The beginning of the 21st century has seen a crucial paradigm shift in the nature of conflict. Sub-conventional patterns, including intra-state conflict and international terrorism have replaced traditional inter-state armed conflict as the primary security challenge of nation states.

While inter-state conflicts have declined in recent times, there has been a remarkable rise in intra-state and other sub-conventional conflicts, which include sabotage, subversive confrontation and armed violence. Cyber space adds yet another dimension to both conventional and sub-conventional wars.

This has led to the emergence of the concept of hybrid warfare, a phrase coined by former US Army Chief George W. Casey, who said future wars would entail “prevailing in protracted counterinsurgency campaigns; engage to help other nations build capacity and assure friends and allies; support

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civil authorities at home and abroad; [and] deter and defeat hybrid threats and hostile state actors.”

Hybrid warfare involves threats to a nation’s political, military, economic, social, informational and infrastructural vulnerabilities. It usually involves non-state actors indulging in subversive roles supported by states in order to give the latter some plausible deniability. Hybrid warfare exploits the ambiguity of the fog of war to remain below obvious detection and response thresholds.

The politico-economic fallout of such a war includes demographic and social tensions, leading to serious internal security and governance issues. With cities emerging as the nerve-centres of economic growth, it is crucial to enhance security of major Indian metropoli. In recent times, armed conflicts are increasingly taking place in urban spaces. The nation’s armed forces, principally oriented to counter external threats in open spaces, are ill-trained and equipped to fight in crowded urban areas with large civilian populations. But this is likely to change given the rising threat of hybrid conflict, which includes threats ranging from new forms of terrorism like ‘lone wolf’ attacks to cyber-terrorism and the use of armed force in urban settings is likely to increase. Security experts conceptualise anything disturbing urban settings violently as the ‘new terrorism’.

According to National Consortium for the Study of Terrorism and Response to Terrorism, although terrorist attacks took place in 100 countries in 2017, there was significant geographical concentration geographically. 59 per cent of all

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attacks took place in five countries (Afghanistan, India, Iraq, Pakistan, and the Philippines), and 70 per cent of all deaths due to terrorist attacks took place in five countries (Afghanistan, Iraq, Nigeria, Somalia, and Syria).⁴

Recent terrorist strikes targeting major cities across the world have added to the nightmares of policy makers, many already grappling with increasing violence in urban areas, including violent mobs rampaging through city streets, arson, assaults and assassinations, bombs and barricades, gang wars, killings and kidnappings.⁵

Since it appears quite inevitable that the armed forces will be increasingly called upon to operate amidst areas with large civilian populations, the forces should understand the urban environment not merely against the backdrop of conflict, “but as a dynamic relationship with the force operating within it – local population, soldiers, guerrilla fighters, journalists, photographers and humanitarian agents.”⁶ Their overwhelming objective will be to disarm the potential threat without harming civilians or suffering unacceptable losses due to this restriction. Both civilian and soldier’s lives are equally compromised by the emerging threats around the cities and town in coming decades. This essay offers a three-pronged approach to understand the new threat and suggest ways to minimise civilian casualties during such hybrid conflicts in urban areas.

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Further, as Dexter Filkins notes, “Apart from the increased effectiveness and lethality of non-state actors within hybrid war, the symbiotic relationship between sponsor and client is another variable that differentiates hybrid war from traditional forms of conflict.”\(^7\) The Syrian Civil War and spread of Islamic State (IS)/Daesh presented examples of the complex strategic challenge to the world posed by modern hybrid warfare.

Hybrid war that simultaneously combines conventional, irregular, and terrorist components is a complex challenge which can only be tackled by an adaptable and versatile military. As aptly stated by Carl von Clausewitz, “Every age has its own kind of war, its own limiting conditions, and its own peculiar preconceptions.”\(^8\) The United States has increasingly focused on a counterinsurgency doctrine in the wake of its wars in Afghanistan, Iraq and Syria.

