

# U.S.I. JOURNAL

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**Vol CLII**

**APRIL-JUNE 2022**

**No 628**

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M-1/ 2022**	"Eastern Military Thought" by Colonel Harjeet Singh (Retd)	325	2022
Adm-5 (UNPO) /2022**	"UN Peace Operations Part - V : Women, Peace & Security" Edited by Maj Gen AK Bardalai and Maj Gen PK Goswami, VSM (Retd)	350	2022
CMHCS-5	"History of Indian Air Defence Artillery 1940-1945" By Col Mandeep Singh (Retd) M/s Manohar Publishers & Distributors	1495	2022
OP-1/ 2022**	"Military Legal System in China" By Wg Cdr Umesh Chandra Jha (Retd)	250	2022
CMHCS-4**	"BATTLE TALES" – Soldiers' Recollections of the 1971 War" Edited by Sqn Ldr RTS Chhina, MBE (Retd)	1350	2022
R-111**	"STRATEGIC YEAR BOOK 2021" Concept and Structure by Maj Gen BK Sharma, AVSM, SM & Bar (Retd), Edited by Lt Gen GS Katoch, PVSM, AVSM, VSM (Retd), Gp Capt Sharad Tewari, VM (Retd) and Dr Roshan Khanijo	1850	2021
R-112	"Maritime Corridors in the Indo-Pacific : Geopolitical Implications for India" By Cdr Subhasish Sarangi M/s Pentagon Press	1295	2021
NSP-38**	"Role of Niche and Disruptive Technologies in India's Deterrence and War Fighting Capabilities" By Lt Gen PJS Panu, PVSM, AVSM, VSM (Retd)	295	2021
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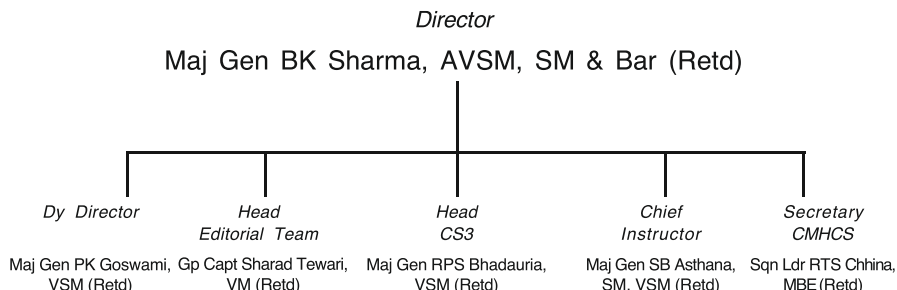
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2. It is mandatory that the author furnishes complete details of the book/journal referred to in the article as end notes. A guide to writing endnotes is given on the next page. Besides endnotes, if the author so desires, a bibliography may also be included, though it is not mandatory.
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Some examples are given below:-

<sup>1</sup> Michael Baxandall, *Painting and Experience in Fifteenth-Century Italy: A Prime in the Social History of Pictorial Style*, (Oxford University Press, London, 1988), p 45.

<sup>2</sup> Lina Bolzoni and Pietri Coral. *The Culture Memory*, (Bologha: Societa editrice Il Mullno, 1992), p 45.

2. Use of *ibid*, *op. cit.* and *loc. cit.*

*Ibid*, refers to the immediate preceding reference; *op. cit.* refers to the prior reference by the same author and *loc. cit.* is used instead of *op. cit.* when reference is made to a work previously cited and to the same page in that work. For example:

<sup>4</sup> R Polrer, *Learning Physics*, (Academic, New York, 1993), p 4

<sup>5</sup> *Ibid*, p.9.

<sup>6</sup> T Elliot, *Astrophysics*, (Springer, Berlin, 1989), p.141.

<sup>7</sup> R Millan, *Art of Latin Grammar*, (Academic, New York 1997), p. 23.

<sup>8</sup> Elliot, *op cit.*, p148.

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During Apr-Jun 2022, 145 Officers registered for Course Membership.

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## Editorial

Dear Readers,

The USI journal for the 2nd Quarter of the year 2022 is here. The journal encourages and inculcates the love for writing and reading amongst the officers of the armed forces as well as the scholars of strategic affairs and spreads knowledge amongst its readers. This issue contains thirteen well researched articles, two review articles, and two short book reviews.

The Russia – Ukraine war has become a long-drawn affair. The war has brought into focus aspects related to the new emerging world order, multilateralism, collective security, nuclear deterrence, economic sanctions, information warfare, food & energy security, and above all, the conduct of war in the present era. In line with the last aspect, the article titled '*Lessons of the Ukraine War: Air Aspects*' authored by Air Marshal Anil Khosla (Retd) is the lead article in the current issue of the USI journal.

The next article is a brief history about the British Indian Army's Corps of Pioneers, which on disbandment had its 23rd, 32nd and 34th Royal Sikh Pioneers converted into the Sikh Light Infantry, a distinguished Infantry regiment of the Indian Army. This has been brought out vividly in the article titled '*Pioneer Regiments of the British Indian Army*' authored by Colonel Harjeet Singh. This is followed by an article titled '*3D Printing: Opportunities for the Indian Armed Forces*' by Brigadier Mandeep Singh (Retd). The author emphasises that it is about time that our armed forces absorb this technology at current levels and should invest in further R&D to exploit it fully towards enhancing efficiency.

*'Effectiveness of Protection Mandates in Current UN Missions: Application of Lessons on Military Force Preparedness'*, the next article, by Colonel (Dr) Kulwant Kumar Sharma, covers key lessons on Protection of Civilians (POC) from the Effectiveness of Peace Operations Network (EPON) studies from the military force perspective; application of EPON lessons to enhance the effectiveness of the military on POC and preparation of Indian peacekeepers on POC aspects. Two years plus has passed after the WHO declared COVID-19 a pandemic, but it's still not going

away any sooner. The actions taken by governments across the world to counter infections and contain the virus's spread led to global supply shocks, especially in manufacturing; lockdowns and other containment measures were imposed causing widespread business disruption. These aspects have been well explained by Colonel Bhaskar Gupta in his article '*Post - COVID 19 Pandemic: Analysing India's Response Initiatives including Actions by our Armed Forces*'. The article also looks into the steps needed to revive India's economy.

This is followed by an article titled '*Operational Art in Peace Operations: Balancing the Peace Triangle*' by Dr Ali Ahmed wherein, a case study of the UN's Abyei Mission is undertaken through the 'peace operations' triangle'. The article postulates a 'peace operations' triangle' with peacekeeping, peacemaking and peacebuilding as its three sides. Lieutenant General Ghanshyam Singh Katoch (Retd), in the article '*Jai Narain: The Legacy of the Unit Bania and Canteen Contractor System*' elucidates on the system of Unit Bania and the Canteen Contractor in past and present armies and brings out the legacy of one such Bania.

Another article on war in Ukraine, which is among the defining events of this period and which will have a far-reaching impact on the security architecture of the world, is '*The Ukraine War: How the West was Lost*' by Group Captain (Dr) K Ganesh (Retd). The article carries out an analysis of the war in an unbiased and objective manner looking at both geo-strategic and military dimensions. This is followed by an article titled '*India-Pakistan Peace Process: Lessons from the Past*' by Shri Gaurav Kumar which explains how historically, the peace talks between India and Pakistan have not led to an end in conflict nor has it reshaped the way two countries perceive each other in the long term; however, in the short term, it has led to a decline in violence, cross border infiltration, less terrorist attacks in Kashmir and across India. The receding violence has helped India to focus on its economic and development policies.

The next in the series is an article titled '*Jammu and Kashmir after Abrogation of Article 370*' by Dr Sanjay Kumar and Dr Neelam Kumari. This article looks into all the development aspects from different sectors in Jammu & Kashmir after abrogation of Article

370 and 35A. Major General (Dr) AK Bardalai (Retd) in his article titled '*UN Peacekeeping and Conflict Management: Is there an Option for Ukraine?*' says that from February 2021 until the actual invasion of Ukraine in February 2022, there was an opportunity for the Secretary-General UN to prevent the conflict by using the art of peace-making and possibly preventive deployment with the consent of the parties. He then examines an idea to use the model of a current traditional peace operation in the context of the Ukraine conflict.

'*Nil Nisi Bonum*' — *Of the Dead say nothing but Good*' by Lieutenant General GL Bakshi (Retd) is a eulogy to late General TN Raina, the Chief of Army Staff of the Indian Army from 01 June 1975 to 31 May 1978. The next article attempts to identify trends in weapon technology developments and classify countries into Type-1, Type- 2, and Type-3 on the basis of their approach in developing Autonomous Weapons and Drone Systems (AWDS). The article '*Becoming the Giants of Autonomous Weapons and Drones (GAWDs) of the World and the Implications for India*', by Shri Shaurya Dhakate, explains how UAVs be tweaked to be used similar to 'migratory birds' behind enemy lines.

In the first Review Article, Maj Gen Jagatbir Singh (Retd) writes about the book '*China Bloodies Bulletless Borders*' by Col Anil Bhat, VSM (Retd). He brings out that this is a very detailed book covering aspects of very vexed and complicated border question between China and India and gives out an historical context, the contours and evolution of the issues confronting both countries and the challenges faced. The other Review Article is by Professor Dr. G.I. Lilienthalon of the book '*Disaster Management: Optimising the Global Military Response*' by Maj Gen Amardeep Bhardwaj, PhD. The book, as per the reviewer, recommends adoption of a three-step process, based on competency-matching, task-analysis, and overview of the traditionally assigned tasks, in order to evolve a better task list for the military in disaster response. It advocates for technology preparedness as the very highest priority.

This issue also carries short reviews of the following books:

- The French Colonial Imagination: Writing the Indian Uprisings, 1857-1858, from Second Empire to Third Republic  
By Nicola Frith  
Reviewed by Maj Gen (Dr) RS Thakur (Retd)
- Rethinking Palkhiwala: Centenary Commemorative Volume  
Edited by Maj Gen Nilendra Kumar  
Reviewed by Wg Cdr UC Jha (Retd)

As always, we look forward to your feedback and suggestions.

Happy Reading!

Group Captain Sharad Tewari, VM (Retd)  
Head Editorial Team

# Lessons of the Ukraine War: Air Aspects

**Air Marshal Anil Khosla (Retd)<sup>®</sup>**

*Being prepared for war is one of the most effective means of preserving peace.*

- George Washington

## **Abstract**

*The Russia – Ukraine war has become a long-drawn affair. The war has brought into focus the issues related to the new emerging world order, multilateralism, collective security, nuclear deterrence, economic sanctions, information warfare, and food & energy security. Russia, in spite of the military balance of power in its favour, has followed a delicate approach and has not used the full potential of its airpower. Ukraine's approach has been air defence centric, waging war like an urban jungle guerrilla warfare. The war has a direct effect on India, and it brings out some important lessons. Since the war is still on these lessons would require a fresh look in the future when the fog of war clears. To that extent these lessons would need a review in the future.*

## **Introduction**

**T**he Russia – Ukraine war has entered the fourth month, with no end in sight. This war has affected every aspect of warfare and international engagement. The war has brought into focus the issues related to the new emerging world order, multilateralism, collective security, nuclear deterrence, economic sanctions, information warfare, and food & energy security. Russia has not used the full potential of its military power — especially its air force — against Ukraine. The question intriguing the military

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analysts is why the airpower has not been utilised fully and freely. While Russia is being criticised by the West for its lack of capabilities, another school of thought is that Russia is following a delicate approach towards the use of the air force and the ensuing destruction. While the world is eagerly waiting for the end of this conflict, a number of lessons are emerging from the prevailing situation which affect the future contours of war in all its dimensions.

### **General Aspects of War**

**Objectives.** Officially, Russia stated her objectives of the “special military operation” as “demilitarisation, denazification and assurance about the neutral status of Ukraine (i.e., not joining NATO)”. The operations were justified by Russia, citing help call from the Donbas Region for its liberation from Ukraine. In retrospect, it appears the undeclared objective was also to consolidate the Russian hold on Crimea.

**Orchestration of Operations.** The operations were initiated by Russia with hybrid warfare using disruption (cyber-attacks) and destruction (using surface to surface and air-delivered long-range vectors). Surface operations were three-pronged, with attacks from North, East and South. In the North, the advance was towards Kyiv and Kharkiv. History will tell whether going for the Ukrainian capital was a part of the plan that went wrong or was it just a diversionary tactic to divide and tie down the Ukrainian forces. In the east advances towards Donbas, Luhansk, Donetsk, and Mariupol were obviously to liberate the Donbas area and create a Russia friendly corridor. In the south addressing Kherson, Mykolaiv, Odesa and Snake Island was to consolidate the hold on Crimea and deny sea access to Ukraine (making Ukraine a landlocked country). A few weeks into the war the Russian forces were reorganised and concentration shifted from the northern area to the eastern and southern areas. What stands out in the entire operation is that the full potential of the airpower is not being utilised by the Russians. The operations have reached a phase of medium tempo, urban guerrilla warfare, with Russian forces surrounding the cities and Ukrainian forces employing defensive, hit and run tactics.

**Achievement of Objectives.** Russia seems to be achieving most of its military objectives.

- Ukraine had already accepted that it would not join NATO.
- Ukrainian combat potential has been considerably reduced. Russia has attacked and destroyed most of its military targets and selective defence industry.
- Russia is now focused on the eastern region and gaining success in creating a Russia friendly corridor.
- Russia now has a land corridor to Crimea. It has also ended Crimea's water and power blockade (the freshwater canal connecting the Dnieper River to the arid Crimean Peninsula is now in Russia's hands, and so is a nuclear power station to the north of the peninsula, along with the power grid in south-eastern Ukraine).
- Russia has claimed control of the southern region of Kherson and is trying to move westward, along the Black Sea coast towards Odesa and beyond. This would cut off Ukraine's access to the Black Sea making it a landlocked country.

**Information Warfare, Narrative and Legitimacy.** Information warfare has become an intrinsic part of any war and is being considered a separate domain of operation. A convincing and acceptable narrative is essential to shape public opinion, provide legitimacy to the actions taken, and enhance the morale of its forces. In this case, the western narrative was that "Russia is the aggressor, trying to rebuild its lost empire, with Ukraine being the victim, and the west (the USA, NATO and EU) supporting the democratic rights of the victim country". The Russian narrative is that "The US-led West is the aggressor, using Ukraine against it as a pawn, not honouring its commitment and expanding the NATO westwards, bringing it to the Russian doorstep, and compelling Russia into taking this drastic action".

**Sanctions.** Economic and trade sanctions have become an effective tool of statecraft, being used extensively against unfriendly nations. India has also faced sanctions earlier at the time of nuclear tests and during the 1971 Bangladesh liberation war. History has shown that the sanctions by themselves have not deterred military actions but have added to the difficulty levels. The effect of these

sanctions needs to be factored in the long run. In this case, Russia has faced severe sanctions from the West to threaten the Russian economy.

### **Aspects of Air War**

**Comparative Analysis.** There is a large disparity between the strength of the defence forces of Russia and Ukraine. Russia is the number two military power globally. The Russian Air Force is ranked second, whereas, the Ukraine Air Force is ranked 27<sup>th</sup> in the world. Numerically Russian Air Force is about 8 to 10 times the size of the Ukraine Air Force. Comparing the Army manpower and equipment, the Russian army is 3 to 6 times that of the Ukraine Army.

**Use of Airpower by Russia.** The Russians have followed a delicate approach and have not used the full potential of their airpower. They are being criticised by the western media for their poor planning, tactics, and training, the poor performance of weapons and equipment and lack of synergy between defence forces. One of the reasons for the self-imposed restraint could be to avoid too much destruction and collateral damage, keeping in mind the public opinion (domestic and worldwide) and long-term problems of insurgency, revolution, and resistance. Maybe for the same reason, Russia has not jumped into the fray of information warfare.

- **Opening Salvo.** Russia started the kinetic warfare with surface and air-launched air vectors. In the opening salvo, it attacked all the military targets including airfields, command and control centres, ammo dumps, early warning radars and air defence systems. Russia put down the Ukraine Air Force to a large extent.
- **Selective Targeting.** Russia has continued to use its long-range precision weapons. It has targeted all the military targets and degraded the military power of Ukraine considerably. Even the defence industry has been selectively attacked and damaged. Besides, attacks on military targets, Russia attacked some targets to send a message e.g., the attack on Lutsk airfield, 70 miles from the Polish border, was in all probability a message that military aid from the West would also be targeted in western Ukraine.

- **Control of Air.** Western media has been asserting that Russia failed to control the air space over Ukraine and it remains contested. The degree of control of air space cannot be ascertained but, no military commander would send its ground forces in kilometres of a long open convoy without assurance of non-interference from the enemy.
- **Airborne / Heli-borne Operations.** Airborne forces are trained and equipped to fight with speed, surprise, and aggression. They are ideal for taking over an airfield and forming an airhead. One of the main Russian targets in the initial hours of the invasion was the Antonov airport near the Ukrainian town of Hostomel, about 20 miles from Kyiv. The airfield was captured but the airhead could not be established due to the threat from shoulder-fired anti-aircraft weapons.

### **Use of Airpower by Ukraine**

The use of airpower by Ukraine is being overstated in the propaganda. Some of the salient aspects of the utilisation of airpower by Ukraine are as follows:

- Ukraine's approach has generally been air defence centric.
- Shoulder-fired anti-aircraft weapons are being used extensively.
- The war has become like an urban jungle guerrilla warfare.
- Unmanned platforms are being used extensively.
- Ukraine kept asking the West to declare a no-fly zone over Ukraine. This request was denied, as the West does not want to get involved in a direct confrontation with Russia.
- The West keeps providing intelligence to Ukraine, without this intelligence it would not have been possible for Ukraine to use its limited fixed wing, missile and drone capabilities effectively.

### **Airpower Specific Lessons**

**Importance of Unrestricted Use of Airpower.** Effect based, offensive application of airpower yields faster results due to the shock and awe effect that it creates. Applying airpower with restrictions is like fighting with one hand tied behind the back.

Unrestricted use of airpower accelerates the achievement of military objectives.

**Integrated Offensive and Defensive Air Campaigns.** Airpower is inherently offensive in nature. Even the concept of air defence has become offensive with the philosophy of active defence. The offensive counter-air and defensive counter-air campaigns are enmeshed with each other. These cannot be planned and executed independently in isolation. The idea of a separate AD command is not viable.

**‘No Fly Zone’ Efficacy.** The declaration of a ‘no-fly zone’ is one of the tools for strategic coercion and signalling in air warfare. However, it is viable and effective only if it is backed up by the wherewithal to implement it, in terms of air defence radars, weapons, platforms, and networks. Willingness to use them and readiness for escalation are other two important factors for the effectiveness of the no-fly zone.

**Importance of Precision and Stand-off Capability.** These two capabilities are important in grey zone operations, punitive strikes, and operations in urban areas, to avoid threats to the launch platform and to avoid collateral damage. Both quality and quantity need to be ensured in the arsenal of surface to surface and air to surface weapons.

**Efficacy of Airborne Operations.** Airborne operations (using fixed-wing and/or helicopters) yield quick results, speeding up the achievement of military objectives. However, the issue of their vulnerability is important. With the proliferation of shoulder-fired anti-aircraft missiles, the vulnerability of these platforms has increased manifold. These weapons can cause a prohibitively high cost to airborne operations, especially in urban and hilly areas.

**Protection of Own Assets.** Protection of own high-value assets from the enemy’s aerial attack with long-range vectors and standoff weapons is essential, especially during the opening phases of the war. Hardened aircraft shelters are essential and they should be able to withstand the destructive power of the enemy weapons. Future hypersonic weapons will have enhanced destructive power due to high kinetic energy. Dispersal of the assets, using the principle of not keeping all the eggs in one basket, would increase the enemy’s effort and cost.

**Importance of Joint Warfare.** Coordinated application of surface and air force is very important. The operations need to be planned and executed jointly. Joint training and joint exercises during peacetime are required, to increase interoperability between land and air forces. Joint organisational structures are required to increase the synergy. Joint theatre commands are one way of achieving it, but not the only way. The structural reorganisation should be done keeping in mind the factors like existing threats, availability of resources, economic strength, and the prevailing geopolitical situation. The restructuring should be able to deal with changing ways and new domains of warfare in future.

**Importance of ISR and Information Sharing.** In modern warfare, a high degree of situational awareness is of utmost importance. The space and air-based assets are becoming the only means to gain operational and strategic situational awareness. Multi-domain surveillance and reconnaissance capabilities are required. AI enabled hybrid systems are essential for processing the plethora of gathered data. A network environment is also required for speedy dissemination of raw and processed data on a need-to-know basis.

### **Conclusion**

The tempo of war has slowed down with the area of operation restricted to the east and south of Ukraine. Russia seems to be prepared for the long haul and is pursuing its military objectives with single minded focus. With the balance of military power in its favour, it can afford to continue the war of attrition. The West is encouraging Ukraine to continue resisting. It is the Ukrainians that are suffering the most. A few questions that remain unanswered are, is Russia preserving its modern next-gen equipment for a stronger enemy? Are two sides looking for an honourable exit? The world is waiting and watching as to how this conflict will end.

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# Pioneer Regiments of the British Indian Army

Colonel Harjeet Singh (Retd)<sup>@</sup>

*“A typical pioneer’s job was this — be present under shell fire all day in support of the main attack. Then move forward and grab ground and dig trenches in so-called no man’s land under enemy fire at night. Go back before day break, sleep and start all over again. Casualties no object!”*

—Captain G S Fillingham, 1916

## Abstract

*This article is a brief history of the British Indian Army’s Corps of Pioneers which on disbandment had its 23rd, 32nd and 34th Royal Sikh Pioneers converted into the Sikh Light Infantry, a distinguished Infantry regiment of the Indian Army. Pioneers have been defined as “the men who lead the way”. They are those groups of far-sighted, tough, skilled and undeterrable workers-adventurers who go ahead to prepare the way for others. In the later part of World War I, the Germans combined Pioneers with light personal weapons, explosives and some heavier close support weapons, using them as “Stormtroopers” who breached barbed wire and created a path for the main attacking troops.*

## Introduction

The origin of Pioneers in the British Indian Army dates back to 1758, in Madras, where the first pioneer companies were formed under the Madras Presidency Army to take the place of the ‘*matti*’ men,<sup>1</sup> i.e., labourers with some form of spade and pick. The men were armed and disciplined soldiers as distinct from the engineer’s coolie, impressed or hired. In 1780, two companies of

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Bombay and Bengal pioneers were formed. They were later increased to 16 in 1803, and divided into two battalions.

### **Later Years**

Extensive use was made of pioneers in the British Indian Army because of the demands of campaigning in difficult terrain with little or no infrastructure. The Pioneer regiments of the time were specialised infantry, rather than engineers. Regarded as amongst the elite, they were additionally skilled in road and railway building and their abilities were prized in the North West Frontier theatre. They were described as “a superior kind of infantry, as expert with the rifle as with pick and shovel” and rarely, if ever, did a Frontier expedition set out without a Pioneer regiment. The frequency with which they saw active service made postings to pioneer regiments popular with British officers. Prior to World War I, each sepoy in a Pioneer regiment carried a pickaxe or a light spade in special leather equipment as well as a rifle and bayonet. NCOs and buglers carried axes, saws and billhooks. Heavier equipment such as explosives were carried by mule. The unit was, therefore, well equipped for simple field engineering tasks, as well as being able to defend itself in hostile territory.

**World War I.** When World War I broke out, there were twelve pioneer regiments consisting of one battalion each in the Army. These were the 12th, 23rd, 32nd, 34th and 48th known as the Bengal Regiments, (the 23rd, 32nd and 34th being the Sikh Pioneers); the 61st, 64th and 81st of the Madras Army; the 107th, 121st and 128th of the Bombay Pioneers and 106th of the Hazara Pioneers. They were trained and equipped for road, rail and engineering work, as well as for conventional infantry service. In the British Army a Pioneer battalion was raised, during the First World War, for every infantry division. After the war these British battalions were amalgamated with the Royal Engineers, but the process was not applied to the Pioneer battalions of the Indian Army because their high traditions justified their continued existence. For many years, the Sappers and Miners worked alongside their brethren, the Pioneers who were looked upon as energetic helpers in large projects and as brave fighters when occasion demanded that the shovel be abandoned for the rifle.

## Organisation and Role

In 1916, a Pioneer Battalion was organised in four companies each of about 209 rifles. There was no Headquarter Wing — that came in 1921. Each company consisted of four platoons with no Light Machine Guns. Before the War and up to the end of 1916, there was a section of Machine Guns in the Battalion Headquarters. These were then replaced by Lewis Guns and gradually more were acquired till there was one per platoon. Pioneer Battalions had a full quota of signallers. So, from an Infantry or fighting point of view, it will be seen that a Pioneer Battalion was really a very strong infantry battalion less machine guns.

Each pioneer carried a tool of some sort or other on his back — the simple “rule of thumb” was “front rank a pick, rear rank a “*phawda*””. Lance Naiks carried a felling axe, other NCOs, a billhook and hand-axe and so on. The idea of this was that men had their tools with them and there was no waiting for mules to arrive before they got on to a job of work. The “tail” of each Pioneer Company was pretty considerable for, apart from Lewis Gun mules, it had a string of eight mules carrying crowbars, jumping bars, tamping bars, guncotton as well as an Animal Transport (AT) cart carrying the remaining four mule loads which were such things as an anvil and grindstone, carpenters’ box, smiths’ box, spare helms etc.

**Role.** The role of the Pioneer Battalion was the execution of semi-technical works and, in emergency, fighting as infantry. Brigadiers were always very glad to have a Pioneer Company or Battalion in their areas as they automatically became a Brigade Reserve. Their role was not the digging of other units’ trenches, nor the erection of their barbed wire. A good infantry unit looks on it as a point of honour to do these things for themselves. But there were other units which were very different. One battalion was digging and saw a Pioneer Company going out to a job of work; with a cry of “*Pioneer aa gaye*” they downed tools....

The Pioneer Battalion was normally Divisional Troops under the direct command of the Commander Royal Engineers (CRE). Sometimes they were used as Corps Troops and very occasionally as Army Troops. The CRE had three Field Companies of Sappers & Miners which were practically permanently allotted one to each Infantry Brigade. The Pioneer Battalion he kept up his sleeve for

work wherever needed; he might allot the whole Battalion to one particular Brigade or send one Company to each Brigade according to circumstances.

### **Post-World War I**

Due to their proven usefulness during World War I, twelve more battalions of Indian Pioneers, six of which were to the Sikh Pioneers, were added. During the war, the increased specialisation required of Pioneers made them too valuable to use as regular assault infantry. After World War I, reorganisation was carried out in 1922, and single battalion Corps were replaced by regiments of several battalions. Three pioneer regiments were created, grouped and numbered according to their original historical date of raising. However, when the whole army was grouped into regiments, the historical position was taken according to the date of the original raising, whether as Pioneers or ordinary Infantry. The three pioneer regiments now formed, had a total of nine service battalions and three training or depot battalions, with a single battalion of the Hazara Pioneers.

In 1923 there were four Corps of Indian Pioneers — the Madras, Bombay, Sikh and Hazara Pioneers — the first three totalling 12 battalions and the last being an independent battalion. An order was issued in 1927 defining the role of Pioneers: *“Pioneers are primarily technical and are maintained and trained in peace for their technical duties in war. Pioneer battalions are organised into three companies to suit technical requirements primarily. Consequently, they will only be employed as infantry in an emergency or as a secondary role.”*

In 1929, the Pioneer regiments were taken out of the line infantry and grouped into the Corps of Madras Pioneers, the Corps of Bombay Pioneers, the Corps of Sikhs Pioneers, and the Hazara Pioneers (one battalion). They were as follows:

- **1st Madras Pioneers**

- 1st Battalion (raised in 1758) earlier known as 61st King George's Own Pioneers
- 2nd Battalion (raised in 1759) earlier known as 64th Pioneers (The Elephant)
- 10th Battalion (Training) raised in 1786 as 81st Pioneers

- **2nd Bombay Pioneers**

- 1st Battalion (raised in 1788) earlier known as 107th Pioneers
- 2nd Battalion (raised in 1838) earlier known as 12th Pioneers (Khelat-i-Ghilzai)
- 3rd Battalion (raised in 1846) earlier known as 128th Pioneers
- 4th Battalion (raised in 1901) earlier known as 48th Pioneers
- 10th Battalion (Marine) (Training) raised in 1777 as 121st Pioneers

- **3rd Sikh Pioneers**

- 1st Battalion (raised in 1857) earlier known as 23rd Sikh Pioneers
- 2nd Battalion (raised in 1857) earlier known as 32nd Sikh Pioneers
- 3rd Battalion (raised in 1887) earlier known as 34th Royal Sikh Pioneers
- 10th Battalion (Training) raised in 1917 as 2/23rd Sikh Pioneers

- **4th Hazara Pioneers.** 1st Battalion (raised in 1904) earlier known as 106th Hazara Pioneers

By 1932, however, amalgamations had reduced the total to six battalions and the Hazara battalion. Each pioneer battalion had eight companies.

**The Disbandment of the Pioneer.** The Pioneer battalions, with their high traditions, continued to justify their existence till the advent of technology forced them to be disbanded. Up to 1914, they were most useful as road-makers in expeditions across the administrative border on the North West Frontier; but as such expeditions became rare, and the regular garrisons stationed across the border were provided with permanent roads built by civil contract, the Pioneers were no longer needed for road work. It was also desirable that the engineer troops of any division should be homogeneous. The end of Pioneers was in sight when Field

Service Regulations came out laying down that Pioneers were technical troops and must not be used as infantry, and by the taking away of such essential personnel as signallers (in 1929). But before and during World War I, there were no such restrictions and Pioneers were Infantry “with just a little something that the others hadn’t got”.

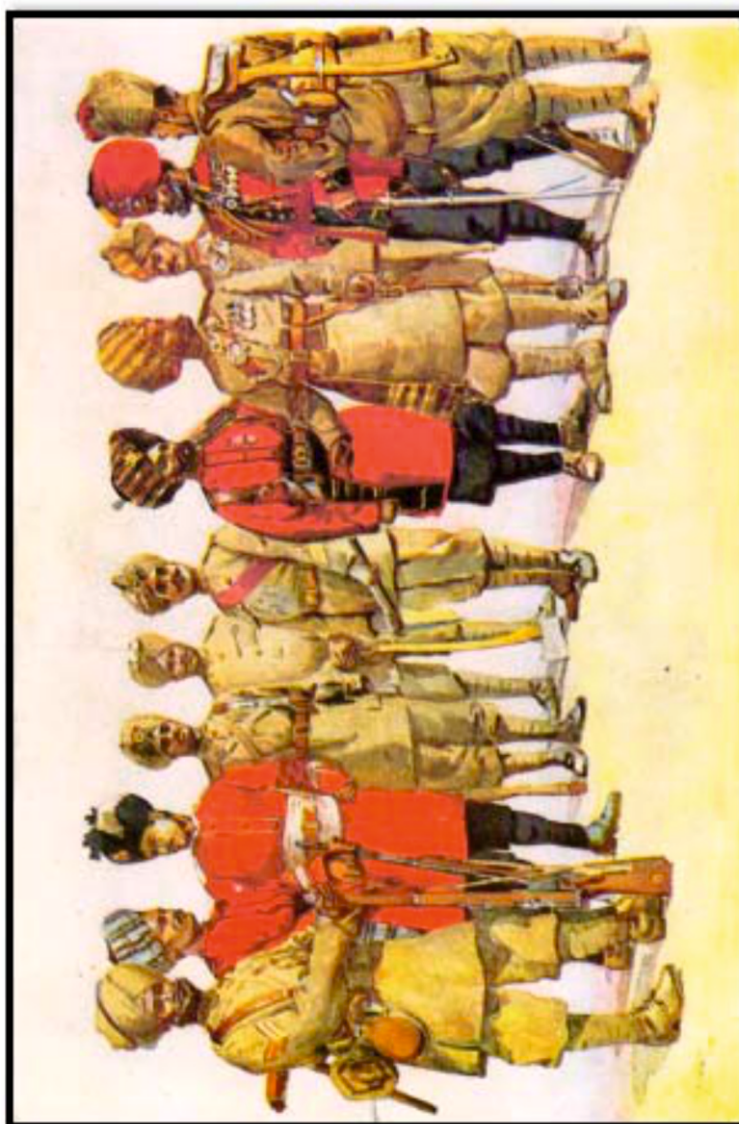
These facts, coupled with serious financial stringency, caused the Government of India to make the decision in 1932 that the Pioneers should be abolished from the Indian Army and that a part of the financial saving so effected should be applied towards an increase in the strength of the three Corps of Sappers and Miners.

The battalions of Pioneers formed a solid backing for the three Corps of Sappers and Miners and a link between them and the infantry. But the conditions of modern warfare as well as fiscal constraints brought about many changes in their organisation and the Pioneer battalions vanished from the Indian Army in 1933. The specialisation demanded by modern warfare killed the Pioneer. It was apparent that, under modern conditions, Pioneers could hardly be both fully trained infantry and expert engineers, and that by reason of their and training they were better fitted to be engineers than infantry.

### **Disbandment**

As given above, serious financial stringency, forced the Government of India to make the important decision in 1932 that the Pioneers should be abolished from the Indian Army. It was thought that further developments might take one of the following courses:

- Pioneer companies would take over all the duties of Field Engineer companies with Indian Divisions, and Sappers and Miners do the more highly technical work usually allotted to Engineer companies with Corps and Armies.
- The former role of Pioneers would be reintroduced, i.e., that they be armed and trained as infantry, and in battle normally be used as such, whilst being available and trained to assist in the less-technical forms of field engineering, such as road and railway making, at other times, when required.
- Pioneers would be reconverted into infantry battalions.



