intellect, make irrational choices. He undertakes a rigorous analysis of a number of historical incidences, such as the Kennedy Administration's debacle of the Bay of Pigs invasion at Cuba, the poorly made decisions of the Johnson Administration to escalate the Vietnam War effort, and many such. While a discussion on any of the isolated historical incidences is beyond the scope of this paper, some of Janis' arguments are worth mentioning and would serve as a good starting point.

In his book, Janis introduces us to the idea/concept of 'groupthink' – a psychological phenomenon that occurs in groups wherein individuals, in view of strong intra-group ties, common goals, aims and values, involuntarily lose their motivations to appraise situations rigorously.² Amongst many reasons for this that Janis lists in his study, one of the most detrimental and yet all-pervading is an individual's striving for conformity, and, subsequently, resistance to dissent, in a close-knit group. Other characteristics symptomatic of the prevalence of groupthink include pressure on dissenters, illusions of vulnerability, high levels of self-censorship, unquestioned belief in the morality of the group and rationalising information that runs contrary to group consensus.³ All of these are, in fact, symptomatic of a key conjecture about human behaviour i.e. *actual human behaviour often deviates from perceived and expected human behaviour, especially in a collective environment of decision-making.*

This paper attempts to explore, understand and answer, albeit in limited measure, the fundamental question: *why do seemingly good, well-trained, competent individuals deviate from expected behaviour?* More

1. Irving Janis, *Victims of Groupthink* (New York: Random House, 1972).

2.. Ibid., p. 23.

3 Ibid., p. 44.

importantly, pertinent from an organisational perspective, it reflects on institutional vulnerabilities which affect and distort individual and collective judgment, leading to systemic departures from expected conduct. By delving on a number of narratives from history, mostly involving uniformed personnel, it construes the implications of such 'departures from expected conduct' on national security. Thereby, it emphasises on, and advocates, the importance of effective training methods, supportive organisational mechanisms and inculcation of a strong sense of personal responsibility towards ensuring that vital state security agencies/institutions and the individuals serving in critical decision-making positions remain overboard from such decision-making vulnerabilities.

SETTING THE CONTEXT

The Challenger Space Shuttle disaster of January 28, 1986, wherein the said space shuttle exploded in space, approximately 73 seconds after take-off, is one of the standard case studies discussed at the Centre of Excellence in Ethics, Leadership and Behavioural Studies (CELABS), Kochi,⁴ to foreground the vulnerabilities underlying group decision-making. Briefly explaining the circumstances of the case, while the *technical* reasons for the explosion were attributed to equipment failure, namely, the malfunctioning of certain critical equipment, as it was made to operate outside of its safe operating temperatures, the 'organisational' reasons were attributed to, among other factors, a difference in risk perceptions held by the engineers who opposed the launch in view of the operating risks and communicated the same to the managers; and the managers, who, owing to systemic organisational pressures, blatantly ignored and overlooked these warnings.⁵ Further, they even rationalised most of these counter-views to suit their preconceived objectives.⁶In simple

4. The Centre of Excellence in Ethics, Leadership and Behavioural Studies (CELABS), Kochi is the Indian Navy's ethics and leadership school, imparting training in leadership, ethics and behavioural studies related subjects to officers from a wide range of seniority. Among the many training methodologies practised here, the case study approach is widely used to discuss topics from the organisational behaviour studies domain. The one discussed here and later in the paper is used in mid-level (length of service 6-9 years service) officers' classes.

5. Diane Vaughan, *The Challenger Launch Decision: Risky Technology, Culture, & Deviance at NASA* (New York: University of Chicago Press, 1997), pp. 77-152.

6. *Ibid.*, p. 120.

words, they *knew* of the potentially fatal risks and still *chose* to go ahead with the launch. The managers were neither malicious nor incompetent. Rather, they were subject to certain circumstances that led them to behave in a manner that would have run contrary, even to their *own* expectations – had they had the privilege of observing their behaviour as third persons. However, since that privilege is open to no one, least of all, military practitioners, who, at times, have to take risky, stressful decisions, often impinging on the questions of life or death, it behoves us to ask the questions: what are the systemic biases that distort decision-making; and more so, how can their pernicious after effects be ameliorated?

So, why should military practitioners be aware about the vulnerabilities that assail individual and group decision-making processes? The answer to this lies in some of the darkest lessons from military history, which has been a far from benevolent teacher – the Nanking massacre of 1938⁷, or the Mai Lai massacre of 1968⁸, or the prison tortures of Abu Ghraib of 2001.⁹ History succinctly shows us that each time, the volatile combination of faulty group-oriented tenets such as ‘authority’, ‘power differentials between two groups’, ‘diffusion of responsibility’ and ‘single minded agendas’ has led to unimaginable horrors and manifestation of human conduct well beyond what may be termed as ‘normative’. The reason these three incidences are highlighted is because all three have some alarming parallels –all three have well trained, uniformed personnel as prime perpetrators, all three involve the most gruesome torture, and, most importantly, all three are examples of what happens when highly toxic group dynamics take over the group: amongst the many types of casualties, morality, or the sense of right and wrong becomes the first and most dangerous one.

In a broader context, therefore, it is vital to study and understand certain aspects of behaviour and how they are linked to individual and collective moral judgment, as our entire security machinery functions in the form of teams within teams – starting from the headquarters/ command level, to the smallest unit on the ground. Further, all group-

7. Paul Bartrop, *A Biographical Encyclopedia of Contemporary Genocide: Portraits of Evil and Good* (Kindle Edition: ABC-CLIO, 2012).

8. *Ibid.*, p. 321.

9. *Ibid.*, p. 334.

centric tenets – authoritarianism, power differential between groups and individuals, and ‘single minded agendas’ towards fulfilment of mission – form the common denominator.

Such a complex matrix of human deliberations and decision-making paradigm is bound to have pressure points, and were these to play up, say, in the form of a commanders’ faulty decision owing to one of the many cognitive or perceptual biases, it may certainly lead not only to mission failure, but also to loss of life and extremely expensive equipment, not to mention, national prestige and reputation – the most recent example of the latter being the shocking collision of the USS *Fitzgerald* with a merchant vessel earlier in 2017.¹⁰

PURPOSE AND STRUCTURE

While each of the incidences cited can potentially serve as an individual case study, analysing which will accrue immense training value and insight, they also come riddled with political, tactical and historical complexities, discussing which may go beyond the scope of this paper. Therefore, towards precluding these complexities, the paper puts forth a fictitious, yet engaging and, hence, effective case narrative, frequently discussed with junior and mid-level officers at the CELABS. Not only will this time-tested, somewhat simple, albeit not simplistic, narrative garner more objectivity, it will also enable emphasising, with adequate clarity, certain behavioural dynamics relevant to military practitioners and decision-makers – which ultimately forms the core purpose of the paper.

ASSUMPTIONS

This paper takes a socio-centric view of behaviour i.e. it makes a fundamental assumption that strong contexts and circumstances are more potent drivers of behaviour than individual disposition¹¹– which doesn’t dilute individual responsibility and culpability – but rather unveils and foregrounds how circumstances and contexts affect

10. “USS *Fitzgerald*, USS *John S. McCain* Collision Report,” *USNI News*, November 1, 2017. <https://news.usni.org/2017/11/01/uss-fitzgerald-uss-john-s-mccain-collision-report> Accessed November 12, 2017.

11. Philip Zimbardo, *The Lucifer Effect: Understanding How Good People Turn Evil* (New York: Random House, 2007).

judgment in latent and unexpected ways. Taking it a step further, we identify the psychological causes embedded in the 'system' which cause ethical blindness, owing to blind spots¹² in decision-making, also defined as 'the inability to see or sense the ethical dimension of a situation' in a specific context.

TEXT OF THE CASE: EMPEROR'S NEW CLOTHES¹³

The narrative of the case, used at CELABS, is briefly reproduced hereafter.

Once upon a time, there lived an emperor who was acutely obsessed with his clothes and external appearance. He spent long hours dressing up and looking at the mirror. Two crooks visited his kingdom. They claimed they were tailors who had a magical formula to make the most beautiful robe in the entire kingdom. The emperor, much taken in by their claims, commissioned them. They further professed that the magic of the robe lay in the fact that the robe was invisible to incompetent and stupid people. Hearing this, the emperor's interest was stimulated further as this afforded him the chance to find out who in his retinue was incompetent and stupid. The crooks asked for a thousand gold coins and precious stones to begin the work. After a fortnight, the emperor was curious to know the progress on his robe. He sent his prime minister, a loyal old-timer to check on the crooks in their makeshift workshop. The prime minister, on entering the workshop, was shown around and taken near the looms by one of the crooks, while the other intricately wove a gold thread in thin air. "*What a fine piece of work this is!*", remarked one of the crooks, "*Yes! it is coming along so well!*", replied the other. The prime minister was shocked, for he saw only thin air. "*Oh my God! Why don't I see anything! Does this mean I am stupid and incompetent?*", he wondered to himself, while the ignominy borne from such awareness dawned upon him. "*No one should ever know of this!*", he thought to himself, and professed, "*Indeed, the robe is*

12. AE Tunbrunsel and MH Bazerman, *Blind Spots: Why We Fail to Do What's Right and What to Do About It* (New York: Princeton University Press, 2011), pp. 10-14.

13. Hans Christian Anderson, *Fairy Tales and Other Traditional Stories*, <http://etc.usf.edu/lit2go/68/fairy-tales-and-other-traditional-stories/5637/the-emperors-new-clothes/> Accessed on October 27, 2017.

coming along really well!". He reported the same to the emperor. This further aroused his interest. In the meanwhile, the crooks demanded another thousand gold coins. After a month's wait, the emperor's curiosity escalated. He sent one of his most trusted chamberlains to check up on the progress and to inform the crooks that the emperor would be visiting them soon. The same sequence of events recurred when the chamberlain visited the workshop. *"Oh my God! The prime minister could see the robe, but I can't! That means I must be stupid and incompetent!"*, he told himself, while congratulating the crooks on their fine workmanship. *"No one must ever know this!"*, he decided.

Based on his testimony, the excited emperor decided to personally visit the crooks. A royal procession was readied, and a public announcement was made that he would parade in front of the entire kingdom in the most beautiful robe made, that very afternoon. On reaching the workshop, the emperor saw the two crooks standing at attention beside the loom. *"Here, your majesty! Look, what colours, what texture! Wait, let us help you try it."*, pronouncing which, the crooks went on to take off the emperor's clothes and made him wear what seemed like an impression of a robe, rather than a real robe. *"Oh my God! The prime minister and chamberlain could see it, but I can't! That means I am the stupid and incompetent one, not the others! And certainly not anyone else in my Cabinet who watches and smiles at me now!"*, thought the emperor, in horror.

"How wonderful you look, sir!", remarked the ministers, and others followed suit. Convinced now that it was only he who couldn't see the magical robe, the emperor decided to go ahead with the royal procession. While the procession paraded amidst the expectant people, a hush fell over. No one could really articulate what they saw, for fear of coming across as stupid. None, except for a boy, who exclaimed, *"But the emperor is naked!"*, at which his father quickly caught hold of him and scolded him. A murmur went about the crowd now, who along with the emperor and his entire retinue saw him for what he was – naked! And yet, despite realising this, he continued to walk in his 'new clothes'.

ANALYSIS

Picking the Threads: Emotions and Judgment

While the story is read as much for its comic verve as it is for its irony, it becomes instrumental in raising some pertinent questions about human behaviour.

To understand why most of the characters behave the way they do, it is essential to understand the interplay of emotion (affect) and reason (rationality) when a person is in an ethically challenging situation. It is no secret that most of the characters in the story confront such a challenge i.e. whether to confess that they don't see the clothes, and thereby compromise themselves (akin to sacrificing their own reputations and 'behaving in the interest of the greater common good'), or to conscientiously accept that they see the robe and save their reputations (akin to preserving their self-interest). Such a conflict between self-interest (or individual interest) and altruistic interest (or collective interest in the name of the 'greater common good') sits at the heart of an ethical dilemma.

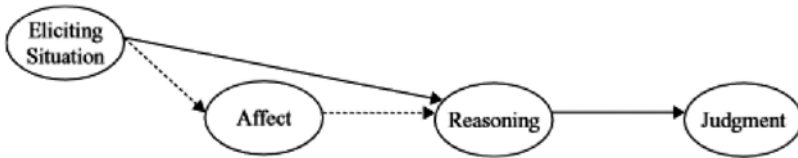
Jonathan Haidt, in his paper, "The Emotional Dog and its Rational Tail"¹⁴ attempts to explore the interplay of affect and reason that comes into play in ethical decision-making. In the study, the participants are given several hypothetical morally challenging problems. An example of such a problem is appended herewith: *a family had a pet Labrador. One fine day, the Labrador, while playing in the street is hit by a car and dies. Since it was considered healthy to eat dog meat, the family brought home the dog, cooked it and ate it.*

The participants were asked whether they were agreeable to what transpired in the situation. Most of them disagreed, protesting against the family's heartless conduct. However, when they were told to support their views with rational arguments, initially they couldn't supply any. Most participants said something like, "I don't know, I can't explain it! I just know it's wrong." What is of note in the study was that once individuals made *value* judgments, it was easy for them to justify their arguments.

14. Jonathan Haidt, "The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Behaviour," *Psychological Review*, 2001, pp. 814- 834.

This is exactly what Haidt and colleagues posited about moral reasoning. When we speak of judgments, especially moral judgments (regarding right and wrong), they inevitably entail an individual to perceive his/her self-image/self-concept linked with, or manifesting in, the decision that he/she takes.¹⁵ Therefore, more often than not, it is not only difficult, but improbable for individuals to be *absolutely rational* and objective while locking emotion behind closed doors. Rather, because of the manner in which morally challenging situations pull the decision-maker into their fold, the first and dominant response is *emotional*. Once an emotionally-driven judgment is established, individuals rationally attempt to justify and support it. Haidt, diagrammatically depicts this dynamic in Fig 1.

Fig 1: Interplay of Affect and Reason in Moral Judgment



Source: Jonathan Haidt, "The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Behaviour," *Psychological Review*, 2001, pp. 814-834.

A slightly different variation of the experiment was replicated at the CELABS. Individuals were given hypothetical cases based in the military context and responses were elicited, with the objective of delineating the dominant pattern of reasoning. An example of a problem is appended herewith: *Lt AZ is facing a financial crunch at home. His father has to undergo a complex surgery. While on transfer, he overstates his transfer claim, thinking a little additional money would help him tide over the crunch. Instead of making a transfer claim for 4,000 kg of luggage (his original baggage weight), he made it for 6,000 kg.* The participants were asked for responses. Broadly, 68 percent (n = 130) found Lt AZ's behaviour agreeable, while the rest opposed it. In the previous problem (Haidt), participants reported that they felt 'disgust' at the conduct of the family and motivated by such emotions,

15. Nina Mazar, "The Dishonesty of Honest People: A Theory of Self-Concept Maintenance," *Journal of Marketing Research*, 45, no. 6, 2008, pp. 633-644.

they argued against the ethicality of such conduct. However, in the latter case, 68 percent individuals reported feeling empathy for Lt AZ – subsequently, they took a relatively favourable view of his conduct. The response to the query, “*Would you report Lt AZ if he was your own batchmate/colleague*”, was even more telling – almost 80 percent of the total sample set (including the ones who had found such behaviour disagreeable) reported that they wouldn’t, owing to arguments ranging from ‘but everyone does it’, ‘his problem was genuine!’ and ‘it only happened once!’

The latent psychological factor underpinning the judgments made by the participants during the study was close identification with the subject/ situation i.e. all situations and actors were structured closely around the sample set characteristics (age, rank), precipitating a higher degree of *felt emotionality*. The behavioural dynamic worth noting is that a large proportion of individuals chose *not* to report the transgression despite recognising its wrongful nature. This further adds to the paper’s preoccupation with systemic deviations in behaviour observed in the group/organisational context.

In the light of the discussion, it would be pertinent to ask ourselves: why do the characters in the story behave the way they do, like the participants in our study: knowing something is wrong, and yet responding to it in a counter-intuitive manner? Say, why don’t the prime minister, despite his wisdom and common sense, the chamberlain, and even the ministers, render an honest report to the emperor?

Looking deeper, the dominant emotion pervading the kingdom is *fear* – and this is one of the first emotions that distort decision-making. We see a thin filigree of sweat mark the prime ministers’ brow, and how the crowds keep silent while the royal procession is parading amidst them. However, such pathological fear operates at two levels: one, at the legal vis-à-vis sociological level i.e. the fear of consequences such as the emperor’s wrath and disapproval; and two, at a personal level i.e. compromising one’s reputation by admitting that he/she can’t see the clothes.

Both conjectures regarding fear lend support to the view that emotion can easily overpower reason, and impede rational judgment, and the context which precipitates such emotion tends to be stronger

than both emotion and reason. The former pattern was observed during a replication of Haidt's study at the CELABS, wherein contextual identification with the subject led to the participants taking a self-serving (i.e. not reporting because of identifying with the situation) view of an ethically grey situation.