**HYBRID WARFARE IN URBAN ENVIRONMENTS**

Hybrid warfare in the urban-environment is seeing a revised form of combat techniques integrated into battle tactics to attack a strong enemy. Urban Warfare is generally defined as “Combat conducted in urban areas such as towns and cities.” But different nations define it differently. According to US Army’s “An Infantryman’s Guide to Combat in Built-Up Area” Military Operation in Urban Terrain (MOUT) is defined as:

“All military actions that are planned and conducted on terrain where man-made construction affects the tactical options available to the commander. These


operations are conducted to defeat an enemy that may be mixed in with civilians. Therefore, the rules of engagement (ROE) and use of combat power are more restrictive than in other conditions of combat.”

The Indian Army, part of many urban operations ranging from low-intensity conflict to counter-insurgency and guerrilla warfare, doesn’t have a formal doctrine per se for Urban Operations. However, Professor C. Christine Fair of Georgetown University provides evidence to show that that India is adopting the US doctrine of MOUT to address this gap.\textsuperscript{10} Even though India is yet to develop a formal doctrine, it has acquired and developed competency equivalent to the MOUT doctrine. In formulating such a doctrine, the historical context and relevance plays a crucial role in developing and preparing soldiers for future urban-warfare.

According to available literature, the concept of Urban-Warfare started to evolve in the minds of military planners since the Second World War. The Battle of Stalingrad is a viable example to start with, in which the powerful German army was outlasted by the Soviet defenders. The Commander of the Soviet Army, Vasily Ivanovich Chuikov, played a crucial role in that battle. Realising the German Army’s inefficiency in Urban-Warfare, Chuikov developed an important tactic called “hugging the enemy”, by which he directed the Soviet Army to manoeuvre closely with German forces to avoid their superior artillery and airpower. He also employed effective psychological tactics, using snipers to terrorise German soldiers. The lack of popular support and underestimating resistance in the city prolonged the confrontation, and the German army lost the


Battle of Stalingrad because it employed conventional military tactics and underestimated the effectiveness of guerrilla tactics in an urban-environment. This was a major triumph for allied forces in the Battle of Stalingrad, and subsequently, the Battle for Berlin. From then on, military history has been dominated by urban military tactics.

The Cold War environment again overturned the argument of conventional military superiority, deterring adversaries from direct attacks. Instead, war broke out in an asymmetric manner and was often fought in the vicinity of urban spaces. The Korean War (1950-1953), Vietnam War (1995-1975), Lebanon (1982 and 2006), military operation in Beirut (1982-1984) and the operations in Kosovo, Iraq, Syria, Philippines and Afghanistan are all principally sub-conventional warfare against the enemy, with a substantial proportion of operations concentrated in the urban terrain. In all these major conflicts, the US was greatly involved in fighting against adversaries in far-away cities. The US strategic community believes that this trend is likely to continue in future and that the military must be ready to conduct such operations.\textsuperscript{11}

Military planner and theorists have pointed out that “the beginning of the 21st century was marked by proliferation of hybrid wars between flexible and sophisticated adversaries engaged in asymmetric conflicts, using various forms of warfare according to the purpose and time chosen.”\textsuperscript{12} This new kind of war has not only questioned the traditional and conventional military thinking but, also generated lots of


debate in the strategic community over the definition of the “hybrid war” and also demands new appropriate measures to adapt to the new reality imposed by it.\(^\text{13}\)

In the case of India, border disputes with its neighbours have dominated strategic affairs and policy thinking for the past 70 years. However, India also has reasonable experience in Urban-Combat. The insurgencies in Punjab and Kashmir, the Indian Peacekeeping Force (IPKF) mission to Sri Lanka (1987-1990) and various counter-insurgency operations have enhanced Indian military might to face emerging challenges. Due to political sensitivities, the role of the Indian military is limited, and Indian Paramilitary Forces under the Ministry of Home Affairs take control of disturbed areas. But apart from the Indian Army’s counterinsurgency doctrine, there is no official literature available in the public domain to understand the Indian armed forces’ policy towards sub-conventional and urban-warfare.

Meanwhile, belligerent elements are increasingly and effectively exploiting the hybrid war paradigm in different shapes and forms. The rising number of terrorists, insurgents and guerrilla forces targeting India and its cities over the past 70 years poses a clear and present danger. The Britain Multinational Capability Development Campaign (MCDC) Countering Hybrid Warfare project has five major reasons for the rise of hybrid warfare.\(^\text{14}\)

First, hybrid warfare uses a wider set of military, political, economic, civilian and informational instruments which are usually overlooked in traditional threat assessments.