Left to right: 34th Sikh Pioneers, 12th Pioneers, 128th Pioneers, 81st Pioneers, 64th Pioneers, 61st King George's Own Pioneers, 48th Pioneers, 23rd Sikh Pioneers, 106th Hazara Pioneers, 34th Sikh Pioneers, 107th Pioneers  
(Painting by Maj AC Lovett, reproduced from *The Armies of India* by Lt Gen George MacMunn)

- Pioneers would be disbanded and all engineering in the field be undertaken by Sappers and Miners, whose strength would be suitably augmented.

In July, 1932, the decision was announced by the Commander-in-Chief in India, H.E. General Sir Philip Chetwode, Bart, G.C.B, K.C.M.G, D.S.O, that all Pioneers were to be disbanded, the official reasons for this decision being given as follows:

- The changed policy on the Frontier under which local civilian labour would be employed for road construction.
- There were two types of field engineering units, one of which, i.e., Pioneers, cannot assume the role of the other, i.e., Sappers and Miners.
- Engineering troops of a division must be homogeneous and organised on lines suitable for their general role. The Sapper and Miner is that most suited to the tasks of a division and, moreover, the work of Field Companies embodies everything now done by Pioneers.
- By concentration of work in a single unit, greater efficiency will be obtained in respect of direction, control and output, and an unnecessary link in the chain of administration will be eliminated.
- The retention of an organisation which is not fully suited to needs cannot be justified.

All four Pioneer Corps were disbanded in 1933 and their personnel mostly transferred into the Corps of Sappers and Miners, whose role they had come to parallel.

### **Conclusion**

**The Legacy.** The history of the Pioneer Regiments is a record of gallantry, of the surmounting of obstacles, and of successful achievements in the face of discouragement and sometimes of failure. It reflects in some measure the experiences of their comrades of the other arms; but there is no doubt that long years of fighting in various war theatres, had created almost a genius for improvisation which stood them in good stead, during the course of their history. In every theatre, they were woefully deficient in

modern weapons, transport and technical equipment; but everywhere, they accepted the inevitable and made the best of it, emerging triumphant by dint of their physical endurance, boundless energy, and the charmed life they seemed to bear, which contributed in no small measure to the success in the campaign in which they participated.

For many years the Sappers and Miners had worked alongside the Pioneers as energetic helpers in large projects and as brave fighters when occasion demanded. On the other hand, the 13 battalions of Pioneers had formed a solid backing for the Infantry. But the conditions of modern warfare had brought about much alteration and the gradual withering away of the role of Pioneers. It was found that the organisation, equipment and system of training of the Pioneers had made them Engineers more than Infantry, and so a large proportion of them were transferred to the Sappers and Miners, and the remainder, with most of their British officers, absorbed into the Indian Infantry. The Sappers and Miners welcomed the Pioneers into their ranks as they had also descended from Pioneers.

An Indian Pioneer Corps was re-established in 1943. Today, there are pioneer units still in existence in the Indian Army. They are intended to provide disciplined and well-trained manpower, where civilian labour is either not available, or its employment is not desirable for reasons of security. Pioneer units are mostly committed in forward and operational areas. They may also be employed as guards and escorts for headquarters, installations, ammunition trains and convoys but they are not classified as 'combat' troops.

#### **Distinguished Pioneers.**

- Field Marshal Sir Claud William Jacob GCB, GCSI, KCMG (21 November 1863 – 2 June 1948) raised the 106th Hazara Pioneers. He was its Colonel from 1916 till its disbandment in 1933. He became Chief of the General Staff in India in January 1920 and was then both promoted to full General. He returned home to England in 1924, and in November of that year was given the Northern Command in India. When Lord Rawlinson died in March 1925, he acted temporarily as Commander-in-Chief, India, until Sir William

Birdwood took over that role in August 1925 and Jacob returned home again. He took up the appointment of Military Secretary to the India Office in April 1926 and, having been promoted Field Marshal on 30 November 1926, he remained at the India Office until he retired in May 1930.

- General SM Shrinagesh (11 May 1903 – 27 December 1977) was among the earliest batches of Indians to be nominated for the Royal Military College, Sandhurst, in England. He was subsequently commissioned onto the Unattached List for the Indian Army on 30 August 1923. After the mandatory one-year attachment to a British regiment in India (1st Battalion North Staffordshire Regiment) he was posted to the 2nd Battalion 1st Madras Pioneers on 14 October 1924 with which he served mostly in Burma until it was disbanded, in 1933. He was then transferred to the 19th Hyderabad Regiment, presently Kumaon Regiment. In January 1948, he was appointed as the Adjutant General at the Army Headquarters and held that post till August of the same year. He was appointed the overall commander of all troops in Jammu & Kashmir during the 1947–48 Indo-Pakistan War and held this command till the ceasefire on 1 January 1949. Promoted to the rank of Lieutenant General in 1950, he was appointed the GOC-in-C Western Command on 15 January 1949. He was then appointed as the GOC-in-C Southern Command and held that post, till he assumed charge as the Army Chief on 14 May 1955. General Shrinagesh retired on 7 May 1957, completing 34 years of distinguished military service. Post retirement, he served as the Governor of Assam from 1959 to 1962, then as the Governor of Andhra Pradesh from 1962 to 1964 and finally as Governor of Mysore (now Karnataka) from 1964 to 1965. From 1957 to 1959, he was the Principal of the Administrative Staff College in Hyderabad.

- General Muhammad Musa Khan Hazara H.Pk., HJ, HQA, MBE (1908–1991) was the eldest son of Sardar Yazdan Khan, hailing from Quetta. He was recruited to the British Indian Army as a Sepoy at the age of 18 in 1926. He was a Naik in the 4th Hazara Pioneers when he was selected to train at the Indian Military Academy Dehra Dun, as a cadet in October 1932. He was commissioned with the first batch as Second

Lieutenant on 1 February 1935 and posted to the 6th Royal Battalion of the 13th Frontier Force Rifles. He served with distinction in the Pakistani Army and rose to be the fourth Commander-in-Chief of the Pakistan Army (1958–1966). He succeeded Field Marshal Ayub Khan, who took over the Presidency of Pakistan in the 1958 Pakistani coup d'état. General Mohammed Musa commanded the Army in the Indo-Pakistan War of 1965, and had overall responsibility for operations throughout the conflict. After retirement from the Pakistan Army, he served as Governor of West Punjab (1966 to 1969) and then Governor of Balochistan Province (1985 to 1991). He died in office as Governor of Balochistan on 12 March 1991.

### Endnotes

<sup>1</sup> *Matti* is the Hindi/Urdu word for 'Mud'.

<sup>2</sup> In the Indian subcontinent, the word *Phawda* is used for a Hoe, the spade is called a *Belcha*.

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# 3D Printing: Opportunities for the Indian Armed Forces

Brigadier Mandeep Singh (Retd)<sup>@</sup>

## Abstract

*3D printing or Additive Manufacturing (AM) technology has grown by leaps and bounds in recent years; however, we have witnessed negligible use in our armed forces. As per past precedent we have assimilated technologies once they are well into circulation thereby losing out on time - technology curve. It is about time that we not only absorb this technology current levels but invest in further R&D to exploit it fully. We should appreciate its advantages and employ the technology suitably to improve our efficiency and economy.*

## Introduction

Additive Manufacturing (AM) can produce an array of parts/objects spanning complex engineering components and assemblies to the medical accessories like dentures etc. From 3D printed door handles of vehicles and rifle grips to fighter jet engine parts and custom prosthetics, AM has tremendous utility in the military. There is no doubt that it is the technology of tomorrow and the sooner our armed forces adopt it the better it is. 3D printing at a production scale can transform the way military hardware is built while reducing supply chain fragility. However, not all parts can be printed cost effectively by AM such as high tensile materials like gun barrels etc. The precision and tolerances of 3D printers also needs consideration, normal grade printers may not be able to print with tight tolerances and precision. However, with growing technology, each day ushers in new possibilities and opportunities. It is such a versatile technology that it can be employed in almost every field and branch of military.

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It can shorten the supply chains immensely specially during operations or even through unprecedented times such as the ongoing pandemic. This technology simplifies sourcing of materials, reduces lead time, and simplifies logistical and supply issues. Once we get to the more complicated parts, the result could be a 60-to-70-day reduction in flow time for aircraft for maintenance.<sup>1</sup>

AM has proven itself in many industry segments, the technology is unbeatable when rapid design innovations and part iterations are involved. 3D printed objects have amazing strength and suited for all applications. AM brilliance in creating honeycomb-style parts goes a long way toward making assemblies lighter and, therefore, more energy efficient. The strength and accuracy of the objects is also remarkable. Automobile industry is one of the major users of AM and is far ahead when it comes to adopting and deploying this technology. This industry is a very capital-intensive business with massive outlay each year on design and development. 3D printing has proven it can improve the overall speed and agility of design and manufacturing. It shortens development time and iteration steps leading to faster delivery. AM is an epitome to customisation; vehicles can be customised to the extent that seating options can be designed to passengers' orthopaedic needs. Special-fitting headrests and seats can be produced using 3D-printed foams. AM excels in providing intricate, customised structures that optimally address applications for heating and cooling as well as lumbar support. While the concept of 3D printing an entire vehicle/assembly may sound improbable, it may materialise in near future.

Increasing reliance on AM for production of parts helps manufacturers improve their materials usage while reducing scrap and wasted parts. AM also reduces carbon footprint considerably. 3D-printed objects made of thermoplastic urethane (TPU) that become surplus can be recycled and reground for use elsewhere.

Manufacturers and their parts/assemblies manufacturing partners maintain gigantic, multi-location warehouses to store a seemingly endless supply of parts and accessories. AM lessens this burden with its ability to significantly reduce warehousing space. When a part is needed, instead of searching the stores and racks, a digital file is called up and the request is printed on demand. Thus, 3D printing optimises supply chain while eliminating

expensive tooling costs. Not only does AM reduce the physical need for costly and vast warehousing, but the process can also be set up virtually anywhere, putting parts acquisition much closer to the end-customer, reducing time-to-delivery. AM is thus poised to be the major change in manufacturing.

### **Basic Process and Current Technology**

3D printing appears to be a highly complex process for many, however, its simplicity and economy relative to the current technology environment is remarkable. One does not have to be a technical graduate to tinker with this technology. With locally available materials and electronics it is possible to build a basic Fused Deposition Modelling (FDM) printer at home. With open-source literature and software<sup>2</sup>, it is possible to construct a 3D Printer using commonly available components and materials. Though the simpler ones can print only plastic objects, the complexity, accuracy and strength of the objects churned out by the home-made printer is surprising. The fact is that 3D printing is not rocket science and can be easily inducted into our processes like a normal ink printer. Further, with minor modifications it can do laser engraving or even light CNC machining.

3D Printing essentially involves three stages and utilises complex but user-friendly software. The object to be printed must be conceptualised, then modelled on a CAD Software like AutoCAD, SolidWorks etc. There is a plethora of open source online and offline software available for this purpose. The 3D model so prepared is then “sliced” using a “slicer” software. The slicer produces a Tool Path File (normally g-code file) of the object which is loaded on the 3D printer to physically print the object. Most of the required software is available in the open-source domain. Most objects may require finishing to improve its surface or finish. Scanning of 3D objects has also evolved to a high level. Objects can be scanned by photogrammetry using a high-resolution camera or laser triangulation. 3D scanning yields a digital file which can be processed further to print the final object. The stages for printing a 3D object from conceptual stage to production are depicted in the following figure.

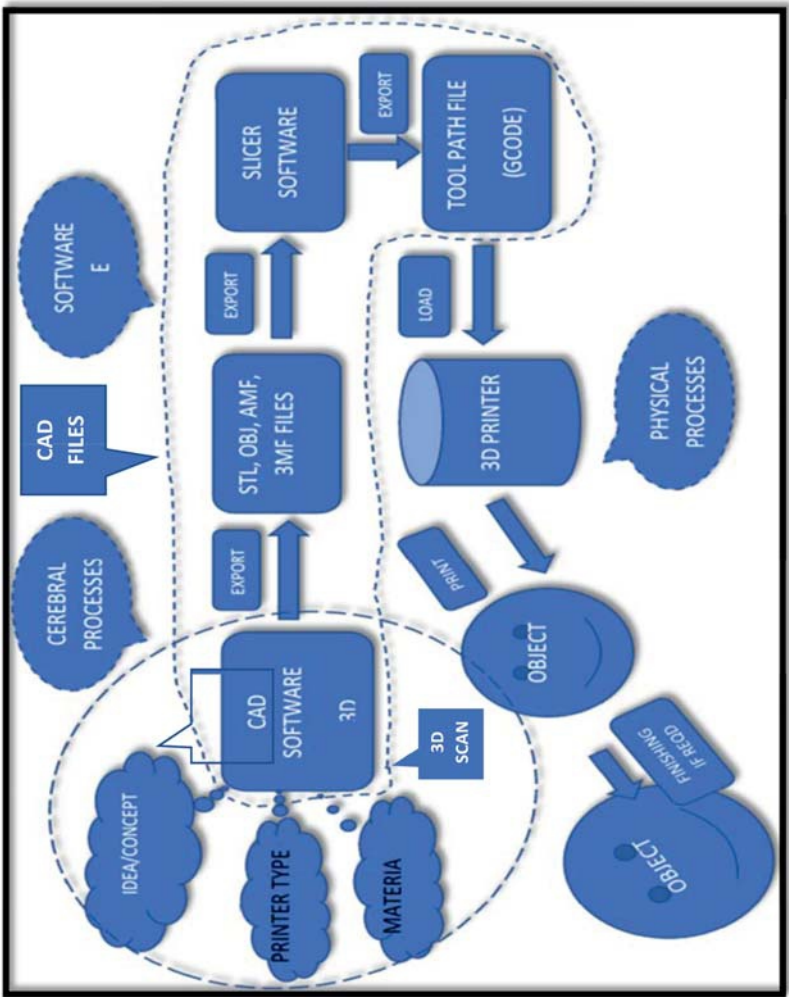


Fig. 1 : Stages for Printing a 3D Object

SLA (Stereolithography) is amongst the first 3D printing innovations and can print resin objects. Fused Deposition Modelling (FDM) / Fused Filament Fabrication (FFF) printer works by extruding a thermoplastic plastic layer-by-layer onto a “bed”. A plastic “filament” is pushed through a heated nozzle, where it liquefies. The nozzle moves along programmed directions, where the printer fibre cools and solidifies thus creating the object. Multi Jet Fusion (MJF) printers create objects from nylon powder. Laminated Object Manufacturing involves layers of paper, plastic, or metal laminates coated with adhesive fused together with heat and pressure and then cut into required shape.

Most metal 3D printing technologies utilise metal powder — the variations lie in the method of fusing the powder into objects. Lasers may be used to fuse loose powder, or a metal powder filament may be extruded and deposited in shape of an object. Powder bed melting is the most common type of metal 3D printing wherein a fine layer of powder is distributed over a build plate and the powder is selectively melted to form a cross section (layer) of the part. Specific Laser Sintering (SLS)<sup>3</sup> is similar in principle to SLA; however, it makes use of powdered material placed in a container. A roller deposits a layer of powdered material on the previous layer which is sintered by a laser beam according to a programmed pattern. Selective Laser Melting (SLM) and Electronic Beam Melting (EBM) is very similar to the SLS process, however, it fully melts the powdered material. Direct Energy Deposition method uses powder or wire feed and a laser to fabricate parts. A powerful laser beam fuses the dispensed metal powder or wire layer by layer till the object is formed. In Binder Jetting process metal powder is evenly distributed over a print bed after which a jetting head distributes binding polymer conforming to the shape of the object which is later sintered. Bound Powder Extrusion utilises metal powder bound in a polymer which is extruded like FFF. Cold Spray technique uses a stream of supersonic gas to accelerate metal powder particles at a surface, building up a dense deposit.

### **Employment of AM in the Military**

**Combat Vehicles Hulls.** Monolithic hulls of combat vehicles are more survivable and lighter. Such hulls are superior; however, they are not cost-effective nor suited to large-scale conventional

production. Hulls of combat vehicles can now be printed in one piece using 3D Printing. This will enable production of vehicles which are lighter and cheaper, however, with greater impact resistance.

**Construction of Field Shelters.** 3D printers can construct entire buildings with quick-drying concrete. In just 36 hours, a 3D printer manufactured by Icon<sup>4</sup>, and operated by US Marines, whipped up a concrete structure bunker big enough to hide a truck-mounted multiple rocket launcher system.<sup>5</sup> This technology can thus create quick and effective field shelters. We can train our combat engineers to operate the equipment and use it effectively in field. It will be possible to create durable structures virtually anywhere for personnel, equipment, and supplies.

**Fabrication of Essential Components.** At times, the original manufacturer discontinues manufacture of a certain part and may charge exorbitantly for the part. 3D printing can be effectively used in such situations. A case in point is the vehicle hatch plug which is an essential component mounted on combat vehicles for missions conducted in low-light conditions. The OEM discontinued the part, which meant that the replacement would cost about \$10,000 with lead time of months. With metal 3D printer from Markforged<sup>6</sup>, the US Army was able to fabricate hatch plugs that were not only significantly cheaper, but sleeker and more efficiently designed. Further the engineers simplified the design of the hatch plug down to four parts from ten. In this case 3D Printing saved them more than \$244,000 in costs for low-volume production, as well as streamlined the design of the crucial part.<sup>7</sup> The AFLMC too has found numerous uses of AM. The Black Hawk helicopter (41 years old), B-2 Spirit (Stealth Bomber), Super Galaxy<sup>8</sup> to the B-52 Stratofortress add to some of the examples. There are only twenty aircraft in the B-2 fleet due to which its replacement costs are enormous with long lead period. However, with AM it is possible to design and print a printable part within a week with fraction of cost of conventional processes.

**Manufacture of Equipment Parts.** Research is underway to create lightweight vehicle parts, such as brackets, turret components, propulsion systems, and weapons, using AM. The use of lightweight metals, such as titanium, titanium alloys, and hybrid ceramic tile composites are being explored in conjunction with 3D printing for

the US Army's Next-Generation Combat Vehicles (NGCV) program.<sup>9</sup> The F-22 Raptor, the US Airforce's most expensive fighter jet is flying with 3D printed parts since 2019. The 3D printed part is used in the cockpit that was made originally of aluminium and was replaced repeatedly during maintenance. Its replacement, the 3D printed titanium part does not corrode and could last the lifetime of the stealth fighter. At least five more metallic 3D printed parts are planned for the F-22.<sup>10</sup> There are many other 3D printed parts approved for use on military aircraft around the world, including the aging E-3 Airborne Warning and Control System and the B-52 Stratofortress.<sup>11</sup> 3D printed propellers provide ships with greater efficacy at sea, including increased thrust efficiency, stealth and is lighter. French have developed the largest 3D printed metal ship propeller for a warship. It has a 2.5-meter span supported by five 200-kg blades. This new technology will considerably reduce technical constraints and allow for manufacturing with complex geometrical shapes which cannot be produced through conventional processes with significantly reduced construction periods.

**Submarine Manufacture and Repair.** The Australian Submarine Corporation (ASC) is trying to explore the potential of using cold spray technology at sea for submarine repairs.<sup>12</sup> This technology will be employed to repair naturally occurring faults in the pressure hulls of submarines. A cold spray printer that can fit within a submarine and carry out repairs at sea will increase the deployment periods of submarines. This will also reduce the docked periods for conventional repairs. The USA has constructed small 3D printed submersible hulls in four weeks and cut production costs by 90 per cent. The hull is 30 feet long and made of six carbon fibre composite sections. A similar submarine built by conventional means would have taken about 5 months. A traditional SEAL Delivery Vehicle costs between \$600,000 and \$800,000, however, this submarine took costed as low as \$60,000 and it took only a few days of printing effort.<sup>13</sup>

US Army Research Laboratory have recycled PET (Polyethylene Terephthalate) from bottles and plastics without any chemical modifications or additives and used it as the material in AM in form of FFF.<sup>14</sup> This will enable printing of replacement parts on demand in field and will increase the readiness of their equipment and print mission-specific devices.

**Design with 3D Models.** 3D Models are proving to be very effective in construction process, for instance the United States Coast Guard is constructing a new vessel that was designed, built, and verified using an end-to-end 3D design process. This implies that it used only 3D models — no paper — in design and construction for all structures. This process reduces costs and time investment and ensures interaction between all stakeholders throughout all the phases. It ensures that the designer, engineer, production manager, fitter, welder, and surveyor all work from the same complete model. Everyone has access to both the micro (component) and macro (complete assembly) with which they are working to better understand the bracket, frame, or bulkhead as it relates to the module, section, and ship.<sup>15</sup>

**3D Explosives.** 3D printing of explosives reduces storage and transport costs and provides enhanced performance with duplicability. The explosives can be printed to custom shapes for specific missions providing greater effect with lesser material. The British Armed Forces have created a technique which could offer on-demand, 3D-printed explosives. The explosive charges can be fabricated with hitherto-impossible intricacy, on-demand, and fully tailored to specifications.<sup>16</sup> AM can also be used to produce gun propellants with greater efficacy than traditional methods. A 3D printed gun propellant based on SLA was developed to overcome the limitation of traditional extrusion technologies.<sup>17</sup>

**Medical Applications.** AM can be employed to produce custom prosthesis, dental tools, and medical models and hearing aids. The USA Veteran Affairs uses 3D printing technologies for pre-surgical planning, which has been reported to save doctors as much as two hours per surgery, or up to \$9,600 in cost.<sup>18</sup> It also reduces the time patients are under anaesthesia and thus increases availability of operating rooms. The Army Medical Research and Development Command (USA) has been 3D printing more than 12,000 nasal swabs per day to conduct Coronavirus testing as well as prototyping and testing N95 respirator masks.<sup>19</sup>

**Reduction of Supply Chains.** It is obvious that bringing the factory to TBA can shorten the military supply chains. A company ExOne<sup>20</sup> has been awarded contract by US Department of Defence to create a special military-edition 3D printer capable of binder jet 3D printing more than 20 metal, ceramic and other powder materials

into direct final products or tooling. This will be a 12 m long military grade portable AM unit capable of being deployed on land and sea housed in a container.<sup>21</sup> Australian Military has also developed a similar system. It's use of cold spray technology as an alternative to gasses or lasers makes it ideal for military applications.

**Reduction of Static Inventory.** 'Produce on Demand' 3D printing offers enormous scope to reduce inventory of spares. The entire printable inventory can be held in digital form and printed on demand on a printer held in a unit or subunit or higher levels. For one all plastic parts of a rifle can be held in a pen drive or a computer as a 3D object. It will even be possible to hold Tool Path Code (g-code) files for specific printers and conditions. All then what is required is to load the file onto a 3D printer and the part will be printed and used. Complex printers printing metal parts can be held at the level of a brigade or a division. An officer (not necessarily a 'techie') who can use a CAD software can design custom made parts for custom objects/innovations. It thus reveals incredible opportunities at all levels. Using an CAD software is a matter of interest and can be as simple as handling a word processor depending on one's aptitude. Units carry a stockpile of replacement parts to field, which is an expensive affair both in terms of money and manpower. Furthermore, a large proportion of spares remain unused. Having the ability to 3D print on demand reduces costs and frees up space.

**Reduced Lead Times.** AM can provide capability to design and produce parts with lead times in terms of days rather than months. It can thus respond faster to combat equipment needs at all locations. It can produce parts of aging but still serviceable equipment for which commercially available replacement parts are not available.

**Minimum Order Quantities.** This technology enables the repair and maintenance echelons to acquire the replacement parts on short notice without concern over the minimum order quantities. This issue is particularly challenging for some types of equipment which have a small inventory or fleet sizes but are still in service.

#### **Formal Structures for AM in other Militaries**

AM is already being used in many major militaries particularly USA. In USA, the Joint Defence Manufacturing Council is trying

to synergise AM under a unified strategy to employ it to promote military readiness, cut costs, shorten supply chains, and accelerate innovation. The Pentagon has enunciated an AM strategy which calls for 3D printing to be integrated into the defence industrial base and promoted for use within all the branches. Further, US Marine Corps have established Advanced Manufacturing Operations Cell (AMOC). The AMOC issues policy, certifies and store digital files of 3D-printed parts, and has established a 24/7 help desk to assist the field forces. It captures several technologies and processes, including directed energy deposition and cold spray.<sup>22</sup> The USA Marine Corps Systems Command (MCSC) is providing instructional courses on basic computer-aided design, 3D printing and other technical skills to Marines. The aim is to enable them to produce custom parts on-demand. Yet another USA entity, the Air Force Lifecycle Management Centre (AFLMC)<sup>23</sup> has also found numerous uses of AM for extending life of older aircraft.

### **The Way Ahead**

The Indian Armed Forces should plan induction of AM at all levels down to subunit level. The inexpensive and simpler versions could be issued at the Brigade, unit, and subunit levels which could be FDM, SLA or FFF types. The metal printing SLM types could be procured at the levels of Divisional and Corps Workshops. The Base Workshops should be equipped with heavy duty versions of metal printers. The quantity of these printers should be worked out in due course depending upon the workload. The Technical Group at the Service HQ should monitor the utilisation of these printers and provide technical inputs and designs. These printers are so versatile that the designing of parts can be accomplished at any level other than those which are very complex and require professionals. The 3D printers for field formations (Corps and below) should be field transportable. The larger ones can be vehicle mounted or carried in field containers. DRDO should undertake research on the AM to develop fresh technologies and processes and feed the services.

It would be worthwhile to introduce AM in military education to make all ranks aware of its potential. This education is more important at impressionable stages at pre commissioning levels. The deployment of AM could take the following format in the Army:

LEVEL	TECHNOLOGY	MATERIAL
ARMY	SLS/SLM/DED	METAL
COMMANDS	SLS/SLM	METAL
CORPS	SLS/SLM	METAL
DIVISIONS	SLS/SLM	METAL
BRIGADES/UNITS	SLA/FDM/FFF	PLASTIC/RESIN

**Fig. 2 : Format for Deployment of AM in the Army**

All technologies have lead time, it is about time that we take 3D printing seriously and deploy these systems in near future. In fact, the cost of these systems has reduced drastically it can be inducted at local levels within an overall policy framework. It may not require long, and lengthy bureaucratic process mired in red tape. The onus thus rest upon the armed forces themselves.

### Endnotes

<sup>1</sup> <https://www.arpc.afrc.af.mil/News/Article-Display/Article/1734558/first-metallic-3d-printed-part-installed-on-f-22/>

<sup>2</sup> example at <https://www.prusa3d.com/>

<sup>3</sup> Sintering is a process of converting loose fine particles into a solid object by heat and or pressure without fully melting the particles to melting point.

<sup>4</sup> <https://www.iconbuild.com>

<sup>5</sup> <https://www.popularmechanics.com/military/a33500541/marines-3d-print-rocket-launch-shelter/>

<sup>6</sup> <https://markforged.com>

<sup>7</sup> <https://acquisitiontalk.com/2021/07/acquisition-headlines-7-5-7-11-2021/>

<sup>8</sup> <https://www.afcmc.af.mil/News/Article-Display/Article/2331370/program-office-keeps-c-5m-super-galaxy-fleet-in-flight/>

<sup>9</sup> <https://nationalinterest.org/blog/buzz/army-wants-use-3d-printing-make-titanium-armored-tanks-and-vehicles-163886>

<sup>10</sup> <https://www.sae.org/news/2019/01/the-f-22-raptor-gets-its-first-metallic-3d-printed-part>

<sup>11</sup> <https://www.popularmechanics.com/military/aviation/a33535790/air-force-3d-print-metal-part-turbofan-engine/>

<sup>12</sup> <https://www.asc.com.au/news-media/latest-news/asc-and-partners-to-pioneer-additive-manufacturing-for-submarines/>

<sup>13</sup> <https://www.energy.gov/eere/articles/navy-partnership-goes-new-depths-first-3d-printed-submersible>

<sup>14</sup> [https://www.army.mil/article/202398/us\\_army\\_lab\\_finds\\_plastic\\_bottles\\_other\\_waste\\_products\\_have\\_re\\_use\\_potential\\_for\\_battlefield](https://www.army.mil/article/202398/us_army_lab_finds_plastic_bottles_other_waste_products_have_re_use_potential_for_battlefield)  
[https://www.army.mil/article/202398/us\\_army\\_lab\\_finds\\_plastic\\_bottles\\_other\\_waste\\_products\\_have\\_re\\_use\\_potential\\_for\\_battlefield](https://www.army.mil/article/202398/us_army_lab_finds_plastic_bottles_other_waste_products_have_re_use_potential_for_battlefield)

<sup>15</sup> <https://www.businesswire.com/news/home/20210630005705/en/Historic-U.S.-First-as-ABS-Robert-Allan-Signet-and-USCG-Use-Purely-3D-Process-to-Deliver-Commercial-Vessel>

<sup>16</sup> <https://3dprintingindustry.com/news/uk-defence-agency-plans-to-3d-print-high-explosives-169082/>

<sup>17</sup> <https://www.sciencedirect.com/science/article/pii/S0264127520302951>

<sup>18</sup> [https://www.va.gov/INNOVATIONECOSYSTEM/assets/images/covid-images/3D-Printing-Overview-HIMSS\\_v2.pdf](https://www.va.gov/INNOVATIONECOSYSTEM/assets/images/covid-images/3D-Printing-Overview-HIMSS_v2.pdf)

<sup>19</sup> <https://www.stripes.com/3d-printed-nasal-swabs-keep-military-bases-in-maine-texas-stocked-with-coronavirus-test-supplies-1.647960>

<sup>20</sup> <https://www.exone.com>

<sup>21</sup> <https://www.exone.com/en-US/Resources/news/ExOne-Developing-Portable-3D-Printing-Factory-in-S>

<sup>22</sup> <https://www.marcorsyscom.marines.mil/Staff/Professional-Staff/Advanced-Manufacturing-Operations-Cell/>

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# Effectiveness of Protection Mandates in Current UN Missions: Application of Lessons on Military Force Preparedness

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## Abstract

*This article aims to study some of the lessons that have emerged out of the effectiveness of the Protection of Civilians (POC) mandate and understand how these can be applied to the deployment training of the UN military forces. The study covers key lessons on POC from the Effectiveness of Peace Operations Network (EPON) studies from the Military Force perspective; application of EPON lessons to enhance the effectiveness of the Military on POC and preparation of Indian peacekeepers on POC aspects.*

## Introduction

The concept of UN Peace Operation (UNPO) has always been an adaptable instrument<sup>1</sup>, ever-evolving yet anchored on the three core principles of consent, impartiality and minimum use of force with certain exceptions.<sup>2</sup> The creation of political reconciliation, a stable society and development will always remain the key milestones to lasting peace. In the complex conflict environment, where the armed groups increasingly use their civil population as a tool for fighting, the *Protection of Civilians* (POC) became one of the prime objectives of UN peace operations since its declaration in 1999. Even after over 20 years of its application, protection activities remain fragile and attempt to create balance with the political objectives of a mission (Russo, 2022).<sup>3</sup> POC is built into the mandates of the UN Organisation Stabilisation Mission in the Democratic Republic of Congo (MONUSCO), UN Multidimensional Integrated Stabilisation Mission in the Central African Republic

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(MINUSCA), UN Multidimensional Integrated Stabilisation Mission in Mali (MINUSMA), and UN Mission in the Republic of South Sudan (UNMISS). Effectiveness of Peace Operations Network (EPON)<sup>4</sup> with many multi-lateral research groups, including the USI of India, carried out an extensive study on the effectiveness of UNPO in implementing the POC mandate in these four complex missions. The draft study and its lessons were recently discussed during the EPON week<sup>5</sup> at the UN Headquarters in New York. The lessons of the studies can be applied to train and prepare military and police contingents for protection mandates. Military contingents are trained in a security operations mould, where the use of movement and firepower against a known hostile group remains the prime focus of training and practice. POC requires a different orientation since there are many stakeholders with the same mandate in the field. Collaboration is the key to POC preparation and conduct of UNPOs.

Action for peacekeeping (A4P) agenda<sup>6</sup> given by the UN Secretary-General on 28 March 2018, called on member states, the UN Security Council, host countries, troop and police-contributing countries (T/PCCs), regional partners and financial contributors to renew collective engagement with UNPO, with a renewed commitment to reach for excellence. In March 2021, this was followed up with A4P Plus<sup>7</sup>, as an implementation strategy of the A4P initiative for 2021-2023, which aimed to focus on key priorities to enhance missions' impact. POC remains a key priority in the A4P, and therefore some of the issues concerning POC mandate effectiveness that emerge out of current ongoing EPON studies<sup>8</sup> need to be incorporated to make the UN forces better prepared, even when the member states and the UN attempt to break them out of the 'cycle of insecurity'.<sup>9</sup>

### **Methodology**

The research is based on a systematic analysis of published and presented reports of the EPON, and other peace operations research groups like the International Peace Institute (IPI)<sup>10</sup>, Challenges Forum<sup>11</sup>, USI of India<sup>12</sup>, published UN guidelines and UN Security Council resolutions, and author's interaction with various peace operations' researchers.

### **Importance of POC for a Lasting Peace**

POC Implementing Guidelines for Military Components of United

Nations Peacekeeping Missions were published in February 2015.<sup>13</sup> Since then POC under UNPO has further evolved with new structures, a new policy in November 2019 and a detailed handbook on POC in 2020. POC contributes to peace processes in several ways like providing physical protection, reducing local communal tensions, and lowering rates of death and displacement. When the state is among the perpetrators, POC activities are likely to clash with the state and the peace process (Russo, 2022). Ongoing multidimensional UN missions in Africa have struggled to address the threats posed by violent extremist groups. In Eastern Congo and the CAR, the missions have had to deal with armed groups that often target civilian populations and also the UN peacekeepers.