It would be pertinent to highlight that fear dominates many organisations – even on a day-to-day level – the fear of not living up to the expectations of the superiors, the fear of being marginalised by one's peers, the fear of time pressure, and, most importantly, the fear of being aggressed, harassed, and expelled from one's social context. In the narrative, the two crooks play with that fear.

How Leaders Set Contexts for their Subordinates

Taking the discussion further, Norman Dixon in his book, *The Psychology of Military Incompetence*¹⁶ posits that one of the key catalysts behind incompetence vis-a-vis dysfunctional leadership outcomes is authoritarianism. This term refers to a cluster of psychological attributes, namely;

*The authoritarian general is described as one who is conforming, submissive to authority, punitive...over-controlled, anti- intellectual...status-hungry, rigid, possessed of a closed mind, and saturated in discipline. Given this basic personality core, several other characteristics such as fear-of- failure and groupthink are derived as logical extensions.*¹⁷

Not only will it be easy to attribute many of these traits to the emperor, but such characteristics are also likely to lead to trouble if a combat commander who has these has to deal with the fast moving complexity of the battlefield.¹⁸

Keeping the socio-centric approach to behaviour adopted earlier, it would be pertinent to mention that the emperor's behaviour vis-à-vis preoccupations, in this context, and that of a leader's in the organisational set-up, sets the context for their subordinates'

16. Norman Dixon, *The Psychology of Military Incompetence* (Chicago: Persues Book Group, 1976).

17. Ibid.

18. Christopher Dandeker, "Military Incompetence Revisited: The Dark Side of Professionalism," *Res Militaris*, 6, no. 2, 2016, p. 4.

behaviour. Thus, it isn't that leaders' are incompetent in the technical sense, but, rather, their faulty personality dynamics create a dysfunctional culture of compromised ethical standards. Gino and colleagues in their paper *Vicarious Dishonesty*¹⁹ have developed the idea that in group environments, individuals take behavioural cues from those they feel close to, or, in military parlance, from the commander or respective peers. A faulty, distorted context, thus, has tremendous power to breed faulty, unethical behaviour. The infamous disbandment of the Canadian Airborne Regiment in the aftermath of the 'Somali Affair' is a succinct example of such a dynamic. The unit's culture and initiation rites led to morally incompetent, disgraceful behaviour in the field, including the beating to death of a Somali youth.²⁰ The unit's culture was based on an exaggerated, stereotyped form of 'the hyper-masculine warrior' – an image which had no place in the military of a legitimate, democratic state, and this ultimately precipitated its disbandment.

Framing and the Power of Contexts

Fear is not the only driving force of the story. The two characters who pose as 'tailors' play with another important element. Vanity drives the emperor's love for clothes. So much so, that he perceives the world only through clothes. And the two crooks write their story exactly in this frame of perception of the emperor. That's why they are so powerful: because of the combination of fear and the frame of the emperor. Individuals don't act in an objectively given world; rather, they make use of frames while in the process of sense making.²¹

What are frames and framing, in the psychological sense? Framing is a cognitive bias in which people react to a particular choice/prospect depending on how these choices are framed. In simple words, we rely on *how* information is presented while trying to make connections. We rely on frames as these reduce complexity. But frames can also be too narrow, giving a too narrow perception of what one should see

19. Francesca Gino Galinsky and Adam, "Vicarious Dishonesty: When Psychological Closeness Creates Distance from One's Moral Compass," *Organisational Behaviour and Human Decision Processes*, 119, 2012, pp. 15-26.

20. *Ibid.*, pp. 1-2.

21. Guido Palazzo Franciska Krings, "Ethical Blindness," *Journal of Business Ethics*, 2012, pp. 323 -338.

while making decisions. Thus, one runs into risks if the frames are inappropriate or too narrow. To corroborate, Herbert Simon in his essay "A Behavioural Model of Rational Choice"²² posits that while approaching problems, we depend on logical reasoning: our capacity for rationality vis-à-vis, logic is, in fact, more *limited than we know*, owing to factors such as limited cognitive/information-processing abilities, paucity of time and extent of information available to us.²³ Canonical problems such as Allais' Paradox illustrate the same.²⁴

Referring back to our original narrative and the prime minister's stance –there's cold sweat on his forehead, he feels uncertain. He actually believes that there is something, but he is not able to see it because of his own incompetence and stupidity. That is why he refrains from telling the truth to the emperor, despite being aware that he should. His case ideally illustrates that the context set by others vis-à-vis external environment/organisational factors profoundly affects individual judgments.

In the Stanford prison experiment²⁵, which in a lot of ways, foreshadows the prison tortures of Abu Ghraib²⁶, undergraduates were randomly assigned to be either guards or prisoners in a mock prison setting for a two-week experiment. After less than a week, the experiment was suddenly stopped because the guards were engaging in sadism and brutality, and the prisoners were suffering from depression and extreme stress. Normal Stanford students had transformed merely by situational conditions created for the experiment.

CONCLUSION

Military practitioners operate in disparate paradigms ranging from 'rendering a file noting' pertaining to critical issues of procurement and deployments to stressful, often dangerous environments,

22. Herbert Simon, "A Behavioral Model of Rational Choice." *The Quarterly Journal of Economics*, 69, no. 1, 1955, pp. 99-118.

23. Ibid.

24. Mark Machina, "Choice Under Uncertainty: Problems Solved and Unsolved," *The Journal of Economic Perspectives*, 1, no. 1, 1987, pp. 121-154.

25. Ibid.

26. Seymour Hersh, "Torture at Abu Ghraib," *The New Yorker*, May 10, 2004, <https://www.newyorker.com/magazine/2004/05/10/torture-at-abu-ghraib>. Accessed on December 10, 2017.

involving risks to own life and that of the men they command. Further, the immense amount of public faith reposed in the institution makes accountability to the public an even more delicate and necessary aspect of functioning.

However, what one doesn't, but must, realise is that operating in life threatening, conflict situations, especially arising in the asymmetric battlefields of the 21st century, is as riddled with challenges as is sitting in an office space and deliberating on whether or not to give a negative input on an important issue to the commander. Challenges, not necessarily *only* strategic or tactical, but psychological, lie in recognising systemic determinants of behaviour which affect and distort judgment – and how they can best be ameliorated through training and individual/organisational reinforcements.

Military practitioners must be careful of the psychological limit wherein authority slips from being a function of rank to food for personal egos. They must carefully bear in mind the point where inter-group cohesion, so vaunted in the military, becomes symptomatic of moral disengagement among group members and of the toxic combination of emotionally driven decisions and self-serving rationality that supports such decisions.

Most importantly, military practitioners must be wary of power and the manner in which it tends to transform one's ethicality and the recurring conflict between self-interest and collective interest. Lastly, in the age of 21st century conflicts, when a potential adversary ranges from a small boat laden with explosives to multiple nuclear-tipped ballistic missiles, decision-makers must safeguard themselves and their teams against being caught in too narrow frames of perception, driven by single-minded agendas.

INDIA-JAPAN DEFENCE TIES UNDER THE LEADERSHIP OF SHINZO ABE AND NARENDRA MODI

PIYUSH GHASIYA

The present conducive environment between India and Japan can be compared to two sets of puzzles that fit into each other perfectly. The features that are creating this conducive environment include India's high Gross Domestic Product (GDP) growth rate vis-à-vis Japan's recession-torn economy, India's young and skilled workforce vis-à-vis Japan's greying population, and India's continuous economic reforms. Moreover, the changing geopolitical environment wherein China and India are emerging as significant players in the world arena is also working in favour of India and has led to the changing Japanese perception towards India. All these developments are directed towards renewed interest between India and Japan in each other. With this kind of conducive environment, the leaders of the two countries are also working towards achieving maximum cooperation.

The icing on the cake is that the leadership in both countries is in sync with each other. Shinzo Abe and Narendra Modi have a good rapport, and their somewhat similar personalities are a leading cause for that. Both leaders have right wings views and are staunch

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nationalists. Both have the guts to take firm decisions even in the face of intense opposition. The 'revision of the Constitution' is the long cherished dream of Shinzo Abe which will change the way the world sees Japan. Shinzo Abe's "Free and Open Indo-Pacific Strategy" complements Narendra Modi's "Act East Policy." Whereas India plays a critical role in the "Free and Open Indo-Pacific Strategy", the support or extensive involvement of Japan in the success of the "Act East Policy" is undoubtedly paramount. Both leaders give particular attention to defence collaboration and want to take India-Japan defence ties to a new level.

In this backdrop, this paper will focus on Shinzo Abe's "Free and Open Indo-Pacific Strategy" and India's role in it. It attempts to analyse the changing defence posture of Japan under the leadership of Shinzo Abe and its impact on India-Japan defence ties. The paper intends to cover Prime Minister (PM) Narendra Modi's "Make in India" initiative, and cooperation with Japan in the defence sector. It also aims to discuss the recent developments in India-Japan defence ties.

FREE AND OPEN INDO-PACIFIC STRATEGY

Shinzo Abe announced the "Free and Open Indo-Pacific Strategy" at the 6th Toyko International Conference on Africa Development (TICAD VI) held in Nairobi in August 2016. This strategy developed out of the idea of "Confluence of the Two Seas" which Shinzo Abe propagated during his speech in the Indian Parliament in 2007. The encompassing area of this strategy includes the Pacific and Indian Oceans. In that way, it not only comprises Asia but Africa also.¹ This region is critical as a huge amount of trade passes through it, and that makes the stability of the Indo-Pacific more critical. The aim is to improve connectivity in the entire Indo-Pacific region to promote prosperity and stability in the region.

India is centrally located between the two choke points of global oil supplies: the Strait of Hormuz on its west and the Malacca Strait on its east. Whereas, 80 percent of Japan's energy supplies pass

1. Kenji Hiramatsu, "Inaugural Keynote Address by Ambassador Kenji Hiramatsu at "India and Japan: Confluence of Maritime Democracies," organised by the Delhi Policy Group on October 7, 2016," Embassy of Japan in India, October 7, 2016, http://www.in.emb-japan.go.jp/itpr_en/00_000122.html. Accessed on October 12, 2017.

through this route. India's critical position, both strategically and geographically, in the Indo-Pacific, make it the most important country for this strategy. Both India and Japan are cooperating to ensure maritime security in the Indo-Pacific region. The annual Malabar Exercise, in which Japan is a permanent member, along with India, and the US, the India-Japan Maritime Security Dialogue and the India-Japan Maritime Security Pact are a few such initiatives that are part of the security of the Indo-Pacific region. For better connectivity of the region, India and Japan have also announced the Asia-Africa Growth Corridor (AAGC).

It is evident that the "Free and Open Indo-Pacific Strategy" is crucial for India-Japan defence ties, especially in the domain of maritime security.

SHINZO ABE'S PRIME MINISTERSHIP AND JAPAN'S CHANGING DEFENCE POSTURE

Shinzo Abe's became the PM of Japan for the first time in September 2006. However, he had to resign due to health reasons after one year in September 2007. In 2012, he defeated Shigeru Ishiba and again became the PM of Japan. In 2014, he was reelected as the PM of Japan for the third time. Since then, he has been ruling Japan, and his term will end in September 2018. He is the third longest serving PM of Japan after Shigeru Yoshida and Eisaku Sato.

He is a conservative and belongs to the nationalist school of thought, and an "Indophile." In May 2017, he laid out the timeline for the revision of the Japanese Constitution's Article 9 in 2020. He has for long argued for a revision of the legal status of the Japanese armed forces to suit the new security environment, especially the threat of North Korean aggression. In 2015, he led the effort to expand the role of the military. The new rules permit Japanese forces to protect allies' assets, whereas earlier, the function of the Japanese Self-Defence Forces (SDF) was limited to domestic guardianship.² The requirement for a constitutional amendment is two-third majority in both Houses in the Diet, and two-third majority in a public referendum. Shinzo Abe's ruling party, the Liberal Democratic

2. Feliz Solomon, "Shinzo Abe Moves Closer to Changing Japan's Pacifist Constitution," *Time*, May 4, 2017, <http://time.com/4766409/shinzo-abe-japan-constitution-military/>. Accessed on September 4, 2017.

Party (LDP) is in a majority in both the Houses. However, surviving a popular referendum is more difficult because of the Japanese citizens' support for the current Constitution.

The *Asahi* poll on July 14, 2016, reported that only 35 percent favoured the constitutional revision, while 43 percent opposed it. Similarly, a *Nikkei* survey on July 25, 2016, found that just 38 percent were for the revision while 49 percent were against it.³ Though the political will for a revision is there, getting enough public support will be difficult.

Other than the constitutional amendment, Shinzo Abe has also elevated the defence agency of Japan into a full-fledged ministry and further created an Acquisition, Technology, and Logistics Agency (ATLA) to effortlessly and swiftly reflect operational needs of the SDF in all stages of defence equipment acquisition through project management.⁴

These efforts by Shinzo Abe and his Administration under the increasingly severe security environment around Japan showcase that Japan's security posture is changing.

IMPACT OF JAPAN'S CHANGING SECURITY POSTURE ON THE PRESENT INDIA-JAPAN SECURITY COOPERATION

Japan's removal of the arms export ban has opened the window for India and Japan to have deeper defence ties. If Shinzo Abe succeeds in his attempt to revise the Constitution, it will create numerous opportunities for both countries. The partnership between India and Japan was upgraded from "Strategic and Global Partnership" to "Special Strategic and Global Partnership" during Indian PM Narendra Modi's visit to Japan in 2014. When Japanese PM Shinzo Abe visited India in December 2015, both countries signed two defence agreements.

3. Sheila A Smith, and Teraoka Ayumi, "Japanese Public Opinion on Constitutional Revision in 2016," *Council for Foreign Relations*, August 1, 2016, <https://www.cfr.org/blog/japanese-public-opinion-constitutional-revision-2016>. Accessed on September 4, 2017.

4. MOD, "About ATLA," Ministry of Defence, September 2017, http://www.mod.go.jp/atla/en/soubichou_gaiyou.html. Accessed on September 5, 2017.

a. The Agreement Concerning the Transfer of the Defence Equipment and Technology⁵

The agreement recognises the fact that countries are increasingly seeking to advance the performance of their defence equipment and technology and cope with rising costs by participating in international joint research, development and manufacture. This agreement for joint research, development and production is expected to contribute to the security of both countries and encourage a closer relationship between Indian and Japanese defence industries.

The agreement has seven Articles which give the details of the arrangements, and legalities. It is initially for five years and can be terminated only after that. The concerned ministries from Japan are the Ministry of Foreign Affairs (MOFA), Ministry of Defence (MoD), and Ministry of Economy, Trade, and Industry (METI). The Indian side includes the Ministry of Defence (MoD), Ministry of External Affairs (MEA), and the Defence Research and Development Organisation (DRDO).

The Japanese defence industry had been constrained till now to concentrate only on the domestic market due to the constitutional binding. However, the 'removal of the arms export ban' in 2014 and this agreement with India in 2015, have opened the doors of opportunity for Japan in the Indian defence market.

b. The Agreement Concerning Security Measures for the Protection of Classified Military Information⁶

This agreement ensures the reciprocal protection of classified military information transmitted to each other, provided that the terms of protection are consistent with the national laws and regulations of the receiving party.⁷ This has relevance for

5. "Agreement Concerning the Transfer of the Defence Equipment and Technology," MOFA, December 12, 2015, <http://www.mofa.go.jp/files/000117470.pdf>. Accessed on September 5, 2017.

6. "Agreement Concerning Security Measures for the Protection of Classified Military Information," MOFA, December 12, 2015, <http://www.mofa.go.jp/files/000117472.pdf>. Accessed on September 6, 2017.