\(^{13}\) Ibid.

Second, it targets vulnerabilities across societies in ways that we do not usually think about.

Third, it synchronises attacks in novel ways. For example, by only looking at the different instruments of power an adversary possesses, one cannot necessarily predict how and to what degree they might be synchronised to create certain effects. Thus, the functional capabilities of a hybrid warfare adversary, although important, will not necessarily provide the right information to understand the problem.

Fourth, hybrid warfare intentionally exploits ambiguity, creativity, and our understanding of war to make attacks less ‘visible’. This is due to the fact that they can be tailored to stay below certain detection and response thresholds, including international legal thresholds, thus hampering the decision-making process and making it harder to react to such attacks.

Fifth, a hybrid warfare campaign may not be discovered until it is already well underway, with damaging effects having already begun manifesting themselves and degrading a target’s capability to defend itself. The September 11 attack on the US, followed by Indian Parliament attack on December 13, 2001, the July 7, 2005, London subway bombing, the infamous 2008 attack on Mumbai and the series of ‘Lone Wolf’ attacks in Europe in the last few years targeting civilians clearly signify the change in tactics and urban settings emerging as a choice of target. In future, non-state actors such as Al Qaeda and the Islamic State/Daesh may seek urban spaces a viable option to launch attacks, particularly to seek media attention.

With the improvement in technology and terrorist organisations simultaneously enabling small groups to inflict harm on much larger populations, “the weapon of terrorism

15 Ibid.
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thus severely limited the safe harbour advantage enjoyed by the cities, in time of traditional warfare.”

Therefore, from prolonged war to limited war and to the war on terror, cities are likely to be the new theatres of such conflicts.

**Hybrid Target**

In the new age of warfare, non-state actors are active in targeting cities and urban spaces to wage global campaigns. Urban spaces provide ample opportunity for terrorists and non-state actors to sneak in and inflict a brutal attack to terrorize large populations through “shock and awe” tactics. American terrorism expert Brian Michael Jenkins thus makes the following points: One, terrorism has become bloodier; two, terrorists have developed new financial resources so that they are less dependent on state sponsors; three, they have evolved new models of organisation and can now wage global campaigns; four, terrorists have effectively exploited new communications technologies; and five, some terrorists have moved beyond tactics to strategy, although none of them have achieved their stated long-term goals so far.

Violence is matter of perception and measurable phenomena. Certain categories of violence associated with political action, such as protests, strikes, demonstrations, tax revolts and civil disobedience movements are not classified as terrorist acts. Earlier, insurgents and guerrilla forces using similar terrorist tactics were exempted from the definition

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of terrorism. However, Alex P. Schimd of the International Centre for Counter-Terrorism, observed,

Terrorism is an anxiety-inspiring method of repeated violent action, employed by (semi-) clandestine individual, group or state actors, for idiosyncratic, criminal or political reasons, whereby – in contrast to assassination – the direct targets of violence are not the main targets. The immediate human victims of violence are generally chosen randomly (targets of opportunity) or selectively (representative or symbolic targets) from a target population, and serve as message generators. Threat- and violence-based communication processes between terrorist (organization), (imperilled) victims, and main targets are used to manipulate the main target (audience(s)), turning it into a target of terror, a target of demands, or a target of attention, depending on whether intimidation, coercion, or propaganda is primarily sought.\(^{18}\)

Schmid goes on to note that terrorism is the “peacetime equivalent of war crime.”\(^{19}\) This leaves no room for ambiguity in defining the terrorist act and clearly differentiates the relationship between terrorism and other violent acts in the society.

Warfare has witnessed a constant change down the ages. Today, terrorist motivation relies on collateral damage and massive destruction. B.S Raghavan explains it in terms of “inhuman hatred, all-consuming ill-will and ranging


\(^{19}\) Ibid.
fanaticism”.\textsuperscript{20} The series of attack on cities worldwide makes it clear that non-state actors, insurgents and guerrilla forces are an emerging threat to urban areas.