Kjeksrud (2019)<sup>14</sup> conducted mixed-method research to understand if and how the UN military troops provided POC under imminent physical threat in Africa between 1999 and 2017. The research looked at 200 military protection operations in ten UNPO missions across Africa from 1999 to 2017. The UN troops used force successfully on 76 occasions, while a similar number also resulted in failures. The findings indicated that the UN troops can use force to protect effectively, once the peacekeepers have decided to intervene. The UN Force must be able to analyse perpetrators' motives and modus operandi for attacking civilians and matching threats with timely military responses. Examples quoted in the study were the troops taking part in the Force Intervention Brigade (FIB), supporting the Congolese government troops (FARDC) in defeating the M23. In South Sudan, TCCs took a significant risk to protect civilians in Pibor in the face of the massive mobilisation of hostile groups. The findings indicated that even risk-averse troops can protect civilians from violence under the right conditions and with the right training. POC provides unmatched dividends, not only to the UN Mission but also to the UN as a multilateral institution.

### **Lessons on POC from the Recent EPON Studies<sup>15</sup>**

**Collaboration and Jointness.** All components and various interviewees in UN Multi-dimensional missions in Congo, South Sudan and the Central African Republic were unanimous that there was a need for collaborative efforts on various protection mandates, their interlinkages and cross-component implementation. An important outcome of the discussions was the recommendation

of joint efforts by dedicated protection advisors/focal points within the civilian, military, and police components. When a joint response with various protection mandate actors is undertaken, everyone contributes to a comprehensive plan. The plan will invariably include political engagement at all levels, humanitarian support, physical security, and long-term livelihood establishment. The UN military component of Congo and South Sudan also felt that such a collaboration falls short when viewed from the perspective of rapid deployment of contingents to critical areas or temporary bases. Very few humanitarian or other UN components were found willing to accompany the force to these bases generally due to the non-existent living comforts.

**Early Warning and Information-Sharing.** Members of the humanitarian community of South Sudan and Congo have both good examples and challenges in sharing of information. In South Sudan, information related to the closing of POC sites was not shared during 2020, which added to the tension and mistrust in the delicate relationship among various components. In 2021, this changed and humanitarian counterparts felt confident to interact and seek assistance when faced with a challenge. Further, working in protection actor silos causes frustration on the part of local partners as they are confronted with the same information requests from the different parts of a Mission. Many interviewees pointed out that information sharing is often personality-driven and depends on personal relationships. This critical aspect needs an institutionalised mechanism and must be top driven.

**Sexual Exploitation and Abuse.** Sexual exploitation and abuse (SEA) violates universally recognised international standards and harms the victims.<sup>16</sup> It also undermines the UN's moral authority, trust and reliability to deliver justice and peace to the local population of a host country. The effects are strategic and invariably harm operational functioning. The move to introduce self-risk assessment for the peacekeepers was considered a best practice, as it acts as an early warning for T/PCCs and highlights opportunities to address concerning indicators before any cases take place. The interviewees also identified some of the issues of 'misreporting', especially around the cases of SEA and conflict-related sexual violation (CRSV). This highlighted a lack of understanding and awareness amongst the military component regarding the distinction of each crime.

**Different Organisational Cultures.** This issue has been highlighted in many prior studies and is unavoidable as in March 2022, 122 nations were contributing to 22 UNPO and political missions. Differences are further pronounced among civilian, military and police colleagues, and a lack of understanding or respect thereof are the challenges mentioned by some reports. The same is generally applicable in all missions and is often personality-driven. There is an urgent need to establish a workable UN culture through these missions.

**Building of Community Trust.** This is of utmost importance as the entire effort of a UNPO mission is towards the safety, security and well-being of the local communities. Developing and maintaining trust amongst the local population is extremely crucial for the eventual political reconciliation and building of peace. The Mission's promises on POC must be delivered promptly. This can help in engaging the vulnerable communities and prove to be an asset for the overall functioning of a mission. Any lapse in this promise can put all components at risk.

#### **Applications of Lessons and Preparation of Peacekeepers**

All the lessons point towards a need for training and briefing of peacekeepers before and after their deployment in the field. There are extensive guidelines on the same provided by the Integrated Training Services of UN DPO in the form of Core Pre-deployment Training Materials<sup>17</sup> (CPTM) and Specialised Training Materials<sup>18</sup> (STM). For the civilian staff of the UN, various modules are prepared and delivered in the mission area. The T/PCCs need to focus on pre-deployment and post-deployment training to apply these lessons and create a more cohesive peace operations ecosystem.

**Pre-Deployment Training.** The military contingents do not need any basic training in their primary security-related operational duties. However, they need to be prepared for the new role in the mission area. Pre-deployment training needs to be structured around the three-module 28 lessons of CPTM and STM. There are Reinforcement Training Packages related to a priority cross-cutting thematic area, relevant to a specific category of personnel to be deployed in missions. Leadership Training modules are framed to specifically enhance the knowledge and skills of senior peace

operations leaders. Based on the EPON lessons, requiring training focus, are as follows:

- **Training.** This must include preparation at a physical, conceptual and moral/ethical level. Understanding of shift from conflict resolution to protection roles. Basic understanding of the structure of a UNPO mission, area of operation, mandate analysis, POC policy and ROE awareness.
- **Understanding of the Stakeholders and Collaboration.** Roles and responsibilities including mandates of the humanitarian components must be thoroughly understood by all. All UN components have stakes in a peace process and understanding their roles will increase respect, trust and collaboration. Diversity in UN peacekeeping missions needs to be respected and understood. There should be extensive briefings on the information flow and joint operations centre for not only information but also POC joint planning, joint analysis and joint assessment of implementation. There is a need of mainstreaming the POC mandate amongst all components.
- **Understanding Non-State Actors.** The UN military component may also have to work with regional military groupings, or international military coalitions, to implement a common international strategy for peace. In the African context, these could be the African Union forces or specialised troops, such as the long-range patrols of the British Army in Mali. These requirements have been amply described in the Handbook on UN Multidimensional PKOs.<sup>19</sup> Different participating actors and the scope of multidimensional UNPOs necessitate increased interface between military and non-military components.<sup>20</sup> The UN forces have to operate in an uncertain environment, which may have transnational crime syndicates, neighbouring countries exploiting the rich resources and non-UN actors, like the Wagner Group<sup>21</sup>, assisting the host governments. Non-UN and groups not a party to a peace accord can be the major spoilers in the process. Training must devise strategies to deal with them and also seek guidelines from the Force HQ in a mission area. It is preferred that each mission has a legal document to determine how to interact with these non-state actors,

including detailed Rules of Engagement (RoE) specifically tailor-made for them.

- **Exercises.** An all component training or joint exercise must be attempted before deployment. This should be based on case studies or practical scenarios. This can also be co-opted with training or briefing on Laws of war (IHL), Human Rights law and understanding of SEA/CRSV.
- **Understanding the Role of Specially Designed Structures.** Examples are understanding the Force Intervention Brigade of Congo mandated with offensive operations and various concepts of Rapidly Deployable Battalions based close to Force and Sector Headquarters to respond to POC matters through short-term Static Combat Deployments. Similarly for South Sudan one should understand the preparation for undertaking short and long-range patrols, and establishing temporary or permanent operating bases.

**Post-Deployment Training.** Various lessons and interactions with the missions recommended that training must include the mentoring programme with 'on the job training' being delivered to focal points in the field. Equally, Force and UN police staff could be 'seconded' to other units to learn 'on the job' and enhance relationships. Integrated training on the basic 'five hats' of protection activities (CRSV, SEA, Gender, Child Protection and POC) should be delivered jointly. The creation of roving training resources with civilian experts from across a mission can be done to deliver sessions on their protection mandates. Integrated scenario-based training should be used to enable participants to work through situations in a simulated environment. Mission components should work together to implement evaluation and impact assessments to ensure training is useful and understood.

### **India's Approach to Pre-Induction Preparation**

Indian troops operate in varying conditions, including active hostility or insurgency areas. The battalions are always ready for a full-scale operational role, anti-insurgency or anti-terror operations and aid to civil authorities on requisition by the civil authorities. The current preparation of the Indian contingents for UNPO goes

through the following process:

- Contingents and various support elements for a PKO are nominated by the Government through Army HQ, normally six months in advance. Mission and AOR analysis are done with support from the Ministry of External Affairs (MEA) when required, returning elements of the force, and even in conjunction with the Indian embassy in the host country.
- The Centre for UN Peacekeeping (CUNPK)<sup>22</sup> carries out training of essential trainers, 3 to 4 months in advance. Training includes scenario and case-based briefings. The CUNPK was conceptualized and raised in 2000 to impart quality training to Indian Peacekeepers and those from other countries. It is a nodal agency for UN pre-deployment training in India and conducts tailor-made national and international courses for Indian Armed Forces officers, select personnel from all services, Central Armed Police Forces and officers from friendly foreign countries. The Centre is a joint venture of the MEA, Ministry of Defence (MoD) and the Service Headquarters and serves as a Centre of Excellence in collaboration with the Centre for Land Warfare Studies (CLAWS<sup>23</sup>). To ensure world-class training, the Centre has a pool of serving and senior veterans and subject matter experts with experience in the UN in the military, police and diplomatic sphere. In case of a returning mission, some of the officers and senior NCOs are utilised to train their troops. A thorough understanding of AOR's three-tier approaches to POC is in-built into the training. The three tiers are, Tier I: Protection through dialogue and engagement; Tier II: Provision of physical protection; and Tier III: Establishment of a protective environment.
- India has taken many initiatives to align training with the new age peacekeeping mandates. National Investigation Course with MP-IDSA, UN and CUNPK is the course about POC, serious violations, and SEA. The last course was conducted for the participants from 20 countries. Besides this, a comprehensive POC Course has been going on under CUNPK which includes policies on SEA<sup>24</sup> and CRSV.<sup>25</sup> Contingent Commanders' Course trains operational and tactical command, focussing on mandate interpretation, ROE,

UN SC Resolutions concerning a mission and POC Policy. The training includes a review and understanding of the latest UN policies on SEA.<sup>26</sup>

- Language training for 30 to 40 personnel and all officers put through pre-deployment training at the CUNPK. Considered average upskilling as language expertise requires more time. There is a need to impart more intensive training, which should continue even after deployment.
- USI of India and ICWA have joined hands in conducting joint discussions on the current concepts and practitioners' inputs. During the year 2021, five webinars were conducted by the USI of India<sup>27</sup> in collaboration with the ICWA. These webinars were attended by in-process peacekeepers, senior leaders and in-mission leadership. The themes included Hostage-taking, Effectiveness of UN Peace Operations, POC<sup>28</sup>, Women, Peace & Security, and Leadership Challenges.
- Once deployed, all Indian peacekeepers are expected to establish good relations with the host authorities and the host community and local and international NGOs' representatives in the operating area. Use of liaison officers, community engagement through WHAM and rural help approach through veterinary clinics or undertaking quick impact projects is encouraged.

## **Conclusion**

The UN multidimensional missions in Congo, South Sudan and the Central African Republic are complex, protection focussed and multi-domain dependent. Indian troops, deployed in Congo and South Sudan, have excelled in their understanding of the complexities and worked for the welfare and safety of the local communities. Lessons from these missions have brought out the further need to understand the mandates of other components, work on joint implementation of the protection mandate and share information to remain effective. The whole mission has to work together and no single component can implement the assigned mandate in isolation. Extensive pre-deployment and post-deployment training is the key to preparing our peacekeepers to deliver well in increasingly complex peace operation environments.

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# Post - COVID 19 Pandemic: Analysing India's Response Initiatives including Actions by our Armed Forces

Colonel Bhaskar Gupta<sup>@</sup>

## Abstract

*On 11 March 2020, WHO declared Novel Coronavirus Disease (COVID-19) outbreak as a pandemic and reiterated the call for countries to take immediate actions and scale up response to treat, detect and reduce transmission to save people's lives. This article is about the actions taken by governments across the world to counter infections and contain the virus's spread which led to global supply shocks, especially in manufacturing. In addition, lockdowns and other containment measures were imposed causing widespread business disruption. The article also looks into the steps needed to revive India's economy.*

## Introduction

Two years plus have passed after the World Health Organisation declared COVID-19 a pandemic, but it's still not going away any sooner, though the world is finally coming to terms with the disruptions caused by the virus. A profound and consequential impact has been the pandemic's toll on healthcare systems. And then, there has been the more persistent and reverberating economic toll.

It is now clear that the pandemic has brought the world to the second great economic and financial crisis of 21st century, which is likely to have long-term structural repercussions. In short, it has laid bare the fragilities of the global economic and geopolitical order. The current world order has been substantially altered and this is bound to give rise to a new post-Covid dispensation. In this

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state of flux, space has been created for aspiring and emerging powers to take centre stage and help shape a new world, with a better future for all. As the world's regions were not affected in the same way, the medium and long-term impact varies significantly. This has three major dimensions as under:<sup>1</sup>

- **The Health Crisis.** Densely populated urban areas were hit hardest, but in later 2020 and early 2021, COVID-19 spread towards less dense regions. Also, economically backward regions and deprived neighbourhoods had higher mortality rates.
- **The Economic Crisis.** Regions are also affected differently depending on 'telework-ability', which is compounded by digital divides. Unemployment increased dramatically in many regions, during latter part of 2020, with stark inter-regional differences.
- **Sub-national Finance.** Data for 2020 confirms the negative impact of the health and economic crisis on sub-national govt expenditure and revenue. This is due to significant central/federal govt measures to support local finance, as well as savings in expenditures, and deferrals or cancellations of investment projects. However, considerable uncertainty over the longer term remains. In 2022, and beyond, the impact will depend on continuation and extent of support provided by govt agencies.

Actions by governments across the world to counter infections and contain the virus's spread led to global supply shocks, especially in manufacturing, and lockdowns and other containment measures, causing widespread business disruption. All these initiatives, policy changes and their effects, including actions of Govt of India (GoI) and those by Indian military are analysed in subsequent paras.

### **Post-pandemic Economic Measures by India**

Experts, including from the World Bank had predicted that India would have a V-shaped recovery, but latest IMF data shows 11.5 percent growth for India in FY 2021-22. It's a massive recovery in any terms, after the 23 percent slump in GDP in the first quarter of the pandemic (Apr-Jun 2020). Moody's predicts a 12 percent growth whereas OECD (Organisation for Economic Cooperation

and Development) has estimated it to be 12.6 percent in the same period. GoI has also committed a spend of INR 1.97 lakh crore on production-linked incentives (PLI) and identified more than 10 sectors to be inclusive, which would create job opportunities for the youth.<sup>1</sup> Our Finance Minister had boldly declared the govt's focus is on 'saving lives during the pandemic without bothering about the fiscal deficit', while allocating INR 35,000 crores for vaccination (and more if needed) in the FY21-22 Budget.

**GoI's Relief Measure that Failed.** Announced in May with a headline-grabbing figure of INR 20 lakh crore, India's fiscal stimulus package did not have enough firepower to boost demand. It was evident from different estimates of its actual fiscal cost (which ranged from 0.75 percent to 1.30 percent), that it was nowhere close to the claimed 10 percent (of GDP).<sup>2</sup> In any recessionary sit, money needs to be directly pump-primed into the system, mainly to boost immediate consumption and investment. Boosting immediate economic activities by investing public capital enhances people's purchasing power, which is then spent on consumption, thus boosting demand and instantly augmenting productions to meet that extra demand, thus creating more purchasing power. This cycle goes into the upper spiral and takes the economy out of recession. Even in its October 2020 monetary policy, Govt's stance of relying on increased credit supply, instead of going for an all-out fiscal intervention, was evident.

### **Six Steps to Revive India's Economy<sup>3</sup>**

**Universalise Public Distribution System (PDS) for a Year.** The first fiscal intervention should be in making food available to as many as possible. That can free substantial amounts of purchasing power for other kind of consumptions. With inequalities remaining large within the Indian economy, this pandemic can be an opportunity for redistributive measures. Given the upward movements in the prices of primary articles (mainly food), universal PDS has the capacity to keep the prices down (Figure 1). Along with the government's intent to launch "One Nation, One Ration Card", this can go a long way to revive flagging consumer demand and ensure food security for the majority.

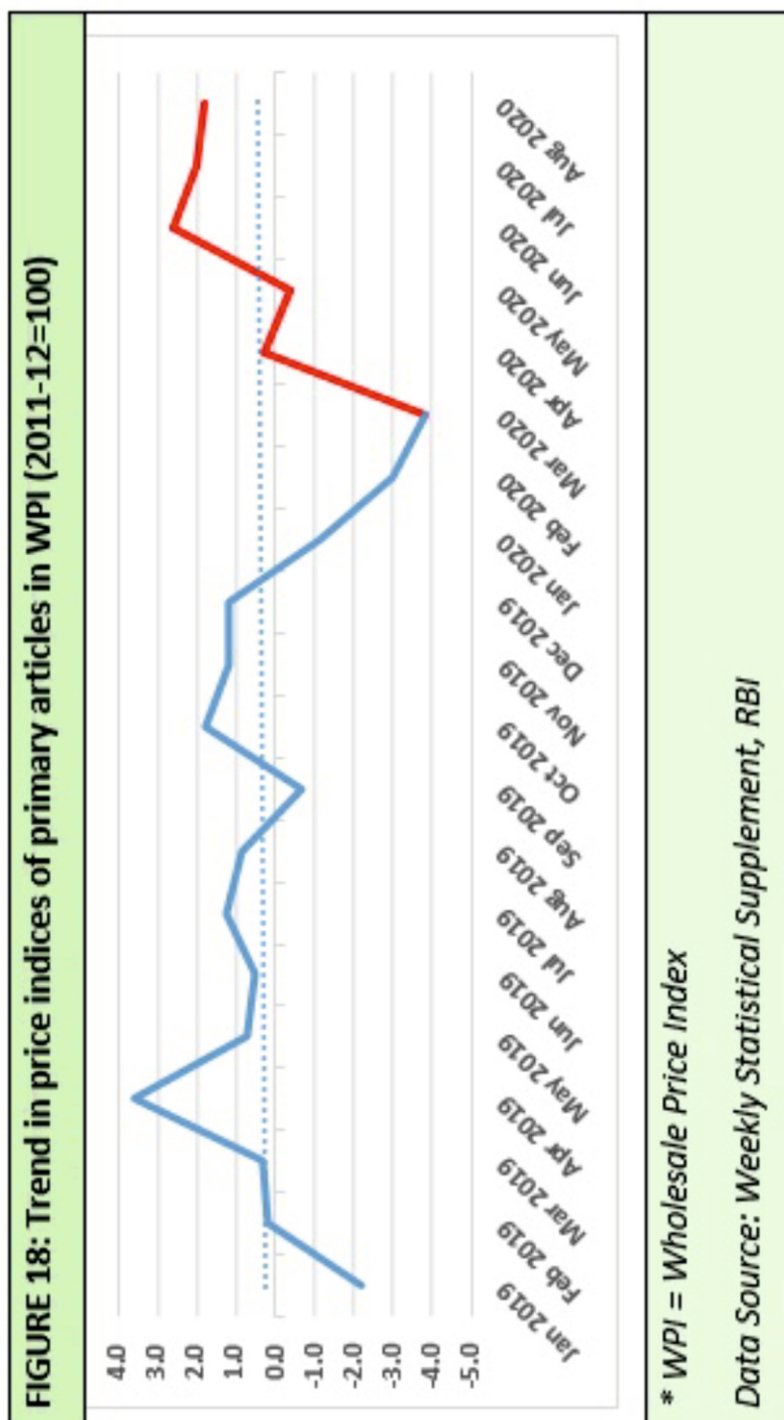


Figure 1

**Expanding Employment Guarantee to Urban Areas.** After the migrant workers' crisis during the lockdown, focus has shifted to reverse migration. There are already reports of workers returning from their homes, where they could not find gainful employment. This scheme has the potential to raise and stabilise urban wages and create urban assets like environment-friendly green public spaces and can also augment existing central government endeavours like smart cities. To start with, around 10-15 non-metro cities can be targeted immediately on a pilot basis, aiming to expand it countrywide in next two years.

**Direct Benefit Transfer (DBT) to Affected Population.** During early 2020, Gol admitted that nearly 90 percent of our workforce is in various informal sectors. There are other estimates projecting the number at 81 percent, while the National Accounts Statistics data pegs it at 52.4 percent. As per World Bank, our lockdown affected 26 crore informal workers. A SBI report estimated income loss of India's 37.3 crore workers during lockdown at INR 4 lakh crore. Hence, Gol's March 2020 relief package of INR 1.7 lakh crore for 80 crore people was inadequate. In August 2020, Centre for Monitoring Indian Economy (CMIE) reported a cumulative 18.9 million job loss among salaried people. In April 2020, around 403 million people were affected, out of which 121 million lost jobs. Hence the only successful mitigation strategy is DBT to informal workers.

**Provide Input Tax Relief to Producers in Select Sectors.** Quick estimates of Index of Industrial Production (IIP) and use-based index for July 2020 reaffirmed the fact that industrial production was in distress. The only large manufacturing segment showing consistent positive growth in May–July 2020 was pharma. The top 10 manufacturing sectors in terms of weightage in the index, totalling close to 63 percent, were mostly still showing double-digit growth contraction, as enumerated in **Table 1 below:**<sup>4</sup>

TABLE 3: Monthly NIC 2-digit sectoral growth rates of industrial production (base: 2011-12)							
NIC 2008	Description	Weights	March 20	April 20	May 20	June 20	July 20
24	Manufacture of basic metals	12.804336	-19.3	-70.7	-40.3	-21.0	-10.5
19	Manufacture of coke and refined petroleum products	11.774919	-1.7	-28.3	-24.5	-13.8	-17.2
20	Manufacture of chemicals and chemical products	7.873036	-21.6	-54.3	-19.2	0.2	-3.5
10	Manufacture of food products	5.302468	-14.9	-22.3	-17.7	-1.6	-4.6
21	Manufacture of pharma, medicinal chemical and botanical products	4.981002	-25.9	-53.8	2.8	34.8	22.0
29	Manufacture of motor vehicles, trailers and semi-trailers	4.857300	-48.9	-99.4	-81.7	-46.1	-31.4
28	Manu. of mach. & equipment	4.765303	-37.6	-91.3	-61.3	-33.4	-19.7
23	Manufacture of other non-metallic mineral products	4.085334	-23.7	-86.6	-27.7	-8.7	-13.8
13	Manufacture of textiles	3.291307	-16.6	-90.8	-68.3	-52.1	-14.8
27	Manufacture of electr. equipment	2.998264	-34.2	-94.5	-70.2	-37.4	-24.7
	Mining	14.372472	-1.3	-26.9	-20.5	-19.6	-13.0
	Manufacturing	77.633210	-22.8	-66.6	-38.4	-16.0	-11.1
	Electricity	7.994318	-8.2	-22.9	-14.9	-10.0	-2.5
	General	100	-18.7	-57.3	-33.9	-15.8	-10.4

**Table 1- Source: Ministry of Statistics and Programme Implementation (MoSPI)**

The problem is that the weightage of pharma in IIP is only a mere 5 percent. Expecting these two sectors to pull up overall industrial production is like expecting roughly 5 people to pull up 95 others. If overall production has to improve, other sectors need to be revived quickly. A possible way through this recessionary trend is to provide input tax concessions. Reducing or abolishing input taxes for some time (say, initially for a year) could have been a starting point. Once some of the initial beneficiary sectors revive themselves, those can be taken out and replaced by others such as machinery & equipment, textiles etc.

**Public Investment in Physical and Social Infrastructure.**

When the economy is suffering from lack of overall demand; it will be futile to expect private investment to come to the rescue. Therefore, public investment — at least for some time — is necessary to crowd in private investment. Infra has thus been a key issue in the inability to attract a sizeable amount of FDI. This crisis time may have created an opportunity to bridge that long-standing gap. There are also expectations to attract manufacturing companies, which are leaving China, towards India. Additionally, it will have a positive influence on future exports. Strengthening and augmenting health infra, urban planning, roads, rural and digital infra will be key drivers in the long run.

**Monetise the Central Fiscal Deficit.** As seen above, fiscal element of Gol's economic package was a fraction of the announced figure. SBI Research has put it at around INR 2 lakh crore or around 1 percent of our GDP. Back in April 2020, noted economists and public-policymakers argued for a direct fiscal stimulus of INR 10 lakh crore or 5 percent of GDP. If SBI's fiscal cost estimate is assumed correct, then INR 8 lakh crore more needs to be provisioned. To raise this amount, three suggestions are outlined below:

- Gol to tap international debt markets as interest rates worldwide have fallen, post COVID.
- NRIs are offered COVID bonds at floating rates, assuming that rates will be at lower levels for some more time. Rupee worsening in the foreign exchange market is indeed a risk but one worth taking at this juncture.
- In the domestic market, there is a larger possibility of mobility of finance because many institutional funds and HNIs may opt for an assured return (guaranteed by Gol) COVID bond — even at a relatively lower rate of interest.
- Mobility of INR 2 trillion each in these three categories of overseas debt market and COVID bonds is possible. Remaining INR 3 trillion can be monetized-borrowed from the RBI at a fixed rate lower than the repo rate (ideally around 3.5 percent) and with longer duration (at least 10-year period). If the economy is to be revived, then a stimulus of this magnitude is necessary.

## **Our Armed Forces — Challenges Faced and Measures Adopted**

**Challenges Faced.** The onset of COVID-19 posed a unique challenge for the Armed Forces (AF), due to the potential for rapid spread of infection amongst troops and their families, hence making them equally vulnerable. However, keeping in view the state of high physical fitness and strict prevention measures like personal hygiene, safe distance protocol, mask etiquettes, controlled movement out of the designated cantonment locations and strict quarantine protocol, the disease was largely been kept in check initially. Another challenge was, 'Force Preservation', amidst an escalated deployment along the northern border with China, post the Galwan incident. Some other functional difficulties faces are summarized below<sup>5</sup>:

- Almost all hospitals had to run a dual set up, the 2-in-1 concept wherein one area of the hospital was earmarked as a COVID-19 hospital and the balance were for management of routine non COVID patients.
- Since these hospitals had limited staff/resources, there were difficulties in establishment of this dual set up, with available manpower for management of emergencies, at times.
- Quarantine/isolation of medical personnel and health care workers resulted in severe shortage of manpower for management of emergencies, at times.
- Initial lapse in promulgation/implementation of advisories leading to confusion. Thus, local guidelines were issued by the administrative authority, which were not always based on scientific data and medical evidence. This resulted in injudicious use of available resources, leading to disparity in resource necessity area vis-a-vis resource utilization areas.

**Corrective Measures Taken.** DGAFMS then issued guidelines on the measures required to contain the spread of infection and for treatment/ management of COVID-19 patients. These were regularly updated, in accordance with those issued by the MoH & FW, ICMR, and WHO etc. Some of the measures were<sup>6</sup> :

- Mandatory quarantine for all persistent cases returning from leave/TD/permanent posting.

- Imparting required target on personal/hand hygiene, social distancing and mask etiquettes.
- Establishment of treatment facilities for all infected personnel and their families in earmarked AF hospitals. Some were also earmarked for treatment of civil population, as part of aid to civil authority.
- Establishment of Covid Care Centres (CCC) at all military stations, for isolation and management of asymptomatic & mildly symptomatic personnel.
- Efficient and timely dispensing of PPEs/other consumables centrally to all CCCs. In addition, under special financial powers, hospitals were able to procure COVID-19 related drugs and consumables on emergent basis.
- Formulation/timely updation of advisories issued by DGAFMS with respect to isolation, quarantine and management, thus standardizing guidelines across all military stations.
- Movement of troops/their families in cantonments was restricted to bare minimum and on emergencies, ensuring essential supplies like food and groceries were made available at door-steps. So, there was minimum exposure, thus preventing spread.
- As a welfare measure, leave of all personnel, who couldn't return due to the country wide lockdown, was regularised.
- Reclassification medical boards, annual and periodical medical examinations held in abeyance were resumed only after the situation was under control.
- As an additional measure, AF established quarantine centers for Indian citizens returning from abroad, besides setting up dedicated COVID treatment centres exclusively for civil population, especially during the second wave. Sardar Patel CCC in New Delhi was an example.
- Armed Forces Medical Service (AFMS) officers posted at Service HQs and lower formations were given emergency financial powers for procurement of medical stores, services, and management of facilities for treatment of Covid affected,

thus augmenting their ability to provide care to the military persons/civil administration, as applicable.

- IA initiated action to procure 13 items that included BIPAP machines, RDT Antigen and PCR test kits, virus transport media with swab, masks, full PPE sets, waste autoclave, multifunctional ICU beds, manual sprayer, ALS ambulances, and O2 concentrators.
- Army HQs established a Covid-19 management cell under the DGOL & SM to oversee assistance to civil administration.
- GoI approved engagement of 400 retired AFMS doctors for 11 months from among those who retired between 2017 and 2019. The remuneration offered — last pay drawn (inclusive specialist pay) minus the pension — was a decent enough incentive.
- MoD order authorized all DGs medical services at all Service HQs to spend up to INR 5 crores. Other med units at lower echelons headed by two-star Officers could spend up to INR 3 crores, and those by one-star officers, up to INR 2 crores. This delegation down the chain of command enhanced the ability of units close to affected areas to respond to the situation quickly. However, when they were approached, (in a big way), by the civil administration to help them in overcoming shortages of vaccine, oxygen, and even hospitalisation facilities, then they had to prioritise.

### **India's Response — Gaps that Remained and Key Recommendations**

It is becoming increasingly clear that infra-assets will have to be sustainable: naturally and organically rooted in the local physical environment, and well aligned with the priorities and concerns of surrounding communities. Advent of technologies like 5G, Internet of Things (IoT), and Machine Learning (ML), Artificial Intelligence (AI), and hybrid cloud will shape future infrastructure. The experience has yielded possibilities for building infrastructure that is leaner (created just for the purpose), cheaper, capable of dynamic preventive maintenance and of multi-functionality, and also more responsive to varying user requirements.

There is also a need, particularly in domains like urban transportation, to integrate various disparate elements, while bringing the user to the foreground. In India's bustling cities, metro-trains, taxis, and buses need to function as part of one seamless system suited to the vagaries of urban commutes. India's struggle to reduce extreme pollution levels necessitates the transition from personal vehicles to public transport for urban commutes.

India's water sector where concerns around scarcity and universal availability, as well as quality and sustainability abound, demands careful action, with practically every drop accounted for and put to optimal use. The consumer also needs to be placed at the centre of India's water ecosystem.

This pandemic has also exposed weaknesses in our public health system, which really is the job of the central govt and its agencies. Hence, to be able to deal with such a catastrophe, we need to build an army of public health personnel to prevent crises during future pandemics. As a nation, we need to do more because simple diarrhoea and childhood pneumonia still kill millions of children in India.

To tackle infectious diseases, we need a solid public health human resource infrastructure, on the lines of IAS or IFS type centralised cadres. Given India's size, we need between nearly 20,000 well trained Public Health Officers (PHOs) to manage our system (USA with 33 crores population has 6,000 as part of US Navy). Every district will need about 10-15 such officers and staff with different skills. They will each need a hierarchy of PHOs, on lines of collector/deputy collectors/revenue officers. This is eminently doable in the next 2-3 years.<sup>7</sup>

At the PHC level (one for every 30,000 people), besides the one MO for clinical services, we should add a PHO for preventive and public health services such as immunization, control of malnutrition/disease, ensuring mosquito control and sanitation etc. Similar pattern can be replicated for urban areas at ward level. They will also supervise the nurses, health supervisors, lab techs, and *Anganwadi* workers at community levels, for implantation of national public health programmes.

In the Covid pandemic we could not even count the number of hospitalisations, and deaths. There were a lot of controversies

on these numbers. WHO suggested solution of Severe Acute Respiratory Illness also did not happen. Contact tracing, testing and isolation also were not happening to the optimal level. All this can be improved if we have a proper public health workforce. All medical doctors are not public health experts, they largely learn medical diagnosis and curative care. Health education and behaviour change in the community need social scientists with a public health target and not doctors or nurses. Thus, a well-trained multidisciplinary public health work force is essential for India to face the next pandemic. The price as a society we have paid (and continue to pay) due to infectious diseases is enormous. Compared to this, the additional cost of such public health workforce is small. India must do this now i.e., create a multi-disciplinary public health work force of international standards.<sup>8</sup>

### **Key Recommendations<sup>9</sup>**

India must maintain the momentum of these laudable initiatives and continue to enhance the robustness and vitality of its economy. At the same time, these and other structural reforms should be aimed at ensuring equitable and inclusive growth. This is critical because the pandemic has exposed and exacerbated existing inequalities and their impact on vulnerable groups. Hence, following six recommendations are made:

- **Modernise the Infrastructure.** GoI has already announced the National Infrastructure Pipeline and National Monetization Plan, to boost infrastructure development. This wide-ranging agenda needs special initiatives across multiple sectors, including reforms to consolidate multiple and disparate labour laws, drafting of the Insolvency and Bankruptcy Code, and banking reforms.
- **Prioritise Economic Expansion and Sustainability.** In order to maintain its trajectory of growth and influence, India must continue to embrace transformational, rather than incremental change to shape an economic policy that supports rapid growth. This will require a continued commitment to wide-ranging and systemic sectoral reforms, with strong measures to restore fiscal balance and strengthening the banking system.
- **Ramp up Health and Education Infrastructure.** COVID-19 has sharply reinforced the importance of a robust primary

health and referral system and the potential of technology-enabled interventions. One such example is of *Armman*, an India-based NGO that leverages technology to create scalable solutions empowering mothers and enabling healthy children. When the pandemic struck, *Armman* was able to quickly adapt its focus to provide over three lakh women and eight lakh health workers with critical information on COVID-19, via their mobile phones. This helped to pre-empt, track, and respond to outbreaks early on, helping to slow down  $R^0$  values and thus hospital admissions. As new surges threaten the world, such examples show that taking advantage of the agility of entrepreneurs (by integrating their responses into mainstream), public and donor-led response efforts increase speed by which the hard-to-reach last mile is covered the quickest. Equally critical is the need to ensure that India's demographic advantage becomes a dividend and that millions of young people entering the workforce every year gain meaningful employment.