7. "India and Japan Sign 16 Agreements," *Business Standard*, December 12, 2015, http://www.business-standard.com/article/news-ians/india-and-japan-sign-16-agreements-115121200435_1.html. Accessed on September 6, 2017.

bilateral military interactions, including joint naval exercises, and it also removes a lot of time-consuming legwork involved in first negotiating and putting in place a Non-Disclosure Agreement for the transfer of defence technologies.⁸

THE US-2 AMPHIBIOUS SEARCH AND RESCUE AIRCRAFT DEAL

The US-2—a four-engine aircraft—can operate in the sea state five condition (wind speed of 30-38 km/hour) on the high seas as well as on rivers and lakes. It can take about 30 personnel and lift 18 tonnes, and fly 4,500 km at a stretch without needing to stop for refuelling.⁹ The features include short take-off capability and the ability to land on high tides (up to three metres). Due to these functions, it suits the needs of India—a country with a vast coastline (around 7,500 km) and remote islands to defend, especially the Andaman and the Nicobar Islands. This aircraft will be helpful for the Indian Navy and Indian Coast Guard for search and rescue, inter-island communication, reconnaissance activities, and rapid response duties.¹⁰

A request for information on the aircraft by India was issued in 2010. The talks started when PM Manmohan Singh visited Japan in May 2014. When the negotiations began five years ago, Japan's 'arms export ban' was still in place. Due to this reason, Japan agreed to sell the US-2 as a civilian deal. Since the US-2 can be retrofitted, even if Japan sells these aircraft for civilian use, India may rework them to restore them for military purposes.¹¹ However, even after five years of negotiations, the deal has not yet been finalised. The

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8. Saurabh Joshi, "India, Japan Defense Agreements to Boost US-2i Sale," *Stratpost*, December 13, 2015, <https://www.stratpost.com/india-japan-defense-agreements-to-boost-us-2i-sale/>. Accessed on September 6, 2017.
 9. Sudhi Ranjan Sen, "For First Time Since World War 2, Japan Will Sell Military Equipment To India," NDTV, September 2, 2014, <http://www.ndtv.com/india-news/for-first-time-since-world-war-2-japan-will-sell-military-equipment-to-india-657952>. Accessed on September 6, 2017.
 10. Shiv Aroor, "EXCLUSIVE: As India-Japan Deal Drifts, HAL Amphibian Aircraft Plan Surfaces," *Livefist Defence*, February 23, 2017, <https://www.livefistdefence.com/2017/02/exclusive-as-india-japan-deal-drifts-hal-amphibian-aircraft-plan-surfaces.html>. Accessed on September 06, 2017.
 11. Vivek, "The Benefits for India of a US-2 Deal with Japan," *The Diplomat*, October 23, 2013, <http://thediplomat.com/2013/10/the-benefits-for-india-of-a-us-2-deal-with-japan/?allpages=yes&print=yes>. Accessed on September 6, 2017.

cost of the aircraft is one of the major roadblocks in concluding the deal. India requested for 12 aircraft (six for the Indian Navy and six for the Indian Coast Guard). The initial cost per aircraft was \$133 million, however, after negotiations, in 2016, Japan agreed to provide 10 percent discount. That lowered the cost to \$113 million.¹² The other reason for the delay in finalisation of the deal is bureaucratic red tape. There is confusion regarding the process since this is the first time that the Defence Ministry of India and Department of Industrial Policy and Promotion (DIPP) are jointly handling an acquisition.¹³ Satoru Nagao, a research fellow at the Tokyo Foundation has pointed out that though this was Japan's first chief defence export, there was no one responsible official on Japan's side.¹⁴

For Japan, concluding this deal is very significant, since it is the first attempt by Japan to export defence equipment (Japan lost to France in the bid to build a submarine for Australia). Hence, pessimism prevails regarding the deal, and scholars hold different points of view. Paul Burton, director of research at Jane's (a defence information provider), thinks that though the deal will go through at some point, "we might have grandchildren by the time it happens".¹⁵ However, another scholar, Dhruva Jaishankar, a fellow from Brookings India is pessimistic about the US-2 deal. He feels that something other than the US-2 will be the first defence export item to India. He has also said that though at some point India will import defence equipment from Japan, there is need to identify systems or sub-systems in which Japan is cost competitive, and in which the Indian military sees high value and priority.¹⁶ If concluded, this deal would further strengthen the strategic partnership between India and Japan.

12. Vivek Raghuvanshi, "India Resolves US-2 Aircraft Price Issue With Japan," *Defence News*, October 20, 2016, <http://www.defensenews.com/global/asia-pacific/2016/10/20/india-resolves-us-2-aircraft-price-issue-with-japan/>. Accessed on September 6, 2017.

13. Joshi, n. 8.

14. Pierre Delrieu, "Japan First Export US-2 Deal With India Delayed Once More," *Asian Military Review*, June 30, 2017, <https://asianmilitaryreview.com/2017/06/japan-first-export-us-2-deal-with-india-delayed-once-more/>. Accessed on September 06, 2017.

15. Mitsuru Obe, "Major Defense Deal Still Eludes Japan," *Nikkei*, June 14, 2017, <https://asia.nikkei.com/Politics-Economy/International-Relations/Major-defense-deal-still-eludes-Japan?page=1>. Accessed on September 6, 2017.

16. *Ibid.*

REFORMS IN THE INDIAN DEFENCE SECTOR

From April 2000 to March 2016, Foreign Direct Investment (FDI) in the Indian defence sector was a paltry \$5.12 million, and in FDI ranking, the defence industry was placed at 61 out of 62 Indian industries.¹⁷

To change this and to attract foreign investors, the FDI limit in Indian defence industry was increased to 49 percent in 2014 from the earlier 26 percent. In 2016, the FDI percentage was enhanced further by allowing 49 percent through the automatic route and 100 percent through the government endorsement route in cases where India would get access to modern technology.¹⁸ These areas include:

- 100 percent FDI under the automatic route for the production in India of tanks, military transport aircraft, and armoured vehicles.
- 76 percent FDI under the automatic route for helicopters and fighter aircraft.
- 51 percent FDI under automatic route for warships and submarines.

It is imperative to note here that all the categories where FDI is less than 100 percent, depending upon case-to-case basis, are those where high-technology is involved.¹⁹

However, even after these reforms in April 2016, incumbent Defence Minister Manohar Parrikar admitted that India had attracted only \$167,000 in defence-related FDI since the National Democratic Alliance (NDA) government came to power in November 2014.

As far as data is concerned, the Indian defence sector, which has enormous potential, is still unable to attract foreign investment. To change this situation much more has to be done: systematic and in-depth reform in defence planning, Research and Development (R&D), acquisitions and manufacturing is the need of the day.

17. Jeff M. Smith, "Waking the Beast: India's Defense Reforms Under Modi," *The Diplomat*, December 16, 2016, <http://thediplomat.com/2016/12/waking-the-beast-indias-defense-reforms-under-modi/>. Accessed on September 19, 2017.

18 "Dawn of a New Era in the Indian Defence Industry," *Forbes India*, July 19, 2017, <http://www.forbesindia.com/blog/economy-policy/dawn-of-a-new-era-in-the-indian-defence-industry/>. Accessed on September 19, 2017.

19. IANS, "Government Considering Path-Breaking FDI Reforms for Defence Sector," *The Economic Times*, July 24, 2017, <http://economictimes.indiatimes.com/news/defence/government-considering-path-breaking-fdi-reforms-for-defence-sector/articleshow/59734839.cms>. Accessed on September 19, 2017.

With the removal of the 'arms exports ban' in the Japanese Constitution in 2015, and escalation of India-Japan relations to the 'special strategic level', Japan can become a significant player in the Indian defence market.

"MAKE IN INDIA" INITIATIVE AND JAPAN

Indian PM Narendra Modi launched the "Make in India" initiative in September 2014. This initiative aims to transform India into a global design and manufacturing hub. It projects the government as a 'business partner' rather than an issuing authority. The aims are to:

- To provide a framework for a vast amount of technical information on 25 industry sectors.
- To inspire confidence in India's capabilities amongst potential partners abroad, the Indian business community and citizens at large.
- To reach out to a vast local and global audience via social media and continuously keep them updated about reforms and opportunities.²⁰

The Department of Industrial Policy and Promotion (DIPP) is one of the leading government bodies that are working towards making this initiative successful.

To facilitate and fast-track investment proposals from Japan, DIPP has set up a special management team known as "Japan Plus," which started its operations from October 2014. India believes that Japan can play a significant role in the "Make in India" initiative. The planned acquisition of the US-2 from Japanese manufacturer Shinmaywa (details of the deal will be explained in the later part of this paper) is the most talked about India-Japan partnership in defence. Other than that, Japanese participation in project 75(I) to build six submarines with the Air-Independent Propulsion (AIP) system is also a project that both India and Japan are looking forward to. Though it is too early to reach any conclusion regarding the success of this initiative, Japan's constructive participation in the defence sector in India, and its willingness to work cooperatively are commendable.

20. Make in India, "About Us," 2017, <http://www.makeinindia.com/about>. Accessed on October 12, 2017.

RECENT DEVELOPMENTS IN DEFENCE TIES

On September 5, 2017, Indian Defence Minister Arun Jaitley and his Japanese counterpart Itsunori Onodera had a meeting on the occasion of the India-Japan Annual Defence Ministerial Dialogue in Tokyo. Though both countries conduct defence staff talks annually, in the first half of 2018, the Japanese Chief of Staff, Joint Staff Japan SDF, will be visiting India for the first time. The two countries are expected to talk about cooperation among their defence forces.

Exchanges between Indian Air Force and Japan ASDF

In February 2017, the Vice Chief of Staff, Japan Air Self-Defence Force (ASDF) participated in "Aero India-2017." Indian Air Force helicopter crews also visited the Japan ASDF's Air Rescue Squadron in Hyakuri, Japan. Both sides are positive about expanding bilateral air-to-air exchanges in the field of aviation safety and aircrew exchanges.

Exchanges between Indian Army and Japan GSDF

The armies of both countries have held staff talks. They have agreed to develop active exchanges in the domain of Peace-Keeping Operations (PKOs), Humanitarian Assistance and Disaster Relief (HADR), and counter-terrorism. In this context, the ministers decided to explore a joint field of counter-terrorism between the Indian Army and Japan Ground Self-Defence Force (GSDF) in 2018.

Exchanges between Indian Navy and Japan MSDF

Other than the Malabar Exercise and cooperation between the coast guards of the two countries, the navies of India and Japan are also considering inclusion of Anti-Submarine Warfare (ASW) training to expand cooperation. In addition, the ministers also agreed to pursue exchanges and training by ASW aviation units such as P-3C. The Japanese minister also proposed to invite Indian Navy personnel for training in mine-counter-measures, held by the Japan Marine Self-Defence Force (MSDF).

The Centre for United Nations Peace-keeping of India and the Japan Peace-keeping Training and Research Centre have also had successful bilateral exchanges in UN peace-keeping.

Engagement between the Japanese Acquisition, Technology and Logistics Agency (ATLA) and DRDO, and prospective collaboration in the areas of unmanned ground vehicles and robotics have also been agreed upon.²¹

MALABAR EXERCISE

The navies of India, Japan and the US recently concluded the 21st edition of their annual drills known as the Malabar Exercise from July 10-17, 2017.²² The exercise aims to achieve better military understanding and interoperability among the three partnering nations. It demonstrates the joint commitment of all three countries to address common maritime challenges, the security of the Indo-Pacific, and enhancement of global maritime security. Malabar-17, which was held in the Bay of Bengal, featured 95 aircraft, 16 ships and two submarines, and was one of the biggest ever since the inception of the exercises in 1992.²³ The INS *Vikramaditya* (India's sole aircraft carrier), USS *Nimitz* (the world's largest aircraft carrier), and Japan's biggest helicopter carrier, JS *Izumo*, along with many warships, participated in Malabar-17.

CONCLUSION

The present geopolitical and domestic situations in both India and Japan create a conducive environment for a productive India-Japan partnership. On the top of that, the shared personality traits between Shinzo Abe and Narendra Modi help both leaders to connect with each other personally. This friendship has the potential to take India-Japan relations to the next level. However, there are many roadblocks in the development of constructive India-Japan defence ties. These include the limited time span of the leadership. Japanese PM Shinzo Abe announced a snap election to be held on October 22,

21. PIB, "Joint Press Statement on the India-Japan Annual Defence Ministerial Dialogue," *PIB*, September 6, 2017, <http://pib.nic.in/newsite/PrintRelease.aspx?relid=170560>. Accessed on September 20, 2017.

22. Piyush Ghasiya, "Changing Geopolitical Dynamics and Malabar Exercise," *CAPS*. August 16, 2017, http://capsindia.org/files/documents/CAPS_Infocus_PG_01.pdf. Accessed on August 30, 2017.

23. "Exercise Malabar Commences in Bay of Bengal/ North Indian Ocean," Indian Navy. July 31, 2017, <https://www.indiannavy.nic.in/content/exercise-malabar-commences-bay-bengal-north-indian-ocean>. Accessed on August 1, 2017.

2017. If he had lost the election, then not only would his dream of the 'revision of the Constitution' have remained unfulfilled, but India would have lost a dynamic and strong-willed friend. However, even with his victory in the election, the 'constitutional revision' will be extremely challenging. Moreover, the effectiveness of the "Make in India" initiative is also questioned, especially Japan's engagement in the Indian defence market. Japan is still reluctant when it comes to technology transfer and co-production of equipment in India. We have strong maritime relations with Japan, but cooperation in other areas is in a nascent stage. There is a long road ahead for India-Japan defence ties to reach to the next-level.

TIME TO CONSOLIDATE TIES WITH MYANMAR TO CREATE A NEW REGIONAL SECURITY BALANCE

MOHINDER PAL SINGH

After the successful elections in November 2015, the new democratic government of Myanmar led by Aung San Suu Kyi's party National League of Democracy (NLD), is about to complete two years of its rule in March 2018. Myanmar is an important neighbour not only because India shares a 1,640 km porous border with it but also because India has historical umbilical relations of the colonial period, and today, Myanmar is our first step towards making an ingress into the other East Asian states. The Modi government's recent "Act East Policy" which developed from a partially successful "Look East Policy" of the early Nineties now needs to seamlessly connect into a largely China-incensed East Asian hemisphere. Myanmar is in a flurry to upgrade its obsolete military hardware and according to *Janes* has inked an agreement (in 2017) to buy over 16 JF-17 jets from the Pakistan Aeronautical Complex (PAC). Some reports also suggest that Myanmar and the PAC are likely to closely collaborate to establish an assembly line to manufacture over 200 JF-17 in Myanmar

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itself. On the other hand, most of the projects of “Look East Policy” vintage initiated by India in Myanmar, are still miles away from completion. It’s time for India to act fast and provide a fresh impetus to its “Act East Policy”, especially in Myanmar, for three reasons; one, to open a land bridge into the Association of Southeast Asian Nations (ASEAN) countries; two, to reduce the growing Chinese footprints there; and, three, to enhance India’s presence by helping the nascent democracy to flourish and strengthen.

Historically, India and Myanmar share a warm relationship, especially due to India’s undaunted support to Aung San Suu Kyi and her party during the two decades of her house arrest and political turmoil. China, on the other hand, increased its presence in Myanmar only in the early Nineties when the West imposed serious economic sanctions owing to the large scale cases of human rights abuse by the military regime. Prior to that, Myanmar and China had very turbulent relations which at one time had resulted in the closure of the Chinese Embassy for almost a decade. However, with over US \$17 billion investment in the last two decades, China has embedded itself firmly as a benefactor, especially with the senior military brass who, until very recently, were in the power centres of Myanmar. It is pertinent to note that from the 1990s till as late as 2010, most analysts had referred to Myanmar as a ‘Chinese colony’, especially when China stymied the introduction of a Bill of human rights abuse against Myanmar in the UN. After the 2010 elections, the new quasi-democratic set-up under President Thein Sein undertook some serious reforms, including the release of over 1,000 political prisoners, opening up of the press and media, and welcoming foreign investment. In view of the sincerity behind the reforms, the US and the European Union (EU) nations soon lifted the two-decade-old trade sanctions, which provided Myanmar with many new investments coming in from the US, Japan and the EU nations and provided timely succour to the impoverished economy. The period from 2011-15 saw the US flipping its Myanmar policy and openly engaging with the newly elected quasi- military government under Thein Sein. By this time, Aung San Suu Kyi had also been elected to the Parliament in the by-elections of 2011. This period also saw India converting its “Look East Policy” into the “Act East Policy,”

with increased visits by the heads of the states and ministers to each other's country. However, after the 2015 elections in Myanmar and the establishment of a government by the Aung San Suu Kyi led NLD party, the expectations are that India-Myanmar relations will touch a new high. Fresh forays in trade, commerce and strategic ties are earnestly expected to check the growing Chinese influence. In 2015-16, India invested \$224 million against the Chinese figure of \$3.3 billion in infrastructure alone. Indian projects are moving at a slow pace and require a fresh impetus.¹

UPGRADATION OF TATMADAW^{*}: MYANMAR'S NEW FOCUS

As per the Myanmar military chief, Min Aung Hlaing, his goal is to "build a professional military" might that could stand shoulder-to-shoulder with the armies of the region's states. At present, the *Tatmadaw* (official name of the armed forces of Myanmar) is a large force, with 406,000 people in uniform, but its equipment is grimly obsolete with many of its existing facilities decaying; its soldiers are poorly trained and, by all accounts, have a low morale. The military has long depended on the Chinese training. The army leaders would like to break out of their isolation and participate in regional exercises and conferences, but had few opportunities to do so.²

Analysis of the expenditure on defence since 2014 clearly shows that Myanmar is seriously planning an upgradation of its military hardware in the coming few years. In March 2013, Myanmar's military was granted a \$2.4 billion annual budget, just over 12 percent of the total government spending in the otherwise poverty-stricken country. It invested about \$1.25 billion in buying aircraft, weapons, etc.³ In 2014, the defence budget was a whopping 23.4 percent of the total spending of the government. Under the former military junta,

1. Tridivesh Singh Maini, *The Diplomat*, October 1, 2016, <http://thediplomat.com/2016/10/can-india-increase-its-presence-in-southeast-asia/>. Accessed on September 23, 2017.
2. Zoltan Bereny, "Armed Forces and Democratization in Myanmar: Why the US Military Should Engage the Tatmadaw," CSIS, September 13, 2016, <https://www.csis.org/analysis/armed-forces-and-democratization-myanmar-why-us-military-should-engage-tatmadaw>
3. Htet Naing Zaw, "Defence Ministry Gets Lions Share of Supplementary Budget", *The Irrawaddy*, December 14, 2016, <http://www.irrawaddy.com/news/burma/defense-ministry-gets-lions-share-of-supplementary-budget.html>. Accessed on September, 25, 2017

which ruled Myanmar for decades, the state budget was neither released publicly nor ever put up for scrutiny. The trend of defence spending has continued to show an upward trend only in the last few years. In 2016-17, the Defence Ministry was allotted 14 percent of the total budgetary allocation, which comprises the largest military spending by any government in the region.⁴

Myanmar, which has been ruled by a military government for the last 60 years, has had a higher defence spending for a long time. In the decade of the 1990s, its defence spending ranged between 30-40 percent of its annual budget. After the famous elections of 2010 which were held by the military regime and a quasi-military government came to power under Thein Sein, the defence spending plummeted marginally, but remained at a higher level compared to the other sectors.

