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Fighting Conventional Wars: Lessons from the Ukraine Conflict

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An armoured convoy of pro-Russian troops moves along a road in the southern port city of Mariupol, April 21, 2022. Source: EPA

Ukrainian National Guard patrol during a reconnaissance mission in a retaken village on the outskirts of Kharkiv, east Ukraine, on May 14, 2022. Source: Bernat Armangue/AP.

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Deependra Singh Hooda

Introduction

The Russia-Ukraine war is now in its third month and there are signs that the conflict will be prolonged. The two sides have not held face-to-face peace talks since March 29, though they are communicating by video link.¹ The Russian military has not achieved the level of success that would enable President Vladimir Putin to declare victory and call off the campaign. As a precondition for talks with Russia, Ukraine has asked the Kremlin to guarantee the restoration of pre-invasion borders, a demand that is unlikely to be accepted.²



An armoured convoy of pro-Russian troops moves along a road in the southern port city of Mariupol, April 21, 2022. Source: EPA

The first major, full scale conventional conflict in Europe since World War II pits two large militaries against one another. While it was initially considered that the Ukrainian forces are no match for the Russian might, the former have not only taken the fight to the invading troops but also forced them to retreat in some areas. In this success, the Ukraine military has been sustained by the



very large infusion of modern arms and equipment supplied by the U.S. and its NATO partners, as well as critical intelligence sharing through U.S. ISR capabilities.

This policy brief will evaluate the progress of the Russia-Ukraine war and derive some major lessons on the conduct of conventional wars between two states. These lessons would be of particular relevance to India as it embarks on a series of military reforms, the restructuring of forces, and the pursuit of capabilities.

Progress of Operations

Starting in mid-October 2021, Russia started mobilising its forces near the Ukraine border and in Crimea, which had seceded from Ukraine in 2014. The war began on February 24, 2022, with an estimated 150,000 Russian soldiers deployed in about 100 Battalion Tactical Groups (BTGs). Following a short air bombardment and precision missile strikes, the Russian military advanced on four axes. The strongest thrust was towards the capital city of Kyiv, along with offensives towards Kharkiv and Sumy, in the Donbas Region, and northwards from Crimea.

From the very start of the campaign, it was clear that the Russian operations were not going as planned. An airborne Russian assault to capture the airport in Hostomel, on the outskirts of Kyiv, was repulsed by Ukrainian forces. Russian attempts to break through the defences around Kyiv were thwarted and while Kharkiv was surrounded and heavily bombed, the city remained in Ukrainian control. The only initial success came from the south, where Russian forces advanced from Crimea and quickly captured Kherson before turning towards the coastal city of Mariupol.

Throughout March, Russian forces attempted to press home their attacks on the Kyiv, Kharkiv, and Crimea fronts. Increased air attacks, and rocket and artillery fire, caused massive damage to cities and led to the mass evacuation of civilians, but military success remained elusive. By the end of March, it was clear that the Russian offensive around Kyiv and Kharkiv had stalled, while heavy fighting was continuing in Mariupol.

In an apparent change of plans, on March 25, the Russian Ministry of Defence announced: "The combat capabilities of the Ukrainian armed forces have been substantially reduced, which allows us to concentrate our main efforts on achieving the main goal: the liberation of Donbas."³ Russian forces started withdrawing from the Kyiv area for redeployment towards the east to



strengthen attacks into the Donbas Region. Attempts to capture Kharkiv were abandoned, and the offensive turned towards the southeast to link up with Russian forces in the Luhansk Oblast. The Russian war aims at this stage appeared to be the seizing of the eastern regions and creating a land corridor along the south coast, eastward from Crimea to the Russian border.

By mid-April, Russian forces had redeployed and begun their offensive in the Donbas Region. A month later, the Russian military has met with some success, but the objective of liberation of Donbas has not yet been achieved. In the south, Mariupol is under Russian control, although some Ukrainian forces continue to hold out in the Azovstal Steel Plant complex.



A service member of pro-Russian troops walks near an apartment building destroyed in the course of Ukraine-Russia conflict in the besieged southern port city of Mariupol, Ukraine, March 28, 2022. Source: REUTERS/Alexander Ermochenko.

The Ukrainian forces have also had their share of success. While accurate casualty figures are hard to come by, it is clear that the Russian military has suffered significant losses in men and materiel. On May 10, Lt. Gen. Scott Berrier, the head of the US Defense Intelligence Agency, told the Senate Armed Services Committee that Ukraine has killed between "eight and ten" Russian generals during the ongoing conflict.