- **Treatment and Relief.** While many organisations saw the new wave coming, no-one could foresee its magnitude and cross-cutting nature. It is here that some NGOs could use their extensive networks to rally stakeholders including government and corporate. For example, the Healing Fields Foundation leveraged its existing network of women community health entrepreneurs to lead the COVID-19 response across 5,000 villages in Northern India.

- **Inclusive Vaccine Access Ensuring No One is Left Behind.** After Jan 2021, as the focus of the pandemic response shifted towards vaccine access critical to containing the virus, several NGOs and local government bodies started using their existing expertise and networks to broaden access to vaccines, overcome vaccine hesitancy and build trust with local communities. With vaccines only estimated to reach the most remote areas by 2023, changing this could prove seminal in ending the pandemic. This is particularly important as all levels of govts must anticipate the surges and ensure that logistics and infrastructure is ready, as vaccine deliveries will take time to accelerate. Involving local governments in vaccination campaigns will thus ensure faster and better territorial coverage. One example is sharing dose delivery projections with all stakeholders.

- **Securing Livelihoods: Standing by Those Who Lost Jobs.** Besides being a health crisis, the pandemic has also delivered a hammer blow to livelihoods. Within three weeks of the first lockdown, most of our informal workers had lost their jobs. Sustained attention for these vital support needs is fundamental to 'build back better' and get back to the 17 Sustainable Development Goals. Nothing in history has shown more clearly than this pandemic that we need to rejig our economic, social and governance structures, to 'expect the unexpected'.<sup>10</sup>

## Conclusion

India's future on the world stage is bright.<sup>11</sup> Rays of recovery are beginning to emerge in our economy. As per IMF projections global economy will grow by 3.6 percent in current FY (22-23), while India will see a 8.2 percent growth as per latest estimates. At the same time, the world is seeing exponential growth in digital services and infrastructure, from the adoption of large-scale work-from-home arrangements, to use of cloud services and video-conferencing. All these were achieved within a couple of months, which would have normally taken two-three years. Despite the economic devastation caused by the virus, India's agile response has been commendable, especially as the country rallied to manage a deadly second wave early in 2021. India was the first country to feel the impact of the virulent Delta variant, but quickly swung into action to ensure that as many people as possible were vaccinated. 195 crore doses of the vaccine have already been administered, covering nearly 90 percent of the target population, and counting.

Amid the on-going volatility and change, India has a rare opportunity to undertake several policy changes to not only address the short-term public health challenges but also to become an important axis of power and influence in the post-COVID world. The World Economic Forum stands with India in its efforts to assume new leadership roles and to help propel the world into a better, brighter, and more sustainable future.<sup>12</sup> The key challenge in navigating this transition is to change mind-sets and to bolster capabilities of all stakeholders, so as to create infrastructure that is efficient, resilient, sustainable, and user friendly. The post-COVID-19 age will be defined by radical changes in our lifestyles,

social interactions and economic transactions, as well as in our relationship with the natural world. What we've learnt the hard way is that we must cultivate a deeper understanding of our impact on the planet and be more prudent about breaching nature's delicate boundaries.

### Endnotes

<sup>1</sup> <https://www.investindia.gov.in/production-linked-incentives-schemes-india>

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<sup>9</sup> <https://www.orfonline.org/research/post-pandemic-economic-recovery-seven-priorities/India>

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<sup>11</sup> <https://home.kpmg/in/en/home/insights/2020/12/reimagining-india-post-covid-19.html>

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# Operational Art in Peace Operations: Balancing the Peace Triangle

Dr Ali Ahmed<sup>@</sup>

## Abstract

*The article postulates a 'peace operations' triangle' with peacekeeping, peacemaking and peacebuilding as its three sides. It argues, through a case study of the UN's Abyei Mission, UN Interim Security Force for Abyei (UNISFA), that the three sides of the peace operations' triangle need to be ministered adequately for success of a mission. Through the lifecycle of the UNISFA, it foregrounds observations on the inter-linkages between the three sides. UNISFA's turn from being a mission with a largely military mandate to a multi-faceted mission indicates the significance of the three sides in peace operations. The operational art of peace operations, therefore, lies in arriving at a balance between the three.*

## Introduction

The heuristic on peacekeeping, made famous by Boutros-Boutros Ghali, had four components: peacekeeping, peacemaking, post-conflict peacebuilding and preventive diplomacy.<sup>1</sup> Preventive diplomacy, as the term suggests, is prior to the onset of violence. The other three lines of operation are not sequential and have a degree of overlap.<sup>2</sup> Challenges in peace operations are usually faced when there is imbalance in the attention and resources devoted to these. A peace operation's success depends on a masterly employment of the *tools* respective to each line of operation. As strategy, in general, is an art, so is efficacious employment of peace tools, termed here as the Operational Art of peace operations.

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In this article, a case study of the UN's Abyei Mission is undertaken through the 'peace operations' triangle<sup>3</sup>. The length of the three sides depicting that the salience of the side varies at different junctures in the lifecycle of a Mission. Preventive diplomacy brings about a peace agreement that allows for peacekeeping. The 'peace to keep' is used for peacebuilding, deepening constituencies in favour of peace, that in turn helps with peacemaking involving dealing with 'root causes'. Thus, an interactive relationship can be seen between the three. Slovenly peacemaking aggravates peacekeeping, thereby constricting space for peacebuilding. On the other hand, peacemaking expands the space for peacebuilding, easing the onus on peacekeeping. Operational Art lies in ensuring none of the three sides loses ballast, while the three are energised to situation-specific levels. The aim is a positive, self-reinforcing equilateral triangle.

### **Background to the Abyei Mission**

Abyei is a territorial dispute between Sudan and South Sudan,<sup>4</sup> a left over from the Comprehensive Peace Agreement (CPA) period.<sup>5</sup> Along with the Two Areas — Kordofan and Blue Nile — Abyei remained an outstanding border dispute issue, along their 2100 km long border.<sup>6</sup> The UN Interim Security Force for Abyei (UNISFA) was inserted as a military mission to prevent the territorial dispute from becoming a thorn in the relationship between the two new neighbours.<sup>7</sup> UNISFA acquired another significant dimension: that of border monitoring and verification.<sup>8</sup> The expanded mandate that brought about the Joint Border Verification and Monitoring Mechanism (JBVMM)<sup>9</sup> assumed significance with the two States indulging in a brief border war in early 2012 over sharing of oil proceeds.<sup>10</sup>

The mission turned out not only the most remote one, but also unique in having a single troop contributing country (TCC), Ethiopia. There is a division of labour between the UN and the regional organizations — the African Union (AU) and the Inter-Governmental Authority for Development (IGAD) — with the latter two in the lead on peacemaking,<sup>11</sup> while the UN did peacekeeping. Peacebuilding in the form of humanitarian relief, reconstruction and support of refugee returns was the realm of respective UN Country Teams (UNCT). UNISFA, not being an integrated mission, limited its activity to provision of security for humanitarian actors

and lobbying the UNCT in both capitals to pay attention to Abyei's needs.

### **Lifecycle of UNISFA**

The intimate interplay between the triangle's sides can be seen over the lifecycle of the UNISFA.<sup>12</sup> In light of the border war outbreak in early 2012, the AU turned its attention through the AU High Level Panel (AUHIP)<sup>13</sup> to tidying up the CPA period leftovers. It put forward proposals on Abyei in September 2012<sup>14</sup> and an implementation matrix with a timeline in March 2013.<sup>15</sup>

Peacemaking in Abyei was through the implementation of June 2011 Abyei Agreement that had requested the Mission deployment.<sup>16</sup> The Agreement formed the basis of UNISFA mandate. Talks proceeded for setting up an interim joint administration over the disputed area, reporting to a joint oversight committee (AJOC) between the two sides. However, a debilitating setback occurred when in May 2013, the paramount chief of the Ngok Dinka community was assassinated by a Misseriya youth.<sup>17</sup>

Hardening of the Ngok Dinka position, led to a unilateral referendum by the Ngok Dinka on Abyei's status in October 2013. The referendum under AU auspices had been held up with disagreement over the definition of a 'resident'. The Misseriya are a migrant community that is present in Abyei Area only during the dry season for cattle grazing. On the other hand, the Ngok Dinka is a settled community, mostly residing in the southern part of Abyei Area.<sup>18</sup> In the event, the unilateral October 2013 referendum was not recognized by either South Sudan or the AU.<sup>19</sup>

Resulting insecurity at ground level held up local inter-community peacemaking and setback peacebuilding effort on part of UN Agencies, Funds and Programs (AFP). At the local level in Abyei, the Mission resorted temporarily to a 'zone of separation', wherein the Misseriya herds were not allowed to cross into settled Ngok Dinka areas for pasture. An intercommunity peace committee was formed in 2016 to dialogue on resumption of relations. This UNISFA supported the initiative for setting up of a joint market at Amiet. The Abyei common market became an economic hub, with a cascading effect on intercommunity relations as commercial stakeholders acquired a stake in peace. Equally, spoilers were active, periodically disrupting the peace effort with violence directed

at the common market. UNISFA used troops to secure the market, but also bid for formed police units for the task.<sup>20</sup>

By end 2013, South Sudan was in the midst of a deadly civil war.<sup>21</sup> This held up the political process at the national level. The period witnessed UNISFA slowly expanding its presence for border monitoring to a four point deployment on both sides at sector level, and, by 2018, also at team site level within a 20 km broad Safe Demilitarised Border Zone (SDBZ). The two sides promised to demilitarise the zone in anticipation of AU-coordinated demarcation activity, logistically supported by JBVMM.<sup>22</sup>

There was an interesting tug-of-war of sorts between Sudan that only wanted a military predominant mission, while the Mission attempted to expand its scope of activity as per best practices elsewhere in integrated missions. Security Council Resolutions added facets, such as human rights, women and child protection, to the UNISFA mandate. Sudan — the host state — being weak and internally distracted, asserted its sovereignty through being difficult with the Mission on issues as visas and transit of logistics.

Peacebuilding progress was reflected in the return of refugees and recovery activity. However, the divided responsibility between the two UNCTs, distracted from a joint effort. There was a sense of alienation in northern Abyei among the Misseriya, since Khartoum-based AFPs were thinly represented in Abyei.<sup>23</sup> The AFPs argued that the Misseriya were not as much conflict-affected as poverty-struck, precluding equivalence between the two communities.

In the interim, national level peacemaking under IGAD auspices concentrated on the fallout of the South Sudan civil war,<sup>24</sup> a proxy war of sorts between Sudan and South Sudan. The two sides were agreeable to disengaging from their proxy war and even went so far as to not only rein in respective proxies but bring them to the table for settlement with the opposite capital. By 2018, insurgencies in both sides ceased, brightening prospects that the two could now discuss Abyei and the border issue.

### **On the Cusp of an Exit Strategy**

Even as South Sudan embarked on implementing the Revitalized Agreement (R-ARCSS) signed on 12 September 2018 in Addis Ababa, the situation in Sudan unravelled. A civilian uprising

unseated Omar al Bashir in April 2019. However, the military continued with its peacemaking — with South Sudanese assistance — with Sudanese rebels in Darfur and Two Areas.<sup>25</sup> On the other side, the South Sudanese civil war protagonist, Riek Machar, re-joined the government in South Sudan in February 2020.<sup>26</sup> These political developments put in place the political atmospherics necessary for settlement.<sup>27</sup>

However, peace at the local level proved elusive. The Ngok Dinka worried that with inter-capital bonhomie might see their cause sold down-river. They sought to be more hardline. In turn, Sudanese followed up by putting in a unilateral local administration in place.<sup>28</sup> The two local administrations displaced the traditional chiefs, on whose back the local peace process was run, to a subordinate role. At the local level, the Ngok Dinka resiled from the local level peace process. A particularly gruesome incident in January 2020 had left some 35 Dinka dead.<sup>29</sup> The annual Misseriya migration was held up. Fallout has been in a *de-facto* separation of the north from southern Abyei. This irks the Ngok Dinka who emphasise the *de-jure* borders of Abyei, arrived at under Permanent Court of Arbitration award during the CPA period.<sup>30</sup>

The mechanism AJOC, that was to oversee the joint administration as per the June 2011 Agreement, went into a limbo. The last time the AJOC met was at Addis Ababa in November 2017, when the AU facilitator last exerted his political role. At the time the chieftains of both sides also met.<sup>31</sup> The Ngok Dinka viewed a joint local administration as Khartoum's way to reassert its sway over the area. They want a time bound joint administration charged with holding a referendum. The Misseriya want the joint local administration to restore sway of Sudan over southern Abyei Area.

The Mission brought the two sides to dialogue again in Abyei in 2020.<sup>32</sup> Peacemaking involves inclusivity, but this brings the problem of too many voices at the table and conflicting agendas. The national authorities like to play the lower levels against each other, sometimes using plausibly-deniable violence through non-state armed groups. This aggravates the protection of civilians (POC) task. Insecurity keeps peacebuilding from moving from humanitarian recovery to the development stage with donors shying away. Counter-intuitively, the Mission's peacekeeping success served to setback peacemaking at the national level, since the

two sides were each distracted with other more compelling crises. Peacebuilding in terms of reconciliation, therefore, got held up at the ground level, subject as the two communities are, to cues from the national level. Reviving the grassroots peace process has been the Mission's priority, which has only recently borne fruit. The Mission brought the two together for three conferences over 2020, to little avail. An innovation was in the Mission taking their representatives to a peace conference in Northern Bahr el Gazal State of South Sudan in 2021.<sup>33</sup> This was followed up by another peace conference in Entebbe in May 2022.<sup>34</sup>

The competing demands on the transitional administrations in both capitals, and bouts of instability such as most recently in Sudan,<sup>35</sup> make the Abyei issue recede further from national priorities. The UN is thus left with a lack of peacemaking to complement peacekeeping. This put paid to an exit strategy, eating up limited UN resources.

Lack of an exit strategy leads to risk from unforeseen events. The Sudanese-Ethiopian relations soured over a border issue in wake of outbreak of the Ethiopian civil war.<sup>36</sup> Sudan asked for a changeover from the single TCC format.<sup>37</sup> India has reportedly volunteered one battalion.<sup>38</sup> Thus, the Mission is in midst of transition, opening up space to spoilers.<sup>39</sup> At the local level, such risks are reflected in the spate of intra-Dinka violence with its unexpected onset in southern Abyei, between the Ngok Dinka and the Twic Dinka, from Twic County, Warrap State, South Sudan, to the south.<sup>40</sup>

With improved relations, prospects of advance on vexed issues such as the border, stand enhanced. In anticipation, local border communities have become more assertive, worried that their traditional homelands will be rent asunder by modern-day borders. The local communities evicted the JBVMM from three sites in the SDBZ and a sector headquarters in 2021.<sup>41</sup> The two defence ministers meet periodically in a Joint Security Committee (JSC) to resolve such matters. The JSC could use the improved relations to put confidence building measures in place on the common border as per the security agreements of 2012. Whereas a border war has not recurred, proxy war has occurred across the SDBZ. The JBVMM can be enlarged to assist with border management, pending territorial resolution. The Abyei issue also

awaits joint attention.<sup>42</sup> Abyei is part of the basket of border problems, numbering 10 sites.<sup>43</sup> Therefore, it will be part of the give-and-take of border negotiations. The Mission may therefore have to craft a pragmatic exit strategy with a time horizon into mid-decade, taking on board the political compulsions of the two sides.<sup>44</sup>

### **Conclusion — From a Scalene to an Equilateral Triangle**

As seen from this case study on Abyei, each of the sides — peacekeeping, peacemaking and peacebuilding — is significant on its own count, as also the three together are mutually reinforcing. Operational Art is to get to a successful closure through synergy between the three. To be sure, there would be periods of predominance of one: unless security is provisioned by peacekeeping, peacebuilding cannot proceed; peacemaking opens up space for peacekeeping; and bottom-up peacebuilding and national level peacemaking are intertwined. Strategizing for a peace operation can use the visualization of an equilateral triangle as guide for operational planning and decisions.

Here Abyei has served as locale for application of this model of Operational Art. The Mission has been hobbled by outsourcing of peacemaking to the regional organizations. Its local level peacemaking suffered since the two communities adapted their stances to suit the position of the two national capitals. Constrained by an outdated June 2011 Agreement, the Mission can facilitate peacemaking, rather than take on mediator role. This deficit in peacemaking places a premium on peacekeeping. While a single TCC model has its advantages, particularly in a mid-sized mission, the regional political flux led to substitution by a multi-national force. Peacekeeping is thus back to square one with the resulting loss in institutional memory and preoccupation with transition logistics, the latter being difficult at the best of times in a UN setting, made worse in Abyei's case as it's the most remote mission in the world besides being only helicopter supported.

Given the vicissitudes of peacekeeping, peacebuilding faces the challenge of resource mobilization. The new Mission in Sudan, the UN Integrated Transition Assistance Mission in Sudan (UNITAMS),<sup>45</sup> which is an integrated Mission, can oversee AFP activity in northern Abyei, easing Misseriya concerns. However, it

is challenged by the scope of needs, stretching as they are from the newly opened up Two Areas and Darfur, to refugees from the Ethiopian civil war.<sup>46</sup> The Abyei Mission is poised for continuing tension between the three sides of the peace operations' triangle, balancing which should keep the Mission leadership, the Secretariat and the Security Council engaged out to the middle term. Once the two States have had their respective UN-supported democratic elections, UNISFA may return to center stage. It would have to persist with enlightened conflict management in the interim.

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# Jai Narain: The Legacy of the Unit Bania and Canteen Contractor System

Lieutenant General Ghanshyam Singh Katoch (Retd)<sup>@</sup>

## Abstract

*'Bania' meaning 'trader' is a Hindi term which over a period of time is not used positively as it progressively was used to describe shrewd or miserly traders. In the Indian army it has been used since British Indian times with a positive and functional connotation. This article is about the legacy of one such Bania and about the contractor system in past and present armies. This system has proved its worth and therefore survives. In an era where contracting out provisioning of certain items and services to the soldiers for their housekeeping and welfare needs is considered an economical way of functioning, this system requires to be strengthened.*

## Prologue

An important member of the units of the British Indian Army was the 'Unit Bania'. He ran what was the Unit Wet Canteen. Post 1947, though, the institute continues in the Indian Army it is not as robust as in yore. While the old term 'Unit Bania' survives in colloquial, formally he is called the 'Unit Wet Canteen Contractor'. This terminology differentiates it from the 'Unit CSD Canteen<sup>1</sup>', which is a self-financing, not for profit attached office of the Ministry of Defence (MoD) set up in 1948. Managed by a board of senior MoD/military officials it aims to provide 'easy access to quality products of daily use, at prices less than market rates' to soldiers, ex-servicemen and their families.<sup>2</sup>

The 'Unit Bania' predates the Unit CSD by a few centuries. Earlier when there were no banks in far flung areas, the Unit

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Bania was the one who cashed cheques for officers, gave loans to soldiers (invariably without interest), sold items of personal daily use like soaps, clothing, prepared tea and savouries, especially *pakora* and *samosas* (forms of fritters) and sweets like the *Jalebies* and *Gulab Jamun*, provided tailoring services and contributed to and was part of unit welfare activities. My own unit Bania, Mr Subhash Agarwal, was from a long tradition of Banias. I had maintained social relations with him from the time I was commissioned in 1977, into the Second Battalion of the Jammu and Kashmir rifles, till date. In late 2020, I visited him as he was unwell having recovered from a bout of Covid. While talking about his life and institution he brought out a campaign medal awarded to his father. I was intrigued to see that it was a proper medal inscribed as is awarded to a soldier. On its rim was the inscription (as it is on all genuine medals) “Bania Jai Narain, 8 Mtn Bty”. Its clasp stated that it was for the 1930-31 North West Frontier operations.

Sadly, Mr Subhash Agarwal passed away in April 2021 during the devastating second wave of Covid 19. To honour his memory and because I was also intrigued with the medal — medals are not bestowed upon civilian unit contractors at present — I have in this article researched the campaign that Bania Jai Narain took part in and also the institution of the Unit Bania. This article is in two formats. In italics are the historically correct events as seen by Jai Narain. In plain font is a brief study of the unique institution of the Unit Bania.

### **The Unit Bania System**

A camp follower to provide those services to soldiers in the field which were not available or provided by the government is an essential prerequisite for any army. The Regimental Sutler of the US Army of yore or the Post Exchange (PX) or Commissary of the present US Military serve the same function. So does the Navy, Army & Air Force Institution (NAAFI) in the British Army. The erstwhile Sutler system in the US Army was practically the Indian Army ‘Unit Bania System’. The PX and NAAFI are an amalgamation of the Unit Canteen Contractor and Canteen Stores Department (CSD) of the Indian Military.

### Why 'Banias'?

The word Bania is derived from the Sanskrit *vanij*, meaning 'a merchant'. The term is widely used to identify members of the traditional mercantile or business castes of India. Thus, Banias are bankers, moneylenders, traders, and shopkeepers. Though some members of the Bania castes are cultivators, more Banias than any other caste follow their traditional caste occupation. The Aggarwals and Oswals are prominent Bania castes of northern India.<sup>3</sup> There is considerable speculation as to why the trading ethic has been so important in the western part of the Indian subcontinent. Some scholars feel that the harsh desert environment of Rajasthan forced much of the population to turn to non-agricultural occupations to support themselves. Others have suggested that proximity to the overland and maritime trade routes with the Middle East have played a role in this emphasis on trade and commercial activities. The latter explanation seems to be more correct.

The term Bania is often used in a negative sense to mean someone who is greedy, who exploits customers, who resorts to shady deals, and who will do anything to make a profit. The reason for this image is because before the era of the modern banking system, the Bania was the principal moneylender in the villages. Uneducated and poor peasants who borrowed money at high rates of interest to grow their crops, for dowry, to repair their huts, dig wells or for food during famines — many times could not pay off their loans. They eventually ended up losing their land, because of which the Bania was seen as the villain. Early Bollywood movies contributed in no small measure to this image, portraying the village Bania as a Shylock, in the same manner as the village landlord (zamindar) was painted as the lecherous villain. The fact is that as bankers, moneylenders, traders, and businesspeople, Banias have played an essential role in the functioning of India's economy. Today, many of the country's important industrialists and capitalists come from the Bania castes.

**Banias and Sutlers.** In the Indian Army, the Unit Bania was held in high esteem as is evident from the fact that they were also awarded a campaign medal. The US Sutler system was the closest to the Unit Bania as would be evident to any Indian Army person

from the description of the Regimental Sutler given below<sup>4</sup>:

“Sutlers were usually selected by the unit officers, (a unit board of officers appoints one in the IA and also regulates his rates). A sutler usually had a business partner who purchased goods and handled other logistical details [...] (the unit Bania may handle these tasks himself or employ others). The scarcity of currency resulted in two things, soldiers bought goods on credit, signing promissory notes authorising the sutler to collect the amount owed at the next pay day (same used to happen earlier in the Indian unit Bania system — with the present proliferation of ATMs and mobile banking this has now reduced considerably).<sup>5</sup>

Sutlers and their employees were civilians subject to military discipline.<sup>6</sup> In the Indian case, Para 2 (1) (j) of the Indian Army act makes the act applicable to the Unit Bania or his employees in war or on an active border or overseas.<sup>7</sup>

### **Why a ‘Wet’ Canteen?**

In the early mass militaries world over, alcohol imbibing remained one of the most common social exchanges for the rank and file. With low educational levels, terrible housing, few recreational venues, and abominable food, it is no wonder that many soldiers turned to the bottle.<sup>8</sup> Also communal drinking has always brought individuals together. The soldiers enjoyed their beer, and they enjoyed drinking in the company of one another. However, over a period of time, the British and US armies realised that if internal drinking arrangements were not made, soldiers would frequent bars of ill repute near their posts and cantonments where they could consume spurious liquor, or very hard liquor, and would also frequent prostitutes who operated around or within such bars. In the process they could be cheated and there would also be many instances of breakdown of discipline as well as disorderly conduct. It was decided at some stage that in addition to the ‘dry canteens’ which stocked items of daily use for soldiers, there would be a ‘wet canteen’ where off duty soldiers could drink soft and hard beverages, the harder ones generally being restricted to beer only (in the US Sutler system till it existed, both dry and wet canteens were run by the Sutler).

The Wet Canteens became a sort of enlisted men's pub/restaurant/club. In the British and Indian armies, officers had their own officers' messes and they were forbidden or discouraged from going to the wet canteen unless the men had invited a platoon or company commander for an occasion. Attitudes to public drinking in the Indian society were different from those of the British society. Resultantly, the Unit Wet Canteens in the Indian Army did not have the 'pub' element and remained as mentioned earlier — more of tea and savouries restaurants. During office hours, they also supplied the *Samosas* and *Jalebies* for unit officers in their offices during tea breaks or when a guest dropped in to the office.

#### **8 Mountain Battery (8 Mtn Bty) in the North West Frontier Province (NWFP)**

*From the 1920s, the Indian independence movement was characterised by Congress' adoption of Gandhi's policy of non-violence and civil disobedience. The movement was in constant ideological evolution. Essentially anti-colonial, it was supplemented by visions of independence and economic development with a secular, democratic, republican, and civil-libertarian political structure. I hailed from Neemuchana village in present Bansur Tehsil of district Alwar, Rajasthan.<sup>9</sup> Alwar was a princely state. It was lesser affected by the independence movement and, hence, traders from princely states were more likely to be selected for running the unit canteen service in British Indian Army units.*

*Sometime in the beginning of the 19<sup>th</sup> century, my father moved to the town of Alwar, which was also the capital of our state. He started off as a small trader and also worked for established contractors in the army. When two units of the Alwar state forces, the Mangal Lancers and the Jey Paltan, fought in the Great War as part of the British forces in the Middle East, my father had gone along with one of these units as a camp follower and, later, on return took contracts in some British Indian Army units. I learnt the job under my father and later was able to bid for and become a canteen contractor with a British Indian Artillery unit, the 8 Mtn Bty (Lahore) in 1925. The Bty had been deployed in the NWFP for quite some time since the Third Afghan War in 1919 for which it was given the Battle Honour "Afghanistan 1919".<sup>10</sup>*

*As stated earlier, in the 20s the Indian independence movement affected every part of British India. In the NWFP it made little headway until 1929 when a landowner in Charsadda — Khan Abdul Gaffar Khan — organised a Frontier Youth League with the objective of obtaining independence. His followers were known as 'Red Shirts' after the red uniforms that they wore. A serious outbreak of rioting occurred in Peshawar city on 23 April 1930. However, deployment of the army brought back normalcy after about 2 to 3 weeks. The unrest continued till December 1930. During this period, the Afridis, who had come in the area, did not want to miss an opportunity of taking advantage of a disturbed situation. Use of the army and aircraft of the RAF broke them up wherever they concentrated their lashkars<sup>11</sup>. It was fascinating for me to see the Westland Wapiti aircraft landing and taking off from the airfield at Peshawar whenever I went to Peshawar bazaar to replenish the Wet Canteen supplies.*

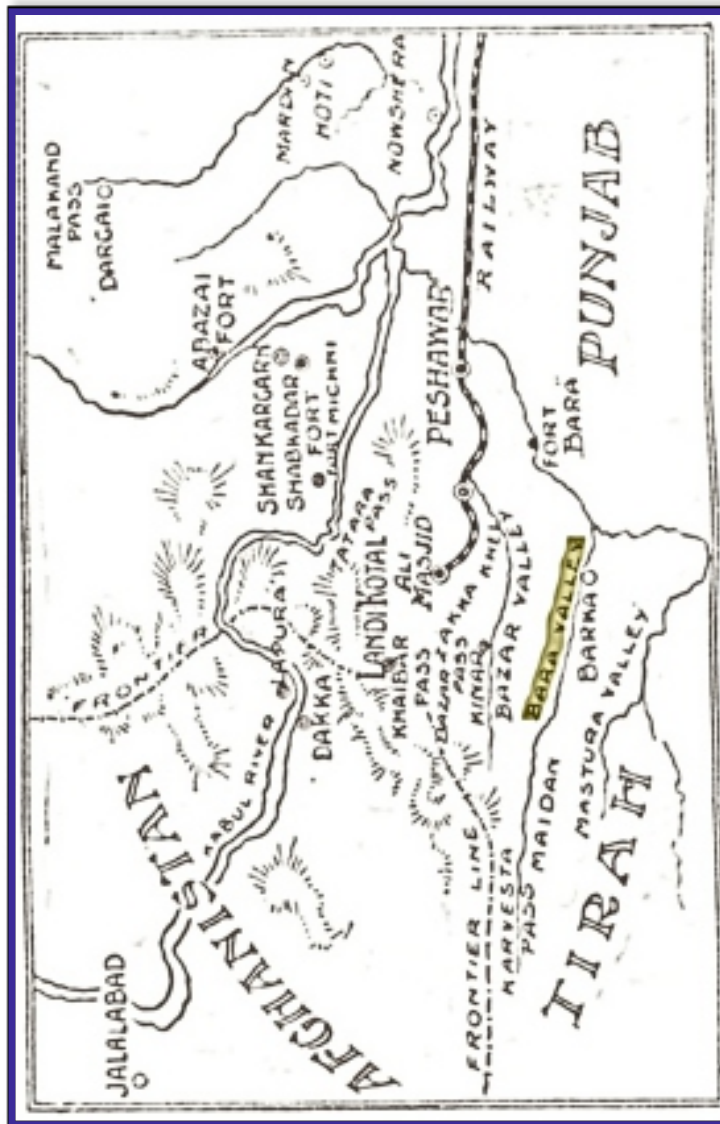
*A more serious operation took place in August 1930 when a lashkar, about 3000 strong, carrying revolutionary standards instead of tribal flags<sup>13</sup> gathered in the Bara Valley with an intention of attacking Peshawar on the 7<sup>th</sup> or 8<sup>th</sup>. To counter them, the British had two brigade sized forces, the Naushera Column (three battalions and a mountain battery) and Fordham's Force (three battalions and the 8<sup>th</sup> (Lahore) Mountain Battery). By this time, I was the unit Bania with the 8<sup>th</sup> (Lahore) Battery.<sup>14</sup> The battery Commanding Officer (CO) was Major GC Meredith, DSO.<sup>15</sup> I moved along with the 8<sup>th</sup> Mtn Bty to the Bara Valley, NWFP and set up my canteen. The weather had become pleasant by Indian standards but water was a problem and had to be brought in from the Bara River or some local wells. There was little opposition but the battery was out every day covering the frequent recces in force out of camps and then the withdrawals, by leapfrogging sections of guns.*

*As time passed, the Kohat garrison was increased by a battalion and the fourth Hazara battery from Abbottabad. Although the Afridi lashkar supporting the agitators disappeared over the next few weeks, the government decided to take over the Khajuri and Aka-Khel plains to the North and South of the Bara River. During October, a camp at Miri-Khel<sup>16</sup> was occupied by the 9<sup>th</sup> (Jhansi) Infantry Brigade with 23<sup>rd</sup> Mountain Brigade. The 2<sup>nd</sup> Infantry Brigade and Nowshera Brigades also reached in*



**RAF Westland Wapiti aircraft in the NWFP12**

(Courtesy IWM from <https://www.iwm.org.uk/collections/item/object/205042659>)



The Bara Valley NWFP

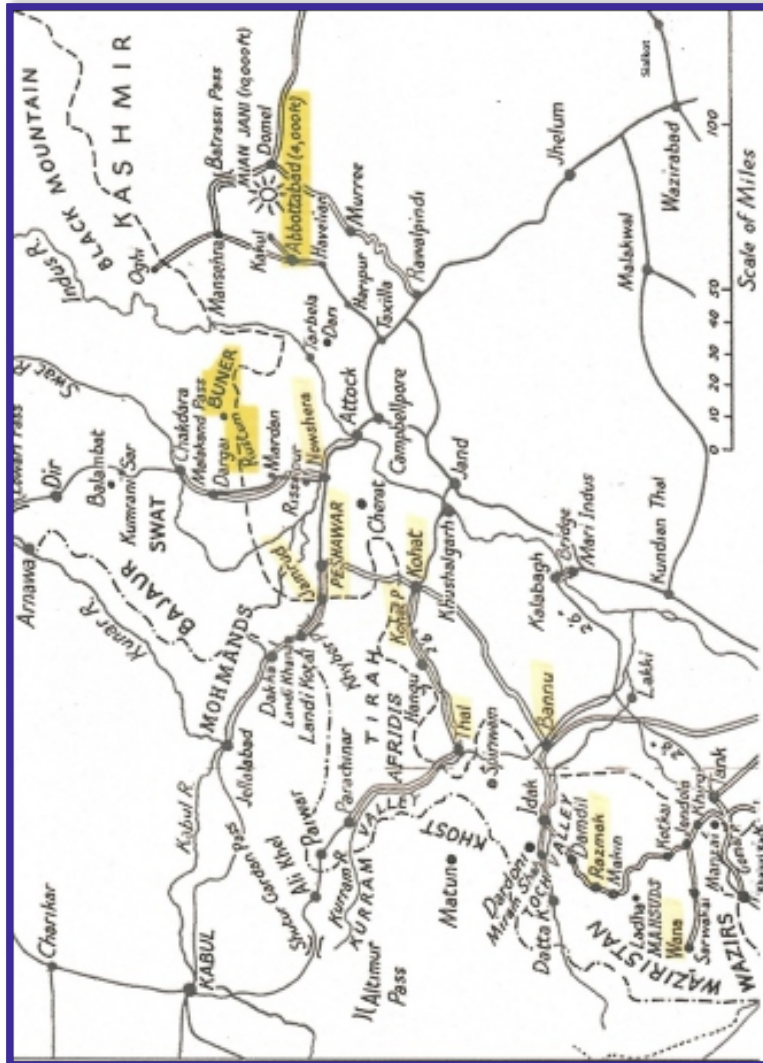
(Map from <https://www.longlongtrail.co.uk/army/other-aspects-of-order-of-battle/british-army-units-stationed-in-india-in-july-1914/>)