According to a SIPRI report, in 2012 and 2013, Myanmar spent 4.5 and 4.6 percent of its Gross Domestic Product (GDP) on defence. In 2014, the Defence Ministry was allocated 23 percent of the total government spending. As per the Asian Development Bank report Myanmar ranks in the top 20 countries of the world which spend more than 4 percent of their GDP on the military. In addition to this, it is a known fact that Myanmar's military also has off budget sources.

In the 1990s' modernisation, Myanmar had imported a large supply of military equipment from China. This included armed vehicles, artillery guns, fighter and transport aircrafts, frigates, patrol boats, missiles and munitions. As per Andrew Stelth, an analyst on East Asian affairs, most of this equipment of the decade of the 1990s was cheap and comprised obsolete weapon systems, and obviously did not last long. Interestingly, US Secretary of State Donald Rumsfeld once described Myanmar's order of battle and operational capabilities as "known unknowns".⁵

In 2011, the new Myanmar Army Chief Gen Ming Aung Hlaing brought in a series of changes to strengthen the *Tatmadaw's* sagging unity and morale. He worked very hard to upgrade its infrastructure

4. Myanmar Defense Spending, Global Security.org, <http://www.globalsecurity.org/military/world/myanmar/budget.htm>. Accessed on October 3, 2017

5. Andrew Stelth, "Strong, Fully Efficient and Modern: Myanmar's New Look Armed Forces", *Regional Outlook Paper*, No. 49, 2015.

and equipment. Between 2011 and 2014, Myanmar purchased new military hardware worth US \$1.6 billion, its main suppliers being China and Russia. India added a miniscule contribution by way of supply of military trucks by Tatas. The main equipment comprised the T-72 Armoured Fighting Vehicles (AFV), Chinese Main Battle Tanks (MBTs) 2000, Russian and Chinese Armoured Personnel Carriers (APCs), Chinese 155 mm Howitzers, Chinese Surface-to-Missile (SAM) systems such as the HQ 12/ KS 1A, Russian Pichora-2M and new Russian BMP-3. The Myanmar Navy also purchased Chinese 1960 frigates in 2012. When the Myanmar Army Commander-in-Chief (C-in-C) visited Israel in September 2016, there was speculation about the purchase of 3 Super Drova patrol boats.⁶ It is also believed that the Myanmar Army chief handed over a list of items to India too which included maritime sensors and components of offshore patrol vehicles. Though most of the Myanmar's defence requirements are being met by purchases from China, the sudden large scale acquisition of the JF-17 Thunder from the PAC has caught India unawares.

In 2015, the Myanmar government initiated the procurement of the 16 JF-17 jets from Pakistan at a total price of more than \$500 million. This aircraft is currently being co-produced with China at the PAC plant near Islamabad. The pact between Pakistan and Myanmar was signed in June 2015, at the Paris Air Show, where this jet was showcased. Earlier, the PAC was co-producing only the Block I variant but has recently advanced the facilities to co-produce the Block II variant which has better avionics and air-to-air refuelling capability. Reportedly after 2017, the Block III variant will also be co-produced in this plant. The latest models of this jet are lightweight, multi-role and able to achieve a speed of Mach 2, with an operational altitude of 55,000 ft. Its original Chinese name is FC-1 Xialong.⁷ As per IHS *Jane's Defence Weekly*, the country is in advanced negotiations for the licensed production of the JF-17 in Myanmar. If this comes through, then the JF -17 will become the mainstay of the Myanmar

6. Ibid.

7. Anthony Davis, "Yangon, Myanmar in Advanced Negotiations to Licence-Build JF-17 Fighter", *IHS Janes* 360, February 1, 2017, <http://www.janes.com/article/67387/myanmar-in-advanced-negotiations-to-licence-build-jf-17-fighter>. Accessed on September 23, 2017.

Air Force (MAF) as the MAF is ready to phase out its obsolete fleet of F-7M Airguard and A-5C 'Fantan' combat aircraft purchased from China in the 1990s.⁸

From the above narrative, it is clear that most of our defence agreements are generally to do with the stability of the India-Myanmar border and not with the upgradations of the *Tatmadaw's* defence prowess. With our western neighbour becoming a proxy supplier of China-developed defence equipment to our eastern neighbour, it would be in India's interest to take due cognisance of this development.

INDIAN PROJECTS IN MYANMAR

In the last decade, India had initiated two important projects and a number of smaller projects aimed at helping the democratic institutions in Myanmar. The lead runners are the Rs 1,500 crore Kaladan Multi-modal Transport Corridor project and the India-Myanmar-Thailand Trilateral Highway project.⁹ The deal for the famous Kaladan Multi-modal Corridor project was signed in 2007 between the Government of India and the Government of Myanmar. The project was to be completed in three phases:

- Phase 1: Development of Sittwe port to handle the future increase in shipping levels. This includes the expansion of its seaport and the construction of a new inland waterway terminal. It also entails deep dredging of the approach channel and the port area to facilitate 6,000-ton ships, as well as construction of two jetties and extensive loading and storage facilities that will significantly expand Sittwe's current size and capacity
- Phase 2: Deep dredging of 225 km of the Kaladan river between Sittwe and Setpyitpyin (Kaletwa) in Chin state, where another terminal will be built.
- Phase 3: Construction of a 62-km-long road connecting Setpyitpyin (Kaletwa) to Mizoram.

The Kaladan project is running much behind schedule and

8. "Myanmar to Buy Pakistan JF-17 Fighter Jets", *Defence Update*, January 16, 2016, <http://defenceupdate.in/myanmar-to-buy-pakistan-jf-17-fighter-jets/>. Accessed on September 12, 2017.

9. Kaladan Multi-modal Transit Transport Project, April 25, 2014, <http://www.mdoner.gov.in/content/introduction-1> Accessed on November 2, 2017.

every stage of the project has had delays. It was India's proposal to build this multi-modal transport project and it was conveyed to the Myanmar government in 2003. Thereafter, it took five years for the two sides to enter into an agreement, and construction work began in 2010. It was initially planned to be completed in July 2013. India had to revise its plans half way in the project as the Kaladan river was found to be unnavigable beyond Paletwa. This change required the road to be extended to Paletwa. A more thorough feasibility report could have avoided the delays and the cost escalations. In October 2015, the Indian government has approved the revised cost estimate of the Kaladan project from Rs 1,500 crore to Rs 2,904 crore. During the visit of Myanmar's president to India in September 2016, the two countries signed four agreements, prime among them being to intensify the work on these projects.

Some of the smaller projects successfully undertaken by India in Myanmar include upgradation and resurfacing of the 160-km-long Tamu-Kalewa-Kalemyo road and construction and upgradation of the Rhi-Tiddim road in Myanmar. An Asymmetric Digital Subscriber Line (ADSL) project for high speed data link in 32 Myanmar cities has been completed by Telecommunications Consultants India Limited (TCIL). The Oil and Natural Gas Corporation (ONGC), Gas Authority of India Limited (GAIL) and Essar are participants in the energy sector in Myanmar. M/s Rail India Technical and Economic Service (RITES) is involved in the development of the rail transportation system and the supply of railway coaches, locos and parts. In September 2008, the National Hydro-electric Power Corporation (NHPC) signed an agreement for development of the Tamanthi and Shwezaye Hydro-electric Power project in the Chindwin river. A heavy turbo-truck assembly plant set up in Myanmar by Tata Motors, with financial assistance from the Government of India was inaugurated on December 31, 2010. Other projects include revamping of the Ananda Temple in Bagan, and upgradation of the Yangon Children's Hospital and Sittwe General Hospital. India has also assisted in the reconstruction of one high school and six primary schools in Tarlay township, the area worst affected by the severe earthquake that struck northeastern Myanmar in March 2011.

In an article in *The Diplomat*, Sampa Kundu has highlighted that “China has left India far behind” with regard to infrastructure projects, especially because of the delays plaguing our implementing agencies working on these projects in Myanmar. Lack of coordination among different agencies and inadequate monitoring are among the main reasons for India’s failure to meet deadlines. There are other challenges like difficult terrain, disruption of work due to heavy and frequent rainfall, and some area being affected by the ongoing insurgency. In addition to these, flawed feasibility studies also came in the way of timely completion of the projects. This is especially the case with the Kaladan Multi-modal Transport project, which envisages linking Lawngtlai in India’s northeastern state of Mizoram via a road and the river Kaladan to the sea port at Sittwe in Myanmar.¹⁰

Another scholar, in his article in the *Indian Defence Review* opines, “India needs to keep its eyes open lest it loses Myanmar” and brings to fore the amount being invested by China in developing the infrastructure in Myanmar. He points out that the first destination of the leader of the ruling party and the Foreign Minister of Myanmar, Aung San Suu Kyi was to China and not to India.¹¹

Myanmar seems to be keen on reducing the increased dependence on China, in view of the Chinese hegemonic designs. This is clearly evident from two examples: one, there were wide ranging talks to cover border management and trade, and stopping of work on the US\$ 3.4 billion Myitsone dam project which has caused a large setback to the Chinese company which had already invested US\$ 1.6 billion in the project; two, in January 2015, the Myanmar authorities had arrested 153 Chinese nationals from Waingmaw township in Kachin state on charges of illegal logging and smuggling. The army also seized 240 logs, 455 vehicles, nine motor cycles, opium, methamphetamines and Chinese Yuan 12,000. The Chinese nationals were detained in Myitkyina prison and charged under the immigration laws as well as under the Public Property Protection Act. The Chinese government’s Foreign Ministry spokesperson Lu Kang said that they had asked

10. Sampa Kundu, “How India Can Direct its ‘Act East’ Policy Toward Myanmar,” *The Diplomat*, September 2, 2016, <http://thediplomat.com/2016/09/how-india-can-direct-its-act-east-policy-toward-myanmar/>. Accessed on October 6, 2017.

11. Amitava Mukerjee, “India Needs to Keep its Eyes Open, Lest it Loses Myanmar to China”, *Indian Defence Review*, June 13, 2016.

the Myanmar government to consider the actual situation of those loggers and deal with the matter in a lawful, reasonable and sensible way. However, it seems that the urgings of the Chinese government were ignored and on July 23, 2015, the court in Myitkyina issued the harshest possible sentence to these 153 loggers (all Chinese nationals).¹² Even after strong government to government parleys with the present regime, the ban on the work of Myitsone dam has not been revoked, which sends adequate signals about the state of relations between the two nations. On the other hand, many US based defence analysts are goading the US government to engage with Myanmar in defence deals to prevent the country getting back into 'China's clutches'.

REGIONAL SECURITY BALANCE

The visit of the President of the newly elected government, Htin Kyaw to India in August 2016 was seen as a significant step by Myanmar. During this visit, Prime Minister Modi and President Htin Kyaw had wide-ranging and extensive talks on all facets of bilateral relations and trade, which included stability on the border and various measures to expand trade and commerce.¹³ A decision was also taken to complete the delayed projects at an early date. Immediately after the meeting of the head of states the Prime Minister's Office (PMO) tweeted, "President (Kyaw) and I agreed to work together for the safety and security of our people. Our engagement is supporting projects in connectivity, infrastructure, capacity building education, healthcare and many other sectors"¹⁴. In the present milieu, it is a great opportunity for India and Indian industry to expand into Myanmar and subsequently into the Association of Southeast Asian Nations (ASEAN) region using Myanmar as a land bridge. In the present sub-regional set-up, India may also consider upgrading the observer status of Myanmar in the South Asian Association for Regional Cooperation

12. Mohinder Pal Singh, "China-Myanmar in Loggers Logjam", CLAWS No. 1444, September 30, 2015, <http://www.claws.in/1444/china-myanmar-in-loggers-logjam-mohinder-pal-singh.html>. Accessed on October 6, 2017

13. Ashok Sajjanhar, *IDSAs Comments*, September 2, 2016, http://www.idsa.in/idsacomments/visit-of-myanmar-president-upgrades-bilateral-ties_asajjanhar_020916.

14. Jayanth Jacob, "Myanmar Prez Kicks off 2-Day India Visit, Holds Talks with Modi," *Hindustan Times*, August 29, 2017.

(SAARC) to a full member state keeping in mind that Myanmar had formally requested for membership of SAARC in 2008. Inclusion of Myanmar in SAARC will give the newly elected civilian government the much required fillip in enhancing ties towards its west and also give it a pivot to counter balance the growing dependence on China.¹⁵ This will also give India a greater role as a regional player.

There is an urgent need to put in place unambiguous policies and speed up the measures for multi-sectarian trade and commerce projects, on the one hand, and a strategic partnership with Myanmar, on the other hand. With a stable democratic set up in Myanmar, this can be the most conducive time to get into a 'comprehensive strategic partnership' for the security of our western borders in the short run, and maintaining regional security balance in the long run.

15 "India-Myanmar Relations: Time to Act", CLAWS No. 1816, November 6, 2017, <http://www.claws.in/1816/india-myanmar-relations-time-to-act-mohinder-pal-singh.html>. Accessed on November 6, 2017.

INDIA'S ENGAGEMENT WITH SOUTH CAUCASUS

NGANGOM DHRUBA TARA SINGH

INTRODUCTION

The disintegration of the Soviet Union in 1991 brought a major change in global geopolitics. The emergence of three countries in South Caucasus—Georgia, Azerbaijan, and Armenia—changed the balance of power in this area. Since their inception as independent countries in 1991, they have caught the world's attention because of their internal feuds, diverse foreign policy orientations, and natural resources. International and regional actors are competing in the region for strategic, economic and political interests. Russia sees the involvement of the West in the region as a threat to its interests in the 'near abroad.' Russia's internal security challenges in the North Caucasus region and its proximity to South Caucasus make the latter a sensitive area for the Kremlin. On the contrary, the United States and its Western partners view the region through the prism of security, geopolitics, and democracy promotion.¹ They also want the region secure for the transit of Caspian energy. In recent years, China

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1. George Mchedlishvili, "Changing Perceptions of the West in the South Caucasus: Adoration No More", Chatham House, <https://www.chathamhouse.org/publication/changing-perceptions-west-south-caucasus-adoration-no-more>. Accessed on April 12, 2017.

too has marked its presence in the region. For the South Caucasus countries, economic cooperation and investments from China have gained utmost priority in their relations.² Interestingly, other actors, for instance, Israel, Turkey, the European Union (EU), and Iran are working towards gaining greater access and solidifying their presence in the region. Amid these developments, India needs to search for opportunities to strengthen its position in the area. This paper endeavours to analyse India's engagement with the South Caucasian states and attempts to find ways for India to gain a stronger foothold in the region.

SOUTH CAUCASUS IN CONTEMPORARY TIMES

The geographical location of the South Caucasus states places the region near powerful neighbours such as Russia, Turkey, and Iran. The South Caucasus states are separated from Russia by the Caucasus mountains in the north. On the eastern side, Azerbaijan is a littoral state of the Caspian Sea; likewise, Georgia is a littoral state of the Black Sea on the western side. The region in its southern part shares boundaries with Turkey and Iran. In the past, its strategic position became an issue of territorial conflicts among the Persian, Ottoman and Russian Empires. Ultimately, the Russian Empire inducted the region which comprised the present-day Azerbaijan, Georgia, and Armenia. The region juxtaposed diverse ethnic-linguistic groups and different religious beliefs.

The region's economic potential led many non-regional external players such as the US, EU, Russia and many others to solidify their position further. In South Caucasus, Azerbaijan is the hydrocarbon-rich country and has a long history of oil production. In 2013, oil contributed 73 percent to the state budget.³ In the 1990s, the country was able to gather the most Foreign Direct Investment (FDI) per capita relative to any country in the former republics of the USSR because of its oil and gas sector.⁴ There is a race among countries

2. Emil Sanamyan, "China in the Caucasus", *The Diplomat*, <http://thediplomat.com/2016/02/china-in-the-caucasus/>. Accessed on April 11, 2017.

3. British Petroleum, "Azerbaijan Marks 20 Years Since Oil Contract", <http://www.bp.com/en/global/corporate/bp-magazine/observations/azerbaijan-marks-20-years-since-milestone-oil-contract.html>. Accessed on April 20, 2017.