A Ukrainian counter-offensive around Kharkiv has driven Russian forces northwards and reportedly reached within 10 kilometres of the Russian border. Kharkiv is now largely outside the range of Russian artillery.⁴ A striking Ukrainian success came on April 13, when Russia's Black Sea flagship, the missile cruiser Moskva, sank after being struck by Neptune anti-ship cruise missiles. It was later reported that the US had shared intelligence about the location of the Russian warship with Ukraine.⁵

Lessons from the Russia-Ukraine War

The Russia-Ukraine war is ongoing, but in the first two and half months, some lessons have clearly emerged on conventional warfighting involving large and fairly modern militaries. These lessons could be classified under two broad heads: **'Timeless Principles'** and **'Timely Reminders'**.

Timeless Principles

Principles of war that guide the conduct of military operations have existed as long as warfare itself. While these principles may be put across in different manuals by various militaries, the concepts are largely similar. It is useful to analyse how some of these principles were violated.

Selection and Maintenance of Aim. A clear objective must be laid down for the military forces and adequate resources allocated for the attainment of this objective. While it appears that the Russians wished to capture Kyiv and probably install a friendly government, the resources assigned were both insufficient and poorly prepared for this task. Unable to reach their objective, the Russian war aims were changed midway through the campaign. However, even if a modicum of victory is achieved in the Donbas Region, the purpose for which this costly war was waged would not be attained.

Surprise. In the transparency that exists on the battlefield today, achieving surprise is extremely difficult. Despite this, the principle of surprise remains critical in warfighting. The Russian military mobilised in full view of the world over several months. Given clear signs of a Russian invasion, Western military aid started flowing into Ukraine even before Russia's offensive began. In January this year, Ukraine received \$200 million worth of military equipment from the U.S. and anti-tank weapons from Britain.⁶ When the invasion actually began, the Ukrainian military was reasonably well prepared.



Concentration of Force. The Russian military dissipated its effort over four axes of attack. As a result, it could not achieve a decisive victory in any of the areas, ultimately abandoning its efforts around Kyiv and Kharkiv. The logistics support was poor and inadequate, hampering combat operations.⁷ It was only after the Russian military redeployed a majority of their forces for the Donbas offensive in April that they have seen some limited success.



Destroyed Russian tanks are seen, amid Russia's invasion of Ukraine, in the Sumy region, Ukraine, March 7, 2022. Irina Rybakova/Press service of the Ukrainian Ground Forces/Handout via REUTERS

Unity of Effort. All branches of the military must combine their capabilities and fight jointly to increase effectiveness. It has come as a surprise to many observers that the Russian Air Force has played only a limited role in the Russian offensive. Many reasons have been advanced for this, but the result has been that the ground forces have operated without close air support, and this has dented their chances of success. Compounding the problem of unity of effort, there was also no unity of command. It appears that each axis of attack was operating independently⁸ for almost six weeks until General Alexander Dvornikov was appointed as the overall commander on April 10.⁹

Timely Reminders

The Russia-Ukraine war also gives some timely reminders about the nature and character of future conventional wars. Some issues that have been regularly debated concern the role of technology, information warfare, cyber warfare, survivability of large platforms, and the human element in warfare. However, definitive answers were not available as most recent wars have been between



mismatched forces, as seen in Iraq and Afghanistan. The lessons from the current conflict could open up these subjects for greater discussion. The analysis that follows also reflects upon how the Indian military could take relevant pointers as it embarks on a series of reforms.

The Nature of War

- War's nature is violent, and it is a struggle in which two militaries seek to impose their will on each other by brutal force. The war will not end until the will of one side is completely broken. No prior assessments can be made on how much cost the two sides are willing to endure or the time that it will take to overcome the enemy.
- It is difficult to achieve insulation of the civilian population from the dangers of war. Civilian casualties have always outnumbered military casualties in any war, and this will not change. The situation could even worsen, with weapons that have longer range and greater destructive power. Almost 30 percent of Ukraine's population has fled their homes since the war began.¹⁰
- For a very long time, the Indian military has planned on short, swift wars. The "Joint Doctrine of the Armed Forces-2017" says that the character of future wars is likely to be "ambiguous, uncertain, short, swift, lethal".¹¹ Some rethinking is required on this bald assertion and is hopefully underway. The new Army Chief General Manoj Pande recently said, "The ongoing [Ukraine] war also tells us that wars need not necessarily be short and swift and can get prolonged."¹²

The Value of Information Warfare

- The highly televised war in Ukraine has seen its share of misinformation, disinformation, and outright propaganda. Both sides are pushing fake narratives and selective information on social media to show their success and dampen the morale of the other side. Ukraine is using facial recognition technology to identify dead Russian soldiers and send photos of the corpses to their families with the message that the killing of their children must be stopped.¹³
- Despite Russia's alleged superiority in information warfare, it is now generally accepted that Ukraine has managed the information domain in a more sophisticated manner.¹⁴ The reasons for this requires a separate



study, but one key element in dominating the information sphere has been the role played by international technology companies, which have taken the side of their governments.