*November, making it a Division plus force with four batteries plus (16<sup>th</sup> Mountain, 17<sup>th</sup> Light, 58<sup>th</sup> Field and 8<sup>th</sup> (Lahore) Mountain) and a section (Troop) of 6-inch howitzers of 15<sup>th</sup> Medium Battery. In my spare time or while supplying food and other items to the troops, I learnt military and artillery terms and could understand their tactical moves. The batteries developed a high standard of snap shooting; all the batteries acquired the habit of dropping a round of gunfire on the target without delay and the OP personal became very efficient at engaging fleeting targets. Whenever the infantry went out, the battery would deploy in selected positions to cover their area domination activities and then withdrawal back to the camp. The roads to Kohat and Jamrud<sup>17</sup> at the Khyber Pass, were also covered by the artillery.*

*We moved to Miri Khel in November 1930. The 3000 strong lashkar was still in the hills around and would frequently snipe at our patrols and road making parties. December was spent in road-making, recce, and showing the flag all over the Khajuri and Akka Khel plains. Though the weather was pleasant now, the troops were nevertheless exhausted with the frequent movement. Whenever they came back, they would wash and change, and reach my canteen. I had placed straw mats for them to sit and partake of sweet tea, savouries and assorted sweets as also a few charpoys to stretch their legs. I also had set up hookahs and sold sweet tobacco for the men to relax in the evenings.*

*The army tactics which were tried out in June against the Afridi lashkars did not work this time and the Lashkar closed up to Peshawar from several directions. A guard of 4/11<sup>th</sup> Sikh Regiment held them off until the arrival of armoured cars and infantry on which the lashkar dispersed but remained in the vicinity in scattered parties. The 8<sup>th</sup> (Lahore) battery with its 2.75-inch guns (it had not yet converted to 3.7-inch howitzers) opened up with shrapnel but they did not have any satisfactory targets.<sup>18</sup> Nevertheless, they did induce caution and demoralised the tribals.*

*On 01 April 1932, the NWFP got the status of a province with a legislative assembly and the troubles died down. A bar "North-West Frontier 1930-31" was added to the India General Service medal, and I too received a medal six months after we got back to Bannu. 8<sup>th</sup> Mtn Bty remained on the Western border till 1944, moving about in stations like Kohat, Razmak, Thal, Bannu,*



## Area of Deployment 8 Mtn Bty 1930- 1947

(Map From <https://gillww1.files.wordpress.com/2012/09/sketch-map-north-west-frontier.jpg>)

*and Wana. In 1940, 2<sup>nd</sup> Jammu & Kashmir Rifles (Bodyguard) was requisitioned by the British for the NWFP and arrived at Wana in South Waziristan. During this time, I came in contact with the CO Lt Col Abdul Hamid Khan. The state unit did not have a Unit Wet Canteen and the CO asked me to run their canteen. Thus started my association with the J&K Regiment. I did the same for 7<sup>th</sup> J&K Regiment at Bannu in 1944. Unfortunately, due to some untoward incidents of fratricide, the unit was moved out and subsequently disbanded<sup>19</sup> (The unit was re-raised in 1946, and a few years later, I was very happy when my son Subhash was able to get back the contract for this battalion).*

*In 1944, a start had been made to form one-class batteries. This was a simple exercise in units with more or less equal personal of different class/religion. Maybe this was a precursor to partition or it was because of administrative convenience to simplify eating habits, especially of meat. 8 Mtn Bty was converted to a pure Punjabi Mussalman battery. It is around this time that I left with some regret because I had spent such a long time in this unit. However, I did not cease being the canteen contractor as I managed the canteen with Muslim Meo employees from Mewat till the battery went to Pakistan on partition. The batteries were now being amalgamated into Regiments. At this time, I was also expanding and could not personally be managing the canteen. Over a course of time, my son Subhash expanded my canteen network to 2, 6, 7, 9 and 15 JAK Rifles and 3 Rashtriya Rifles and 160 Infantry Battalion (TA) — both also JAK RIF units. I had some other units 10, <sup>20</sup> and 13 Sikh Regiments, 15 Maratha LI, and 175 Engineers (TA).*

*8<sup>th</sup> Mtn Bty (Lahore) went to the Pakistan Army in 1947 along with three other batterys. I was sorry to see it go because a unit becomes part of your life. It was renumbered as the 4<sup>th</sup> (Lahore) Mtn Bty and became part of 1<sup>st</sup> Mountain Artillery Regiment of the Royal Pakistan Artillery. Presently it is part of 1 Field Regiment (SP) of the Pakistan Army.<sup>21</sup> Two of my four sons got into the canteen contractor business with one of them dealing with many battalions of the Punjab Regiment.*

## **Conclusion**

The Unit Wet Canteen Contractor exists in the Indian Army. The unit keeps an oversight on the hygienic preparation of the unit

Bania's eatables through the duty officers of the day and through periodic inspections by the Regimental Medical Officer (RMO). Enterprising COs of some units extend help to the unit Bania to provide a good atmosphere for the men to relax — especially in field — by providing a good and clean accommodation/location for him or even providing him some items of furniture. Units also oversee the rates charged for items so that there is quality control and both the unit and the Bania get their due. The first in terms of service and the other in terms of reasonable profit, as this is after all a commercial enterprise. Some units have dispensed with the unit Bania and run their own wet canteen. However, this engages unit manpower as well as is a digression from the primary task of the unit. The unit Bania is an institutionalised system of outsourcing welfare and a part of the Indian Army's regimental system. In the view of this author, this is an organisation which needs to be strengthened and maintained. The spirit of Bania Jai Narain must be giving his benign blessings to his grandson Sanjay Agarwal who is carrying on his tradition being the wet canteen contractor.

### Endnotes

<sup>1</sup> CSD standing for Canteen Stores Department.

<sup>2</sup> CSD Website.

<sup>3</sup> Encyclopedia.com. <https://www.encyclopedia.com/humanities/encyclopedias-almanacs-transcripts-and-maps/banias?msckid=e477178ac56a11ec89f8967df61d8e1a>

<sup>4</sup> Claire Prechtel-Klusken, "Sutlers of the Civil War", *NGS Journal, US National Archives, April—June 2014 · Volume 40, Number 2*. pp 39-42

<sup>5</sup> Ibid.

<sup>6</sup> Ibid. p 42.

<sup>7</sup> It states "Persons subject to this Act. 1. The following persons shall be subject to this Act wherever they may be namely: - .....(j) Persons not otherwise subject to military law who, on active service in camp, on the march or at any frontier post specified by the Central Government by notification in this behalf, are employed by, or are in the service of, or are followers of, or accompany any portion of the regular Army".

<sup>8</sup> Tim Cook, "Wet Canteens and Worrying Mothers: Alcohol, Soldiers and Temperance Groups in the Great War", *Social History, Vol 35, No 70* (2002), <https://hssh.journals.yorku.ca/index.php/hssh/issue/view/337>

<sup>9</sup> As confirmed from Mr Sanjay Agarwal in April 2022.

<sup>10</sup> CAL Graham, Brigadier General, *The History of the Indian Mountain Artillery*, (Aldershot, Gale & Polden 1957), p.215.

<sup>11</sup> A *Lashkar* was roughly a battalion sized irregular force of tribesmen.

<sup>12</sup> These aircraft were probably of No 5 (Army Cooperation) Squadron RAF which was flying Westland Wapiti aircraft out of RAF Peshawar.

<sup>13</sup> Graham, p.232.

<sup>14</sup> The artillery at that time was not organised into three battery regiments as they were in subsequent reorganisations.

<sup>15</sup> Graham, p.232.

<sup>16</sup> This is most likely the place which is now known as Jhansi Post and is South of Barra.

<sup>17</sup> Jamrud Fort at the mouth of the Khyber Pass was engraved on the Indian General Service Medal.

<sup>18</sup> Ibid.

<sup>19</sup> K Brahma Singh, *History of the Jammu & Kashmir Rifles (1820-1956)*, (New Delhi, Lancer International: 1989)

<sup>20</sup> 10 Sikh is presently not among the units where Mr Sanjay Agarwal has a Wet Canteen contract.

<sup>21</sup> Maj Gen Syed Ali Hamid, "Mountain Guns and Trusty Mules", *Friday Times*, Nov 15, 2019. <https://www.thefridaytimes.com/2019/11/15/mountain-guns-and-trusty-mules/>

# The Ukraine War: How the West was Lost

Group Captain (Dr) K Ganesh (Retd)<sup>@</sup>

## Abstract

*The war in Ukraine is among the defining events of this period which will have a far-reaching impact on the security architecture of the world. This article carries out an analysis of the war in an unbiased and objective manner looking at both geo-strategic and military dimensions. It does not demonise the Russians; it peers through the veil of perception management, and lastly, it brings out that the outcome of the war may not be favourable in the long term to the West.*

## Introduction

The Russian war with Ukraine arose from a number of factors. These range from Russian expansionist policies with respect to support to ethnic Russian majority breakaway areas of Abkhazia, South Ossetia, Donetsk and Luhansk and the annexation of Crimea to the Russian need to keep NATO from expanding eastwards. Lastly was the requirement to keep the Black Sea firmly in its control. Apparently, the Putin Plan which was to keep NATO in check has been upended by the fact that NATO has not only regrouped after Ukraine became a theatre of war, but also now Sweden and Finland are queuing up to join NATO in right earnest. Mr. Biden claims a great strategic victory through these pointers against his Russian counterpart.

While the Ukrainian scenario has a NATO perspective that is vehemently anti-Russian, whereas a non-NATO perspective is more neutral. For this side of the world view, Mr. Putin was assessed as always, a pragmatist and realist. His clear-headed approach that NATO was not going anywhere, his entire effort, both in Georgia as well as Ukraine, earlier from 2008 through 2014 to

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now in 2022 has been singular — to thwart the creation of a NATO boundary that would be shared with the motherland. So, the declaration of two autonomous/ independent Republics in the Donbas was firstly a continuation of this defensive approach, to deny NATO common borders with Russia, and now what we are seeing in Phase 2 of the Ukrainian campaign that is more like an aim plus, since Ukrainian leadership under Mr. Zelenskyy is showing a sense of brinkmanship and not pragmatism. Russia is trying to persuade Finland and Sweden, by threats, by arguments of history and other means from entering NATO. It could also supply Turkey and some East European nations like Serbia and Hungary favourable conditions, to oppose the unanimous entry of these two countries that had remained neutral throughout the period of the post-World War 'Cold War' era till date.

### **Conduct of Military Operations**

NATO has repeatedly asserted that Ukraine is winning the war. NATO has justified its arming of Ukraine while asserting that it does not have ground forces in Ukraine and will not militarily intervene in the ongoing conflict, the evidence is that now there is significant presence of special forces operatives including on ground controllers of drones, radar or remote sensing units, special communications, etc., directing operations and offering real time battle field intelligence to Ukrainian commanders. The presence of non-active or veteran combat troops from friendly countries including NATO members in Ukraine is common knowledge. Presently the narrative is how the Ukrainians are throwing back the Russians in Kharkiv Oblast. An unverifiable report like this one creates this narrative of Ukrainian victory being imminent!<sup>1</sup>

A non-NATO analyst's view on the conduct of the war by Russia is different. Such analysts would not state that Russians are tired and bungling through their war. After three months of this campaign, we see a military that is far from 'has been', fighting with multiple restraints that are simply humanitarian considerations. This war in Ukraine is unique in how from the start, humanitarian corridors are operational and openly abused by Ukrainian forces to regroup and replenish. Hence operations are witnessing graded escalation, with frequent dial downs, interruptions for cease fires, for evacuation of civilians and more. Overwhelming force from the air superiority that Kremlin enjoys, has been largely used in breach than *de rigueur*!

From the initial military plan of carving a buffer in Donbas to now making Ukraine a land locked country, the Russian plan has shifted a huge goal post, one which the Western myope is unable to see even at this stage when Russian artillery and aerial bombardment are calling on Odessa's door! CNN finally reported that Azovstal Factory as lost with the caveat that Ukrainian Military HQ had ordered the cessation of operations there. Then Der Spiegel carried a report which you could actually think was all about the Western narrative of heroic Ukrainian resistance until you catch a line just placed without context in this report: "The Russian steamroller may be rolling slowly, but it is still rolling".<sup>2,3</sup>

These conflicting claims can be best described as 'fog of war'. Since the war began, a campaign of manoeuvres that saw swift incursion of Russian forces to Kyiv's suburbs, has now altered into one where attrition has happened in a clear line along the East and South of Ukraine. This has raised a spectre such that now even the West acknowledges a possible Russian campaign beyond Ukraine, perhaps with the highlight about Transnistria, an enclave of Russian ethnic people within Moldova, another 'non-NATO neutral country' next door to Ukraine. Yet, we can see American government lead by the Secretary State and Secretary Defence arrive at Kyiv, the Defence Secretary Lloyd Austin, speaking in a Polish hangar near the Ukrainian border went on to clearly lay down the 'war aim' of the USA stating "We want to see Russia weakened to the degree that it can't do the kinds of things that it has done in invading Ukraine".<sup>4</sup>

The weeks now of hard-fought battles in Mariupol, Izyum, in Cherniv, Kharkiv and elsewhere suggest that the Russians are not a spent force. That Mariupol Azovstal Factory was supposedly holding out some 400 foreign military personnel and they were condemned to be 'entombed' by the Russian leaders is a distraction at best. The social media chatter, the evidence of Ukrainian military actions, occasional Western media coverage all point to the undeniable presence of American, British, and perhaps even Canadian special forces deep inside Ukraine. In their thousands, they must be either working as target designators, command and control elements, or the key elements of the defence now of Central Ukraine. The Russians have established a clear bridgehead and if they can breach the centre at Dnipro, they will break out. In all probability the Russians are in a consolidation mode these

next few weeks, as they will allow the terrain to become more favourable for tanks and heavy vehicles to pass through, without being hampered by the logistical need to stick to only metaled roads and communication nodes.

### **Crystal Gazing**

Can the Russians be defeated in Ukraine? According to many Western analysts, and a BBC report, the American Administration clearly believes that they can be.<sup>5</sup> You can see how quickly the 'genocide', 'mass graves', 'war crimes' narrative has changed to one of Ukraine now receiving ample supplies of hardware (howitzers from all over and now tanks from Germany) and munitions and how they are fighting back. In February, few thought that Russians would actually invade, but while on their side then, it was equally clear that if Putin made up his mind to invade, then it would be with a clear goal. Till now the West has not taken a clear-eyed view of what that goal could be like. There are theories, insinuations, historical inputs. Yet militarily, it is baffling that no Western capital saw this as a military campaign to consolidate the first phase that annexed Crimea and kept Sevastopol as the headquarters of the famous Black Sea Fleet in 2014. Now most agree that coastal Ukraine is Putin's key target, besides consolidating the Eastern Ukrainian Donbas. When will they see that Kyiv is also important? After the Russians roll over to the Polish- Moldovan borders in the West?

The Russian brass (Deputy Chief of Central Military District) actually conveyed last week that Transnistria corridor was a campaign aim. Naturally the buzz it generated followed by news of 'terror attack' in Transnistria itself, saw the Rybar media channel on Telegram chatter about Polish plans to place combat brigades in Moldova as a 'peace keeping mission' and to place another special battle group in readiness for neighbouring Odessa against anticipated Russian aggression West. One really doesn't know if Poland is really girdling her loins and preparing for such eventuality, yet exercising near Kaliningrad with Americans last fortnight and refusing to fly MiG-29s to next door Ukraine in March 2022 are not postures of such military perspective or planning.

**NATO.** This is also the time to look at NATO. We are led to think that the NATO expanded eastward, it is now 30 countries strong. Yet, from Mahabharata, we know, that the fewer allies and fewer

numbers did not deter the majorly *Panchala* forces of the *Pandavas* from repeatedly wresting the initiative from the unwieldy and much allied *Kauravas* who included the invincible *Narayanis* as well as formidable *Samsapathakas*. We can also see the role of Shalya of Madura, whose role as a charioteer derailed Karna, and who ended up falling to *Yudhisthira's* lance in his turn as Supreme Commander of the Forces under the Kuru banner! One can stride into the Homeric Iliad's 'Trojan Horse' to expand this logic. Are there any scenarios where one NATO or two NATO countries attack a third? Who are the hardcore Russia supporting NATO members? Is Bulgaria, Hungary, Serbia, Croatia as dyed in wool NATO and anti-Russia belligerently as say the Baltic trio — or Poland?

**Borders & Boundaries.** When President Zelenskyy passionately argued about 'UN', he should have been taught by history that UN did not create nations, nor did it draw boundaries. Likewise, the decades of peace we have seen relatively, is one where the balance of power was even and the threat of mutually assured destruction under nuclear umbrella perhaps restrained full-fledged wars. Yet, post Ukraine, all these calculations are now out of the window. We now have a nuclear power invading and operating conventionally without escalating the controlled violence beyond a threshold. So, nothing would stop countries from looking afresh at War as an Instrument of State Policy for shifting borders.

Will maps be redrawn? After all, what are they, but lines on cartographic paper, drawn and enforced by military arms? Previously only Alaska was transferred for monetary compensation, that too was preceded by a series of military manoeuvres by both Russia and USA. (UN backed referendums created East Timor and South Sudan as conflict resolution) Europe is full of such concessionaire addition and subtraction of territories, including some de nouveau nations. What we must accept is the new reality post Ukraine, which is that these decades of settled boundaries are gone. Unlike Chinese incrementalism in Vietnam, in South China Sea and along the Himalayan border with India, Russian military operations have led to de facto new identities, in Georgia, in Ukraine, and now more so. From 2014 to 2022, Russia has moved the means and the goal post. Perhaps in 2023, will Russian expansion further westwards beyond Ukraine involve territories that are now in Moldova, in Poland or Baltic States as feared by them?

**Cultural Aspect of Ukraine Conflict.** By othering Russia, by equating the Russian with barbarian or pagan mindset, key Western interlocutors forget that alienating the enemy is the sure way to intractable enmity and never-ending cycle of conflict. Militarisation of the thawing polar icecap is only going to offer the Russians greater 'lebensraum' with its concomitant logistical leeway. The recent spate of events surrounding World War 2 memorials to the Soviet Fallen in Lithuania, Latvia, Poland etc. is one which opens memories of Russian sacrifices, which consolidates the Russian consensus about Ukraine and 'De Nazification'. Dismantling many of these memorials in Ukraine and other Eastern European states or disregarding Russian in VE Memorials in Europe is not military etiquette, worse it stokes Russian nationalism in more ways than one. Few of today's generation remember the outsized sacrifices that were made by Russians to liberate Europe from Hitler's self-proclaimed 1000 Year Reich. However, such a luxury is not with professional diplomats or military personnel. Then there is another historical but nonmilitary aspect, which is how the Russian Orthodox Church's leader Patriarch Kirill and Pope Francis seem to be on the same page in cautioning about ostracization of Russia.<sup>6,7</sup> Putin offered the religious spin of Kyiv being a seat of the Russian Church on numerous occasions, hence the significance of two tallest Church leaders is not to be lost.

**The Western Loss is the Rest's Gain.** The assessment that AUKUS is a consolidation of Anglican states against China in the Indo Pacific only indicates that now the AUKCUSZ (Acronym of all Anglican States) must gather, to maintain their sense of primacy over the Global Commons. It also implies that some pact will be needed to assuage the French, to gather the Germans under the same fold. The issue of widening the Anglican compass is important because Finland and Sweden now thinking of joining the NATO club created a ripple in Croatia.<sup>8</sup> It shows up that the more the diverse the grouping the greater the degree of its impact on cohesion. Ukraine unleashes the proverbial Pandora's Box contents, upending many formulations that served the global commons for the last 50 years.

When Russia meets at BRICS in China or virtually, she will find that these partners are already looking beyond Ukraine. Moscow will find China's theme for 'New Era for Global Development'<sup>9</sup> is more than spin. The opportunities arising out of

the West's economic and military posture against Russia will be for these countries to exploit. More countries will back Russia in more ways than just violating sanctions or refusing to join them as a result. The failure of the West to carry the 'Global South' is basically a legacy failure. A hundred-year epoch of pernicious colonialism practised by the West has offered this posture of pragmatism, one of a historical 'paybacks' that would placate native populations and electorates.

### **Conclusion**

NATO seems to be succumbing to its own narrative and planning a Victory Parade in Kyiv soon. Ukraine will be a military case study for surprisingly flexible and tenacious higher direction of war by Kremlin. There has been no European conflict of this order in its entire history, where humanitarian corridors and agencies have been involved in mitigating civilians trapped in conflict zone and that remains a great aspect of this conduct. It reveals that the overall discipline and military bearing of Russian combat elements to be of the highest order, not a case that Western analysts would like to admit at all. It is also clear that Russia will not allow the war to escalate beyond Ukraine for now, as it has expertly defused the situation in Transnistria and ensured that Georgia professes peace even now.<sup>10</sup> By allowing Warsaw to throw paint on her ambassador during the V Day celebrations and by orchestrating and highlighting the Soviet efforts of the WWII, Russia has created a neat wedge in countries along the entire of once Nazi occupied Europe, with the scope for further exploiting the sentiments it aroused now in future Psychological Operations against those States.

The way we can see these portends is that Ukraine will get a peace, no doubt, not one that Kyiv wants, but one that will clearly be guaranteed by Russian boots on ground and a realism born after visitation of war by what emerges as Ukraine. The global economy will now be truly more global and stronger, as American or dollar backed hold over it wanes. OPEC, Afro Asian countries refusing to toe the US line today are only going to trust their wisdom that much more going forward. Within EU itself, the narrow French re-election result for President Macron shows how the long-term repercussions of this stoked conflict in Ukraine will play out. There will be back lash against peaceniks, against liberals and possibly a return to ethnic nationalism which democratic

coalition building had papered over. The influx of Ukrainian refugees into Europe will be a significant political input going forward. In America, as the war enters the second half of the year, it will play a great role in weakening the Democrats, who will be blamed for not managing the situation.

So, Ukraine 2022 will be remembered as changing the global dynamics in more ways than one. It shows how humans suffer primacy to man-made war and undermine or offer conditional support to equally threatening but more natural causes like Climate Crises or Pandemic. It is as if humans understand more acutely only what they are inflicted with by other humans! In 2030 we will see the first signs that will connect the dots back to this Ukrainian calendar. It will be redacted heavily and stamped as ‘How the West was Lost’!

### Endnotes

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<sup>2</sup> Tim Lister, Taras Zadorozhnyy, Victoria Butenko and Jack Guy, The Battle for Marioupol Nears an End as Russia says ‘combat mission’ over CNN, May 17, 2022 <https://edition.cnn.com/2022/05/16/europe/azovstal-siege-halt-mariupol-intl/index.html>

<sup>3</sup> Alexander Sarovic and Emre Caylak , The Elite Ukrainian Soldiers Defending the Donbas, Der Spiegel International, May 10, 2022. <https://www.spiegel.de/international/world/starnya-s-mission-the-elite-ukrainian-soldiers-defending-the-donbas-a-54bde7bd-4c37-4bd0-9ae1-05272466cc3d>

<sup>4</sup> Missy Ryan and Annabelle Timsit , “U.S. wants Russian military ‘weakened’ from Ukraine invasion, Austin says”, Washington Post, Apr 25, 2022, <https://www.washingtonpost.com/world/2022/04/25/russia-weakened-lloyd-austin-ukraine-visit/>

<sup>5</sup> You Tube, BBC News, Apr 27, 2022. Accessed may 17, 2022, [https://www.youtube.com/watch?v=BuXGrvm7DP8&ab\\_channel=BBCNews](https://www.youtube.com/watch?v=BuXGrvm7DP8&ab_channel=BBCNews)

<sup>6</sup> Cécile Chambraud, “The Russian Orthodox Church closes ranks behind Putin over Ukraine war”, *Le Monde*, Apr 20, 2022. [https://www.lemonde.fr/en/international/article/2022/04/20/the-russian-orthodox-church-closes-ranks-behind-putin-over-ukraine-war\\_5981020\\_4.html](https://www.lemonde.fr/en/international/article/2022/04/20/the-russian-orthodox-church-closes-ranks-behind-putin-over-ukraine-war_5981020_4.html)

<sup>7</sup> Francis Rocca,” Is Ukraine’s War Just? The Pope Hasn’t Said”, *The Wall Street Journal*, May 5, 2022. <https://www.wsj.com/articles/is-ukraines-war-just-the-pope-hasnt-said-11651758894>

<sup>8</sup> Pekka Vanttinen and Zeljko Trkanjec, “Croatian president says Finland, Sweden cannot join NATO before election law change in BiH”, EURACTIV Apr 27, 2022. [https://www.euractiv.com/section/politics/short\\_news/croatian-president-says-finland-sweden-cannot-join-nato-before-election-law-change-in-bih/](https://www.euractiv.com/section/politics/short_news/croatian-president-says-finland-sweden-cannot-join-nato-before-election-law-change-in-bih/)

<sup>9</sup> Theme and Cooperation Priorities of 2022 BRICS Summit [http://brics2022.mfa.gov.cn/eng/dtxw/202203/t20220302\\_10647107.html](http://brics2022.mfa.gov.cn/eng/dtxw/202203/t20220302_10647107.html)

<sup>10</sup> Amy Mackinnond and Jack Detsch,, “Georgia Walks a Fine Line After Ukraine Invasion”, Mar 11, 2022, <https://foreignpolicy.com/2022/03/11/georgia-ukraine-invasion-russia/>

# India-Pakistan Peace Process: Lessons from the Past

Shri Gaurav Kumar<sup>@</sup>

## Abstract

*The India-Pakistan relations have been marred by consistent rivalry. The post-independence animosity over a period of time evolved into an intractable conflict, including four wars, the one in Kargil under the nuclear umbrella. Historically, the peace talks between India and Pakistan have not led to end in conflict, nor has it reshaped the way two countries perceive each other in the long term; however, in the short term, it has led to decline in violence, cross border infiltration, less terrorist attacks in Kashmir and across the India. The receding violence helped India to focus on its economic and development policy. The article aims to look at the episodic peace talks under various Prime Ministers that tried to reduce tension between the two neighbours.*

## Introduction

The longstanding hostility between India and Pakistan over a range of issues including territory and security has forced the two countries into an intractable conflict. The successful conclusion of negotiation on and political settlement of these issues have been marred by a range of factors—lack of trust, political instability, historical grievances, and above all lack of political will and risk-taking abilities by the respective governments. Various attempts in the past including the diplomatic process in 1987-89 and recently attempted composite dialogue have had helped reduce tensions and prevent a return to the climate of extreme hostility and outright war, but had failed to resolve two of the most important contentious issues — Kashmir and Terrorism. Some of the structural and institutional factors that played dominant role in constraining the

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policy choices were the dominant role of the military in Pakistan, conflicting interests, sovereignty issue of Kashmir, war in Afghanistan etc. These factors were key in restricting India to pursue a proactive policy of constructive engagement with Pakistan with the objective of cementing a durable structure of peace and stability in South Asia.

### **Past is Prologue**

Several Prime Ministers, including the incumbent PM Narendra Modi, had tried their hands in mending ties with the Pakistan. In the past, Rajiv Gandhi could be credited for attempting to revive India's relations with Pakistan during his tenure as an Indian Prime Minister. While India and Pakistan shared a small stint of comprehensive dialogue and confidence building measures during the Rajiv-Benazir Bhutto period; Rajiv Gandhi had initiated this process of extending hand of friendship to the leadership of Zia-ul-Haq.

This was amply clear during the Pakistani President Zia-ul-Haq's visit to India in February 1987. During the press conference, Zia-ul-Haq on return from India admitted that his trip had been quite a success in further defusing tension between the two countries. In fact, he added, recent political contacts plus the 04 February accord on troop's pull-out in one sector had gone a long way in minimising the chances of any conflict between the two countries. He also assured cooperation with India in curbing smuggling, narcotics, and the movement of terrorists across the border.<sup>1</sup> The 04 February 1987 accord was an outcome of extensive consultation between the two sides to defuse tension, to prevent escalation, and to deescalate the situation along the Indian Pakistan border. Despite the fact that both sides took some honest measures including meeting of top officials in the coming months, Indo-Pakistan relations hardly saw any meaningful improvement, before it started to drift towards mistrust and suspicion.<sup>2</sup> It worsen after the President Zia's reported statement on Kashmir during his visit to Pakistan Occupied Kashmir on 20 July 1987. He, in his speech, claimed that Pakistan would not allow Kashmir issue to be consigned to the cold storage nor would it adopt apologetic attitude on this. He also reiterated Quaid-e Azam stand that Kashmir was the jugular vein of Pakistan.<sup>3</sup> In an interview to the BBC on 16 August 1987, Indian Prime Minister Rajiv Gandhi accused Pakistan

of direct interference in Punjab by training and arming extremists. Amidst tension between the two sides on the issue of insurgency in Punjab, role of Pakistan in Afghanistan, the two sides had some success in discussing some of the major irritants in their relations.<sup>4</sup>

Rajiv Gandhi visited Islamabad twice, once to attend the SAARC Summit in December 1988 and the other, on 17 July 1989 for a bilateral visit. This bilateral visit of an Indian PM to Pakistan took place almost after thirty years, if one were to discount the visits of Rajiv Gandhi to Pakistan for the funeral of Badshah Khan in January 1988 and for the SAARC Summit in December 1988. However, the ouster of Benazir Bhutto in 1990 and later, the assassination of Rajiv Gandhi in 1991 crippled the process, and could never revive despite attempts by former Indian Prime Minister late PV Narasimha Rao. The rise of violence by terrorists after the incitement, money and weapons, and training from Pakistan nearly shut the doors on any possible prospect of settlement of major issues between India and Pakistan. By the end of 1994, talks completely collapsed.

It was at the SAARC Summit on 12 May 1997 at Male, Maldives, after the gap of 3 years that the two sides formally agreed to the idea of a structured dialogue or the Composite Dialogue Process (CDP)<sup>5</sup> when Indian PM, IK Gujral, met his Pakistani counterpart PM Nawaz Sharif. Within 09 months Gujral met Pakistani Prime Minister 4 times at various platforms and reiterated his stand for a peaceful solution to India-Pakistan conflict. Later, under the leadership of Atal Bihari Vajpayee, Indian foreign secretary met with Pakistan's foreign secretary on 23 September 1998 and agreed to address the outstanding issues substantively and specifically through the agreed mechanism in an integrated manner under the levels indicated<sup>6</sup>:

- Peace and Security including CBMs at the level of Foreign Secretaries.
- Jammu and Kashmir Foreign Secretaries.
- Siachen Defence Secretaries.
- Wullar Barrage/Tulbul Navigation Secretaries, Water & Power Project.

- Sir Creek Additional Secretary (Defence)/Surveyors General.
- Terrorism and Drug Trafficking Home/Interior Secretaries.
- Economic and Commercial Cooperation Commerce Secretaries.
- Promotion of friendly exchanges Secretaries, Culture.

The mechanism and the levels became the template for future India Pakistan composite dialogue.

### **Composite Dialogue 2004-2008**

The years preceding 2001, witnessed intense tension between India and Pakistan. The deepening of faultlines between India and Pakistan and the surge in the level of violence in Kashmir were major factors which forced the two nations to engage in a dialogue process for a peaceful future of the region. Furthermore, the United States had also nudged both parties towards renewing a bilateral dialogue. Various foreign governments, including that of the United States, have urged mutual restraint along the Pakistan-India border, and requested that President Musharraf stop Kashmiri militants from crossing the border into India.<sup>7</sup> Major breakthrough came during the 2004 SAARC Summit paving way for the composite dialogue at highest bureaucratic level. The composite dialogue between India and Pakistan to resolve outstanding issues reached sensitive and important stage in 2005-06 with two sides getting more pragmatic and sincere in approach towards a lasting solution for a wide range of contentious issues.

The goodwill gesture shown by two sides after the devastating earthquake on both side of the LoC translated into further confidence building measures in 2006. Despite the 2006 Mumbai terror attacks, India and Pakistan kept space open for dialogue. During 2004-07, the two sides were involved in hectic diplomacy; composite dialogue was backed by backchannel negotiations. The two sides narrowed divergences and focused on convergence to the point that they came close to a framework agreement for resolution, comprising self-governance, phased demilitarisation on both sides of the LOC, and over time, joint development institutions.<sup>8</sup> For several years, special envoys from Pakistan and India had been holding talks in hotel rooms in Bangkok, Dubai,

and London.<sup>9</sup> The President of Pakistan and the Prime Minister of India, had encouraged the negotiators to seek a 'paradigm shift' in relations between the two nations. The two principal envoys—for Pakistan, a college classmate of Musharraf's named Tariq Aziz, and, for India, a Russia specialist named Satinder Lambah—were developing what diplomats refer to as a 'non-paper' on Kashmir, a text without names or signatures which can serve as a deniable but detailed basis for a deal.<sup>10</sup>

Although the talks moved on at end of the 2007, internal political crisis in Pakistan and the growing international clamour over restoring democracy had started to mount monumental pressure on Pakistan President Pervez Musharraf and reflected in the dialogue process with no major breakthrough achieved. Same year, discussing his vision of future South Asia, Indian PM Manmohan Singh in his FICCI address on 08 January 2007 said, "Retaining our respective national identities, one can have breakfast in Amritsar, lunch in Lahore and dinner in Kabul".<sup>11</sup> Indian PM clearly suggested that India is keenly interested in mending ties with Pakistan. Two days before the foreign secretary level meet in Islamabad, Pakistan Foreign Office spokesperson Tasnim Aslam said, "On Jammu and Kashmir it is important that we now move from CBMs to dispute resolution. We believe that an early resolution of the Jammu and Kashmir issue will pave the way for durable peace in this region and bring about greater cooperation in South Asia".<sup>12</sup> Kashmir despite, many measures remained the bone of contention.