4. Oksan Bayulgen, *Foreign Investment and Political Regimes: The Oil Sector in Azerbaijan, Russia, and Norway* (New York: Cambridge University Press, 2010).

and organisations to engage in the South Caucasian states for their prospective interests. The South Caucasian countries, connecting the Caspian Sea and Black Sea lie in a valuable geographical position. Many countries are eyeing the hydrocarbon resources of the Caspian region and their easy accessibility to the global market. For the Kremlin, the region's importance is not limited to hydrocarbon resources and their transit, but also includes security. The issue of the Pankisi gorge and its possible repercussions in Russia's North Caucasus is worrisome for the Kremlin.⁵ For the United States, the issues of democracy, energy, security and human rights are the concerns while dealing with the South Caucasian countries. However, since the last 25 years, Washington has been constantly changing its policy for the region. For instance, energy was a priority under the Clinton Administration; under the Bush Administration, it was security; and under the Obama Administration, it was a liberal-interventionist policy.⁶ Washington pursued an active role under the Clinton and Bush Presidencies compared to that of Obama.

Three countries, Georgia, Armenia and Azerbaijan, were once union republics of the USSR. The post-Soviet period witnessed an agile involvement of international actors in the regional power game. At the regional level, the Black Sea Force (BLACKSEAFOR), the Black Sea Economic Cooperation (BSEC), the GUAM Organisation for Democracy and Economic Development, and the Collective Security Treaty Organisation (CSTO); and similarly, at the global level, the North Atlantic Treaty Organisation (NATO), the European Union (EU), and the Shanghai Cooperation Organisation (SCO) are all endeavouring to influence the South Caucasus region. Apart from external influence, the region is also the theatre of the unresolved regional conflicts of Abkhazia and South Ossetia (Georgia) and Nagorno-Karabakh (between Armenia and Azerbaijan).

The three South Caucasian states have chosen different ways to pursue their domestic and foreign policy orientations. Georgia has moved towards the Western political, security and economic

5. Georgia Today News, "Russian Foreign Minister Says Daesh Uses Pankisi Gorge for Training", <http://georgiatoday.ge/news/2783/Russian-Foreign-Minister-Says-Daesh-Uses-Pankisi-Gorge-for-Training>. Accessed on April 20, 2017.

6. Cavid Veliyev, "Can Trump Shake Up the South Caucasus?", *The National Interest*, <http://nationalinterest.org/feature/can-trump-shake-the-south-caucasus-18774>. Accessed on April 20, 2017.

institutions. In the energy sphere, the United States has invested a significant amount in an oil pipeline from Azerbaijan to Turkey via Georgia. For its energy needs, the country initially was dependent on its northern neighbour (Russia), but gradually it moved towards Azerbaijan. When it comes to security, the US has been providing training and support to the Georgian security forces.⁷ Georgia's neighbour, Armenia, has prioritised its relations with Russia, for instance, securing its membership in organisations like the CSTO in 1994, the Eurasian Economic Union in 2015, and hosting the 102nd Russian military base in Gyumri.⁸ Armenia, after gaining independence, was embroiled in a conflict with Azerbaijan over the Armenian-speaking region of Nagorno-Karabakh. Unlike Georgia, which gets energy supplies from Azerbaijan, Armenia has to lean towards Russia for the same.⁹ In the region, Azerbaijan has adopted an independent position between the West and Russia and wants to maintain balance and independence in the region's geopolitical rivalries. Azerbaijan's membership in the Non-Alignment Movement (NAM) in 2011 can be seen as evidence.

INDIA AND SOUTH CAUCASUS: HISTORICAL BACKGROUND

India and the South Caucasian states share a long history of geocultural closeness despite their remote geographical positions. The role of the ancient Silk Route (a term coined by Ferdinand von Richthofen in 1877) as a channel was not limited to trade; it facilitated ways for the exchange of culture, ideas, thoughts, and religions. These states have spent a significant portion of their past under the Russian Empire and later the Soviet Union. Hence, this section is an endeavour to examine the historical evolution of India's engagement with the region.

Georgia

The relationship between India and Georgia is centuries-old as their connection is assumed to have begun after the commencement of the

7. "Georgia: Country Profile", *The BBC News*, <http://www.bbc.com/news/world-europe-17302106>. Accessed on April 17, 2017.

8. "Russia, Armenia Unite Air Defenses, Create Regional System in the Caucasus", *Russia Today News*, <https://www.rt.com/news/326869-russia-armenia-airdefense-caucasus/>. Accessed on April 19, 2017.

9. "Armenia: Country Profile", *The BBC News*, <http://www.bbc.com/news/world-europe-17398605>. Accessed on April 20, 2017.

Silk Route. India finds a mention in many Georgian poems such as: "The Knight in the Panther's Skin" by Shota Rustaveli, "Abdulmesia" by Ioan Shavteli and "Tamariani" by Chakhrukhadze. The 18th and 19th centuries witnessed intensive trade linkages between Georgia and India. For instance, the King of Kakheti and Kartli, Erekle II, sent an ambassadorial mission comprising merchants dedicated to developing trade ties with India. Here, the multiple visits of Rafiel Danibegashvili to India during King Erekle II's period need mention. As a foreigner living in India, he travelled and provided complete discursive accounts of Indian cities. His visit to Calcutta coincided with the rule of the British East India Company, where he witnessed discrimination in the settlement pattern among Indians and foreigners. The Europeans lived separately from the Indians as the former resided in the towers located near the sea. Moving further north, he visited Benaras and Delhi. He described the people's spiritual attachment with the former and praised the latter for its beautiful palaces and mosques.¹⁰ The three empires of Persia, Turkey, and Russia always fought for the Georgian territory before it finally went to Russia. Most of present Georgia was part of the Russian Empire.¹¹

Armenia

The relationship between India and Armenia can be traced back to the 5th century. Indian muslin, herbs, spices, and precious stones were major items of trade for Armenian traders. The Armenians resided mainly in Chennai, Mumbai, Kolkata and Surat which were important centres for trading. These settlements must have provided a quick way for traders to conduct their activities. Their settlements in the coastal cities prove that the Armenians mainly belonged to the trading community. The Armenian community lived amicably with the local population, which later provided a suitable environment for the emergence of Armenian culture, values, faith, literature and religion. For example, the establishment of the Holy Church of Nazareth in 1707, in Kolkata,

10. Vazha Kiknadze, "India and Georgia: Historical Perspective", *The Journal of Central Asian Studies*, vol. XIX, 2010.

11. "Georgia Profile: Timeline", *The BBC News*, <http://www.bbc.com/news/world-europe-17303471>. Accessed on April 24, 2017.

and the publication of the Armenian language journal *Azdarar*, in 1794, in Chennai.¹² In the Caucasus region, Armenia was important for the then imperial powers like the Ottomans and Persia. It was partitioned between the Ottoman Turks and Persia in the 16th century. Later, in the early 19th century, the eastern Armenian territories became part of the Russian Empire, while the remaining territory stayed with the Ottoman Empire.¹³

Azerbaijan

Relations between India and Azerbaijan began with the establishment of the Silk Route in the 10th century, which connected the East and West. The temple of Ateshgah and the Taj Mahal are seen as examples of their historical relationship. Above the narrow arched entrance of the temple of Ateshgah is an inscription in Sanskrit and Gurmukhi which clearly shows the knowledge and use of India's ancient languages by the people in the region. Through the Silk Route, many Hindu traders visited and worshipped at the Atashgah temple in the Middle Ages. The involvement of craftsmen from Tabriz in the construction of the Taj Mahal is also noted.¹⁴ Like Georgia and Armenia, Azerbaijan too was divided between the Russian and Persian Empires by the Treaty of Turkmenchay in 1828. The present-day Azerbaijan became part of the Russian Empire and southern Azerbaijan that of the Persian.¹⁵ After the fall of the Russian Empire, all three regions declared independence; however, they were later incorporated into the USSR and became Soviet Socialist Republics.

After India's independence, Indo-Soviet relations strengthened due to the efforts by leaders on both sides. During the Soviet period, the South Caucasus Soviet Republics were visited by Indian heads of state and heads of government. For instance, President S. Radhakrishnan visited Armenia in 1964, and Azerbaijan in 1964.

12. "India – Armenia Relations", Ministry of External Affairs, http://www.mea.gov.in/Portal/ForeignRelation/Armenia_July_2016.pdf. Accessed on April 25, 2017.

13. n. 9.

14. Nivedita Das Kundu, "India-Azerbaijan Ties: From Taj Mahal to Oil and Gas", *Russia & India Report*, https://in.rbth.com/articles/2011/09/30/india-azerbaizan_ties_from_taj_mahal_to_oil_and_gas_13059. Accessed on April 29, 2017.

15. "Azerbaijan Profile: Timeline", *The BBC News*, <http://www.bbc.com/news/world-europe-17043424>. Accessed on April 24, 2017.

Indian Prime Minister Nehru visited Azerbaijan and Georgia in 1955, and Prime Minister Indira Gandhi visited both Armenia and Georgia in 1976.¹⁶

CONTEMPORARY TIES AND PROSPECTS

India recognised the independence of Georgia, Armenia, and Azerbaijan in December 1991, and subsequently established relations with them in 1992. Since the establishment of foreign relations, high level economic, political, and cultural exchanges have taken place. India does not share borders with any of the South Caucasus states, but it has efficiently managed to bolster its relationship with them.

In the cultural and education spheres, many events and programmes were held in Georgia and Armenia, for instance, performances by the Bollywood dance and music troupe “Sugar and Spice” sponsored by the Indian Council of Cultural Relations (ICCR). India has provided several scholarships under the ICCR and Indian Technical and Economic Cooperation (ITEC) programmes. The ICCR offers the General Scholarship Scheme to pursue undergraduate and postgraduate courses in universities in India in the fields of culture and social sciences.¹⁷ The government is providing support for the promotion of the Hindi language among the students from the three countries at the Kendriya Hindi Sansthan and has also opened a Hindi teaching centre at the Azerbaijan University of Cultural Relations, and the Hindi Language Chair at the Yerevan State Linguistic University in Armenia.¹⁸ It is significant to note that both India and the South Caucasian states have a centuries-old heritage which provides much information to understand their histories. Study of the historical sites, monuments, ancient texts, and cultures of both would provide opportunities for in-depth historical research. In recent years, the popularity of yoga has transcended borders. The United Nations

16. “India–Georgia Relations”, Ministry of External Affairs, http://www.mea.gov.in/Portal/ForeignRelation/Georgia_July_2016.pdf. Accessed on April 25, 2017; Ministry of External Affairs of India, “India–Armenia Relations”, http://www.mea.gov.in/Portal/ForeignRelation/Armenia_July_2016.pdf. Accessed on April 25, 2017; Ministry of External Affairs of India, “India-Azerbaijan Relations”, http://www.mea.gov.in/Portal/ForeignRelation/Azerbaijan_05_12_2016.pdf. Accessed on April 25, 2017.

17. “General Scholarship Scheme”, Indian Council for Cultural Relations, <http://www.iccr.gov.in/content/general-scholarships-scheme-gss>. Accessed on May 20, 2017.

18. n. 16.

General Assembly declaring June 21 as the International Day of Yoga on December 11, 2014, shows its global acceptance. The proliferation of knowledge of yoga in the region will be facilitative for relations. Also, many events related to Hindi cinema have been organised in the states. However, much more can be accomplished here. With the increasing Indian regional and Hindi cinema viewership in the world, there is much scope in the area of co-production and co-direction of films.

In the economic sphere, relations between India and the South Caucasian states are uneven. In 2015, India's imports from Georgia were worth US \$14.32 million, and Georgia's imports from India were at US \$50.6 million. India has invested in the steel, infrastructure, agriculture, services and power sectors: for instance, Tata Power has invested in Georgia's Adjaristsqali Hydropower Project.¹⁹ Focussing on Armenia, India's imports were worth US \$0.4 million, and Armenia's imports were at US \$31.9 million. India's exports mainly included electrical equipment, agricultural products, plastics, pharmaceuticals, cosmetics, garments, and chemical goods. India imports crude oil from Azerbaijan while the latter imports textiles, tea, meat, refrigerators, rice, drugs, clothes, machine parts and plant equipment from India. Trade with Azerbaijan rose from around US \$50 million in 2005 to around US \$305 million in 2015.²⁰ For greater engagement in the South Caucasus states, India needs to identify areas which are on the priority list of the states. For instance, the main challenges to Azerbaijan's economic growth are monopolies, the limited role of Small and Medium Enterprises (SMEs), lack of infrastructure, and labour challenges.²¹ For its growth, Georgia prioritises macroeconomic stability, private sector competitiveness, human capital development and access to finance.²² India can provide financial assistance in selected fields through

19. Tata Power, "Press Release", URL: <http://www.tatapower.com/media-corner/pressrelease-2015/press-release-24-mar-2015.aspx>. Accessed on May 20, 2017

20. n. 15.

21. Asian Development Bank, "Country Partnership Strategy: Azerbaijan, 2014-2018", <https://www.adb.org/sites/default/files/linked-documents/cps-aze-2014-2018-sd-02.pdf>. Accessed on April 30, 2017.

22. Asian Development Bank, "Country Partnership Strategy: Georgia, 2014-2018", <https://www.adb.org/sites/default/files/linked-documents/cps-geo-2014-2018-ea.pdf>. Accessed on April 30, 2017.

aid which can be facilitative in the long run. Promoting private investment opportunities in sectors such as retail, banking and allied sectors, insurance, information technology, life sciences, energy, and alternative medicine will be beneficial. Economic cooperation will be more fruitful with like-minded countries.

India looks at Azerbaijan for its hydrocarbon requirements. The latter is endowed with rich energy resources and is also one of the world's oldest oil producers. It contributes 50 percent to Azerbaijan's Gross Domestic Product (GDP).²³ The hydrocarbon production is from the Caspian Sea offshore fields. India's ONGC Videsh has acquired 2.71 percent share in the Azeri Chirag Guneshli field and 2.36 percent share in the Baku-Tbilisi-Ceyhan pipeline. This pipeline carries 85 percent of the oil produced in Azeri Chirag Guneshli.²⁴ Azerbaijan, as a littoral state of the Caspian Sea region, holds huge energy prospects for India. With the successful beginning of the Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipeline which will transport Caspian gas to India, similar initiatives cannot be ignored. An overland transit corridor for energy for Caspian Sea resources can be proposed. In the South Caucasus-Caspian region, two overland energy transportation lines can be proposed. First, an energy route from Azerbaijan to India (via Iran and Pakistan); and, second, an oil pipeline running parallel to the TAPI gas line, starting from Azerbaijan, to India. Securing overland access to the region will significantly reduce both transportation time and the energy price. For India, the Chabahar port (Iran) can also be an option to pursue sea-land trade with the region, and becoming a member country of the Ashgabat Agreement would be a feather in its cap.

Geographical location undoubtedly affects a country's foreign policy, trade and commerce, and people-to-people contacts. The geographical distance between India and the South Caucasian states puts them at a disadvantage in strengthening their relations. The absence of overland access makes it necessary to evolve strategies to overcome this issue. Therefore, it is necessary for India to look

23. Asian Development Bank, "Country Partnership Strategy: Azerbaijan, 2014-2018", <https://www.adb.org/sites/default/files/linked-documents/cps-aze-2014-2018-ea.pdf>. Accessed on April 30, 2017.

24. ONGC Videsh, "Assets", <http://www.ongcvides.com/assets/cis-far-east/>. Accessed on April 27, 2017.

at all possible opportunities for regional cooperation in the region. India's membership in the Shanghai Cooperation Organisation can facilitate this. Cooperation will undoubtedly lead to joint ventures, trade connectivity, and investments, and would cultivate confidence among the businesses. A major point which requires attention is that while engaging in regional cooperation or a regional level dialogue, a strategic inclusion of countries would be helpful. A strategic inclusion of countries is necessary because the notion of 'the-more-the-merrier' for membership might jeopardise or prolong the negotiation process in major areas due to conflicts of interests.

At the domestic level, a favourable climate can encourage the region's countries to participate in various Indian government initiatives such as "Make in India." This will allow businesses from both India and the South Caucasus states to offer each other a wide range of opportunities. Georgia is rich in agricultural and mineral resources, Armenia has significant mining resources, and Azerbaijan has huge hydrocarbon resources. These sectors also rely on other allied sectors which help in their symbiotic growth. Hence, India requires to examine, and find out, areas for cooperation and engagement. According to an international financial agency's report, India will become the world's fourth largest economy by 2022, and in a few years, it will surpass Germany.²⁵ Given India's growing economic stature, its consumers, diverse domestic market, and wide global communication reach, cooperation would be advantageous to both sides.

25. "India Likely to Overtake Germany to Become World's Fourth Largest Economy in 2022: IMF", *First Post News*, <http://www.firstpost.com/business/india-likely-to-overtake-germany-to-become-worlds-fourth-largest-economy-in-2022-imf-3410618.html>. Accessed on April 29, 2017.