**Urban Settings**

Global urbanisation is a crucial environmental factor gaining prominence in urban warfare. Generally, an urban area is characterised based on the density of human population. In 1800, less than 3 per cent of world population lived in urban areas. In the 21st century the figure has risen to approximately 47 per cent, says the UN. By 2025 the world population living in urban areas is likely to grow significantly.\textsuperscript{21} Particularly, urbanisation in India is ratcheting up very fast. In 1991, only 26 per cent of India’s population lived in urban areas. But projections conclude that, by 2025, 40 per cent of India’s population will be living in cities and two-third of the total population growth between 2000 to 2025 would be in urban areas.\textsuperscript{22} Mumbai, with 29,650 people per square kilometre, will be the second most populous city in the world by 2020, with over 25 million inhabitants. The future urban area is thus going to be increasingly congested, complex and confusing. At the same time, these cities emerge as centres of politics, finance, industry, transportation, communication and cultural activity.

In the globalised world the city acts as a hub for business and international politics. Rapid urbanisation provides ample


\textsuperscript{22} P.N. Mari Bhat, *Indian Demographic Scenario 2025*, Institute of Economic Growth, Delhi, 2001.
opportunity for business and trade to flourish, and transforms cities into economical nerve centres of a nation. Elena Irwin, Faculty Director at Ohio State Sustainability Institute, emphasises that “economic growth and urbanisation are inextricably linked.”

Many rural areas have transformed into urban centres because of massive inflow of capital and Foreign Direct Investment (FDI). Therefore, most nations have their economic strongholds in cities.

The integrity of the nation is also based on its urban spaces due to their heterogeneity. Multi-cultural, multi-lingual and multi-religious societies are unique, but at times such diversity also creates a tension in urban society. German sociologist George Simmel asserts that urban living has a profound social and psychological effect. According to him, urban dwellers avoid emotional involvement and interactions tend to be economic, rather than social. The urban environment leads to a self-centred lifestyle and curtails socialising in larger ways. But though urban life is self-centred, many sociologists believe that distinctions and differences in class, caste and race still persist in the urban conglomerations.

On a tactical level, high rise building, broad roads and lanes jostle for space with slums, narrow streets and congested lanes. Such irregularities are integral to urban areas, particularly in Third World countries, where urban spaces are not planned and governed properly. Therefore, they appear highly unorganised. On several occasions, when lives are in danger, street vendors, occupied pavements, traffic and haphazard and illegal parking have created major hurdles for emergency teams trying to reach crisis areas.

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Other major imperatives of emerging urban societies are knowledge and value based. The instant flow of information through modern telecommunications and social and mainstream media, allow inhabitants to communicate constantly in real time across vast distances, giving them a greater and immediate sense of awareness. Moreover, the mainstream media’s stress on immediate dissemination of news has often led to media crews reaching emergency spots before other first responders or law enforcement agencies. In future, the flow of information and media are increasingly going to determine the credibility of the government’s response to a crisis. There are also distinct possibilities that terrorist organizations, non-state actors and insurgents will exploit both modern communication tools and the media to achieve their political and ideological objectives.

Strategically, cities play a critical role in the emerging security environment and offer a viable opportunity for non-state actors, guerrillas, militants and terrorist to wage war against nations. For maximum impact, large gatherings, economic centres, diversity in society, as well as high profile monuments (symbols of nations), are often the targets of non-state actors. If non-state actors manage to execute an attack in a highly urbanised space, they will inevitably succeed in promoting their objectives. Given this scenario, the armed forces’ response to such threats has to be swift and target oriented, while ensuring that no civilians are caught in the cross-fire.

With this in mind, it is worth reflecting on Russia’s Chief of General Staff General Valery Gerasimov and his so-called “Gerasimov Doctrine,” which highlights the increasing importance of non-military means to achieve political and strategic goals, and the ramifications of these means. According to Gerasimov, the lessons of the Arab Spring are that if the
‘rules of war’ have changed, their consequences have not – the results of the ‘coloured revolutions’ are that a “thriving state can, in a matter of months and even days, be transformed into an arena of fierce armed conflict, become a victim of foreign intervention and sink into a web of chaos, humanitarian catastrophe and civil war.”