In 2007, after two years of negotiations, Lambah and Aziz reached a solution deemed acceptable to all parties — India, Pakistan and the Gemini-twin Kashmiris. The final document would have been signed by Manmohan Singh and Musharraf, had the Pakistani lawyers' movement not weakened and then emasculated Musharraf. He asked the Indians for time, then an extension. The Indians waited, and finally gave up hope.<sup>13</sup> On Indian side, 26/11 Mumbai attacks derailed both front and back-channel negotiation between India and Pakistan. The attack closed the door over any possibility of bilateral relations, dialogue, and positive movement.

The downfall of Musharraf, the 26 November 2008 terrorist attack in Mumbai eroded all the possibilities of a negotiated settlement of contentious issues between India and Pakistan. By

the end of the 2008, it was clear that the peace process was unravelling and the two countries were unable to regain trust and start it refresh.

The talks under various nomenclatures continued till 2012. The two sides, apart from the conventional issues, also included counter terrorism, Mumbai attack trials and humanitarian issues which were to be overseen at the home secretary level.<sup>14</sup> Along with peace and security, CBMs, and Jammu and Kashmir, cultural exchanges also came under the purview of foreign secretary. In the second round of the resumed dialogue, Secretary, Water of Government of India and Secretary, Water and Power of Government of Pakistan met in New Delhi on 27-28 March 2012 to discuss Wullar Barrage/Tulbul Navigation Project. Home Secretary level talks were held on Counter-Terrorism (including progress on Mumbai trial), Narcotics Control and Humanitarian issues in Islamabad on 24-25 May 2012.<sup>15</sup> In January 2013, India accuses Pakistan of 'barbaric and inhuman' behaviour after two Indian soldiers are killed in a firefight in Kashmir and at least one of the bodies is mutilated. Indian Prime Minister Singh says there can be no "business as usual".<sup>16</sup>

### **India Pakistan Relations: 2015-2022**

Days before the change of guard in India in 2014, the former Pakistani Army Chief described Kashmir as the 'jugular vein' of his country, saying the issue should be resolved in accordance with the wishes of Kashmiris and in line with United Nations Security Council (UNSC) resolutions for peace in the region.<sup>17</sup> In days to come, newly elected Indian Prime Minister Narendra Modi was to be sworn in as India's 15th Prime Minister. Despite the provocation, India invited heads of the state of the SAARC countries for his swearing in ceremony. A day later, Narendra Modi held talks with his Pakistani counterpart Nawaz Sharif and stressed his desire for better relations and trade. Later, in 2015, Indian PM made a surprise visit to Lahore on Sharif's birthday and the wedding of his grand-daughter.

However, tension started to escalate after one of the deadliest attacks on the Indian Army base in the garrison town of Uri killed 18 soldiers.<sup>18</sup> In less than two weeks after the Uri attack, Indian Army conducted 'surgical strikes' on suspected militants in Pakistan, suspects of preparing to infiltrate into the part of Kashmir it

controls.<sup>19</sup> The increase in terrorist activities, attacks on Indian forces in Jammu & Kashmir led to sharp rise in India-Pakistan tension. On 14 February 2019, 40 security personnel of CRPF were killed following a suicide bomb attack on a CRPF convoy in south Kashmir's Lethpora village of Pulwama district, along Srinagar-Jammu national highway. In a retaliatory strike, the Indian Air Force carried out an airstrike in Pakistan's Balakot on 26 February 2019, targeting terrorist camps.<sup>20</sup> According to Rohan Joshi, a fellow at the Takshashila Institution, the attack appears to have been timed to test the resolve of India's leadership and of Prime Minister Narendra Modi at a time when he and his Bharatiya Janata Party (BJP) are in the midst of a contentious election season.<sup>21</sup>

Historically, the peace talks between India and Pakistan have not led to end in conflict, nor has it reshaped the way two countries perceive each other in the long term; however, in the short term, it has led to decline in violence, cross border infiltration, less terrorist attacks in Kashmir or across the India. The receding violence has helped India to focus its economic and domestic policy. Remember, India had done very well economically during the period of the composite dialogue in 2004-2008. Therefore, both India and Pakistan have limited, mid to long-term incentive to commence some kind of dialogue. The peace process of 2001-2008 may have some positive lessons to imbibe.

On the flip side, the long period of talks, followed by incremental positive steps and then the breakdown of the talks has exposed the critical gap between the institutional and organisational level attempts for reconciliation and ground level reality. The fact that the return of terrorist attacks on India, often, is blamed upon the non-state actors, and enemy of peace; it is very clear that the survival of non-state actors and their grand actions can't be possible without the support of state actors. The real challenge, therefore, for the India Pakistan is to address all the elements of the peace process which, in turn, would require uncharacteristic commitment from Pakistan.

### **Conclusion**

India and Pakistan have opened channels for negotiation on Indus Water Treaty. The Pakistani delegation was here in India in May to hold dialogue on Indus water. Indian delegation was in Pakistan

in February 2022 for Permanent Indus Commission talks in Islamabad. Pakistan delegation was in India for multilateral talks on terrorism as part of the Shanghai Cooperation Organisation's Regional Anti-Terror Structure. The two sides, in February 2021, have held discussions regarding establishing a mechanism for hotline contact among both nations. Both sides had also agreed to a ceasefire along the Line of Control (LoC). The change of political leadership in Pakistan may open space for more bilateral talks between India and Pakistan, which in turn could lead to establishing mechanism and structure for resumption of talks between them. The role of the political actors, bureaucracy and back-channel diplomacy had played very critical role in achieving limited goals in the past. It has led to overcoming the phase of uncertainty between India and Pakistan, and had given some clarity and direction to the talks.

Therefore, it is important to understand the deployment of larger structural, procedural, organisational/institutional components, and enforcement mechanisms of peace process. It will help to give better insight into how the processes and measures adopted between India and Pakistan created overall attitude and mind-set of the two countries at public and policy level. Secondly, what were the main achievements of process? Also, what were the areas where the two sides had reached near consensus? The lessons from the past, particularly the composite dialogue between 2004-2008, and the underlying initiatives and processes started from 2001 onwards may provide better procedural understanding and way forward to conduct the talks.

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# Jammu and Kashmir after Abrogation of Article 370

Dr Sanjay Kumar and Dr Neelam Kumari<sup>@</sup>

## Abstract

*The architects of the Indian Constitution were eager to make the country sovereign, stable, peaceful, and to protect the human rights of people. Constitutional laws contributed a very pivotal role to take the country's judicial system on right track. The controversial Article 370 provided the Jammu and Kashmir (J&K) state vast powers as an autonomous body which created complex problems including the threat to unity of the country. Therefore, the central government bifurcated the state into two successors 'Union Territories', with additional limited aboriginal administrative powers under the central government. Article 370 was a 'Temporary Provision' and, thus, the move of the government was essential to abrogate, modify and to eliminate it. This article looks into all the development aspects from different sectors in J&K after abrogation of Article 370.*

## Introduction

Jammu and Kashmir (J&K) has its own distinct and peculiar cultural ethos. It has a predominant place as it shares the international boundary with both, Pakistan and China. It is enriched with the boundless beauty of snow-clad mountains, large natural lakes, forests, rivers and springs. It comprised of three main natural regions, namely, Jammu, Kashmir and Ladakh. However, for administrative purposes, the state was divided into two main divisions, Kashmir with eight districts (including two districts of Ladakh region) and Jammu with six districts.

In 2019, the Government of India invalidated the separate status, or autonomy, granted under Article 370 of the Indian

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Constitution to J&K. Besides the abrogation of Article 370, the government also created two new Union Territories by bifurcation of the state of J&K in — Jammu and Kashmir (with Legislature) and Ladakh (without Legislature). With Article 370's abolition, Article 35A was also made null and void. Article 370 had been an enabling legislation allowing the existence of Article 35A and bolstering its effectiveness. For years, Article 370 and Article 35A held back the erstwhile state from achieving its true potential.

The trends of development activities in J&K have not been encouraging. It has lagged behind most of the other Indian states in regard to the growth of Net State Domestic Product (NSDP) at current prices. The average annual growth of NSDP at current prices during 1980-81 to 1999-2000 was 12.45 per cent for J&K against 15.01 per cent, 14.28 per cent, 14.3 per cent and 13.83 per cent for Andhra Pradesh, Gujarat, Kerala and West Bengal respectively. In the case of the growth of Per Capita Net State Domestic Product at current prices also, the state of Jammu and Kashmir was lagging behind most Indian States. The average annual growth of Per Capita Net State Domestic Product at current prices during 1980-2000 was estimated as 9.63 per cent for Jammu and Kashmir against 12.9 per cent, 12.86 per cent, 11.63 per cent and 11.63 per cent for Andhra Pradesh, Kerala, West Bengal and Gujarat respectively.<sup>1</sup> However, things began to improve following the annulment of Article 370 and the formation of two new union territories. On the third anniversary of the seminal move that paved the way for greater integration of J&K with the Indian Union, here's a look at the radical changes the decision brought in its wake.

### **Impediments to Growth**

The slow growth of the state of J&K can be attributed to various factors. The climate of terrorism in Kashmir during the past decades has been a major factor. Low productivity in agriculture and allied sectors has impeded employment and income generation. Poor industrial infrastructure, along with meagre investment, has left the industrial sector in its infant stage. There has not been any suitable strategy for the potential sectors to achieve higher economic growth. Lack of good governance and good fiscal management has also been responsible for the poor economic growth of the state. Kashmir had been away from mainstream for decades as it was treated differently from other states of India. As

per the provisions of Article 370, the Parliament had the right to enact laws with regard to defence, external affairs, and communication for J&K; but to make laws related to any other subject, the centre had to seek the consent of the state. The Parliament of India could enact laws only on limited subjects in connection with J&K.

Due to Article 370, most of the sections of the Constitution of India did not apply to the state of J&K. The people of other states could not purchase land in J&K. Similarly, the provision of financial emergency as enshrined in Article 360 of the Constitution of India did not apply to J&K. The Central RTI Act also did not apply to Kashmir. The tenure of the Legislative Assembly of J&K was 6 years, whereas the tenure of Legislative Assemblies of other states is 5 years.

### **Change after the Effective Removal of Article 370 and 35A**

Removal of Article 370 and 35A was approved by the Parliament on 05 August 2019. Soon after the issuance of the notification, J&K and Ladakh were reorganised into two separate UTs from 31st October 2019. With this, 170 laws of central government, which were not applicable earlier, have been applied in this region. Now the local residents and the residents of other states enjoy the same rights. Out of the 334 State Laws, 164 laws have been repealed and 167 laws have been adapted, according to the Indian Constitution. For the people living in areas adjoining the international border, a provision of 3 percent reservation in jobs and educational institutions has been affected.

### **Benefits of Schemes Reaching the Beneficiaries Directly**

The following benefits became available to the deprived:

- 4.4 lakh beneficiaries have been verified in J&K under Ayushman Bharat Pradhan Mantri Jan Arogya Scheme. Under this scheme, 1.77 lakh treatments have been authorised in the hospitals of J&K, for which, an amount of Rs. 146 crores have been authorised.<sup>2</sup>
- J&K is now at the forefront in availing benefits under the PM Kisan Scheme in terms of beneficiary percentage as a ratio of total population. Under this scheme, 12.03 lakh beneficiaries have been included so far.

- Under PM *Awas Yojana* (rural), 1.34 lakh homes have been sanctioned.
- The people of Valmiki community have the right to cast their vote for the first time, now.
- Domicile law has been applied. According to the new definition of domicile, the persons residing in J&K for 15 or more years will be treated as domiciles.
- Displaced refugees from western Pakistan too, have human and civil rights now. The way has been paved for the resettlement of Kashmiri Pandits ousted from the Kashmir Valley in 1990.
- The protection of rights of the women marrying outside J&K, as well as their children, has been ensured.
- For the cultivation of apple, a market intervention scheme has been implemented. Direct Benefit Transfer (DBT) payments and transportation by central procurement agency under the scheme have stabilised the prices of apple.
- Bringing the valley into the mainstream through Employment & Skill Development.

**Biggest Recruitment Campaign.** The details are:

- 10,000 vacancies have been identified in the first phase of the biggest ever recruitment campaign, out of which, 8575 vacancies have been advertised by the Services Selection Board. As a part of the second phase of recruitment campaign, 12379 posts have been identified. The Government of the Union Territory of Jammu and Kashmir is in the process of referring these vacancies to the recruitment agencies. Prime Minister Modi mentioned the Himayat Scheme in the program 'Mann Ki Baat'.
- Approval has been accorded for training of 90,792 candidates under the Himayat Scheme.<sup>3</sup>

**Social Sector.** The details are:

- Back-to-village scheme has been implemented. Gazetted officers have to stay in the Panchayat and Blocks assigned to them, for two days and one night, to understand the problems of people.
- Saffron is traditionally associated with the famous Kashmiri delicacies and its medicinal values are a part of the rich cultural heritage of Kashmir. Kashmiri Kesar has received G.I tag. Now Kashmiri Saffron is reaching even the north-eastern states.
- Ukhu village of Pulwama is all set to receive the tag of 'Pencil Wala Gaon'. 90% of the country's pencil slate is manufactured here and reaches different parts of the country.
- Out of 50 newly sanctioned colleges, 48 colleges have been made operational with around 6,700 students.
- 7 new medical colleges were operated/approved. Also, 5 new nursing colleges were approved.
- Indian winter games were organised at Gulmarg for the first time.

### **Freedom from Terror onto the Path of Development**

After the removal of Article 370, the support base of separatists is diminishing. The security provided to the Hurriyat leaders at government expense has been withdrawn. 82 bank accounts of separatist were frozen.<sup>4</sup>

The government's primary rationale behind the revocation of special status was to 'eliminate the threat of terror'. Data provided by the home ministry shows that terror-related incidents have reduced drastically since the revocation of Article 370. In a written reply in Rajya Sabha, the Home Ministry recently said that compared to 2019, number of terrorist incidents have reduced during 2020 by 59% as compared to 2019 and 32% up to June 2021 in comparison with corresponding period up to June 2020. The incidents of terror have significantly declined and there is a new-found atmosphere of peace and security in the valley.

**Yearly Fatalities**

<b>Year</b>	<b>Incidents of Killing</b>	<b>Civilians</b>	<b>Security Forces</b>	<b>Terrorists</b>	<b>Not Specified</b>
2000	1,385	641	441	1,708	9
2001	2,084	1,024	628	2,345	14
2002	1,642	837	447	1,758	56
2003	1,427	563	319	1,504	121
2004	1,061	437	318	961	72
2005	1,004	454	220	987	56
2006	694	256	172	607	90
2007	427	127	119	498	0
2008	261	71	85	382	0
2009	208	53	73	247	0
2010	189	34	69	258	0
2011	119	33	31	117	0
2012	70	19	18	84	0
2013	84	19	53	100	0
2014	91	28	47	114	0
2015	86	19	41	115	0
2016	112	14	88	165	0
2017	163	54	83	220	0
2018	206	86	95	271	0
2019	135	42	78	163	0
2020	140	33	56	232	0
2021	153	36	45	193	0
2022	54	11	13	67	0

**\*Data since 06 March 2000 till 04 April 2022**

**Source: Compiled from news reports and are provisional<sup>5</sup>**

### **Industrial Development for Atma Nirbhar J&K**

With the motto of *Antyodaya and 'Sabka Sath, Sabka Vikas Aur Sabka Vishwas'*, central government has accelerated the pace of development in J&K, which had been neglected for decades. It is for the first time that under an industrial promotion scheme of Government of India, industrial development will be taken to the block level in J&K. Under the new central scheme, incentives worth Rs 28,400 crores over the next 15 years will open new doors of development in the state. Specifics are:

- Approval of the new central sector scheme of Rs 28,400 crores for J&K - Until now, Rs 1,123.84 crores have been provided under various schemes of the package.
- Central government has opened new avenues for development of J&K. This initiative will provide a major boost to domestic manufacturing of different types of products and services. It will help reduce dependence on imports and will simultaneously increase export capacity. The new scheme has been made attractive for both large and small units of MSME's.
- For the industrial development of J&K under the new central scheme, Rs 28,400 crore will be spent up till 2037. Under this scheme, industries will be promoted and a new chapter of industrialisation will be ushered.
- The scheme is designed for bringing about a massive change in the current industrial eco-system of J&K by focusing especially on employment generation, skill development and sustainable development.
- Apart from employment generation in the primary sector, another 4.5 lakh direct and indirect employment is expected to result from the scheme in agriculture, horticulture, sericulture, fisheries, animal husbandry and dairy industry.
- On the investment made in manufacturing and services sector, a capital investment of Rs 5 crores and 7.5 crores in Zone A and Zone B respectively, will be provided under the scheme.
- For investment in manufacturing and services sector, a capital interest subvention at the annual rate of 6 percent for

a maximum of 7 years, on the loan amount of up to Rs 500 crores, will be provided.

- A 300 percent GST linked incentive, on the eligible value of original investment will be provided for 10 years, on investment in manufacturing and services sector.
- All the existing units will be provided an interest incentive on working capital of up to Rs 1 crore, for a maximum of 5 years at an annual rate of 5 percent. New investment would also be similarly encouraged.
- This is expected to make J&K a preferred destination for investment and conducive for industrial growth.
- It aims to make J&K capable of competing at the national level.

**Development of Tourism, Arts and Crafts Sectors.** The following initiatives have been taken:

- The new Wool Processing, Handicrafts and Handloom Policy, 2020 has been adopted for promotion and development of Handicrafts and Handloom sector.
- The Government of J&K has approved a new Financial Support Scheme for each Cooperative/Self Help Group in the Handicrafts and Handloom Sector.
- The J&K Government has approved a new Credit Card Scheme for providing a loan to Artisans/Weavers with interest subvention of 7 percent for five years.
- MoU has been signed under 'Samarth Programme' to promote online sale of genuine Handloom and Handicrafts products directly by Artisans/Weavers.
- Under the Central Sector Scheme 'PRASAD', construction of tourist interpretation centre at Dargah Hazratbal has been completed.<sup>6</sup>

### **Panchayati Raj**

The promulgation of Village Panchayat Regulation Act No.1 in 1935 marked the commencement of the unique history of Panchayati Raj in the state. Subsequently, the Act of 1935 was

amended in 1941 to cover a wide range of subjects and to delegate more powers to the Panchayats. Before the Panchayati Raj system could be introduced in the whole country, J&K took a lead by passing the J&K village Panchayat Act of 1958, repealing its earlier Acts. Although the act was passed primarily to make better provisions for the administration of village Panchayats, the manner of its implementation made it open to manipulation by various vested interests. In order to improve the system further, the J&K Panchayati Raj Act 1989 was passed in March 1989. The information collected through informal sources reveals that Panchayats were not at all in a comfortable state of affairs on various counts till 2019. Large numbers of seats were vacant as the number of village headmen became targets of militants and lost their lives. Due to shortage of funds, Panchayats were non-functional and development schemes continue to be implemented by departmental functionaries. Moreover, the delegation of power to Panchayats has not taken place, keeping them in a dysfunctional state.<sup>7</sup>

In the recent budget, the allocation of Rs. 1313 crores to Panchayati Raj institutions and urban local bodies were aimed at strengthening the grass-root democratic setup in the UT. “Rs. 200 crores have been earmarked as Development Fund for 20 District Development Councils (Rs 10 crore for each DDC) and Rs. 71.25 crores for Block Development Councils (Rs. 25 lakh each). Besides, Rs. 357 crores have been kept for Solid Waste Management with the two Municipal Corporations and other ULBs”.<sup>8</sup>

### **Budget 2022-23**

The budget 2022-23 is primarily a ‘growth-oriented’ budget and is in line with the endeavours of the UT government to double its economy in the next few years. The budget envisages inclusive, all-round development in J&K and has also provided resources to realise the vision of developed and prosperous J&K. 2022-2023 budget (Rs 1.12 lakh crores) for J&K caters to the following:

- Good governance, agriculture and horticulture, power sector, rural development, strengthening grass-root democracy, facilitating investment and industrial growth, infrastructure development, improving connectivity, broadening social Inclusion, *Har Ghar Nal Se Jal*, education, youth, tourism and health and medical education sectors have remained the focus areas of the budget 2022-23.<sup>9</sup>

- This year, Rs 2,835 crores has been allocated to the agriculture sector and Rs 646 crore to horticulture. The budget aims at doubling the farmers' income in a planned manner. The strategy is to focus on cultivation of high yielding/high density crops, use of modern technology and a host of other measures. Nine lakh farmers are being benefitted by distribution of High Yield Varieties or hybrid seeds. Provision for coverage of 400 hectares under high density apple plantation and 1000 hectares under sub-tropical fruit plants has also been made in the budget.<sup>10</sup>
- The allocation of Rs 5,443 crores for the rural sector will give a major fillip to our endeavours of rural development and economy. Under MGNREGA, 426 lakh person days to be generated and more than 14,000 youth will be trained under the Rural Skill Development Programme. Target has been set for constructing 54,000 houses under Pradhan Mantri Awas Yojana during 2022-23. Dedicated focus is being given to connect all Gram Panchayats with the Internet. Under Gram Swaraj Abhiyan, 1500 elected public representatives of Panchayati Raj Institutions will be sent for exposure visits outside Jammu and Kashmir.<sup>11</sup>
- 500 kindergartens will be established in government schools; 518 Smart Classrooms and 200 Vocational Laboratories are targeted to be established. The aim is to complete 37 Girls Hostel Buildings and 12 KGBV buildings, constructing 7 college buildings, setting up Centres for Invention, Innovation, Incubation and Training (CIIT) in Jammu and Srinagar, giving computer tablets to 8000 meritorious tribal students, besides providing skill training to around 20,000 undergraduate students. A target has also been set up to accomplish 100 percent coverage of pre-matric and post-matric scholarship to tribal students.
- The tourism sector contributed significantly to J&K's economy. Rs. 508 crores tourism budget will enable the sector to grow, thus benefiting the local population. 75 offbeat destinations are being identified and developed, and unexplored areas are also being developed under public-private partnership.

- Keeping in mind the welfare of the tribal community, provision had been made to establish 14 new milk villages, besides constructing 7 transit accommodations for the community. Moreover, 29 Cluster Model Villages were being established which are at different stages of implementation.<sup>12</sup>
- Development of border villages is another important sector that received a dedicated focus in the budget. With allocation of Rs 600 crore for border villages, and Rs 50 crores under the *Samridh Seema Yojana*, special efforts will be made for the development of villages along the borders.
- Under Smart City Mission, 80 projects would be completed and Rs 200 crores had been earmarked for this. “100 electric buses each will ply on the roads of Jammu and Srinagar. 9 major sewerage schemes at an estimated cost of Rs 1131 crores are to be executed and Rs 373 crores will be spent for the revival of Dal and Nagin Lake. Moreover, the balance portion of work on Tawi Barrage costing Rs 73.34 crores is expected to be completed during 2022-23”.<sup>13</sup>
- While maintaining operational focus on the crackdown on terror-machinery, outreach and education reform, efforts are also needed on revival of healthy, democratic, secular, and constructive political processes. It is absolutely essential to provide efficient and corruption-free governance, create employment opportunities for the youth, and unleash measures that give a growth-spurt in the tourism sector. The idea is that people should be made to feel the immediate benefits of the abrogation of Article 370 and full integration with India.

### Conclusion

Based on the statistical data, it can be concluded that the security situation in J&K is well within control and has improved. However, it is too soon to assert if absolute peace has been achieved in the UT. In a state that has borne the brunt of insurgency, terrorism and political instability for so long, undoing the wrongs will certainly be a protracted process. Much has been recommended on the road ahead in J&K and development prospects, but the primary focus must be on the empowerment of youth on a war footing and encouraging society to reject the idea

of terrorism being sown from across the border. Through all the actions taken in past 3 years despite the shortcomings, the state has taken steps to improve the situation in all sectors. Development is seen in different sectors, as discussed above. But over a period of time, the socio-economic profile of demography will be improved. However, the state has to make sure that, whatever promises made have to reach the grassroots level.

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# UN Peacekeeping and Conflict Management: Is there an Option for Ukraine?#

Major General (Dr) AK Bardalai (Retd)®

## Abstract

*Russia invaded Ukraine on 24 February 2022, five months back, but there hasn't been any de-escalation yet. From February 2021 until the actual invasion in February 2022, there was an opportunity for the world leaders including the Secretary-General UN to prevent the conflict by using the art of peace-making and possibly preventive deployment with the consent of the parties. Despite the lost opportunity, taking a cue from some of the traditional peace operations which were established during the cold war, there is an idea to use the model of a current traditional peace operation in the context of the of the Ukraine conflict. This article aims to examine this idea.*

## Introduction

Russia's invasion of Ukraine has entered the fifth month but there is no sign of a ceasefire yet. The US and North Atlantic Treaty Organisation (NATO) strengthen their military presence in Europe along with the supply of arms to Ukraine and the threat of more economic sanctions continues. While President Zelensky shouts about a defunct UN and continues to plead for more armament to get back the lost territory, there are speculations about President Putin's aim and how far would he go. Friedman

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#This article is an updated and revised version of the author's previous articles: "Ukraine Conflict: Is UN peacekeeping an option?" April 1, 2022, <https://hesperus.co.in/research/f/ukraine-conflict-is-un-peacekeeping-an-option>, and "Role of UN Observer Mission: experience of cold war peacekeeping and relevance in the Ukraine crisis," May 19, 2022, <https://usiofindia.org/publication/cs3-strategic-perspectives/role-of-un-observer-mission-experience-of-cold-war-peacekeeping-aad-relevance-in-the-ukraine-crisis/>

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concluded in more simple words that the US worries about the threat to the Atlantic if Russia expands further west and Poland though is worried about its sovereignty.<sup>1</sup> Therefore, it appears that to the US, if Russia cannot be defeated, the continuation of the conflict serves its interest by keeping Russia at a distance. Poland, however, is worried and wants an end to the conflict. It is in this context that Poland had earlier suggested a kind of peace mission as an interim measure. Gowan, the UN Director of Crisis Group, even though has not outrightly rejected the Polish 'Peace Mission', rightly pointed out that, "There is a natural tendency in moments of crisis to raise the idea of 'peacekeeping' in a vague way, much as Poland has done". Gowan observed that such an idea of using Blue Helmets came up earlier also in 2015 and Putin was open to the idea. Comparing the starting points for a peacekeeping mission in 2015 and now, it had a better chance in 2015 because Putin was at least open to the idea.<sup>2</sup> That the Blue Helmets would be able to do something is making rounds again. Even a former Canadian foreign minister and a professor of law at the University of Ottawa Axworthy and Rock believe that the UN can use Blue Helmets to save Ukrainian lives.<sup>3</sup> Gowan reaffirmed his views during his intervention in the "Multilateralism and the state of the international order after Russia's invasion of Ukraine", at Finnish Institute of International Affairs. He believed that as and when there is a ceasefire, the UN can play a role in the form of peacekeeping (and various other forms) for conflict termination.<sup>4</sup> His observation was in the context of a post ceasefire agreement between Russia and Ukraine.

In this regard, Dr Novosseloff has, while referring to the role of cold war era peacekeeping missions, reflected that if the UN peacekeeping mission is called to help to monitor and implement the eventual agreement, it will be an observer mission.<sup>5</sup> Without being prejudiced against the probability of success, such optimism of UN peace operation can be analysed in the context of firstly, the kind of role the UN peacekeeping can play, and secondly, the probability of its success in the face of several security challenges. Before that, it would be worthwhile to see if the UN could have done something to prevent the Ukraine conflict.

### **What the UN could do?**

The world is cursing Russia for the suffering of Ukraine. But there was one year time for the UN (Secretary-General) and the world

leaders, when Russia dropped paratroopers near the Ukraine border on 21 February 2021 and until the actual invasion on 24 February 2022, to initiate preventive diplomacy and may even consider preventive deployment to prevent the conflict.<sup>6</sup> Intriguingly, that window was lost either deliberately or out of ignorance. It is difficult to believe that it can be out of ignorance. The world kept talking about the invasion much before the actual invasion. But nothing was done to prevent it other than threatening and asking Russia to respect the sovereignty of Ukraine. Ukraine too believed that the West would come to its rescue. A few European leaders tried but, after all, Russia looks at Europe with suspicion. There was a chance that Russia would have listened to its close friends like China (they have come very close recently and maybe united against a common rival). Sadly, neither the UN nor the West did anything to seize the initiative to assure Russia and convince Ukraine that neutrality of Ukraine is important to avoid war and can be arranged using ways other than war. The international community, thus, lost out on the theory of 'Preventive Diplomacy' as introduced by the then Secretary-General Butros Ghali in Agenda for Peace.<sup>7</sup> The Secretary-General is best suited to begin preventive diplomacy.

There are at least two earlier similar, if not the same, situations involving the permanent member of the Security Council when the security situation created a decision dilemma for the Security Council. The first one was when Egypt nationalised the Suez Canal when US and UK refused to fund the Aswan Dam project after the British had handed over the canal to Egypt in June 1956.<sup>8</sup> Based on a secret agreement between Israel, the UK and France, Israel invaded Egypt on 29 October 1956. The plan was for Israel to invade Egypt first, followed by an intervention by the UK and France forcing Israel to withdraw, but they would stay back and wrest full control of the canal.<sup>9</sup> A situation like that involving two permanent members was not in the interest of either the US or the USSR. Besides, UK and France would have surely vetoed any move by the Security Council asking them to pull back their troops. Recognising the situation that the Security Council was almost paralysed, the Security Council adopted a resolution calling for an emergency meeting of the General Assembly to address the issue.<sup>10</sup> Since a collective enforcement action became politically impossible, on 02 November, the UN General Assembly

passed a resolution calling for a ceasefire and withdrawal of forces.<sup>11</sup> The strategy and the composition of the force were left to the Secretary-General and United Nations Emergency Force (UNEF) came into being.

The second instance was when the Security Council was caught in the power play between the West and the Soviet Union soon after Belgium, the colonial master of Congo, announced Congo's independence on 30 June 1960 and Moise Tshombe, the head of the provincial government of Katanga, declared the independence of Katanga on 10 July 1960. Following this, when Congo's new leaders President Joseph Kasavubu and Prime Minister Patrice Lumumba appealed to the UN on 12 July for assistance citing Belgium's involvement in inciting the secessionist movement of Katanga, Dag Hammarskjöld, the then Secretary-General, exercising his power under Article 99 of UN Charter XV, called for an immediate meeting of the Security Council.<sup>12</sup> On 14 July 1960, the Security Council adopted resolution 143 calling for the withdrawal of Belgium troops and authorising the Secretary-General 'to take all necessary steps' to provide the government with 'such military assistance as may be necessary' until the national security forces are able 'to meet fully their tasks'.<sup>13</sup>

In both cases, the UN, namely the Secretary-General, took the initiative to force the General Assembly and the permanent members of the Security Council to decide to prevent a war. The role played by Secretary-General in finding a solution that satisfies both sides is an example of an innovative leader.<sup>14</sup> It, therefore, is puzzling why such an initiative was not taken to prevent the invasion of Ukraine. It is obvious that by not doing anything, for whatever reasons, it might be the UN has failed the people of Ukraine. Who gains from the conflict? Russia and Ukraine are suffering and to a large extent, the global economy. We are yet to see the worse. NATO's survival is based on the presence of threats from the East. Therefore, NATO is regaining its lost relevance. And finally, those nations that have profited from the arms sale unless these are for free. Hence, were they sincere in preventing the conflict, or is it the other way around?

Those who make the decisions are the same since the inception of the UN. If the UN and the world are still sincere in bringing a quick end to the suffering of innocent people, measures

outside the political rivalry between the West and the East will have to be considered, including seeking help from countries like China, or maybe even India, to play a constructive role to defuse the situation and work out a ceasefire plan.<sup>15</sup> Despite the challenges of the internal organisational dynamics of the UN, it was possible for the Secretary-General to comprise a high-level delegation (that may or may not include a representative from the West) to find an escape route for both President Putin and President Zelenskyy to come out from out of their political trap.<sup>16</sup> In his interview with the Time, President Zelenskyy has talked of making compromises.<sup>17</sup> Great leaders are known to have made compromises for the sake of their people. It depends on how far President Zelensky is prepared to go to save Ukraine and where does President Putin want to draw his line to make him feel secure against threats from the West. It brings us to the likely role of UN peacekeeping in the Ukraine conflict.

### **What Next Then?**

Even though an opportunity for preventive diplomacy has been lost due to inaction on part of the UN from February 2021 until the beginning of the invasion in February 2022, the latest initiative of the Secretary-General to meet both President Putin and President Zelensky has brought in some hope. As it appears, Russia has agreed in principle to a UN role and Red Cross in evacuations from Mariupol.<sup>18</sup> It was only about the evacuation of the civilians. But it might also open the way for more involvement of the UN in the future, in case both sides agree to end the conflict and ceasefire. If that happens, there will be a need for some neutral organisation to see that the ceasefire is holding on by observing, monitoring, and deconflicting instability because of animosity and lack of trust between the opposing sides. UN peacekeeping is one of the options. But the question is how and in what form? For this, it will be good to visit our experiences of United Nations Interim Force in Lebanon (UNIFIL), the only traditional peace operation which was established during the cold war in the context of the inter-state conflict between Israel and Lebanon and is still in place.<sup>19</sup>

The mission has a strong force structure with three European Troop Contributing Countries (TCCs) deploying their soldiers who are equipped with heavy armaments which are rare in the UN peace operations. But the mandate, in general, is that of conflict

management by a peacekeeping mission under Chapter VI of the UN Charter. The presence of UNIFIL signifies the presence of the threat from Hezbollah to Israel and justification for Hezbollah to hold on to its military wing to defend the sovereignty of Lebanon against Israel. So far, the mission's quick response, combined with its liaison and coordination mechanism and not the robust structure, has helped to prevent the incidents near the Blue Line (BL) from escalating into a major conflict and bringing stability to the region and ushering in negative peace.<sup>20</sup> In UNIFIL, the presence of armed contingents was accepted by the parties to the conflict due to political reasons even though this has not contributed to deconflicting the situation. With this background, to explore the role and structure of a peace operation for Ukraine, the probability of the success of a peacekeeping mission in the context of the conflict between Russia and Ukraine, should be examined first. It will be discussed next.