CLIMATE CHANGE: THE FUTURE CHALLENGE TO SECURITY

STUTI BANERJEE

The definition of national security has changed over the past few decades. From being defined as a war fought between the armed forces of countries, to one being fought between non-state actors and the state. Over the past decade and a half, increased importance has been given to non-traditional security threats such as terrorist networks, drug cartels, piracy on the high seas, intra-state crises. They have become the new challenges to national security. To this increasing list has been added the threat posed by environmental degradation, which is likely to change the nature of conflicts of the future. Nation-states have to be prepared to address the pressures posed by climate change to global ecosystems, and also find solutions for challenges this will pose in the socio-political, economic and security arenas of the country.

This paper is an attempt to understand the growing challenges that nations will face in the future as a result of climate change. In this endeavour, the paper will try to bring forth the linkages between the traditional and non-traditional dimensions of the threat and the likely solutions. It needs to be pointed out that not all social-economic change that occurs as a result of climate change would be negative,

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but the adverse effects are anticipated and they will be the future challenges before countries.

CLIMATE CHANGE: THE FUTURE CHALLENGE TO SECURITY

The impact of climate change is affecting all nations and increasingly posing a threat to national security, at both the national and international levels. The likely physical effects of climate change include: (1) higher average surface and ocean temperatures; (2) more rainfall globally from increased evaporation; (3) more variability in rainfall and temperature, with more frequent and severe floods and droughts; (4) rising sea levels from warming water, expanded further by run-off from melting continental ice fields; (5) increased frequency and intensity of extreme weather events such as hurricanes and tornadoes; and (6) extended ranges and seasons for mosquitoes and other tropical disease carriers.¹

Climate change might not cause nations to fight wars; nonetheless, it is likely to serve as an “accelerant of instability” or a “threat multiplier” that makes already existing threats worse. The threat of global warming for security is likely to manifest through a range of effects: resource scarcity, extreme weather, food scarcity, water insecurity, and sea level rise will all threaten societies around the world.² These and other aspects of climate change are disrupting people’s lives and damaging certain sectors of the economy and also the social life of the citizens. The national security implications of climate change impacts are far-reaching, as they may exacerbate existing stressors, contributing to poverty, environmental degradation, and political instability, providing enabling environments for terrorist activity abroad. For example, the impacts of climate change on key economic sectors such as agriculture and water can have profound effects on food security, posing threats to overall stability.³ Sea level rise, coupled with storm surge, will continue to increase the risk of major coastal impacts on transportation infrastructure, including both temporary and permanent flooding of airports, ports and

1. The United Nations and Environmental Security, “The Security Implications of Climate Change for the UN System,” Accessed on November 6, 2017.
2. Climate Security: Building National Security, <https://www.americansecurityproject.org/climate-security/>. Accessed on November 6, 2017.
3. The White House, “Findings from Select Federal Reports: The National Security Implications of a Changing Climate,” https://obamawhitehouse.archives.gov/sites/default/files/docs/National_Security_Implications_of_Changing_Climate_Final_051915.pdf. Accessed on November 6, 2017.

harbours, roads, rail lines, tunnels, and bridges. It will have an impact on the fishing industry as the estuaries and mangroves that are used by the marine life to shelter and reproduce get damaged. Extreme weather events are also affecting energy production and delivery facilities, causing supply disruptions of varying length and magnitude, and affecting other infrastructure that depends on energy supply. Increasing risk of flooding affects human safety and health, property, infrastructure, economies, and ecology in many basins across nations. These impacts increase the frequency, scale, and complexity of future defence missions, requiring higher costs of military base maintenance and impacting the effectiveness of troops and equipment in conflict.⁴ However, viewing climate change as a security threat is not something all countries have historically been comfortable with, or were even aware of. Moreover, the issue was not so prevalent and the linkages were more tenuous in the early stages of international discussions on climate change.

The UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol contain no reference to human security. Furthermore, when discussions on security and climate change at the international level first took place almost ten years ago, when the UN Security Council addressed the impacts of climate change on peace and security, the issue was still considered a “future” concern. At the time, climate change was mostly being addressed within the traditional climate change-related fora, was considered an “environmental issue” and primarily fell under the purview of environmental ministries.⁵

It was in 2007 that the United Nations Security Council (UNSC) started to discuss climate change in respect to peace and security, during a ministerial-level open debate on the relationship among energy, security and climate, which was convened by the UK and included a briefing by then UN Secretary-General Ban Ki-moon. The

4. Ibid.

5. W.N. Adger, J.M. Pulhin, J. Barnett, G.D. Dabelko, G.K. Hovelsrud, M. Levy, Ú. Oswald Spring, and C.H. Vogel, “Human Security. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects,” Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2014, [C.B. Field V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L.White, eds.], (UK and New York: Cambridge University Press,), pp. 755-791, https://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap12_FINAL.pdf. Accessed on November 6, 2017.

issue discussed was the relation between climate change and the UN's and Security Council's conflict prevention responsibility. The Council again debated on the issue in 2011 based on the view that climate change aggravated existing threats to international peace and security. Similar debates were convened in 2015 and 2016 to discuss the problems faced by small island nations, and water security in the future respectively. Over the past decade of the UNSC discussions on these issues, some member states have asked if the Council is the appropriate forum to discuss such issues. While the Council has acknowledge that the UNFCCC is the key instrument for such discussions, the Council continues to discuss these issues as climate change affects global security,. The UNSC members have addressed climate change through the Arria-formula meetings, which are meetings of the Council with a diverse and informed group of stakeholders in an informal setting.⁶ In 2015, the UNSC held an open Arria-formula meeting on the role of climate change as a threat multiplier for global security. The aim of the meeting, was "to better identify the inter-connected threats to international peace and security related to climate change."⁷

In 2014, the Intergovernmental Panel on Climate Change (IPCC), an international body set up in 1988 to study the science of climate change, in its report "Climate Change 2014: Impacts, Adaptation, and Vulnerability", stated on its conclusions on the human security aspect, that climate change would compromise traditional cultural values and change the patterns of migration. It would have an impact on livelihoods, further straining social and environmental norms. It further stated that climate change would lead to new challenges for states and increasingly shape their views on security and national security, while putting people living in conflict zones and/or conflict prone zones in a vulnerable position.

Another body of the UN that is contributing to the rethinking on climate change is the United Nations Educational, Scientific and Cultural Organisation (UNESCO). It has started programmes that will redirect

6. The Security Council Report, "In Hindsight: The Security Council and Climate Change- An Ambivalent Relationship," http://www.securitycouncilreport.org/monthly-forecast/2017-08/the_security_council_and_climate_change_an_ambivalent_relationship.php. Accessed on November 30, 2017.
7. Caitlin Werrell and Francesco Femia, "UN Security Council Meeting on Climate Change as a Threat Multiplier for Global Security," <https://climateandsecurity.org/2015/07/08/un-security-council-meeting-on-climate-change-as-a-threat-multiplier-for-global-security/>. Accessed on November 30, 2017.

technology, science, finance and ingenuity to transform economies, ensure equality and promote a sustainable future for all, including young people, women, and indigenous and ethnic minorities. It is doing this through its various programmes that focus on developing adaptation technology to contribute towards water security, encouraging an interdisciplinary growth of climate change knowledge and, perhaps, most importantly, bringing the focus on women as agents of change in this debate. Women's experience of climate change is different from that of men and their security issues are also different⁸

The Paris Conference of Parties (COP) in 2015, also highlighted the connection between climate change and migration. The Alliance of Small Island States has been at the forefront of highlighting the need to address the loss and damages incurred, in the debate in climate change. These countries are vulnerable to the rise of sea water that is leading to land erosion forcing migration of the people of these islands. This forced migration requires attention and long-term solutions from states.

Today, that debate has evolved to the stage that countries are accepting that there is a link between the two issues; however, nations, organisations and the international climate change regime have to continue to highlight the need to change national policies to accommodate these future threats and challenges.

SECURITY IMPLICATIONS: NATIONAL LEVEL

One of the key tenets of national security is the ability of a country to ensure the integrity of its sovereign territory and protect its citizens. Nonetheless, a nation-state has no control over the melting of the Arctic which is contributing to the rise in sea water levels. As these water levels rise, they will have a corresponding impact on the coastal areas and the littorals. For example, India has a coastline of 7,516.6 km (approximately), which includes 70 coastal districts, and is home to 171 million people or 14.2 percent of the population of the country (2014 census).⁹ The rise in sea water levels and sea water

8. United Nations Educational, Scientific and Cultural Organisation, "UNESCO, Climate Change and 21 C," <http://unesdoc.unesco.org/images/0023/002336/233685e.pdf>. Accessed on November 30, 2017.

9. Figures have been taken from Centre for Coastal Zone Management and Coastal Shelter Belt, <http://iomennis.nic.in/index2.aspx?slid=758&sublinkid=119&langid=1&mid=1>. Accessed on November 6, 2017.

temperatures has changed the intensity of tropical cyclones in the coastal areas. This, in turn, has meant that these regions are facing accelerated coastal land erosion: a rising ocean brings increasing intrusion of brackish water into the ground water, harming coastal agriculture. Moreover, gradual ocean encroachment harms the coast's natural protection, whether dunes, reefs, barrier islands, or mangrove forests. Then, suddenly, when a major cyclone blows in, a storm surge will overcome previously insurmountable barriers. If one is to take the example of the Sunderbans mangrove forests in West Bengal and Bangladesh, climate change has had an impact on the marine ecosystems that has meant that the local fishermen have to now venture further into the sea to catch fish, impacting their livelihoods. The loss of land to the sea and the rise in sea water inundating agricultural land with brackish salt water, rendering the land non-fertile, have also impacted the agricultural economy of the area. This has forced people to migrate. Combined with already existing social problems like religious strife, poverty, political uncertainty, high population density, rapid urbanisation and being border areas of two countries, it poses a security threat to the nation.

Agriculture is an important component of the economy and is largely dependent on the monsoons. A change in the weather pattern has meant that the monsoons are either deficient or excessive, causing drought or flooding. In the case of deficiency, it has meant that farmers who can afford to pump ground water have done so insistently, causing a lowering of the water table. The low yield of agricultural production could have long-term effects on the countries' nutritional and food security needs.

Climate change also has an impact on the health of the population. It affects the social and environmental determinants of health – clean air, safe drinking water, sufficient food and secure shelter. Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year, from malnutrition, malaria, diarrhoea and heat stress. The direct damage costs to health (i.e. excluding costs in health-determining sectors such as agriculture and water and sanitation), are estimated to be between US\$ 2-4 billion per year by 2030. Areas with weak health infrastructure – mostly in the developing countries – will be the least able to cope without assistance to prepare and respond.

Reducing emissions of greenhouse gases through better transport, food and energy-use choices can result in improved health, particularly through reduced air pollution.¹⁰ With the change in climate, bacteria and viruses are also adapting and evolving, and mutating to form new types of diseases. The burden of diseases for families, households, and social networks cannot be ignored. Similarly, researchers have amply demonstrated the significant social and economic contributions of unpaid caregivers, yet this work is generally not included in the calculations of the burden of disease.¹¹ Thus, the health performance and economic performance of a country are interlinked.

Climate change and extreme events are projected to damage a range of critical infrastructure, with water and sanitation, energy, and transportation infrastructure being particularly vulnerable. Climate change impacts on critical infrastructure will reduce the ability of some states to provide ecological, economic, social, and political services that fundamentally contribute to human security.¹²

SECURITY IMPLICATIONS: INTERNATIONAL LEVEL

Climate change is an urgent and growing threat to national security, contributing to increased weather extremes which worsen refugee flows and conflicts over basic resources like food and water. A changing climate will act as an accelerant of instability around the world, exacerbating tensions related to water scarcity and food shortages, natural resource competition, underdevelopment, and overpopulation. Climate change is altering the environment of regions; glaciers are retreating, the flows of rivers are becoming more unpredictable, and the seas are rising. However, whether these changes manifest themselves in either civil or inter-state conflict will depend upon how both the populations and the governments in the region react to them. How governments adapt is important; some adaptations, like capturing water that would otherwise flow across borders into new reservoirs, could actually make the threat of conflict worse. If countries do not work cooperatively, they could

10. World Health Organisation, "Climate Change and Health," <http://www.who.int/mediacentre/factsheets/fs266/en/>. Accessed on November 6, 2017.

11. National Collaborating Centre for Infectious Diseases, "More Than Just Numbers: Exploring the Concept of 'Burden of Disease,'" <https://nccid.ca/publications/exploring-the-concept-of-burden-of-disease/>. Accessed on November 6, 2017.

12. Adger, et. al., n.5.

stoke conflict.¹³ China's efforts to control the flow of, and build dams on, the Brahmaputra river have caused India and Bangladesh to complain, and could force them to engage in a conflict. Scarcity of water will have an impact on the agricultural production as well as the availability of fresh drinking water for the people.

Historically, people have migrated to escape harsh weather conditions. Generally, this migration was temporary in nature. However, with climate change and the conditions that it is creating in the poorer countries, migration is no longer a matter of one's choice or temporary. It is difficult to say exactly how many people around the world will be forced to move as the effects of climate change grow starker in the coming decades. But mass displacement is already happening as climate change contributes to natural disasters such as desertification, droughts, floods, and powerful storms. A warmer world will generate more natural disasters and, therefore, more humanitarian crises. About 203 million people around the world were displaced by natural disasters between 2008 and 2015.¹⁴ This displacement is not limited to intra-state movement of people. The people who cross borders due to environmental reasons are not defined as refugees, as per the 1951 Refugee Convention. Thus, due to this legal gap, they are viewed as illegal immigrants and have little legal protection from prosecution. Moreover, large scale migration has socio-economic and political consequences for the recipient nation, especially if it is a developing nation absorbing people from its poor neighbours. This increases the possibility of conflict.

Impacts and rates of change are greatest in the Arctic, where temperatures have been increasing at about twice the global rate over the past four decades. The rapid decline in summer sea ice cover in the past decade has outpaced scientific projections and is drawing international attention to emerging commercial development and transport opportunities previously blocked by the frozen sea. The Arctic is, therefore, a bellweather for how climate change may

13. Andrew Holland, "Bay of Bengal – A Hotspot for Climate Insecurity," American Security Project <https://www.americansecurityproject.org/bay-of-bengal-climate-insecurity/>. Accessed on November 7, 2017. This is not a journal but a viewpoint.

14. Jared Ferrie "Climate Change and Mass Migration: A Growing Threat to Global Security," Integrated Regional Information Networks, <https://www.irinnews.org/analysis/2017/01/19/climate-change-and-mass-migration-growing-threat-global-security> Accessed on November 6, 2017.

reshape geopolitics in the post–Cold War era. The emerging Arctic is being explored for a new sea route for commercial purposes and also for the possibility of exploration of hydrocarbons. In response to these changes, many of the Arctic states have begun to reexamine their military capabilities to operate in the Arctic region. Some have started to rebuild their military forces, while most of the other states are drawing up plans to begin the rebuilding process. All these developments have implications not just for nations that neighbour the Arctic but other nations as well. For example, the developments in the Arctic have strategic implications for India. Thus, India needs to take part in building an Asian perspective on the Arctic.

Environmental changes have the potential to exacerbate existing ethnic and sectarian divides that may have an effect on nations' relations with the regional countries. It might also undermine the governments' legitimacy, compounding the problem further. The security implications of these socio-economic changes are significant.

CONCLUSION

While the debate on climate change has gained attention in the recent past, there is an urgent need to develop a 'climate security' strategy that would look at the political, economic, social and security impacts of climate change. Countries need to have a comprehensive policy on responses and preparedness for climate change induced instabilities.

Nation-states need to not only build new strategies for disaster and climate management. They also need to include a strategy on security and humanitarian responses. There is a need to help the more vulnerable states to build better climate strategies to help avoid and/or predict disasters. This would help address the security challenges of migration, armed conflict and possible state collapse. The security risks of climate change, therefore, need to be a factor in debates about a standing multilateral peace-making or humanitarian intervention force. The international community needs to revisit norms and institutional arrangements concerning the use of force in response to disasters just as it is doing with respect to terrorism and weapons of mass destruction.¹⁵

15. Nigel Purvis and Joshua Busby, "Policy Brief: The Security Implications of Climate Change for the UN System," *The United Nations and Environmental Security*, https://www.wilsoncenter.org/sites/default/files/ecspr10_unf-purbus.pdf. Accessed on November 30, 2017.

Climate change has an impact on the economic security of nations. The debate has brought to the forefront the prospect of scarcity of resources and, more importantly, the need to develop renewable sources of energy. This is likely to further complicate the debates on protectionism, free flow of goods and people. It is going to spur growth in some industries, and discourage the growth of others.