In terms of the scale of casualties and destruction these new-type of conflicts are equivalent to the consequences of any real war. The Russian Armed forces therefore need to have a clear understanding of the forms and methods of the use and application of force. This corresponds to the statements by other senior Russian officials about how hybrid-type conflicts can evolve and merge—and draw states into interstate wars that then undermine them. Russian Armed forces need to be able to fight that “fierce armed conflict” and also shut out potential “foreign intervention.”

**Humanitarian Issues**

Accomplishing military objectives inside populated areas is difficult. Besides, the rules of conduct devised by the International Humanitarian Law (IHL), largely limit state armed forces in their pursuit of targets in urban areas. IHL particularly focuses on the legality of the conduct of parties to hostility that has reached the level of armed conflict (*jus in bello*).

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25 Robert Coalson “Top Russian General Lays Bare Putin’s Plan for Ukraine”, HuffPost, November 2, 2014, https://www.huffpost.com/entry/valery-gerasimov-putin-ukraine_b_5748480?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAD_CHGntH8EEUa20Bi84wTIHVKC27TFsTikxYZjgqUH05nerwL42KEiUkky9rF0_tG1tbx8DPzf7k6_d6YK6wLY6MYdMKc4m4paWAuvYWTDt1uW8AOhvvVkr2Vr__IEkLDizJq5GAXSfmEqGeQPYybxcDnF0LcQgKcCPpxWaKbG9CS

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In an asymmetric conflict the weaker side can integrate or conceal itself within civilian populations to avoid detection. If the military target\(^{27}\) is within a civilian population, the objective tends to be immune from a wide range of attacks, *per se*.\(^{28}\) At the same time, it is understood that a non-state actor benefits from the presence of civilian populations and uses it as a shield or cover in military operation, which is in total violation of international law.\(^{29}\) Article 57, Additional Protocol I, offers the following guidelines about the proportion of force to be used and precautions that armed force should take into account before attack\(^{30}\):

- Do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects and are not subject to special protection, but are military objectives;
- Take all feasible precautions in the choice of means and methods of attack in order to avoid, or minimise, incidental loss of civilian life, injury to civilians and damage to civilian objects; and
- Refrain from deciding to launch any attack on a target which may be expected to cause incidental loss of

\(^{27}\) Under Article 52, military objectives are limited to “those objects which by their nature, location, purpose, or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage”.

\(^{28}\) Article 51, Geneva Convention.


civilian life, injury to civilians, damage to civilian objects or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.

- Apart from these, Additional Protocol Articles 12, 15, 53, 54, 55 and 56 impose liability on armed forces and restrain them from targeting civilian populations.

The IHL also imposes a specific obligation on the armed forces to protect civilians and property in case of war, and the military commander is made responsible for the operation and is obliged to follow the key specific rules laid down by the IHL. Increasingly, non-government organisations, human rights watch groups and international law agencies have the authority to scrutinise the legality of military responses.

In India, the government has arranged a specific mechanism to look into the violation of rules and norms of armed forces engaged in counter-insurgency and anti-terrorist activity. In principle, the Indian Constitution guarantees fundamental rights to citizens, and the National Human Rights Commission (NHRC) is authorised to look into any violation of such rights. Nevertheless, the issue related to urban-combat is yet to be seriously analysed by the civil and/or legal administration. Civil society, human rights activist groups and media seek strong responses from the government to restrain the use of armed forces in urban areas. Indian authorities would need to closely study emerging trends in urban warfare if they are to craft appropriate responses.

**INDIA AND URBAN COMBAT EXPERIENCE**

India’s security perception over the past 70 years has been dominated by conventional military thinking. At the same time, India faces a unique internal security problem, partially aided
by external actors such as Pakistan’s ISI and China. Rapidly developing India faces crucial 21st century security challenges from all quarters.

A report submitted to the Planning Commission under the heading “India Vision 2020” pointed out some key security issue for future India. There is no direct reference to urban environments, but it points out the key ‘Factors Influencing the Security Environment in 2020’:

- The twin revolution of rising expectations and information and communication will continue.
- The fundamental ideological conflict between India and Pakistan is unlikely to be resolved without a major socio-political change in Pakistan.
- Territorial disputes with neighbours that have defied resolution for 50 years may not lend themselves to an early solution.
- Religious extremism and radical politics will continue to have an adverse impact on core values.
- Rising dependence on energy imports will make us increasingly vulnerable, economically, as well as diplomatically.
- Public opinion, both domestic and international, and the media will become increasingly important forces in international affair.
- The international order is likely to evolve into a polycentric configuration, with its centre of gravity shifting increasingly to Asia, which will include seven out of the ten largest economies and six out of the eight nuclear weapon states.