### **Can UN Peacekeeping succeed in Ukraine?**

At this stage, when exploring the feasibility of peacekeeping as a conflict management tool is only an idea, it is difficult to comment on its effectiveness in Ukraine. There can be several reasons why peace operations either succeed or fail.<sup>21</sup> However, presuming both Russia and Ukraine may be amenable to a role in UN peacekeeping, such an option can be examined in the context of the basic conditions that peace operations must fulfil to succeed. One of the primary conditions is the need to adhere to the principles of peacekeeping.<sup>22</sup> It is always not easy to strictly adhere to the principles because of the inherent ambiguity in their interpretation. At the minimum, deploying peacekeepers without the consent of the parties to the conflict is against the first cardinal principle of UN peacekeeping – *Consent*.<sup>23</sup> Even if both Russia and Ukraine agree to the UN's intervention to monitor a ceasefire, the consent may not be absolute, but conditional. Some of the conditions can even be implied.

As regards the use of force, given the kind of violence that the peacekeepers would be exposed to (including the threat to peacekeepers), the biggest challenge will come from the mercenaries that are fighting for both sides. These are loose organisations and easily get out of control of their handlers. To some extent, these groups may even continue to operate with

tacit support from the main parties to the conflict. Therefore, unless there is sincerity on part of Russia and Ukraine to restrain these irregular fighters, the ceasefire is not likely to hold. Another challenge is finding the TCCs that would be willing to participate in such a mission. The member states from the West, who have the desired capability, are not inclined to take part in difficult peace operations and those nations from the global South who have the capability, may not be inclined to make political and military sacrifices by getting caught in between the Russian and Ukrainian armed forces and the mercenaries whose ownership does not have any legitimacy. Given the cause and the ferocity of the conflict, Russia and Ukraine's context is far removed from UNIFIL's. It is, therefore, unlikely that other than an unarmed (or may be lightly armed) monitoring role, the presence of any armed foreign troops would be acceptable to either of them.

In this context, it would be worthwhile to note that there appears to be a rethinking of the relevance of traditional peace operations (including unarmed observers and formed armed contingents) in the observer role. This was discussed in a round table conference organised by the Effectiveness of Peace Operations Network (EPON) at the UN HQs on 12 May 2022 where the author was also one of the panellists.<sup>24</sup> There was a consensus that while the traditional peace operations of the cold war era have become status quo, these are still relevant and can be considered as an option in conflict management tools in inter-state conflict.<sup>25</sup> But as explained in the earlier section, an armed peacekeeping force is not likely to be accepted by both Russia and Ukraine. Hence, rather than an armed observer mission, an observer verification mission comprising peacekeepers from neutral countries supported by a liaison and coordination mechanism is likely to be more suitable to facilitate a ceasefire. This thought is not looking at peace enforcement in Ukraine since the intention is not to tangle in the fight between Russia and Ukraine. It is opting for a less violent option, i.e., monitoring/peacekeeping in response to Novosseloff's comments on the feasibility of an observers' mission if the UN peacekeeping is called for. However, the role, composition and size of the mission, and modalities will have to be worked out only after deliberations with the stakeholders (including Russia and Ukraine) and the field visit by the technical teams. If acceptable to the main parties to the conflict, even a UN civilian observers' mission in the line of the Organisation of Security

and Cooperation in Europe's Special Monitoring Mission (OSCE SMM) is another option worth considering. So far, these observers have performed well.<sup>26</sup>

Why civilian peacekeepers? Military peacekeepers would find it easy to deal with foreign militaries in a hostile environment because of their familiarity with the common and basic military culture. When military personnel act in a particular manner because of their training, military peacekeepers can anticipate such actions with more ease than their civilian counterparts. However, given proper military training and their availability in adequate numbers, there is potential for civilians to participate in UN observer missions either independently, or better, by complementing the military peacekeepers in an integrated UN observer mission. Even though the civilians are generally not comfortable working alongside the military, there were earlier instances of both military and civilians working together. During the UN-supervised Angola general election in September 1992, the unarmed military observers were asked to provide only logistic support like transportation (that too only if required) to the electoral teams. But because of the uncertain security situation, several electoral teams were forced to stay on the military observer's bases during the period of the election. Staying together in difficult times brought both military and civilians together, respecting each other's space.<sup>27</sup> Besides, as military peacekeepers find it easy to relate to military activities because of their familiarity with military culture, civilians can also bring with them certain nuances of peacekeeping that may go unnoticed by the military peacekeepers in the normal course.

## **Conclusion**

UN peacekeeping as a tool for conflict management serves the best when there is consent from the parties to the conflict. Given the suffering, there are chances that Ukraine might agree to a peacekeeping mission just to alleviate the suffering of the civilians. As noted earlier, President Putin was also open to the idea in 2015, possibly with the hope that the Minsk Agreement could be implemented in letter and spirit. Using statistical analysis and selected case studies, Doyle and Sambanis studied several complex peace operations since 1960 and concluded that UN peace operations can also be effective by supporting new actors who are sincere in their commitment to peace.<sup>28</sup> Regardless of the form, the peacekeeping mission should take place only post a

ceasefire agreement and there is peace to keep. Putting it differently, unless there is a reasonable chance of even partial success, it would be futile to invest in deploying a peacekeeping mission in Ukraine. If a non-violent international intervention is either not acceptable or not considered workable, a solution to the conflict will have to be found by Russia and Ukraine themselves with support from those nations who are working behind the scenes in support of the continuation of the conflict. The Ukraine conflict has given rise to the renewed possibility of large inter-state conflicts. Therefore, the idea put forward in this article needs to be examined further as one possible model.

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<sup>19</sup> UN Security Council Resolutions 425 and 426 March 19, 1978, and S/RES/1701 (2006), August 11, 2006

<sup>20</sup> The Blue Line is the withdrawal line of IDF in May 2000, based on certain geographical features between Lebanon and Israel. It is not the boundary between Lebanon and Israel. Please also see, Johan Galtung, "Violence, Peace, and Peace Research," *Journal of Peace Research* 6, no. 3 (1969): 167–91. <http://www.jstor.org/stable/422690>. Please also see, Jessica Di Salvatore and Andrea Ruggeri, "Effectiveness of Peacekeeping Operations", *Contentious Politics and Political Violence, World Politics* (September 2017), 23, DOI:10.1093/acrefore/9780190228637.013.586.; Vincenzo Bove, Chiara Ruffa and Andrea Ruggeri, *Composing Peace: Mission Composition in UN Peacekeeping* (New York: Oxford University Press, 2020), 25; Annemarie Peen Rodt, "Successful Conflict Management by Military Means," *Ethnopolitics*, 11, no. 4(2012): 376-91; Barbara F. Walter, Lise Morje Howard, and Virginia Page Fortna, "The Extraordinary Relationship between Peacekeeping and Peace," *British Journal of Political Science* (2020): 3, doi:10.1017/S000712342000023X. Also see Virginia Page Fortna, "Does Peacekeeping Keep Peace? International Intervention and the Duration of Peace After Civil War," *International Studies Quarterly* 48, no.2 (2004): 269–292, <https://doi.org/10.1111/j.0020-8833.2004.00301>

<sup>21</sup> A. K. Bardalai, "United Nations Peacekeeping Operations: Causes for Failure and Continuing Relevance," *Journal of Defence Studies* 12, no. 4 (October-December 2018): 5-34.

<sup>22</sup> United Nations Peacekeeping Operations: Principles and Guidelines (New York: UN Department of Peacekeeping Operations, 2008), 31-40.

<sup>23</sup> Peacekeeping principles were identified after the establishment of UN Emergency Force I (UNEF I) in Gaza. See United Nations, "Summary Study of the Experience Derived from the Establishment and Operation of the Force: Report of the Secretary-General, A/3943," (October 9, 1958) and Paul F. Diehl, "First United Nations Emergency Force (UNEF I)" in *The Oxford Handbook of United Nations Peacekeeping Operations*, ed. Joachim A. Koops, Norrie Macqueen, Thierry Tardy and Paul D. Williams (Oxford: Oxford University Press, 2015), 151.

<sup>24</sup> Please see <https://effectivepeaceops.net/> for more about EPON.

<sup>25</sup> Please also see for details about the round table conference <https://drive.google.com/file/d/1zU1jsPvrWurUhaj7MNYJ5dgB-jHr0U28/view?usp=sharing>

<sup>26</sup> André Härtel, Anton Pisarenko, and Andreas Umland, "The OSCE's Special Monitoring Mission to Ukraine: The SMM's Work in the Donbas and Its Ukrainian Critique in 2014–2019," June 7, 2021, [https://brill.com/view/journals/shrs/31/1-4/article-p121\\_121.xml?language=en](https://brill.com/view/journals/shrs/31/1-4/article-p121_121.xml?language=en), accessed on May 18, 2022

<sup>27</sup> Personal experiences of the author from his days as an Unarmed Military Observer in the United Nations Verification Mission in Angola (UNAVEM) in 1991-92

<sup>28</sup> Michael W. Doyle and Nicholas Sambanis, *Making War and Building Peace: United Nations Peace Operations* (Princeton: Princeton University Press, 2006); Paul F. Diehl, *International Peacekeeping: With a New Epilogue on Somalia, Bosnia and Cambodia* (Baltimore: The Johns Hopkins University Press, 1993); Dennis C. Jett, *Why Peacekeeping Fails* (New York: Palgrave, 2001); Lise Morje Howard, *UN Peacekeeping in Civil Wars* (Cambridge: Cambridge University Press, 2008); K. N. Pepra, *UN Robust Peacekeeping: Civilian Protection in Violent Civil Wars* (New York: Palgrave Macmillan, 2014).

## ‘Nil Nisi Bonum’ — Of the Dead say Nothing but Good

Lieutenant General GL Bakshi (Retd)<sup>®</sup>

### Abstract

*This article is both, a eulogy to late General TN Raina, the Chief of the Army Staff (COAS) of the Indian Army from 01 June 1975 to 31 May 1978; and an advice to not speak ill of someone after he has passed away. With first-hand experience of the man and the events of his times, the author brings out little known/forgotten facts about a man who died more than 40 years ago after a long and distinguished career.*

### Introduction

A few days back, an old internet untruth was recirculated on Army WhatsApp groups criticising ‘Gen Raina’, one of Indian Army’s former Chiefs, who had passed away in October 1980. The Latin phrase *De mortuis nihil nisi bonum*, “Of the dead, [say] nothing but Good”, abbreviated as *Nil nisi bonum*, is a mortuary aphorism indicating that it is socially inappropriate to speak ill of the dead as they are unable to justify themselves. Attributed to Chilon of Sparta, one of the seven sages of Greece in the 6<sup>th</sup> century BCE, it is eternally relevant. This short article reaches out to a military audience to say that please do remember that on WhatsApp or other social media you are not in a ‘one to one conversation’, but on a ‘public platform’ of the kind from which any one can resort to forwarding your comments to one or many other groups, or individuals, including in civilian forums without any qualm, check, or hindrance. This causes a good amount of damage to anyone about whom unverified facts are being circulated. In this case, the internet untruth harmed the late Army Chief’s and officer’s dignity and honour. Concurrently, since such media is in public

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domain, it also irreparably hurts not only the ex COAS’s respect and standing in society but does some damage to the army and the armed forces in the eyes of civilian and readers from younger generations. I may also add that these are my personal first-hand views from the service and close interaction I had with him for many years.

### **The General Tapishwar Narain ‘Tappy’ Raina I Knew**

On commissioning in December 1956, I joined the 14 Kumaon (Gwalior) which is now 5 Mechanised Infantry. Later I served in the 12<sup>th</sup> battalion of the Kumaon Regiment. In 1957, Indian commissioned officers started getting commissioned into the Jammu and Kashmir Rifles (from 1948 till 1957 no young officers had been commissioned into this regiment which till that time was a State Force which was not amalgamated into the Indian Army). The result of no commissioning for almost nine years was that by 1962, there was a big deficiency in the middle order officer cadre. Consequently, a number of officers from other infantry regiments in the ranks of Major and Senior Captains were selected for transfer to the Jammu and Kashmir Rifles. I was one of them.

While in the Kumaon Regiment, I was in the same battalion as General Raina — a battalion which he later commanded — and, hence, had served under him for a long period and known him very well. He was a gentleman and an honourable officer, leave alone his being counted as one of our ‘Outstanding Chiefs’ — in some reckonings — at a rather critical juncture (during the period of the Emergency) in our nation’s history. I call General Raina my ‘First Commanding Officer (CO)’ because my meaningful service started under him. After commissioning, I joined the battalion in January 1957. After a couple of months, I proceeded on the Officers Physical Training (PT) Course, my first army course. After the PT course at Pune when I returned, my first CO, Lieutenant Colonel MMS Mathur, had been posted out and Lieutenant Colonel TN Raina had taken over the battalion. I served under Lieutenant Colonel Raina as his ‘Battalion Intelligence Officer’ for the entire two years of his Battalion Command and hence came to know him very well. I had also interacted with him on numerous other occasions during my service, picking up some great ethical and value-based learning/lessons which have guided me, as also served me, well by making me whatever I am.

To give a brief measure of the man and the soldier he was, it was during his time as the Chief of the Army Staff that two major operational initiatives were born and executed. Firstly, moving the Regimental Centres to stations far away from the Indo-Pakistan border and moving fighting formations to those closer locations vacated by the Centres. The aim, as is obvious, was the very desired 'quick operational build up' which was then badly needed. Fighting formations located in the interior of the country was a British era legacy when troops were required to maintain internal order and there were few or no threats on the borders of British India. This move was done against tremendous opposition and pressure from both, some politicians and some very senior retired Generals who did not want their respective centres to lose the huge immovable assets created by them. But General Raina stood like a rock and fully executed the plan in the interests of our country's operational readiness.

Secondly, he became the only Chief to set up an 'Expert Committee' under Lieutenant General Krishna Rao, with Lieutenant Generals Sundarji and BC Nanda as members, to prepare a relatively long term and futuristic '25 years Perspective Plan' for our army, something not done by any other Chief till then.

Thirdly, on the welfare side, the biggest step was getting our men their first pension authorisation by prevailing over the government to agree to enhancing 'Colour Service' from 'seven years' to 'pensionable service'. Also, on the pure welfare side, the 'Army Group Insurance (AGI)' and the 'Army Welfare Housing Organisation (AWHO)' were his innovations and creations, which were, subsequently, copied by many others, after liaising with our set ups.

### **General TN Raina's Stated Negatives**

It has been said that General Raina hid his ailments in order to protect his promotions. As I know it, General Raina never ever hid any ailment of his from anyone, at any time in his life. I know it for sure because when he was a Lieutenant Colonel and we were on a 'Training Exercise' at Ferozepur, he was suddenly taken ill by way of experiencing 'chest pain' on the left side, which the Battalion Regimental Medical Officer immediately diagnosed as likely 'Heart Attack'. In my presence, all the senior Company Commanders strongly advised then Lieutenant Colonel Raina, to

go for 'no reporting' and to resort to 'outside private treatment' with the aim of not taking the risk of becoming a Low Medical Category (LMC) to safeguard his further promotions. He totally ignored their advice and, without batting an eyelid, reported his problem officially to the Divisional Headquarters at Jalandhar and immediately got himself evacuated by road to the best hospital at Amritsar, which after seven days stay, and full check-up, cleared him and sent him back to the Battalion. I don't know which other ailment the posts refer to. Some people used to talk of his one eye, the other having been lost — as I recall — due to an accident as a Captain at a firing range. The fact was that he could see a lot more with his one eye than we could do with our two.

There is also criticism that he went after LMC officers while safeguarding his own ailment/disability. Let me clarify that the LMC case was also a decision taken by him in the best interests of the army and the country. The decision was based on his analysis of those cases wherein it was found that some people 'managed' to become LMC soon after promotion to get a good and comfortable posting based on their 'LMC Status' and then again get 'upgraded' before the next board so as not to miss the next promotion. They had developed this into a very fine art. All that he did was, he made all such people to go to postings which were as difficult as were permissible within the 'medical classification'. Just this and no more, and yet there was cribbing and noise resulting in loose talk.

Some people are also critical of the award of *Maha Vir Chakra* (MVC) to him after the 1962 war. About the award of MVC to him in 1962, let us face the fact that 1962 was — except for a few exceptions — overall a shameful chapter in the history of the Indian Army. If anywhere we did conduct ourselves with some acceptable dignity and honour, it was either his Brigade in Ladakh or, possibly, a couple of Battalions in the East in 2 Mountain Division. So, this MVC, strictly speaking, was not a 'bravery award' in the traditional sense but an award for leading the Brigade in a competent and honourable manner. This explanation is my own and its validity, or otherwise, would need to be checked with what was written in the citation for MVC. As an aside, I would like to share that I do recall that post 1962, when General Raina was on leave at Delhi and I met him at the Sangli Hostel, I asked him, "Sir, do tell us the story of your MVC". He, very nonchalantly, told

me in Punjabi, addressing me as 'Chotu' (little one) which was my battalion nickname, "*Chotu, Main ki keeta, Kuch Nahin. Oye, 'Banda kare Kawalian, te Rab kare Swalia'*", which roughly means, "Chotu, I did nothing, we only foul up, God sorts out". He never claimed anything big for himself and was always very humble. Therefore, it was the army and the government which conferred this award on him for whatever reasons.

### Conclusion

I have written this brief to enable those who have not lived in General Raina's time, and are unaware of him, to have an insight into the man and his character. The article is also to make us all reflect whether it is right to cast judgement on anyone's actions decades after his demise? While I am for freedom in speech and the written word, we should be sure whether we are using this 'right' to so called 'free speech' with due balance and responsibility or are we going overboard. I have had the great privilege of enjoying some bit of beneficial guidance and imbibed great learning from many senior officers. The four that stand on the top in my consciousness are Generals KS Thimayya, Sam Manekshaw, TN Raina, and Kashmir Singh Katoch. If I may say, I do think that General Raina, in his own right, was as good and as accomplished as the others. His strongest belief was in the Chetwode adage that "The Country Comes First, Always and Every Time". Therefore, his every decision, and the promptness with which it was taken, was influenced and dictated by just this consideration.

Finally, I will end by saying, that, if someone is in disagreement with my line of thinking, I would say that they are welcome to their thoughts. They should only air them in case they have first-hand/ personal knowledge and not only on hearsay, and, thus, uphold the adage '*Nil Nisi Bonum*'.

# Becoming the Giants of Autonomous Weapons and Drones (GAWDs) of the World and the Implications for India

Shri Shaurya Dhakate®

## Abstract

*The last few decades have seen a paradigm shift in war-fighting doctrines around the world where newer theatres of war have emerged leaving the traditional three (Land, Sea, and Air) in a completely different light. The newer two (Space and Cyberspace) when bred with the former three, results in a cross-species that we commonly call disruptive or 'grey-zone' warfare. Nations have begun to employ newer 'un-trackable' and 'zero footprint' technologies to rain havoc on the adversary during conflicts. Their development, modifications, and deployment strategies of Autonomous Weapons and Drones (AWDs) come into use when we categorise them into Type-1, Type-2, and Type-3. Drones being predominantly used in offence, defence, and surveillance role and can also be exploited for the art of distraction. The article puts forward the intelligence point of view where UAVs be tweaked to be used similar to 'migratory birds' behind enemy lines.*

## Introduction

Conflicts are often fashioned in such a manner that despite the devastation they cause in people's life, they must be portrayed as just and civilised wars. To achieve such representation, nations resort to using soft power more than actual hard power. We see this happening in the ongoing war between Russia and Ukraine where each side uses the means at its disposal to create a

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favourable narrative and perception. Today influencing the 'mass opinion' of the adversary nation is as important as the kinetic effects of war. Mass opinions can be triggered by various methods. One, you use actual weapons and target valuable installations affecting a nation's sentiments. Two, you harass the adversary by showing your capabilities and using technologies which don't particularly have any antidote, such as spywares or hi-tech drones. The latter one, I like to call 'Triggering Tactics' using 'Poke Weapons', which pokes the adversary with a deceptive intent to ascertain the reactive nature of the adversary rather than trigger an offensive action. The ensuing paragraphs attempt to identify trends in weapon technology developments and classify countries into Type-1, Type-2 and Type-3 on the basis of their approach in developing Autonomous Weapons and Drone System (AWDS s). The analysis will try to uncover the potential uses of drone technology and convert a conflict into a 'Poke War'<sup>1</sup> using ancient methodologies like the art of distraction and strategies like Psychological Operations (PSYOPS).

### **Blending Disruptive Warfare with Psychological Warfare**

Blockchain is now being recognised as an asset with a virtual universe also known as Metaverse. Being born on that blockchain, it is near certain that technology penetration will grow manifold and become an intrinsic part of our lives as internet is today. The world is shifting from WEB 2.0 to WEB 3.0 and with new developments being introduced such as the WEB 3.0<sup>2</sup>, the common notion of information consumption and use of technology is changing. WEB 3.0 is a more decentralised platform which runs mostly on the blockchain. "The Emerging Disruptive Technologies (EDTs) such as artificial intelligence (AI), big data, quantum technology, robotics, autonomous systems, new advanced materials, blockchain, hypersonic weapons systems, and biotechnologies are applied to human enhancements which are expected to have a disruptive impact on defence and revolutionise future military capabilities, strategy and operations".<sup>3</sup> With Software and Codes like AI, machine learning (ML) and Blockchain in the back-end, when it comes to new-age warfare, the front end is held by Autonomous Weapons Systems (AWS) and Unmanned Technologies. These are the instruments where the software and codes are deployed.

Remotely Piloted Aircrafts (RPAs) are a crucial part of EDTs. With conventional wars being replaced by 'Grey Zone' wars, drones offer a blend of both the worlds. Conventional wars meant physical 'Force on Force' damages, whereas the new-age wars include physical, economic, and psychological damages. The act of using drones to impose constant physical damages to the adversary without attributability is nothing but playing with the leadership's mental state. Such acts, in today's overly connected world, plays with a fragile mass opinion affecting the country's internal well-being and its international relations.

In recent years, not just nations but non-state players have demonstrated their drone capabilities by exploiting drone swarms for attack purposes. The recent attack on Abu Dhabi's new international airport, on 17 Jan 2022, by the Houthi rebels causing significant damage and casualties comes just a little over two years after a similar attack by the same group on Saudi oil fields on 14 Sep 2019. The effects of constant 'poking' is devastating, even more when it is combined with PSYOPS. In geo-political issues, putting/maintaining pressure and handling pressure are the most important tools in the art of disruptive and hybrid warfare. The use of disruptive weapons and psychological weapons can be debilitating when paired with human psychology. As Von Clausewitz opined, '*War is a contest of wills*' which is fought in the minds; disruptive and hybrid warfare targets the minds of the adversary.

**Mastering the Art of Distraction using Drones.** A drone is a flying object to most people; it is a revolutionary step when it comes to e-commerce, cinematography, etc. But for militaries, drone is an eye, an arms carrier, a gun, a spy and much more. Drones can be prevented from entering military installations using drone radars and jammers but with every encumbrance comes a new antidote. The UAV technology with stealth capabilities and ultra-low radar signature is difficult to counter. Using single drones one at a time, to attack installations of great but not national/international importance will create a feeling of vulnerability in the population, which would eventually pressurise the government, leaving them with limited courses of action. With techniques of disruptive and psychological warfare, the art of distraction plays an important role. Shifting spotlights from one event to another and keeping real intent in the darkness is what is called the art of deception.

### **Using Drones like a ‘Fire They Can’t Put Out’**

With every new virus, comes a new anti-virus; with every new ailment comes an antidote; with every weapon comes a counter weapon, whether it takes months or years to make, but it comes for sure. Similarly, for every new anti-drone technology comes an already available counter-counter measure. India had militarised drones more than a decade back with the induction of IAI Heron/ Searcher and now the Indian Navy has leased two MQ-9 Reaper drones. But when a game of disruptive and psychological warfare is played, these are not the drones we might want to use. Smaller drones which are harder to detect on a radar screen can be like a swiftly erupting fire which, when it lights up, assures that the victim gets pyro-phobic for the rest of his life. Now, we'll analyse the scope of using drones from multiple views, each one giving new options in which these small sized drones can be operationalised, keeping in mind low stakes and high value of return because the chances of winning are highest when the stakes are low.

- **Troops’ Point of View — Drones as an Extra Limb.**

Many countries have operationalised and developed maritime drones, wheeled drones and even human shaped armed bots. The U.S. Marines Corps has recently tested a multi-purpose mini-drone that has been designed to transport diverse payloads and be fired from grenade launchers. The Drone40, developed by Australian firm DefendTex, is less than 5 inches in size with its take-off weight being 300 grams. “The modular bay of the unmanned aerial vehicle (UAV) allows handlers to fit a payload into the tiny aircraft according to the nature of the mission. The UAV can be equipped with munitions including counter-drone hard and soft kill options, flashbangs, and chemical smoke along with kinetic options”.<sup>4</sup> These highly capable drones paired with operatives during warfare can give them an edge over their counterparts; not only by using the on-board vision but to use those for Kamikaze attacks whenever required [...] and drones are eminently suitable for the Kamikaze roles.

- **Commander’s Point of View — Drone as a Third Eye.**

Operationalisation of drones as surveillance systems and for monitoring real time situation in a warzone has been ongoing

for decades now. The leadership can see what is happening in the warzone from command headquarters, ensuring much better battlefield transparency as well as Battlefield Damage Assessment (BDA). An indigenously made airborne technology, with AI/ML embedded, which can make shoot/no shoot decisions based on pre-fed decision matrix, can relieve the Commander from decision making in an intensive combat environment.

- **Sailor's Point of View — Drones as a Shiver of Sharks.** "At another level, the underwater domain is emerging as an important medium for drone warfare. An underwater drone or a Remotely Operated Underwater Vehicle (ROV) is a submersible platform and can move through underwater currents. The underwater drones are generally fitted with cameras, obstacle avoidance sensors, and powerful lighting to record good quality footage even in dark underwater environments".<sup>5</sup> The People's Liberation Army Navy (PLAN) has deployed many underwater drones in the Indian Ocean, which have been found by Indonesian fisherman on the coast of Indonesia on various occasions. The PLA drones called '*Sea Wing gliders*' are a type of Uncrewed Underwater Vehicle (UUV) which can operate and do observations for months on end, with or without human control.

- **Aviator's Point of View — Drones as Wild Pterosaurs.** The name 'Pterosaurs' strikes an image of a flying dinosaur with a long beak, which attacks anything that is airborne. High speed drones with destructive capability can be highly frustrating to the adversary when used in right quantities and with correct operational integration plans. They can pose a serious threat to the adversary if we use high speed drones to home on to Offensive Counter Air (OCA) packages and hit the strike aircraft. Using low cost but high capability drones as decoys can help distract the interceptors and aid our ground attack force along with the respective escorts/fighter sweep. Same can be done to phased-out aircraft of the air force, which is already being done by many countries like China and now India is also looking at similar possibilities with the trials on Kiran Mk-II aircraft (CATS-OMCA), and possible modifications on the phased-out MiG-21 and MiG-27.<sup>6</sup> These full-sized aircrafts have the same radar signature as a manned aircraft on a radar screen.

- **Intelligence Point of View — Drones as Migratory Birds.** Drones are made in every size imaginable; some drones, today, are as small as a few centimetres to being full sized aircrafts. The US. has been working on self-sufficient drones which can use solar power and use pre-planned routes for operations. Why don't we think a few steps ahead and create technologies suiting our geographical conditions? Like migratory birds change habitats and still manage to remain self-sufficient and adapt to changing geography, migratory drones can be developed which use solar energy to power themselves, can remain at rest/in hibernation for long period of times in remote areas, tree tops and when needed, can move to do whatever required, be it surveillance or strike, much like sleeper cells. The Remotely Piloted Aircrafts (RPAs) must be highly autonomous and rely on pre-fed offline maps/terrain data, TERCOM, on-board vision and AI/ML based environment detection, navigation and target acquisition. Such systems would necessarily require satellite based encrypted communication for data dump and strike authorisation.

### **Cutting Edge Technology Usage**

However, just being 'Sleeper Cells' is not good enough. The RPA must have on-board optical seeker/sensor technology not only for navigation and terrain recognition but for comprehending emotional states of subjects of the hostile territory. AI and ML have already been incorporated in small sized cameras for surveillance and espionage. The technology not just understands how someone is feeling at the moment, but predicts their future behaviour and decodes their personality. Thousands of firms across the world are researching and developing psychology-decoding technologies with intent that one day computers can fully understand human psyche by just looking at their facial expressions.

While the drone is in hostile territory, its operators must make sure that the equipment is safe, sustainable, and fully operational. The drone's operational capabilities have already been addressed in the former paragraphs. Another factor of self-sufficiency is the communication and navigation. Catering to Murphy's Law, the developers must assume a situation when the connection to the RPA is lost and the whole objective of the mission is at stake. Making it self-sufficient in this sphere is also vital. The same can

be done by introducing the drone to a Plan-B and, if required, a Plan-C procedure, where loss of connectivity means it has to switch to offline maps and terrain data in order to carry out the objective or return back to the friendly side of IB. The most crucial and game-changing innovation which can be done to the espionage drones is the development and incorporation of Autonomous Drone's Nesting Technology (ADNT) which will be tasked with effective camouflaging of the drone according to the terrain, using suitable methods.

### **Innovations in Drone Developments and Action Plans**

When it comes to developing technology for military use, there are two types of nations. Type One, which dive in the depths of innovation to make their technology a cut above the rest. Their aim is not to create a technology for export or generating profits, but to design a weapon that not only fulfils their own needs but turns out to be something which is truly fearsome for the adversary. Type Two are countries which reverse-engineer technology and manufacture machines with little tweaks and changes to suit their own needs. But this leads to compromises in the capabilities of the system and whenever a new innovation in technology emerges, their systems become outdated. Then the Type Two countries start work on similar technology with a long gestation period of many years. Thus, they are constantly lagging behind the innovation cycle. When their technology finally becomes successful, a new innovation is brought out by the Type One countries. Last, but not the least, are the Type Three countries; the ones who don't participate in the above race at all.

Israel has mastered the art of using software algorithms and hardware to create the most beautiful but lethal drones and not just to make them and showcase to the world, but to manufacture them in huge quantities and utilise them in effective action plans. They understood much earlier that putting a human life up in the air for warfare is likely to be out of fashion in the decades to come. Today, the cutting-edge drone technology breeds in the labs of Israel. "Sitting on the front lines of how wars are fought in the 21st century, Israel has developed in its arms trade, new weapons, and retrofitted old ones so they remain effective, relevant, and deadly in a constantly-changing battlefield. Israel is, in effect, a laboratory for the rest of the world. The ground-breaking US

Predator was designed by Abraham Karem, who built drones for the Israeli Air Force before moving to the US in the 1970s".<sup>7</sup> One of the biggest advantages of the drone tech and its application in warfare is that it is unavoidable, un-foreseeable, and highly capable. Militant organisations around the world have operationalised drones for signalling and posturing to monitor military establishments, transport arms, bomb targets of national and international importance. Other military technologies often require vast human and financial capital to operate efficiently. Drones can be maintained and operated by just one person, anywhere, and without any infrastructure with hefty operating costs.

"Over the last few years, Israel has exported \$4.6 billion worth of unmanned aerial vehicles according to a study by the business consulting firm Frost & Sullivan. UAVs, or drones, constitute nearly 10 percent of Israel's total military exports. Israel is considered a powerhouse in the field of unmanned aircraft, primarily due to the Israel Air Forces' impressive squadrons of UAVs".<sup>8</sup> In addition, "Israeli state-owned defence contractor, Israel Aerospace Industries (IAI), has unveiled a remote-controlled armed robot which, it says, can patrol battle zones, track infiltrators and open fire [...] this is the latest addition to the world of drone technology, which is rapidly reshaping the modern battlefield".<sup>9</sup>

The Defence Research and Development Organisation (DRDO) has developed an Anti-Drone detection and neutralisation system which was in the news after the Jammu airfield attack in June 2021. The equipment has an operational radius of 3 kilometres. "This DRDO-developed anti-drone system had earlier been deployed for VVIP protection on Independence Day 2020, former US President Donald Trump's visit to Motera stadium in Ahmedabad, and Republic Day 2021".<sup>10</sup> The technology has been used in selective events of global importance and wasn't used in operational service with the military till recently.

"On 21 October, the Russian military claimed it had shot down nine Bayraktar TB-2 UAVs flying in the vicinity of Gyumri. The reports stated that the IL269's sister system, KRET's IRL257 Krasukha-4, was the platform used for the attacks".<sup>11</sup> Russia's Krasukha is a mobile Electronic Warfare (EW) system mounted onto a BAZ-6910-022 8x8 truck system. The Krasukha-4 is intended to neutralise Low-Earth Orbit (LEO) spy satellites, ground-based

radars, airborne radars (AWACS), and UAVs at ranges between 150 to 300 kilometres.

With an engagement distance of 3 km (as in the case of DRDO's novel Anti-drone system) and low response time, panic shooting is something very hard to avoid. Today, most military-grade large drones can achieve an average speed of about 200 miles per hours or 321 kmph. With that speed, distance of 3 kilometres can be covered in 33 seconds. If not a military drone, other publicly available quad-copters used by various militant groups can achieve speeds up to 50 mph i.e., 80 kmph which will cover the said distance in 2 min 15 secs, which is unlikely to give a wide enough window to tackle them.

