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Future Warfare: Prognosticate and Prepare



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Understanding future warfare is the most important responsibility of those who must defend a nation from future enemies!

—Perry M Smith

General

Warfare has been described by Clausewitz as a political and social activity, within the 'trinity' of policy direction by the government, people's primordial passions and chance taken by the militaries. It is worth noting that the changing character of world politics would inevitably entail a change in the character of warfare too¹.

As always, conflict will be driven by the political, economic, social and technical conditions of the particular contestants². It is the interaction between the contestants that define the 'why' and 'how' of a fight. Thus, predicting how a potential enemy will fight includes the risky business of considering current trends in these areas, then projecting them into the future and considering how

Key Points

1. The emerging war, which is ambiguous and irregular, is now being fought within and beyond land borders, in the physical and psychological domains.
2. Resource constraints, energy needs, ideological differences and extremism, expansionist and revisionist states are all contributing to a spectrum of conflicts, adding a new dimension to it.
3. The rise of insurgents as well as non-state actors in war and their readiness to use terror and other irregular methods of fighting, unbridled proliferation of dual-purpose technologies and concepts into the hands of violent non-state actors (VNSA), and use of space and cyber will make the future conflicts more complex. The combat capabilities of the armed forces thus, have to cater to the hybrid forms of war.
4. Capability of sea forces to project their power 'forward from the sea' by virtue of four modern attributes, namely, aircraft carriers, precision missiles, long-range guns and amphibious forces will continue to dominate future naval warfare.
5. Developments in the field of nuclear technology are only making the nuclear weapons more useable. Adding to this complexity is the strategy of nuclear brinkmanship, followed by our neighbour on the western front.
6. We cannot simply continue to improve on the existing forces and concepts, but must seriously study how the convergence of changes in all these fields will alter the conflict. We may therefore, need to fundamentally alter the way we will fight the future wars.

The Centre for Land Warfare Studies (CLAWS), New Delhi, is an autonomous think-tank dealing with national security and conceptual aspects of land warfare, including conventional and sub-conventional conflict and terrorism. CLAWS conducts research that is futuristic in outlook and policy-oriented in approach.

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they might apply to specific conflicts or types of conflicts.

The 'old wars' were waged solely between states and were accordingly fought between comparable and 'symmetrical' armed forces³. Over the past couple of decades (and indeed ever since the Cold War), the rise of insurgents as well as non-state actors in war and their readiness to use terror and other irregular methods of fighting, have led experts to speak of 'new wars'⁴. The so-called new wars, whose characteristics according to Mary Kaldor, include 'the politics of identity, the decentralisation of violence [and] the globalised war economy', have allegedly replaced the 'old wars'.

Evolving Spectrum of Warfare

Evolving character of war and strategy in the emerging geopolitical environment reflects the tension between the traditional Trinitarian concept of war, pursued by a state for attaining some policy objective and a transformed, non-Trinitarian, stateless war pursued for myriad objectives⁵. This has rendered the territorial boundaries of nations irrelevant and the emerging war, which is ambiguous and irregular, is now being fought within and beyond land borders, in the physical and psychological domains. On one side, it is asymmetric and on the other, it is hybrid in nature, a combination of conventional and sub-conventional warfare⁶. Wars of the recent past like the 1967 Arab-Israel War or the 1965 India-Pakistan War with large armies on either side are unlikely today.

Nuclear weapons have changed the balance substantially. The United States is unwilling to act against North Korea but did go to war against Iraq, twice. In fact, a review of the global scene over the past five decades reveals

that potential nuclear warfare has given way to restricted nuclear deterrence; total war has given way to limited war and there has been a rise in irregular warfare or unconventional forms of warfare.

Emerging Security Environment

The emerging security environment is radically different from what it was even a decade ago. In an increasingly globalised environment, there is an ongoing conflict of humanity for the control of wealth, ideologies and strategic autonomy. The new security challenges are primarily driven by economic, demographic and societal tensions that are transnational in nature. It appears that direct conflicts between nations will soon become history. Large conventional armies may give way to Special Forces with precise capabilities. According to John Arquilla, 'many and small' beats 'little and large' and 'swarming will be the new method of surging'⁷.