The increasing economic and military strength of China may pose a serious challenge to India’s security unless adequate measures are taken.

In the emerging security environment, the Indian armed forces will be increasingly responsible for countering internal security issues. Article 355 enjoins the Union to protect the States against “internal disturbance” and “armed rebellion”. It is from this Article that the central and state governments draw their authority to call upon the armed forces to provide aid to civil authority.

The Indian Army formed a specialised force called “Para Commandos” to deal with special operations. Starting from the 1971 India-Pakistan War, the Para Commandos have participated in many operations in India and abroad: Operation Blue Star (1984), the Indian Peace Keeping Force in Sri Lanka (1987), Operation Cactus in the Maldives (1988), the Kargil War (1999) and Operation Khukri in Sierra Leone (2000) are notable among these.

Other specialised units formed for counter-terrorism and urban-warfare operations include the Ghatak Unit (Indian Army), Indian Navy’s Marine Commando (MARCOS) and Garuda Commando (Indian Air Force). Paramilitary special forces such as the National Security Guard (NSG), Special Protection Group (SPG), Special Frontier Group (SFG), Commando Battalion for Resolute Action (COBRA) and the newly formed Force One elite commando force of the Mumbai Police are trained to respond to any urban terrorist attack within 15 minutes.32

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To facilitate the armed forces to carry out such operations, they are provided legal cover under the constitutional and legal statutes such as:\[33:\]

- Constitution of India, Articles 352 and 355.
- Code of Criminal Procedure, Section 127 to 131.

This legal cover imposes great responsibilities on the armed forces during such operations. However, civil right activists and human right groups have lodged a series of complaints against armed forces engaged in counter-insurgency and anti-terrorist operations. The best example to quote is Operation Blue Star, where the Army’s assault on the Golden Temple complex, the holiest Sikh shrine, resulted in a series of human rights’ violations. Many top government officials, including K.P.S Gill, who served twice as Director General of Police (DGP) Punjab, criticised the pattern of the use of military force in operation Blue Star, resulting in enormous human loss and material damage.\[34\] This operation subsequently led to the assassination of the then Prime Minister Indira Gandhi and the subsequent anti-Sikh riots across the country. This case demonstrates the necessity of extreme caution while employing military force in the urban context. Even paramilitary forces employed in urban-centric warfare should be trained in all aspects of such operations, particularly including human rights issues and a high degree of political consciousness, apart from normal combat training.

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PREPARING SOLDIERS FOR THE HYBRID WARFARE ENVIRONMENT

Soldiers are essentially trained to kill or disable enemy forces during combat operations. But in urban warfare, they must temper that training to ensure the safety of civilians and also prevent unacceptable losses while doing so. To help them in this, smart robots, Unmanned Aerial Vehicles (UAV) and precision munitions offer a wide range of option for policy makers as well as tactical planners. At the same time, non-state actors are also learning from past experience, presenting a more complex security challenge for the armed forces. The hybrid aspect of urban areas thus becomes a “centre of gravity” for non-state actors to wage a covert or direct assault on civilian populations to perpetuate their political or ideological struggle.

The responsibility of the soldier in this unique environment is thus enormous. The problem of identifying “foe or friend” remains the centrepiece of argument for civilian and combatant casualties. When differentiating enemy from friend is achievable, civilians and non-combatants will become less vulnerable during urban-conflict. Operational preparedness and a policy level approach for the armed forces, which might possibly reduce civilian, combatant and non-combatant causalities in urban-environments, is consequently necessary.

TRAINING REQUIREMENTS

The military is principally trained for conventional warfare. Fighting in built-up areas requires special battle techniques and tactics, as well as conditioning to overcome urban combat stress. Past performance guarantees nothing for future operations, and therefore, training sequences need to be revised constantly to match evolving situations. Soldiers must be prepared to absorb and understand complex situations before taking decisions in
dynamic built-up areas, rather than waiting for orders from higher authorities. Bottoms-up learning needs to be inculcated into the training methodology, and this should also fulfil the soldier’s career aspirations. This, in turn, encourages the urban war-fighter to assume responsibility and adopt correct attitudes while fighting an enemy in built-up areas.