Militaries across the world are accepting that climate change poses a risk, despite not being a traditional threat. Yet their involvement in developing a strategy to climate change is negligible. Their role is limited to responses in disaster management and green military operations. The debate within the military has to be linked to not just operations but also production, on the knowledge of how defence requirements impact the environment. The defence forces need to be engaged in building a defence policy that incorporates the debate on climate change. This can be done by introducing it as a subject of study in the war colleges and higher defence learning institutions. For a country like India, this is much needed. As a nation that contributes high numbers to the UN peace-keeping forces, its armed forces may be deployed in areas where environmental stress is contributing to instability. On the national security aspect, the Indian military forces are deployed in terrains that are vastly different, but these areas are also now becoming ecologically sensitive. Thus, there will be a need for the forces to develop defence and security policies that keep in mind the environmental criticalities while running an effective operation. The armed forces can also, at a limited level, experiment with a shift away from fossil fuel to more sustainable sources to reduce their overall energy consumption.

Assessing the impact of climate change is a very complex exercise. However, it can be said with a fair amount of certainty that climate change will have a negative impact on global activity. While building their domestic agendas to mitigate the effects of climate change, states also need to continue to develop contingency plans at the international level. Climate change is a global threat and would require nation states to devise a global strategy to combat it.

LEFT WING EXTREMISM IN INDIA: UNDERSTANDING IDEOLOGICAL MOTIVATIONS

SUPARNA BANERJEE

Dr. Manmohan Singh, the ex-prime minister, has dubbed the Left Wing Extremism (LWE) problem as the single biggest internal security challenge of the country. Although it has declined in its extent and depth, the conflict continues to pose serious challenge even after 50 years since its beginning. The aim of this paper is to understand the genesis of the uprising and the ideological motivations that went into its formation.

2017 marks the 50th year of the Naxalbari uprising, which started over a land dispute on May 22, 1967. The Cambridge English dictionary defines 'uprising' as "an act of opposition, sometimes using violence, by many people in one area of a country against those who are in power." The operationalisation of this definition can be divided into three segments: an act of opposition, the participants in that act, and the opposed i.e. those against whom the act is directed. The Naxalbari uprising had all three elements present to qualify as one. The peasants of the Siliguri sub-division rallied under the militant leadership of Charu Majumder who had become critical of the parliamentary left political parties, especially the Communist

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Party of India (Marxist) (CPI(M)) of which he was a member. The peasants, led by Majumder, began to demand land reforms. The violent clashes which triggered the uprising were initiated when the share-cropper Bigul Kissan was beaten up by the local *jotedar*.¹ The clash following this incident led to the killing of a policeman, Sonam Wangdi. The security forces, in turn, retaliated by killing nine women and a child.²

For an agriculture dependent country which was a young, independent nation in 1967, *land and its distribution among the landless*, was a sensitive matter. Therefore, land became a symbol of contestation between the landlords who had been enjoying the privileges of huge tracts of land, as guaranteed under the *Zamindari* system since the colonial period, and the peasants who expected the situation to improve post-independence. Land distribution was to become a major issue for the left politics in West Bengal (WB), leading to its successful implementation with Operation Barga, in the coming years. However, it is a moot point whether the uprising played any role in triggering such an enterprise undertaken by the mainstream left parties.

POLITICAL PRECONDITIONS LEADING UP TO THE NAXALBARI SPLIT

The Communist Party of India (CPI) was formed on October 17, 1920, at Tashkent. Most of the members faced persecution when trying to return to India. However, this émigré political party proved to be a source of inspiration for many within the country. During the independence struggle, the party was involved in many mass activities like organisation of the peasants, and participation in elections.

In the meantime, after the death of Stalin in 1956, Nikita Khrushchev, at the 20th Congress of the Communist Party of the Soviet Union (CPSU) announced that revisionism would be the party line for the future. Among other philosophies of the Communist ideology, the class struggle between the proletariat and the bourgeoisie, leading to

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1. A class of rich peasantry in the villages of Bengal
 2. Deepayan Bose, "Naxalbari and Subsequent Four Decades: A Retrospection" *The Anvil- A Journal of Marxist Theory*, <http://anvilmag.in/tag/communist-movement-in-india/#.WaOX2ygiHIU> Accessed on August 20, 2017.

the formation of a socialist state structure, has been one of the basic tenets.³ Revisionism propagates that class struggle can be eschewed and the socialist system of government can be set up following the parliamentary path. In order to overthrow the dominance of the bourgeoisie, the proletariat need not engage in a protracted class struggle.⁴ Such philosophical modifications have been denounced in the Communist circles as “a form bourgeois ideology takes on within the ranks of the revolutionaries.”⁵

In the process of this tectonic shift within the Communist movement, arguing for the relevance of the class struggle, the Indian Communists, too, could not escape its fallout. The CPI (M) parted ways with the CPI in 1964, based on ideological differences. The CPI (M) was formed at the 7th Congress of the CPI held in Calcutta from October 31 to November 7, 1964. The website of the CPI (M) delineates, “The CPI(M) was born in the struggle against revisionism and sectarianism in the Communist movement at the international and national level, in order to defend the scientific and revolutionary tenets of Marxism-Leninism and its appropriate application in the concrete Indian conditions.”⁶ The CPI (M) included the more radical elements of the Communist Party, who supported China, which promoted anti-revisionism in this global ideological war of leadership between Soviet Russia and China. The CPI, on the other hand, was ideologically inclined towards Soviet Russia.

There was yet another line of argument which widened the rift between the two political factions. While the CPI distinguished between the national bourgeoisie and other major bourgeoisie classes, the radicals within the party painted the class in the single frame of “class rule of the bourgeoisie and landlords, led by big bourgeoisie, who are increasingly collaborating with foreign finance capital

3. For more, please refer to David McLellan, *Karl Marx: His Life and Thought* (London: Harper Collins, 1978).

4. John P. Reis and John P. Rais, “Political Stance of The Communist Party of Indian (Marxist),” *The Indian Journal of Political Science*, vol. 30, no. 2, 1969, pp. 177-184 <http://www.jstor.org/stable/pdf/41854322.pdf?refreqid=excelsior:0356dc72a6ac820c63342919a914363f>. Accessed on 28 August, 2017.

5. Sam Richards and Paul Saba, “Mao on Revisionism”, *Encyclopedia of Anti-Revisionism On-Line*, 1980, <https://www.marxists.org/history/erol/uk.hightide/red-star-mao.htm> Accessed on August 16, 2017.

6. Communist Party of India (Marxist) <https://www.cpim.org/about-us> Accessed on August 16, 2017.

in pursuit of the capitalist path of development”⁷. The approach, therefore, of the CPI(M) towards the national bourgeoisie was more radical, deeming the latter as the comprador bourgeoisie class.

- **Further Split**

The members of the CPI(M), therefore, included the more radical elements of the Communist Party, opposed to revisionism. The birth of this new left political party was formed on the premise of class struggle to achieve a socialist state. However, with the passage of time, not quite satisfied with the functioning of the party, some members segregated themselves and formed the All India Coordination Committee of Communist Revolutionaries (AICCCR) in 1967.⁸ While the CPI(M) had split, with the CPI opposing revisionism, the even more radical elements within the CPI (M) accused the latter of not fulfilling the promises which had formed the basis of the separation. Later, AICCCR formed the Communist Party of India (Marxist-Leninist) and further got sub-divided into many splinter groups like the People’s War Group (PWG), Maoist Communist Centre (MCC), etc. over the next three decades. These groups finally combined to form the Communist Party of India (Maoist) in 2004 which has been listed as a terrorist organisation as per the Ministry of Home Affairs (MHA).⁹

The events at Naxalbari gradually spread to the urban centres of WB¹⁰ where the educated urban youth started questioning the relevance of independence. One of the plausible explanations for the uprising was the task of fulfilling the unfinished business of independence¹¹ and, hence, the participants included not only those who were victims, but also people who belonged to the ruling class and came out in support of the peasants, having witnessed their exploitation from close quarters.¹² They began to challenge the status quo and demanded change in terms of equal distribution of resources.

7. Sumanta Banerjee, *In the Wake of Naxalbari* (Kolkata: Sahitya Samsad, 2008), p. 82.

8. Amitabha Chandra, “The Naxalbari Movement,” *The Indian Journal of Political Science*, vol. 51, no. 1, 1990, pp. 22-45, <http://www.jstor.org/stable/41855467> Accessed on August 28, 2017.

9. The website of the Ministry of Home Affairs, http://mha.nic.in/naxal_new

10. Sugata Bose, *Peasant Labour and Colonial Capital: Rural Bengal Since 1770*, Vol. 3 (New Delhi: Cambridge University Press, 1993), p. 177.

11. Mallarika Sinha Ray, *Gender and Radical Politics in India: Magic Moments of Naxalbari* (New York: Routledge, 2011), p. 111.

12. *Ibid.*, p. 112.

Therefore, this did not fall within the watertight compartment of a reactionary opposition by the victimised against the privileged class. Rather, the intellectual support to it was the result of the political consciousness of the youth who were exposed to the Communist and students' movements ongoing at that point in time all over the world. The uprising which turned into a movement, thus, provided this educated middle class an opportunity to put their ideological theories into practice. Such legitimisation is evident in the thinking and writings of Charu Majumder¹³ who regarded the time as ripe to launch such struggles and surround the cities with the villages, thereafter establishing their rule in a manner different from the parliamentary path adopted by the other left parties in India.

GEOGRAPHICAL EXPANSION

The political scenario of the streets of Calcutta immediately after the events at Naxalbari in the late 1960s underwent radical changes, with the incessant sloganeering of the students from prestigious educational institutions like Presidency College and Jadavpur University, challenging the establishment and its status quo.¹⁴ A democratic polity provides space for dissent, although this privilege comes with its riders; however, the space for violent dissent is virtually absent. As the movement gathered momentum, the line of "annihilation of class enemies" (one of the principles promoted by Charu Majumder as the base of the struggle),¹⁵ led to massive violence and bloodshed. This trend of the uprising raised doubts on the effectiveness of mass movements mobilisation and raising of political consciousness among the uprising's supporters, making many, including Ashim Chatterjee, question the path propagated by Charu Majumder.¹⁶ To curb the spread of the movement, the government of WB responded with force. One of the glaring instances was the Cossipore-Baranagar

13. "Charu Majumder on the *Naxalbari* Road," <http://www.bannedthought.net/International/RIM/AWTW/1987-9/AWTW-09-Mazumdar-NaxalbariRoad.pdf> Accessed on August 28, 2017.

14. Bose, n. 2, p. 177.

15. Sumanta Banerjee, "Annihilation of Class Enemies: CPI(ML) Tactics at Critical Point," *Economic and Political Weekly*, vol. 5, no. 35, 1970, pp. 1449+1451-1452. Available at <http://www.jstor.org/stable/pdf/4360387.pdf?refreqid=excelsior%3A7fa533855395b38169b281547d356831> Accessed on August 28, 2017.

16. Banerjee, n. 7, p. 88.

massacre where suspected Naxalites, including renowned leaders like Saroj Dutta, were killed in police action.¹⁷ When all these incidents were taking place in Calcutta, the stories of the peasant opposition to the landlords reached as far as Srikakulam in Andhra Pradesh (AP) as well as in neighbouring Bihar. Thus, “the myth of the Indian village as sleepy, lethargic and idyllic was exploded when the Indian rural village in general and Bihar, Andhra Pradesh and West Bengal in particular witnessed violent rural conflict in the late Sixties.”¹⁸ While the current spread of the movement, according to the MHA, is 10 states and 106 districts of India,¹⁹ though in varying degrees, it was WB, Bihar and AP that witnessed its spread in the initial years.

WHAT'S IN A NAME?

The movement has acquired different nomenclatures and has been dealt with under various levels of conflict scenarios, as per the Government of India (GOI). Broadly speaking, these names have been categorised under two groups: one is from the perspective of the Maoists; and the other is labelled by the state,²⁰ depending upon how it plans to deal with the crisis. However, in the latter grouping, the nature of the conflict also plays a role in the selection of names, for instance, secessionism, terrorism, extremism, etc. When the dispute over land began in 1967, it captured the imagination of the people as the conflict began to be called the Naxalbari Movement, based on the name of the village from where the dispute had erupted. However, the name of the political party led by Charu Majumder which had split from the CPI(M) and to which the conflict at Naxalbari provided the beginning of the class struggle, was the Communist Party of India (Marxist-Leninist) CPI (ML).²¹ Over a period, as the group split into

17. Sudeep Chakravarti, *Red Sun: Travels in Naxalite Country* (New Delhi: Penguin, 2008), p. 159.

18. APS Chouhan and Dinesh Kumar Singh, *The Indian Journal of Political Science*, vol. 65, no. 4, 2004, pp. 517-530. Available at <https://www.jstor.org/stable/41856074> Accessed on July 27, 2017.

19. Press Information Bureau, Government of India. Available at <http://pib.nic.in/newsite/PrintRelease.aspx?relid=136706>. Accessed on July 27, 2017.

20. In this article, state is meant as the border notion of authority and state is used as a federal division within the country.

21. Chandra, n. 8, p. 22.

a number of sub-groups²² – the MCC and PWG being the prominent ones among the many others – it began to be named according to the modified ideology, to enable the sub-groups to establish their identity as distinct from their parent party. Eventually, in September 2004, during the peace talks between the state government of AP and the PWG, all these splinter groups came together to form the CPI (Maoist), especially headed by the MCC and PWG.²³ Since 2004, this group has been the largest and the most popular of what became known as Left Wing Extremism (LWE), when the MHA established a separate division to deal with this conflict. The aim of this group, which is a banned political party²⁴ within the state's purview, is violent overthrow of the existing state and establishment of its rule by the barrel of a gun. Therefore, in the official parlance, since the middle of the last decade, the conflict has come to be known as LWE. In colloquial terms and in popular use like in newspapers or the visual medium of television, it is also known as Maoism.

On the other side, following the GOI classification, the CPI (Maoist) has been designated as a terrorist organisation and its cadres arrested are tried under the Unlawful Activities Prevention Act (UAPA). Although, William Shakespeare had said, "What's in a name?," names, in this context and in other similar ones, help to advance a cause and ideas, and this is true of both sides in a conflict anywhere in the world. The state, through the nomenclature, can clarify its stance on the conflict and, subsequently, its manner of handling it. The CPI (Maoist) through its name, propagates, the ideas on which it bases its struggle. However, it is wise to clarify at this juncture that there can, and will always be, a chasm between ideology and its practical application in the socio-economic conditions of its sphere of experimentation. Some of this hiatus is the result of the rigorous intellectual debate and dialogue among the followers, basing their

22. "Disunity Over Unity," *Economic and Political Weekly*, vol. 10, no. 10, 1975, p. 429. Available at <http://www.jstor.org/stable/pdf/4536918.pdf?refreqid=excelsior%3A9853f5de0ecf999e2c5d0c3ced7929e0> Accessed on August 28, 2017.

23. "Left Wing Extremists Groups Communist Party of India (Maoists)." Available at http://www.satp.org/satporgtp/countries/india/terroristoutfits/CPI_M.htm. Accessed on July 30, 2017.

24. Vinay Kumar, "Centre Bans CPI (Maoist)", *The Hindu*. Available at <http://www.thehindu.com/todays-paper/Centre-bans-CPI-Maoist/article16583345.ece>. Accessed on July 27, 2017.

arguments on the demands and needs of the society they reside in. For instance, the debate between the CPI and CPI (M) over revisionism and the path to be adopted for revolution was undertaken before they had eventually split, and from which evolved different names to establish their identities. The rest would cover ideology under the garb of opportunism and convenience, hiding the genuine rationale. For instance, the CPI (Maoist) and its activities in the last decade have very little to do with Maoism or any idea related to it. Nevertheless, both lines of thought are justified through various ways and means among its followers.

THE NATURE OF THE CADRES

According to historian Ramchandra Guha, Indian society has for long systematically neglected the demands of the indigenous sections of the population²⁵. During the transfer of power, the debate on the tribal question was restricted to areas which mattered in the process of transfer and partition. Additionally, the debate was overshadowed by the communal issues in the wake of the partition of the country, along religious lines, and the violent bloodbath that ensued before and after its declaration.²⁶

During the Constituent Assembly debate on December 19, 1946, Mr. Jaipal Singh had said:

I rise to speak on behalf of millions of unknown hordes – yet very important – of unrecognised warriors of freedom, the original people of India who have variously been known as backward tribes, primitive tribes, criminal tribes and everything else, Sir, I am proud to be a *jungli*, that is, the name by which we are known in my part of the country. Living as we do in the jungles, we know what it means to support this Resolution. On behalf of more than 30 millions of the *adibasis* (cheers), I support it not merely because it may have been sponsored by a leader of the

25. Ramchandra Guha, "Adivasis, Naxalites and Indian Democracy", *Economic and Political Weekly*, 2007. Available at <http://ramachandraguha.in/archives/adivasis-naxalites-and-indian-democracyeconomic-and-political-weekly.html>. Accessed on August 5, 2017; I have restricted my analysis to the question of tribals in the post independence era.