- U.S. companies reacted within days of the start of the conflict. Facebook and YouTube blocked Russian state media from running ads on their platforms, while Twitter suspended all advertising in Ukraine and Russia.¹⁵ In a temporary change to its hate speech policy, Facebook and Instagram users in some countries were allowed to call for violence and death against Russian soldiers.¹⁶ U.S.-based Clearview AI has provided free access to its facial recognition software to Ukraine to identify Russian soldiers.¹⁷
- India is still in the nascent stage of developing an information warfare strategy. It must carefully study the Russia-Ukraine information campaigns and the influence of the parent country on social media and other technology companies.

Whither Cyber War

- One of the surprises of the war has been the minimal impact of cyber operations that were expected to play a major role in Russian war plans. Russia has sophisticated cyber capabilities and extensive knowledge of Ukrainian networks that have been regularly attacked in the past. Some cyber-attacks on Ukraine's digital infrastructure have been carried out during this war, but the effect has been mainly psychological.¹⁸
- There are still fears that major cyber-attacks could occur in the future, but current indicators have raised questions on the effectiveness of cyber operations in direct support of conventional conflicts. There are many instances of cyberspace being used for attacks on critical infrastructure, intelligence gathering, influence operations, and stealing technology. However, the evidence on cyber operations complementing conventional operations is limited.
- This suggests that while nations develop both offensive and defensive cyber capabilities, the militaries must acquire skills that permit the use of cyber weapons to directly influence the battlefield. This will require that the cyber domain not be seen as a standalone capability but become an integral part of joint operational planning.



The Future of Large Conventional Platforms

- Pictures of shattered Russian tanks and armoured personnel carriers, destroyed by man-portable anti-tank missiles, have become a routine sight. The guided-missile cruiser Moskva, considered the most powerful warship in the Black Sea region, sank when it was struck by two Neptune anti-ship cruise missiles. One of the reasons advanced for the inability of the Russian Air Force to dominate the skies has been the effective employment of air-defence systems, including man-portable missiles, by Ukraine.
- All the incidences described above have opened up a debate on the future of large conventional platforms and their vulnerability on the battlefield. Some experts argue that it is too early to write off the tank and the ship and that the losses suffered by Russia are primarily due to faulty planning and poor execution of tactics. Others stress the need to shift to smaller, more agile systems laced with technology. Either way, as the Indian military embarks on an integrated capability development plan, it must discuss these issues in a completely objective manner, and not be tied down by traditional thinking.



An OSINT image of the damaged missile cruiser Moskva emerged online on April 18, 2022. Source: Twitter



The Human Element

- There are continuous reports of low morale among Russian soldiers. According to western and Ukraine media, some Russian troops have abandoned their equipment and fled, while some have refused to join the fight in Ukraine.¹⁹ Admittedly, these are one-sided reports and cannot be verified, but looking at the performance of Russian soldiers, there is evidence of poor morale.
- The Russian military is a force composed of 65% contract soldiers and 35% conscripts. The conscripts serve for one year while the contract soldiers sign an initial contract to serve for five years. Although Russia had initially stated that conscripts would not be used in Ukraine, it later acknowledged that some conscript soldiers had been sent to Ukraine.²⁰ It was reported that a group of 135 Donbas conscripts in Mariupol put down their weapons and refused to fight.²¹
- Morale, fighting spirit, and unit cohesion are all key elements in military professionalism. While much attention is devoted to capability development, the intangible strengths that motivated men and women in uniform bring must not be overlooked. As India looks to implement the 'Tour of Duty' proposal,²² it must be ensured that the professionalism of the Indian military is not diluted.

Technology as a Force Multiplier

- The use of technology for information dominance has already been brought out. Drones have been used in large numbers for both information gathering and direct attacks. However, Russia's superior military technology has not been able to overcome Ukrainian resistance. Russia's much-vaunted Electronic Warfare capability was ineffective, its most modern tanks failed to achieve a breakthrough, and its advanced aircraft had little impact on the battlefield.
- What lessons can be learnt from this? Militaries cannot be satisfied with the adoption of incremental technologies, and upgrading existing equipment is only a short-term fix. We have to think of technology as a disruptive force and find new ways in which it can be employed as a battle-winning factor. In India, this would perhaps require a complete overhaul of the defence R&D structure that is primarily focused on modernising current military equipment.



Conclusion

The Russia-Ukraine war is not yet over, and it could be said that it is premature to draw any conclusive lessons at this stage. It is thus necessary to accept that some of the conclusions drawn in this brief are initial assessments which could need review or further refinement. The lessons drawn that are also briefly discussed and their nuances have similarly to be further fleshed out. However, almost three months into the war, there is now sufficient evidence to indeed draw some reasonably clear conclusions.

For the last three years, the Indian military has been discussing various proposals that would usher in major reforms and restructure the forces. The lessons from the Russia-Ukraine war will certainly help in providing some guidance on the way forward.

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