Some of the trends of modern day wars and armies are that no great power war has taken place. After peaking in the 1970s, the numbers in armies have started declining. The actual quantities of equipment have gone down because of their exorbitant costs. Computers and the back-end support, which provide the computing backbone to operations, are growing in number. The venture of big powers has given way to the rise of regional powers like China and India and armies are mostly fighting insurgents in Jammu and Kashmir or Xinjiang. Hybrid warfare poses additional challenges to the existing armies.

Thus, if the war-for-territory paradigm is diminishing around the globe and future wars are going to be fought in the political, economic, social and limited military domains, then what is the justification for having large conventional

armies? In the Indian context, the threat of a large war may have been reduced but the constant threat scenario of sudden skirmishes or a limited conflict does remain relevant since India is encircled by inimical state and non-state actors who are capable of threatening the sovereignty of this nation⁸. The Joint Doctrine for the Indian Armed Forces released in April 2017 reiterates, “Strategic interests in regions along our northern, western and eastern borders and sensitivities along the Line of Control (with Pakistan) and Line of Actual Control (with China) are to be protected with effective deterrent capabilities”⁹. Though a conventional army is relevant as a dissuasive deterrent, there is a case for taking a fresh look at force restructuring in the backdrop of the emerging trends in warfighting.

Future War

With increasing number of stakeholders, the potential for competitions, conflict and hostilities also rises. Nowadays, non-contact is overtaking contact warfare. International order does not apply to non-state actors. It is difficult to define which capabilities a nation requires and what are the emerging contours of this change. There is a paradigm shift in the nature of conflict. Resource constraints, energy needs, ideological differences as well as extremism and expansionist as well as revisionist states are contributing to the spectrum of conflicts, including internal armed conflict which has adding a new dimension to it.

In view of the above, it is likely that India would continue their rapid pace of armed forces development in the hybrid and conventional warfare scenarios, to meet the full spectrum of threat over-riding the constraints of nuclear overhang. Conventional forces will continue to be backed by a robust nuclear strategy.

It also needs mention that Special Forces are playing an increasing role in warfare. Special Forces are strategic assets for a strategic effect. Their integration with the conventional military is transforming the way conflicts are being undertaken. Role of Special Forces in the strategic and operational dimension requires a relook and greater deliberation. Today, rather than interstate conflict, sub-conventional conflict has become the new normal. India is faced with a dual threat. Having faced threats on two fronts as well as sub-conventionally, the nation has chosen to be prepared for this conventional threat and also adapt to fight the sub-conventional war. The likelihood of employing Special Forces in a covert role to gain exponential dividends makes them a potent and powerful force to gain exponential results.

Space and cyberwarfare have added new dimensions by making war real time and distantly controlled while eliminating collateral damage, to achieve desired results. Space-based assets have become pivotal to strategic security and play an essential role in the conduct of future military operations. Leading space-faring nations of the world have described space as the fourth dimension of warfare and are integrating space-based assets in their concept of operations. Therefore, capability development in the space arena is becoming critical in prosecuting future wars.

Cyberwarfare will invariably form an essential component of every scheme of future operations, which are likely to be intensely net-centric in the future¹⁰. Cyberterrorism is seen as a much safer, low cost and easily operable option which can be implemented from any part of the globe making it more lethal and destructive, thus, necessitating strong countermeasures. Cyberwarfare is in a continuum and is detached from conflict

timelines; hence, response measures have to be suitably instituted.

The transformation of the Indian Army will involve a change from an industrial age army, trained, equipped and postured to undertake conventional operations to an information age army capable of simultaneously fighting high-intensity conflicts together with insurgencies and terrorism. Simultaneously, it will have to guard against cyberattacks, bioagents, media manipulation and other forms of irregular warfare. Thus, the combat capabilities of the armed forces have to cater for hybrid forms of war.

Maritime and Air

India stands at a very critical strategic maritime threshold in the Indo-Pacific. With its growing economy, growing maritime infrastructure, the evolving maritime and naval power architecture and its expanding diplomatic influence in the Indo-Pacific region offers India prospects for power rise that could be the most important stabilising influence in the region. Securing India's vital interests in the Indian Ocean region and island territories is a vital priority mission for the Indian Navy as that constitutes the assurance of India's position in economic and strategic terms. Capability of sea forces to project their power 'forward from the sea' by virtue of four modern attributes, namely, aircraft carriers, precision missiles, long-range guns and amphibious forces will continue to dominate future naval warfare.