26. Amit Prakash, *Jharkhand: Politics of Development and Identity* (New Delhi: Orient BlackSwan, 2001), p. 61.

Indian National Congress. I support it because it is a Resolution which gives expression to sentiments that throb in every heart in this country. I have no quarrel with the wording of this Resolution at all. As a *jungli*, as an *adibasi*, I am not expected to understand the legal intricacies of the Resolution. But my common sense tells me, the common sense of my people tells me that every one of us should march on that road of freedom and fight together. Sir, if there is any group of Indian people that has been shabbily treated, it is my people. They have been disgracefully treated, neglected for the last 6,000 years."²⁷

A critical discourse analysis of the speech points out three distinct sets of thoughts: firstly, the sentiment surrounding the perspective of the 'higher born' towards the original inhabitants of the country; secondly, the continuous neglect of this segment of the population for a long time; and, last but not the least, the faith in the political system and the hope of a better future which ensured their support for the resolution. The debate over whether the indigenous population should be made part of the 'mainstream' to facilitate their participation in the process of civilisation and modernisation has been comprehensively dealt with in the writings of Verrier Elwin, a British anthropologist who considered himself a "British born Indian."²⁸ It, consequently, enriched the policy approach adopted by the first Prime Minister of India, Jawaharlal Nehru, towards the question of tribals and their constitutional protection. As recent as in 2008, the 7th report of the 2nd Administrative Reforms Commission adequately highlighted this aspect of policy disadvantage towards the tribals and the marginalised sections of the society and listed it as one of the reasons behind the expansion of the Maoists in the areas inhabited mostly by them.²⁹

27. Constituent Assembly of India, Vol. 1. Available at <http://parliamentofindia.nic.in/ls/debates/vol1p9.htm>. Accessed on August 10, 2017.

28. Ramchandra Guha, "Savaging the Civilised," Ramchandra Guha, *Economic and Political Weekly*, 1996. Available at <https://www.jstor.org/stable/4404559?seq=1>. Accessed on August 16, 2017.

29. "Capacity Building for Conflict Resolution- Friction to Fusion", Seventh Report of the Second Administrative Reforms Commission, Government of India, February 2008 http://arc.gov.in/arc_7th_report/ARC_7thReport_Ch3.pdf. Accessed on August 20, 2017

STATE RESPONSES: A BRIEF ASSESSMENT

The response of the central government towards the conflict has passed through different stages. It began with incidents such as counter retaliation when nine people were killed after the death of a police inspector at the start of the uprising, in the initial years. Following effective consolidation of the police force under the then Chief Minister (CM) of WB, Mr. Siddhartha Shankar Roy, the streets of Calcutta witnessed a free hand being given to the executive to implement measures intending to prevent the further spread of the uprising.³⁰ With the proliferation of the uprising in other states, primarily Bihar and AP, in the 1970s, these states began to implement their own way of handling the crisis, with support and guidance from the central government. After the formation of the CPI (Maoist) in 2004, the MHA created a separate division, called the LWE Division, in 2006, dedicated solely to this purpose.³¹ The central government has clearly demarcated the division of responsibilities towards managing LWE.³² The Centre has designated LWE as a law and order problem, and since law and order is a state subject, the duty of managing LWE falls within the power parameters of the respective states. However, the approach of the Centre, apart from coordinating the policies of the various state governments, is three-pronged: development, security, and management of public perceptions. There is no watertight compartmentalisation in the approach of both the states and the central government, and they have often crossed paths.

CONCLUSION

George Orwell once said, *“Those who ‘abjure’ violence can do so only because others are committing violence on their behalf.”* This philosophy resonates when the actions of both the extremists and the state do not match what they claim to follow, with innocent people falling prey to this vacillating approach. However, this framework of the

30. Ashoke Kr. Mukhopadhyay, ed., *The Naxalites Through the Eyes of the Police: Select Notifications from the Calcutta Police Gazette 1967-1975* (Calcutta: Dey's Publishing, December, 2006).

31. Left Wing Extremism Division, “Ministry of Home Affairs,” <http://mha.nic.in/hindi/Naxal>

32. Managing here is not used as an academic theoretical term of conflict management, although, broadly speaking, the approach of the central government can fall under this categorisation.

understanding of an uprising is not exclusive to India. One such example is the armed conflict which began in 1964 in Colombia, popularly known as Revolutionary Armed Forces of Colombia (FARC). LWE and FARC have two things in common: first, they are both inspired by the left oriented ideology; second, after a continuing conflict for five decades (1964-2017), the Colombian government has been successful in signing a peace accord with the rebels. At one point of time, the rebels were considered to be the richest rebel group in the world. At the same time, the political and socio-economic scenarios of the two countries are undeniably different, which leaves the comparison between the two insurgencies with a gap. Nevertheless, when the stakes are so high in terms of loss of lives and property, absence of development and governance, and last but not the least, hopes of a better future for so many of the people fighting on both sides, peace, unquestionably, deserves a chance!!

While the state responses are continuing to deal with this kind of political antagonism, questions abound as to the legitimacy of the *modus operandi* in use in a democratic state structure. There is hardly any doubt that the Indian state has remained true to the typical essence and character of a state in general. Simultaneously, it can also be argued that history is scripted by those who choose to become atypical in their own very way –who knows, may be India can lead the way towards the making of a similar history.

BOOK REVIEWS

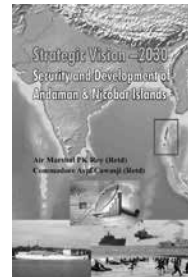
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MANMOHAN BAHADUR

Seminars and workshops on China have become the latest craze in strategic circles worldwide as the rise of the dragon, with its dizzying Gross Domestic Product (GDP) growth and a US \$12 trillion economy, holds everyone's attention. The almost insatiable requirement of energy resources to fuel its economy has led China to invest in countries around the world on terms that many see as being indicative of a new colonising power taking root – a modern version of the famous cliché that 'flag follows trade.' Down history, such expansionism has always been met with resistance as the expanding power's outward drive generates friction, and bruises national egos;

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this cyclic variation has been chronicled for the past five centuries by Paul Kennedy in his famous tome, *The Rise and Fall of the Great Powers*. India-China relations are following a similar pattern, a situation exemplified by Chinese incursions into Depsang, Chumar and, lately, into Doklam in the Sikkim area; while these incidents have their genesis in the border dispute between the two countries, they fit the hypothesis expounded by Kennedy.

Even though Doklam, and other crises, have focussed interest on the Himalayan border, India's southern 'frontier,' in terms of its island territories, has also been drawing attention for the geostrategic advantage they accrue due their location in the Indian Ocean Region (IOR). Of these, none is more important than the Andaman and Nicobar Islands (ANI) in the Bay of Bengal which sit on one end of the Malacca Strait and constitute the Malacca Dilemma for China – due the fact that almost 80 percent of China's energy supplies from Africa, South America and the Gulf have to pass through this choke point on their way to its Pacific coast. There is a large body of work that discusses the significance of the Andamans and a welcome addition to the discourse is *Strategic Vision 2030: Security and Development of Andaman and Nicobar Islands* (Vij Books India Pvt Ltd, 177 pages) co-authored by Air Mshl PK Roy (Retd) and Cmde Aspi Cawasji (Retd) – the former was a commander-in-chief of India's only tri-Service Andaman and Nicobar Command and the latter an Indian Navy submariner, with extensive experience in IOR matters through service in the area and at the Naval War College; the researchers have produced the work as part of their study at the United Services Institution (USI) of India, New Delhi, a tri-Service think-tank.

Strategic Vision 2030..... researches the subject through four distinct sub-divisions. It first gives the readers a broad overview of the complex security environment prevailing in the IOR, the various forces at work, and then goes on to describe the natural, industrial and economic potential of this group of islands that total upto 572 in number, with only 37 being inhabited. Expanding on this data, and using their experience of having served on the islands, the authors then expound on the strategic significance of the Andamans, as also discuss the strengths and weaknesses that the Indian state has to cater

to. The book concludes through developing a set of recommendations and suggesting a way ahead for policy framers in New Delhi.

Strategic Vision 2030... makes for easy reading. Heavily referenced, the narrative enlightens the reader on the rich flora and fauna of the ANI as also the mineral wealth that lies in its surrounding oceans that constitute 30 percent of India's Exclusive Economic Zone (EEZ) – all these are sectors that are a boon for tourism and important for the economic health of India. While building on these strengths, the book brings out the limitations of the lack of good connectivity with the 'mainland' and an almost total absence of building materials that inhibit infrastructure development, both military and civil – not many would know that, despite its 1,962-km-long coastline, even sand has to be brought to the ANI by ships and barges from the 'mainland' for construction! This obviously results in high costs and deferred timelines of completion of large projects due to reasons beyond the control of the local administration. Additionally, strict environmental laws and rules that are in place to safeguard tribal reserves are a hindrance for securing land for infrastructural development that is required for exploiting the strategic location of the ANI; ports, airfields and cantonments require large tracts of land and would result in cutting down of the rich forests that comprise a trademark of the Andamans.

It is the location of the ANI that is finally galvanising the government to allocate more resources for its development. With the southernmost tip of the Great Nicobar Island just 150 km from the Indonesian coast of Aceh and sitting on the western end of the choke point of the Malacca Strait, the ANI constitute an 'unsinkable aircraft carrier' for India in the game of power politics vis-a-vis China. As Roy and Cawasji bring out, "India's aspirations of becoming a regional power....can be realised through the very presence of the ANI in its quiver. Their....location has the potential to balance the grave uncertainties surrounding China's maritime intentions and influence in the Indian Ocean." The authors elucidate that the ANI possess the potential to be further developed as an important tri-Service Command and as a forward base for the strategic forces (nuclear assets). While suggesting an enhanced allotment of forces and equipment from each of the three Services (and, hence, the authors are indirectly critical of

the present state to meet future challenges), it is understandable that they cannot give further details due their classified nature; however, what comes out clearly is that synergisation of the three Services is still work in progress, despite the Andaman and Nicobar Command having been in existence for the past decade and a half. The book ends with making a set of policy recommendations but laments the fact that despite an Island Development Authority having been formed in 1986, not much progress is discernible. A silver lining, though, is the recent appointment of Adm DK Joshi, an ex commander-in-chief of the Andaman and Nicobar Command, as the new lieutenant governor of the ANI; it would be music to the authors too as it indicates the renewed importance being given by the government to matters, military and civil, in the islands. It also goes without saying, that this particular appointment of the lieutenant governor would have been noted in Beijing too.

Strategic Vision 2030... is a good source for researchers looking into matters, civil and military, connected with the ANI. It is rich in facts and figures, discusses the shortcomings and positives of the islands and offers a set of policy recommendations for the way forward. Though the authors do give their recommendations on the enhanced military presence that is required on the Andamans, they could have been a little more expansive and focussed with figures from open source information. Also, it would have helped greatly if more inputs from the research of Chinese scholars and their views on how India is moving forward on the development of the ANI was included; this would have given additional gravitas to the discourse. Having seen the beauty of the Andamans first-hand, this reviewer missed the inclusion of some photographs of the stunning beauty of the islands, which would have added to the value of the book – possibly, the authors are keeping this in reserve for a sequel to their fine original work!

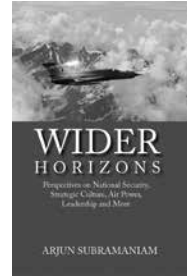
**Wider Horizons: Perspectives on National Security,
Strategic Culture, Air Power, Leadership and More**

Author: AVM Arjun Subramaniam

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POOJA BHATT

How do soldiers perceive security and strategy? It is a crucial question to ask in a realm where concepts such as national security and strategic culture have long been the purview of the political leadership, bureaucrats-cum-strategists, and scholars. The parlance of security has been two-pronged; one, based upon geostrategic realities in great power rivalries; and, two, as a quest for a theoretical understanding of security. One angle that is often overlooked is the reflection of those who are in the forefront of guarding the nation, the “soldiers”, whose mandate is often seen as protection of the motherland.

The 21st century has seen changes in the modes and paradigms of warfare. To keep pace with these shifts, defence structures in India have undergone a transition at an institutional level, with planned development and force modernisation to keep up with technological advancements and the vagaries of war-fighting. However, war-fighting is multi-dimensional and requires a multi-pronged approach.

Arjun Subramaniam’s latest book is a warrior-scholar’s reflection of issues in national security and strategic culture. *Wider Horizons* is a collection of more than 40 small essays that he had written between

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2010 and 2017. The title initially strikes as an address to younger officers with a focus on the importance and evolution of air power, usually expected from an air veteran. However, the book surprises delightfully with its breadth and depth of knowledge on topics ranging from terrorism, non-alignment, to discussing the conceptual understanding of theoretical concepts such as nuclear deterrence, statecraft, and the Indo-Pacific region.

AVM Subramaniam, in this book, has bravely indulged in comparing China's acclaimed leader, Deng Xiaoping, with India's legendary statesman, Kautilya, for their strategic far-sightedness, intellectual brilliance, and military innovativeness. Such studies and comparisons are often helpful to appreciate and comprehend the evolution of strategic culture—a term brought into the limelight by US researcher George Tanham, two decades ago. Tanham had argued that Indian policy-makers lack a strategic culture, an accusation that has been widely debated amongst scholars and intelligentsia till date. AVM Subramaniam argues that strategic culture is what a nation and its people collectively feel about a myriad issues that affect their immediate, medium-term and long-term existence and evolution. These feelings are then structured around ideas, thoughts, writing and oral articulation to form what can be loosely called a "culture" (p.49). He further believes that India's position of proactive deterrence with restrains in the escalation ladder is one such example of a well-calibrated attempt that guides New Delhi's strategic culture. The takeaway from this thought is that strategic cultures are fluid and evolve as per the present domestic as well as international conditions.

There is an old Confucius saying that gently reminds us to study the past if we wish to define the future. History reminds us of our past and helps us to be well prepared for the future. Human history is replete with blood shedding battles and wars, and there is need to avoid conflicts in the future. Military history examines more than the behaviour of the political and military leaderships during wars. It carefully tries to understand human emotions such as greed, fear, and honour that are attached to fighting, winning and losing a war. There has been an immense focus on the study of military history in the US, UK and other countries in Europe. In this regard, the author has

extrapolated his personal experiences regarding the lack of interest in military history in India. Inadequate archives and declassified primary information force researchers to rely on autobiographies and biographies for conducting their academic work. History based upon facts not only provides a better perspective on how we fought our wars in the past but also on how to avoid them in the future by not repeating the same mistakes.

The book works at several levels. It is a guide and inspiration for young officers to delve deeper into issues of security at an intellectual level beyond physical war-fighting. At the same time, it is a primer for non-warriors on practical concepts such as aspects of air power, air operations and contemporary warfare from a fighter's vantage point. Air power can act as a "tool of statecraft" if understood properly and used judiciously. Having an extensive career as a fighter-pilot, with over 3,000 hours of flying India's frontline fighters like the Mirage-2000 and MiG-21, the author intricately understands the employment of air power, with its significant command, and its role in the complex fourth generation warfare. He explains the importance of air power in the dynamic paradigms of fourth generation warfare.

He justifies the use of air power for successful coercion due to its ability for delivering strategic effects, reducing the need for engagement by vital surface forces. Apart from that, air power can be a "forceful persuasive" tool, such as it was in Operation Parakram in 2002 (post-December 2001 Parliament attack) where Indian Air Force (IAF) fighters evicted the intruders from Machi Neelam Gurez sector in Jammu and Kashmir (J&K). He further contends with those who consider air power as "escalatory" by arguing that air power has often helped in "de-escalation" by signalling to the adversaries about the country's intentions and capabilities.

Perfection can be achieved only when one is open to self-criticism as much as self-appreciation. AVM Subramaniam is well cognisant of this and has not minced words where he felt was necessary. He has made pointed remarks in his book, for example, on the lack of transparency and inclusiveness between different stakeholders in the development of critical technologies for national security. At the same time, he factually "clears the air", under a chapter with a similar

name, when his seniors or colleagues were wrongfully targetted by the Chinese media.

AVM Subramaniam has narrated his life-experiences in the book for the younger audience and junior officers with sophistication. Without sugar-coating the mistakes that he made both professionally and personally during his younger days, he narrates his stories for the benefit of others. His personal anecdotes are learning lessons and teach several important life lessons. He encourages youngsters to acquire knowledge and accept criticism for their holistic growth. A prolific writer, AVM Subramaniam understands the nuances of writing and difficulties in publishing, and advises more officers to take up military writing. He believes that an insider's viewpoint can add to their skill sets and also enrich the discourse of military history.

Additionally, he provides five simple tenets of leadership that have bolstered his belief that it is a quality that isn't inborn but can be learned by anyone. These are: mastering the balancing act between personal and professional life; broadening one's shoulders by an effective delegation of work; generosity and human goodness; a positive attitude; and hard work with a relentless focus.

Metaphorically, *Wider Horizons* is an apt title for the book. It goes beyond the regular military jargon and establishes the importance of the military, especially the air force and air power in the wider canvas of the current geopolitical context and sensitivities. Written in an extremely lucid manner, the author has kept a wide variety of readership of his book in mind—the readers can relate to the author speaking to them in a conversational manner while explaining comprehensive issues with such ease and detail. A poem titled "The mighty Su-30", written by his young daughter, is a befitting personal tribute to air warriors and a finale for the book.

NOTES FOR CONTRIBUTORS

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