### **Conclusion**

This article made an attempt to examine the trends in the development and implementation of EDTs blended with techniques of PSYOPS. It focused towards unfolding the capabilities of more relevant aspects of EDTs today, which include UAVs, Remotely Operated Underwater Vehicles (ROVs), and Anti-Offensive Counter Air (Anti-OCA) systems. The novel ideas that the article offers were discussed on the basis of operationalisation of such technologies through five different points of view namely, Troops', Commander's, Sailor's, Aviator's, and Intelligence. Today, weapon wizards such as Israel are thinking beyond the present as far as the drone technology is concerned. Various softwares, codes, algorithms, and technologies are combined to sculpt intricate and lethal weapons. Taking into consideration the diversity of terrain that the Indian military operates in, the Research and Development (R&D) should be focused on production of such systems which will suit the Indian needs and aid our forces in smooth conduct of sensitive operations while not becoming a liability if lost or captured by the adversary.

### **Endnotes**

<sup>1</sup> "Poke War" is a slang originating from Pokeman games/books and used on Facebook to signify jousting till one participant finally gives in, signifying defeat.

<sup>2</sup> WEB 3.0 is essentially a user-friendly, more secure, more private and better connected internet.

<sup>3</sup> Portuguese MOD, High-level conference discussed impact of emerging disruptive technologies on defense, 20 April 2021, European Defense Agency. Accessed on 6 January 2022.

<sup>4</sup> Inder Singh Bisht, US Marines Test Grenade Launcher-Fired Mini-Drones, July 14 2021 on The Defence Post , <https://www.thedefensepost.com/2021/07/14/us-marines-mini-drones/> accessed on 6 January 2022

<sup>5</sup> Dr Vijay Sakhuja, Underwater Drones: New Challenges, ol 15 Issue 3 Jul – Aug 2021, August 5, 2021. Defstrat.com

<sup>6</sup> How India is converting the Kiran MK-II into an unmanned combat, aircraft <https://www.wionews.com/photos/how-india-is-converting-the-kiran-mk-ii-into-an-unmanned-combat-aircraft-430699#kiran-mk-ii-converted-into-cats-omca-430680> accessed 17 Jan 22

<sup>7</sup> David Hambling, Israel's Combat-Proven Drone Swarm May Be Start Of A New Kind Of Warfare, Forbes, July 21, 2021. <https://www.forbes.com/sites/davidhambling/2021/07/21/israels-combat-proven-drone-swarm-is-more-than-just-a-drone-swarm/?sh=415b66bd1425> accessed on 28 September 2021

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<sup>11</sup> Dr. Thomas Withington, The Drone that fell to Earth, Armada International, November 4 2020, accessed on 8 January 2022 from The Drone that fell to Earth - Armada International

## **Review Articles**



## China Bloodies Bulletless Borders\*

Col Anil Bhat, VSM (Retd)

### Introduction

While there have been great strides taken as far as economic linkages between India and China are concerned with bilateral trade well over hundred billion dollars with the balance of trade remaining firmly in China's favour, the undefined borders continue to cause severe strains in our relationship. The major issue that needs to be resolved between India and China remains the borders or the 'perimeters' as referred to by Kanti Bajpai, the Indian academic, international affairs analyst, and the former headmaster of The Doon School, Dehradun, India, in his recent book "India Versus China: Why They Are Not Friends". The centrality of this issue continues to remain uppermost in the minds of all those concerned with policy; be it at the political, diplomatic, or military level in addition to analysts and academicians and is the core of 'China Bloodies Bulletless Borders' by Col Anil Bhat.

### The Author

Col Anil Bhat the author of this remarkable book has been part of the Defence Ministry's Directorate of Public Relations and was also posted as the Indian Army's Public Relations Officer. He is also a well-known Defence Analyst and has written numerous books on defence/strategic issues, authored numerous research papers and is presently associated with both the Salute Magazine and South Asia Monitor as the Editorial Consultant.

### The Book

The book is divided into seven chapters each dealing with major landmark events between the nations with the focus on developments at the border during the period and the perceptions of both countries. The author categorically states that post-independence, Prime Minister Nehru conveyed that the nation did

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\***China Bloodies Bulletless Borders.** By Col Anil Bhat, VSM (Retd); Publisher: Pentagon Press LLP, New Delhi (28 February 2022); Pages: 264; Price Rs. 700/-; ISBN: 9789390095476 (Hardcover).

not need an army, and police forces were sufficient for the security of the country. This may be due to the cultural gap existing as the army had fought as part of the British forces in World War II and was viewed with suspicion by the political class, who before independence viewed the army as the British coerced arm which backed up the police in case the police could not handle the activities related to agitations and acts with an aim of achieving independence.

The then Defence Minister Krishna Menon believed that India's Ordnance Factories were better off producing pressure cookers and coffee percolators. Badly equipped, the Indian Army was insufficiently clad and housed and was poorly tasked. All this while political rhetoric stressed upon fighting to 'the last man and last round'. This is not something that those in higher command should be proud of as it displayed a total lack of planning at the higher levels of command due to the inability to either reinforce or re-supply the troops in contact in a major war.

The author clearly points out the blunder in deciding to go to the UN in 1948. He brings out the folly in 1962, when we did not use our air force for offensive tasks 'for fear of escalating the situation'. While Krishna Menon was removed as the defence minister after the 1962 debacle, the 'pace had been set for India's powerful bureaucracy to keep the armed forces in a stranglehold'.

In 1967, the retaliation by the Indian Army to the Chinese belligerence at both Nathu La and Cho La led to the death of almost 400 hundred PLA soldiers and a large number of bunkers destroyed. This shock resulted in the Chinese pressing for a discussion on all border disputes and asking that no firearms be used against each other. It is a different matter that they often went back to primitive and barbaric means as was evident in Galwan over fifty years later. The role of Brigadier MMS Bakshi, MVC, the then Brigade Commander at Nathu La has been covered in substantial detail. Undoubtedly, he, along with General Sagat Singh, Division Commander, who have both repeatedly lead from the front in conflicts; had a major role to play in the display of India's aggression and seizing the initiative. He had been awarded the *Maha Vir Chakra* for his exemplary determination, courage and leadership while in command of Hodson's Horse in the attack on Phillora in 1965; these qualities stood out once again and he

shared his experiences and insights regarding Nathu La with the author as both belonged to the same Regiment. Fortunately, permission was given by none other than the then Prime Minister Indira Gandhi to open up own artillery fire and this proved to be a game changer and heralded a new resolve. When Brigadier Bakshi visited Nathu La nearly forty years later in 2005; the wire fencing; the laying of which had sparked of the clash in 1967 was still intact and the Chinese 'wisely refrained from violating it'.

The next landmark incident, that the book covers, took place on 20 October 1975, when the PLA killed four riflemen of 5 Assam Rifles after torturing them. This was the battalion that had escorted the Dalai Lama in 1959. Diplomatic relations were restored with China in 1976 and Mr KR Narayanan was appointed as Ambassador to China and China in turn appointed Zhen Zhao Yuan as the Ambassador to India. Shri Atal Behari Vajpayee visited China in February 1979 but had to cut short his visit as China intervened in Vietnam during his visit. However, he did meet his counterpart and also Vice President Deng Xiaoping. The Chinese Foreign Minister Huang Hua visited India in June 1981 which broke the ice regarding border negotiations, which then began in December 1981 almost two decades after both countries had stopped talking to each other. However, by 1985, the Chinese started showing signs of rigidity and were even evasive on the nature of the way the LAC was to be demarcated and in July 1986 intrusions took place in Sumdorong Chu in western Arunachal Pradesh.

Unfortunately, over four decades later, there has been no progress with reference to resolving the border issue to include disengagement of troops at friction points in spite of over twenty-two rounds of talks by special representatives and more recently fifteen rounds of military level talks in eastern Ladakh. The 1993 'Agreement on Maintenance of Peace and Tranquillity' paved the way for reduction of troops and both countries agreed to 'resolve the border question through peaceful and friendly consultations'; 'each side was to keep its military forces in the areas along the LAC to a minimum level compatible with the friendly and good neighbourly relations between the two countries'; they were to 'work out effective confidence building measures' and lastly, the two sides were to 'deal with problems through friendly consultations'.

This agreement signed during the visit of the then Prime Minister PV Narshima Rao came about as a result of a milestone visit by Shri Sharad Pawar, the first visit by a defence minister to China in July 1992, when it was agreed to develop academic, scientific, technological, and military exchanges between the two countries and when the Chinese emphasised reduction in troop strength due to the prohibitive costs. It is ironical that nearly thirty years later India is being forced to deploy additional troops due to the Chinese expansionism and belligerence. Having become an economic powerhouse, China is now forcing India into spiralling defence expenditure in order to defend its territorial integrity.

In 1996, an 'Agreement on Confidence Building Measures on the LAC' which included reduction of certain weapon platforms, avoiding large scale exercises, and relating to air intrusions was signed. In 2003, the then Prime Minister Atal Bihari Vajpayee visited China and the joint declaration stated that 'the common interests of the two countries outweigh their differences' and 'the two countries are not a threat to each other'. Yet, despite these diplomatic niceties and even compromises from the Indian side, Chinese coercive tactics have continued. The major achievement during this period was, of course, the opening up of the Nathu La border for trade in 2006, this followed the upward revision of ties following the visit of Premier Wen Jiabao in April 2005 which witnessed growing understanding in defence and strategic aspects. The visit of Shri Pranab Mukherjee, then the defence minister, to China in June 2006 resulted in the signing of a first ever MoU regarding engagements at a military-to-military level and he also visited the Lanzhou Military Command which was a significant step in building bilateral trust.

In May 2007, Shri Kiren Rijju spoke regarding Chinese intrusions in Arunachal Pradesh. Despite this, India still attempted at stopping the ties from deteriorating and the then Prime Minister Manmohan Singh visited China in 2008 and signed a 'Shared Vision for the 21<sup>st</sup> Century'. In 2008, following an earthquake, China accepted India's assistance but yet raised a claim on the northern tip of Sikkim known as 'Finger'. The pattern persisted; cartographic and diplomatic aggressiveness, followed by tactical incursions on ground. In fact, in 2013, the Chinese had intruded in eastern Ladakh at a time when the then External Affairs Minister Salman Khurshid visited China in April 2013 and both countries

were discussing a 'Border Defence Cooperative Agreement'. It is quite ironic that later that year, when Prime Minister Li Keqiang visited India, he referred to India as a 'strategic partner' while their nuclear weapons were capable of targeting all corners of India and they were actively providing nuclear technology to Pakistan. The book also examines the standoff at Doklam and the barbaric incident at Galwan which resulted in India taking a firm stand. Unfortunately, these incidents have exposed the fragilities and strains in our relationship. These events have been analysed in detail in the book.

### **Conclusion**

This is a very detailed book covering aspects of very vexed and complicated border question. It gives out an historical context, the contours and evolution of the issues confronting both countries, and also gives a glimpse of the challenges faced by those responsible for maintaining the security and integrity of the lines which are perceived differently by both countries. The book covers the nature of this inhospitable, difficult and barren terrain. In the end, the book brings out that the fact remains that stability in our relations can only manifest itself on the bedrock of settled borders and not trade and commerce. The book is highly recommended for those who wish to understand the military and border dimensions of India-China relations. Unfortunately, the peace and tranquillity on the border which is what India is wanting, and is an imperative for both development and prosperity, has eluded us as mistrust still dominates the narrative between the two countries. Unfortunately, the LAC cannot be resolved without China declaring its claim lines. It seems uninterested in doing so as it obsessed with consolidating military gains by salami slicing, frequent transgressions, and aggressive expansionist behaviour. That said, it is evident that apart from the land, the Chinese larger interests also lie in controlling the waters of the rivers that flow through the area and the minerals that exist in these far frontiers.

*Maj Gen Jagatbir Singh, VSM (Retd)*

## Disaster Management: Optimising the Global Military Response\*

Maj Gen Amardeep Bhardwaj, PhD

### The Author

A soldier and scholar of international repute, Major General Amardeep Bhardwaj, PhD (Retd) has enjoyed a distinguished military career in the Indian Military. This has encompassed the field of disaster and emergency operations including its planning, policy, and advocacy. He has researched this field for over 10 years, critically investigating how various national militaries have sought to engage in disaster response.

His last military assignment was as a Chief Instructor and Head of Faculty at the Indian Defence Services Staff College, a globally recognised institute of military excellence and one of the world's premier defence training establishments. Having received two distinguished service awards, he has had extensive military operations command and staff experience. General Bhardwaj is a graduate of the Indian Defence Services Staff College and of the Higher Command courses. He has served on the Board of Management of the Centre for Strategic Studies and Simulation at the United Service Institution of India, which is India's pre-eminent strategic think-tank. His memberships have included the International Emergency Management Society, the All India Management Association, the board of examiners for PhD of the University of Madras, and the experts committee of the Indira Gandhi National Open University – INMAS – HQ IDS (Joint Initiative).

General Bhardwaj holds academic credentials including, a Doctor of Philosophy degree in Defence Studies, a Masters of Philosophy degree, a Master of Science degree and a Senior Level Diploma in Management. General Bhardwaj is an experienced public speaker, having lectured extensively at prestigious institutions both, in India and abroad. He has a number

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of published scholarly articles to his credit and has served on the editorial boards of two leading defence journals, the *War College Journal* and *Pinnacle*. General Bhardwaj now has published his work *Disaster Management: Optimising the Global Military Response*.

### **The Book**

The book contains seven chapters and the chapter wise details are given in succeeding paragraphs.

Chapter 1 of the book '*Disaster Management: Optimising the Global Military Response*' is entitled 'Disaster Trends and Future Projections.' It provides an objective global overview of disaster trends as well as predictions for the future. The sources referred to have been specially selected for their authenticity, objectivity, and credibility, and are, therefore, among the most widely respected all over the world.<sup>1</sup> The compilation is essentially factual, based on the latest available data and analyses.

Chapter 2 is entitled 'Why the Military Must Get More Involved,' and it examines a number of reasons commonly cited in making a case for the military to play a more prominent role in disaster response. General Bhardwaj analyses about a dozen different arguments and perspectives, each time coming to the very same conclusion, that there is strong merit in augmenting the role of the armed forces in disaster management.<sup>2</sup> General Bhardwaj concludes that the arguments in-support far outweigh those against. An upscaled and synergised global military disaster response offers perhaps the best option to reduce the current deficit in disaster-coping-capability.<sup>3</sup> Extrapolating to the future, this capability gap grows even wider, therefore incremental approaches to improving existing capabilities will not suffice. Transformational change is needed in disaster management thinking as well as in current response mechanisms.<sup>4</sup> Augmenting, optimising and synergising the world's militaries for higher efficiencies in disaster response implies a bridging of this capability gap.

Chapter 3 is entitled 'Optimising Roles and Tasks,' an argument seeking to bring-in role clarity and define a more practical, as well as pragmatic, role for the armed forces, premised more on their capabilities and competencies than on dogma, theory or academic constructs.<sup>5</sup> It further suggests a three-step process,

based on competency-matching, task-analysis and overview of the traditionally assigned tasks, in order to evolve a better task list for the military in disaster response. In the process, it uncovered many weaknesses and grey areas, which currently exist in defining roles and assigning tasks to the military.<sup>6</sup> General Bhardwaj states that these sometimes constitute the major reasons for sub-optimal performance of the military in such operations. Thus, he suggests that this chapter seeks to offer to policy makers and practitioners, in the field of disaster management, a more efficient and improved alternative to the present system.

The armed forces also need to develop a clearer and more precise role-articulation by government at the apex level, as well as more pointed, competency-linked task-assignments at the tactical level.<sup>7</sup> General Bhardwaj advocates that the key issue is to be at all times cognisant of the intimate relationship between capabilities and competencies of the armed forces vis-à-vis their role definition and task-allocation. While articulating roles and tasks, attention needs to be paid to specificity and clarity as well as the need to optimise the military's task-list for efficient execution.<sup>8</sup>

Chapter 4 is entitled 'Optimising Education and Training' and is based on the author's extensive study of how various militaries engage in disaster management training. In this chapter, General Bhardwaj argued for taking a trans-national view of the subject, with a view to substantially upgrading the military's efficiency in disaster response, using a 15-point skillset.<sup>9</sup> Putting in place an institutionalised system of disaster management education and training for the militaries of the world, while allowing for individual variations and idiosyncrasies, will enhance significantly their effectiveness in disaster management operations.<sup>10</sup>

Chapter 5 is entitled 'Optimising Organisational Structures.' It focusses on the military's organisational optimisation for disaster tasks.<sup>11</sup> General Bhardwaj carefully dwells on a number of structural and functional issues that presently dog the armed forces, often leading to sub-optimal outcomes in such operations. He observes that the armed forces are structured and organised primarily for the fighting of wars, whereas disaster response operations demand somewhat different organisational structures. The chapter considers how to reconcile these diverse requirements, starting with the basic policy choices available and proceeding to analyse various

re-structuring options, with a view to their practicability and ability to be implemented.<sup>12</sup> Finally, in this chapter, General Bhardwaj discusses some structural inadequacies which hamper the military's functioning whenever it engages in such operations. Different militaries are organised differently, however a closer look at their legacy structures shows that congruities may well outweigh differences between them. Adapting these combat-optimised structures for disaster response is not only possible, but it is necessary and can be done with finesse.<sup>13</sup> Only militaries which are sensitive to these issues, and take concrete action to optimise their organisational structures better for disaster response, will show far greater efficiencies in such operations.<sup>14</sup>

Chapter 6 is entitled 'Optimising Equipment, Leveraging Technology.' General Bhardwaj describes equipment as a vital necessity for disaster-relief and is often needed in large numbers. Its quality and quantity directly impact the efficacy and reach of the relief operations. According to General Bhardwaj, as per policy, the military should be provided the required wherewithal for disaster response duties by the civil authorities, but this seldom happens in practice. As a result, the armed forces invariably end up using some of their combat stores and hardware to meet the shortfall of specialised equipment. Often, such equipment cannot be retrieved when the military disengages, or else, it may be rendered unserviceable by that time. Since this dilutes the military's wartime operational efficiency, the military needs to be compensated quickly. Such compensation is usually done only in the account books, through 'paper transactions', with no equipment or funds being physically given to the military units who came to render aid. While such an arrangement may work well in bureaucratic circles, it acts as a disincentive for the military to engage in disaster response operations. This system needs refinement. Many other equipment related issues also need ironing out, since their collective impact is to negate the efficiency of the military in disaster operations. This chapter dwells on such issues and endeavours to show how workable solutions can be found to address these problems. It raises the interesting idea of *Disaster-Relief Bricks*, as practiced by the Indian military, which has several considerable merits.<sup>15</sup> It also touches on a host of other relevant aspects, such as equipment procurement, its management, accountability, usage and serviceability. Equipment cannot be separated from technology,

since a machine, device, or any gadget, is merely the end product of technological innovation.<sup>16</sup> Also, the spinoffs from technology help to improve situational awareness, make cumbersome manual processes quick and efficient, facilitate decision-making and empower agencies to execute operations on the ground with enhanced effectiveness.<sup>17</sup> The latter part of the chapter devotes itself to this technological aspect, linking it with disaster response and offering a number of technology samples for possible adoption by various militaries, with a view to optimising their efficiency.<sup>18</sup> General Bhardwaj cites Tae Yoo, Senior Vice-President, Corporate Affairs and Corporate Social Responsibility, Cisco, who had observed as follows:

“In many cases, technology is the easiest part. The challenge is to create a long-term, digital foundation for humanitarian organisations that enables them to invest in, test and scale technology solutions prior to disasters so they are prepared when they need it the most. While technology cannot replace the vital resources people need in disaster – food, water, shelter, or comfort from loved ones - it is transforming disaster relief efforts and paving the way for an evolving approach to international aid: one that can reach more people, faster, and help communities to develop resilience for when the next disaster strikes.<sup>19</sup> General Bhardwaj advocates for technology preparedness as a priority”.<sup>20</sup>

Chapter 7 is entitled ‘Learning from Each Other and the Experts’. In the field of disaster management, the main issues facing all nations are, to a great extent, the same.<sup>21</sup> What concerns the military the most are aspects like forging civil-military synergies, precise role-definitions, an effective ‘Command and Control’ HQ at the apex level and modalities of inter-agency coordination at the field level.<sup>22</sup> Studying the manner in which various militaries have applied themselves to solve these attendant problems can prove very beneficial and highly instructive to all. In this regard, the chapter clearly brings out the main learning points for all militaries. The United Nations is perhaps the biggest repository of knowledge, expertise and experience in the field of disaster management. This chapter probes the United Nations system to identify its major strengths. The chapter also draws out vital and insightful lessons for world policy makers, to consider for

incorporation into their countries' existing plans, policies, structures and procedures, and in particular, those which concern the military.<sup>23</sup>

## Conclusion

The overall thesis of the book appears to be the worrisome proposition that since all the studies corroborate and reinforce each other<sup>24</sup>, leading to an unequivocal and obvious conclusion that mankind is propelling planet Earth to its early doom<sup>25</sup>, and in this process, endangering its own survival, implying an imperative to involve the military in disaster response. Argument suggests adoption of a three-step process, based on competency-matching, task-analysis and overview of the traditionally assigned tasks, in order to evolve a better task list for the military in disaster response. It advocates for technology preparedness as the very highest priority.

*Professor Dr. G.I. Lilienthal*

## Endnotes

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<sup>25</sup> Ibid.

## **Book Reviews**



**The French Colonial Imagination: Writing the Indian Uprising, 1857-1858, from Second Empire to Third Republic.** *By Nicola Frith; (Lexington Books, London 2014); Pages: 220, Price: Rs 4162/-; ISBN: 978-0-7391-8000-2*

After decades of historical writings highlighting British and Indian perspectives on the 'Indian Revolt of 1857', historians in the recent years have turned their attention towards the alternate perspectives, i.e., the perspectives of other nations about this monumental Indian historical event. The main theme of the book under review, by Dr Nicola Frith from Bangor University, UK, is about how the Indian Revolt of 1857 was used by the French academia, media, and fiction writers as a tool to recall the history of French loss of the missed opportunity to colonise India way back in 1754, to undermine British colonial hegemony and to imagine a future in which French colonialism would replace the British.

The book is laid out in five parts. The first part highlights the drawbacks of the binary model (framework between the colonizer and the colonized), used in most post-colonial writings. The second brings out the differences between the British and the French writings in the nomenclature being used to describe the Indian Revolt of 1857 and the rationale behind it. The third chapter enumerates the contrasting manner in which the resistance by the revolters is described by the British and French writings. The subsequent chapter covers how the British and the French describe the brutal revenge exacted by the British East India Company forces against the Indians to quell the Revolt. The last part discusses how the French writings about the 'Indian Revolt of 1857' undermined the policies of British colonialism while at the same time imagining the scenario of a French-led India.

In the first chapter, the author notes that the binary model as well as the Anglophone post-colonial model may not be the best ways to examine the writings about the France's engagement with India, because of the difference between the basic natures of French versus British colonial thought. The author has highlighted the historical milestone of 1754, when France was on the verge of making significant progress towards colonisation of India, with Dupleix, the then Governor of Pondicherry having already provided a launch pad with his successful efforts during the preceding years, in enhancing the political influence of France along the

Coromandel coast including the Carnatic and Deccan regions. However, the Versailles Court, under Louis XV, disregarded these endeavours and instead recalled Dupleix back to France. This decision is seen as a historic moment of opportunity lost during the *Ancien Regime* (from the 15<sup>th</sup> Century till 1789), because at approximately the same time, Dupleix's principal opponent Robert Clive was given the necessary support by the British Crown, which facilitated the defeat of *Shuja-ud-Daula* in the Battle of Plassey in 1757 that heralded the commencement of the British rule in India. Notwithstanding the above and the fact that the French colonialism always remained eclipsed by the dominant colonial power, the continued presence of the French trading posts at Chandernagar, Karikal, Yanaon, Mahe and their administrative capital at Pondicherry remained a source of pride for the French.

The second chapter focuses on the 'war of words' between the two colonial powers in India, regarding the terminology of the Indian Revolt. The British press and academia attempted to limit the significance and potential of the Indian challenge; one of the greatest threats to the British Empire, by terming it as mutiny, thereby implying that the resistance was of a local nature. On the contrary, the French press disagreed with the British representation, by viewing the Indian Revolt as a mass movement and using the terms like insurrection, national revolt and revolution. Moreover, the French press speculated the possibility of the Revolt escalating into a large-scale rebellion all across India. Interestingly, Count Edouard de Warren wrote in '*L'Inde anglaise: Avant et après l'insurrection de 1857*' that the Indian Revolt marked the commencement of a national revolution, which would take perhaps another hundred years to throw the British out of India. As events unfolded, his prophecy was proved correct.

The third chapter has covered the responses of the two colonial powers to the threat posed by the revolt of 1857 against the colonial empire. The chapter is mainly devoted to Nana Sahib, who in the eyes of the British was the biggest as well as the most hated enemy of the human race. The British press created the myth about Nana Sahib, to be a monster, traitor and a conspirator, and linked him with the three massacres of the Europeans at Satichaura Ghat, Bibighar, Kanpur and of Fatehgarh escapees. In 1857, his story was also displayed at the Madame Tussaud's

museum. *Nana Sahib* was depicted as a symbol of Indian revolt, thus characterising all Indians as barbaric and uncivilised who needed to be dealt with firmly. This provided the British with justification for brutal revenge and mass executions against the Indians that took place subsequently. On the other hand, the French writings reversed the narrative and termed the British as traitors who had betrayed the civilising mission of Europe. The British were also seen as incapable of civilising their subjects, owing to their exploitative nature.

The fourth chapter talks about how a narrative was structured in the British academic landscape to justify the extremely brutal revenge targeted against the Indians and the French counter-narrative to the same. The events of the Bibighar massacre were so structured and articulated so as to propagate that the Indian men had brutally raped and murdered the British women and children. The story was further sensationalised by exaggerating the images of violence against their women. The author states that a sense of psychic powerlessness and fear of the Indians lay in the British minds behind such a narrative. Such a selective and biased representation of facts allowed the British to put the blame on the Indians; provide a justification for their own atrocities and hide their own inadequacies. The French press instead represented the events in a factual, non-emotive manner without advocating revenge against the Indians. French press also criticised the British brutality and termed the British colonialism as backward that had failed to graduate the Indians beyond slaves. Such writings were motivated with an aim to reveal the exploitative and predatory nature of British colonialism.

The last chapter focuses on the strategic possibilities that opened up to the French Second Empire (January 1852 till October 1870), under Napoleon III and subsequently, in the political and economic realm by the vulnerability and possible collapse of the British Empire in their largest colony in India as a result of the threat posed by the Indian revolt of 1857. Consequently, the revolt revived French interest in India with the likelihood of the downfall of British colonialism that would pave the way for revival of French imperialism in India and elsewhere. The French writings highlighted the oppressive, selfish and materialistic nature of British colonialism as against the moral and value-based civilising mission of France. The Indian revolt also led the French academia to imagine a

scenario where India would be liberated from the British rule and instead be ruled by a benevolent colonial power; France.

The book is an outcome of PhD research at the University of Liverpool by Dr Nicola Frith. It provides a detailed account of various aspects of French perspective on the Indian Revolt of 1857 in an interesting and holistic manner and is a valuable addition to the historiography of the Indian Revolt of 1857, by way of French sources. The central subject of the book, though pertaining to a milestone event in Indian history, is largely unknown to the Indian audience who are familiar with only the Indian and the British perspectives; herein lies the importance of the book. The author, with her domain expertise in French, has meticulously researched available primary and secondary sources and duly cited these at the end of every chapter.

Overall, this is a very well written book, which would be a reference material and a guide for the scholar warriors, academicians and others who are associated with the subject and who wish to have a deeper understanding of the international dimension of the Indian Revolt of 1857.

*Maj Gen (Dr) RS Thakur (Retd)*

**Rethinking Palkhiwala: Centenary Commemorative Volume.**

*Edited by Maj Gen Nilendra Kumar; (OakBridge Publishing Pvt Ltd, Gurugram, 2021); Pages 328; Price Rs 995/-; ISBN 9788194991151 (Hardbound).*

Nanabhoy ("Nani") Ardeshir Palkhiwala, an eminent constitutional lawyer and a vocal champion of human rights had an unusual career. At the age of 30, he wrote '*The Law and Practice of Income Tax*' alongside Sir Jamshedji Behramji Kanga, a senior lawyer of repute. More than seven decades later, the book is still a point of reference for tax professionals in India. He also served as ambassador to the United States in the late 1970s. Palkhiwala was a man who revered the Constitution of India and the principles it stood for. He once said, "The Constitution was meant to impart such a momentum to the living spirit of the rule of law that democracy and civil liberty may survive in India beyond our own times and in the days when our place will know us no more".

As the title of the publication suggests, the volume under review is a brief account of opinions expressed by the eminent jurists, academicians, political analysts, and senior military commanders during fourteen events related to Palkhiwala's birth centenary held at New Delhi and other places from 03 February 2019 to 02 February 2020. The prominent contributors are Shri Pravin H Parekh, Abhishek M Singhvi, Arun Shourie, Bibek Debroy, Justices DY Chadrachud, Ms Indu Malhotra, L Nageswar Rao, former diplomat Lalit Mansingh, and former Chief of the Army Staff General VP Malik, besides others. Few write ups relating to personal interaction with Palkhiwala have been contributed by Shri Iqbal M Chagla, Janak Dwarkadas, Pravin H Parekh, V Sudhish Pai, and Manish Arora.

The first 'Palkhiwala Lecture' was delivered by Justice Madan Lokur, the former Judge of the Supreme Court, at Indian Society of International Law on 13 February 2019. Justice Lokur in his talk on 'Rule of Law and Role of Free Citizens' highlighted that a citizen has a right to know the policies and plans in existence and also their implementation strategy so that his role in their success is meaningful (p. 21). This was followed by a series of lectures by eminent personalities and the text of their talk has been included in the publication. The text of these lectures provides a true understanding of the legal brilliance of Palkhiwala.

In September 2019, as part of Palkhiwala's Birth Centenary celebrations, a panel discussion was held at USI of India. Distinguished panellist at the event included Ambassador Lalit Mansingh, General VP Malik, Shri Sanjay Baru, and Major General Nilendra Kumar. This event focused on different facets of the life of Palkhiwala. The scripts of talk delivered by the panellists as well as their views on questions are included at pp 139 to 155 of the publication. General Malik in his talk said that Mr Palkhiwala was an eminent jurist and great admirer of the armed forces. On several occasions, Palkhiwala would say that India has survived due to valour and sacrifice of the armed forces personnel (p. 143).

Another important event which took place was at Hotel Taj Mahal on 31 October 2019, where panellists included Dr Vinay Sahastrabuddhe, Dr Salman Khursheed, Dr Yogendra Yadav, and Mr Peter Rimmele. It was moderated by Ms Mandira Nayar, senior

special correspondent of *The Week*. Dr Yadav eloquently expressed his views on the evils of dynasty in Indian politics. The text of speeches delivered by the distinguished panellists has been included in the publication.

A number of other prominent contributors have shared the anecdotes and their personal experiences with Palkhiwala. This volume also includes 64 photographs taken at various events, making it an illustrious publication. This publication will be of great value to legal professionals, judges and jurists, students, and law institutions in India and abroad.

*Wg Cdr UC Jha (Retd)*

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# USI

(Estd. 1870)

## OUR ACTIVITIES

### Library and Reading Room

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

### Correspondence Courses

The Institution runs regular correspondence courses for officers of the Armed Forces to assist them in preparing for promotion examinations, and for the entrance examinations to the Defence Services Staff College and Technical Staff College. Over the years, this has been a significant and well-received activity.

### USI Journal

The USI Journal is the oldest surviving defence journal in the country and in Asia, having first appeared in 1871. In an era when there is a feeling that free expression of views by Defence personnel is not looked upon kindly by the establishment, the Journal in fact provides just such a forum, without regard to seniority and length of service in the Armed Forces, subject of course, to propriety and quality of the written work.

### Centre for Strategic Studies and Simulation

The Erstwhile Centre for Research and its resources have been merged into the new Centre named as USI Centre for Strategic Studies and Simulation (USI-CS3) wef 01 January 2005. The Centre aims at conducting detailed and comprehensive enquiry, research and analyses of national and international security related issues, and gaming and simulation of strategic scenarios, to evolve options for wider discussion and consideration.

### USI Centre for UN Peacekeeping (CUNPK)

The Centre was established in 2000 and functioned with USI till Aug 2014, when it moved out of USI premises and was delinked from USI. Its aims were organising workshops, seminars and training capsules for peacekeepers, observers and staff officers – both Indian and foreign. It also oversaw the practical training of Indian contingents. It functioned under a Board of Management headed by the Vice Chief of the Army Staff and worked in close coordination with the Service Headquarters and the Ministries of External Affairs and Defence. In August 2014, CUNPK moved out to the accommodation allotted by the Army HQ.

### Centre for Military History and Conflict Studies (CMHCS)

The Centre was established on 01 Dec 2000 and encourages study and research into the history of the Indian Armed Forces with objectivity, covering different facets such as strategy, tactics, logistics, organisation and socio-economic aspects and their implementation.

### Gold Medal Essay Competition

Every year the Institution organises a gold medal essay competition open to all officers. These essays, the first one of which was introduced in 1871, constitute a barometer of opinion on matters that affect national security in general and the defence forces in particular.

### Lt Gen SL Menezes Memorial Essay Competition

This has been instituted from 2015 on a subject related to Armed Forces Historical Research. The Essay Competition is open to all across the globe.

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### MacGregor Medal

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

## MEMBERSHIP

The following are eligible to become members of the Institution :

- Officers of the Armed Forces
- Class I Gazetted Officers of Group 'A' Central Services.
- Any category mentioned above will be eligible even though retired or released from the Service.
- Cadets from the NDA and Cadets from the Service Academies and Midshipmen.

For further particulars, please write to Director, USI of India, Rao Tula Ram Marg, (Opposite Signals Enclave) Post Bag No. 8, Vasant Vihar PO, New Delhi – 110 057

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