Air power has evolved from a support force to a power projection force—the 1967 Arab-Israel war and Bangladesh operations demonstrated the power of air if used imaginatively. Air power will continue to enjoy its predominance in providing precision firepower, stealth and lethality to shape

the battlefield in a conventional war. Counter-air campaigns directed against the enemy's air power either in air or on ground to achieve and maintain the necessary degree of control of air is the key to conduct successful air, ground or sea operations in war. In irregular wars, their role will largely be directed towards intelligence gathering, target acquisition, surveillance, reconnaissance, logistics and selective precision engagement. Armed drones will obviously find a prominent place in the air power doctrine, taking a lead from the US Central Intelligence Agency's successful use of this remotely-controlled means of intimidation with a light footprint that has changed the face of warfare¹¹.

Technological Prowess

Technology may influence strategies and doctrines, thus, it must be developed to incorporate new thoughts and the effect of these technologies, which in turn must shape contours of future warfare. Technology will be the force which would catapult the Indian Armed Forces to a modern 'net-centric force' capable of fighting effectively across the entire spectrum of conflict. There is therefore, a need for not only seeking technology transfers and absorption of technology in the process of acquisition of modern warfighting capabilities but also encouraging indigenous research and development process.

Unbridled proliferation of dual-purpose technologies and concepts into the hands of violent non-state actors (VNSA) will make the future conflict more complex. Incidents ranging from Lone Wolf Attack to pitched battle by Islamic state of Iraq and Syria (ISIS) and the likely proliferation of nuclear technology/fissile materials in the hands of non-state actors are

manifestations of such complexities making it more violent, complex, subtle and blinder than ever.

The potential of emerging military technologies to reduce the 'fog of war' could change the way wars are fought. Space-based sensors and those integrated in manned aircraft, unmanned aerial vehicles (UAVs), vehicles and soldiers, when networked in real time can virtually monitor everything that is going on in a particular battle area, dramatically improving battle space awareness resulting in complete 'situational awareness'. Exploiting situational awareness requires advanced command, control, communications, computers and intelligence processing (C4I) systems. The lethal and non-lethal munitions when integrated with robust command and control features, communication devices, sensors and seekers would form an integral part of the future command, control, communications, computers, intelligence, information, surveillance and reconnaissance (C4I2SR) system.

Developments in the field of nuclear technology are only making the nuclear weapons more useable. Despite a series of initiatives by nuclear haves as well as have-nots to check nuclear proliferation, aspiring for global nuclear disarmament or moving towards a nuclear weapon-free world namely, Non-Proliferation Treaty (NPT), Comprehensive Nuclear-Test-Ban Treaty (CTBT), Fissile Material Cutoff Treaty (FMCT), Ban Treaty or New Strategic Arms Reduction Treaty (START), the technology demonstrations in the form of developing clean bombs, improvements in the delivery means,

development of super-fuze, nuclear drones, hypersonic nuclear cruise missiles, to name a few, only make nuclear warfare more probable and lethal. And, to add to the dynamics is our neighbour on the western front with the strategy of nuclear brinkmanship.

Conclusion

Changes in political, economic, social and technical conditions will change the way people fight. In the dynamic geopolitical environment and Revolutions in Military Affairs, the future conflicts are going to be volatile, uncertain, complex and ambiguous (VUCA). Adding to this VUCA environment is the complexities of sub-conventional conflict waged by state and non-state actors. India has been fighting this hybrid war for nearly three decades now. We cannot simply continue to improve on existing forces and concepts, but must seriously study how the convergence of changes in all these fields will alter the conflict. We may have to fundamentally alter the way we will fight the future wars. National security will require a thoughtful exploration of possibilities and a willingness to consider drastic changes to the Indian Armed Forces – and perhaps even our basic concept of the meaning of security. The security forces [therefore], must prepare for the wars they may have to fight [which may fall in any segment of the conflict spectrum]. Those who refuse to change with the changed environment rarely bring victory and often become victims of an ageing psychology and tired ideas. The gestation period of military preparation is long, thus, perspective planning is vital to look ahead and change with the emerging trend lines¹².

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Notes

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