**REDUCE QUANTUM OF FORCE**

Armed forces operating inside built-up areas must use appropriate force to eliminate potential threats. Exercising massive fire-power against a weaker adversary results in excessive and avoidable collateral damage. Further, falling debris can provide fortifications for the enemy to mount attacks against the armed forces. In close quarter combat, the debris and destruction caused by shelling can jeopardise troop movements and make them vulnerable to enemy fire. Massive use of force in urban areas can result in destruction of lives and property. The use of air power, in particular, must be optimised, overwhelmingly for gathering intelligence, surveillance and reconnaissance, and transportation of personnel and material. Countries such as the US, Israel and Sri Lanka have effectively used air assets in operations against insurgents, which resulted in many civilian deaths. Moreover, the frequent use of the Predator UAVs to track and attack Taliban near the Af-Pak border resulted in numerous civilian casualties, and also strained the US-Pakistan relationship.

Indian counter-insurgency and anti-terrorist operations principally take place internally. The inappropriate use of force not only kills fellow citizens, but also turns the public will against the government. Proportionate force is, consequently, necessary to tackle the menace. New weapon systems, with greater precision and lower levels of lethality, designed for
urban environments, need to be explored and deployed. Traditional tactics such as rolling in tanks, artillery, and conventional infantry in cities must be strictly prohibited and special command and control systems developed to monitor and direct soldiers in urban warfare to minimise the actual use of force in urban combat.

**Doctrine Driven Technology**

Rapidly evolving technology and sophisticated gadgets play a vital role in reducing civilian and combatant casualties in urban area. Basically, superior technology gives the armed forces an edge while dealing with enemy forces. In hybrid warfare, strategic thinkers believe technology has to be modified according to need of an operator (soldier). Advances in limited effect ammunition can help planners and operators reduce collateral damage by inflicting a carefully measured quantum of destruction.

Non-lethal technology will also be helpful for the armed forces engaging in urban-combat other than war. For instance, in peacekeeping operations or a humanitarian situation, non-lethal weapons can help the armed force perform their duty without inflicting major casualties. However, operators should not over-use such weapons. Moreover, any indiscriminate or excessive use can also prove counter-productive. For example, the overuse of “pellet guns” in Kashmir has led to a huge uproar and public anger against the armed forces in the Valley.

**Stress in Hybrid-Combat**

Combat in open space gives much room for soldiers to engage a target. But operations in built-up areas with complex building structures restrict a soldier’s view, creating tension and panic. Stress is compounded by the pressure to engage
targets while minimising civilian casualties. This stress creates negative reaction and can result in misconduct. In long-drawn deployments, Post-Traumatic Stress Disorders (PTSD) and Combat Stress Disorder (CSD) undermine a soldier’s combat effectiveness. Soldiers deployed in extreme condition are prone to CSD. For instance, as many as 891 suicide cases have been reported by the Indian defence forces between 2011 and 2018.\textsuperscript{35} In many cases, stress has led the killing of fellow officers or soldiers, as well as civilians in combat areas.

Stress disorders can be partially addressed by tough and realistic training, making soldiers understand the operational environment and keeping them informed about enemy tactics and movements. A habit of following Rules of Engagement (ROE) and the army’s moral code must also be inculcated. Scientific debriefing after operations help soldiers understand the environment and keep them healthy.

**REAL TIME SITUATIONAL AWARENESS**

Real Time Situational Awareness (RTSA) is going to be important component for future soldiers. The flow of intelligence has to be channelised properly to reach every operator in the battle field and alert them about the situation around them in real time. Enclosed urban spaces limit a soldier’s ability to look beyond a certain range; so intelligence gathered through various other sources invariably helps them engage the correct target.

RTSA, human intelligence and intelligence through other (technological) means can be major sources to help distinguish “foe from the friend” in the urban battlefield. It also helps the

soldier in a vulnerable or disadvantaged position in a built-up area find the right direction for pursuit or engagement.

**Perception Management**

The military or any other armed force in today’s context has to be prepared to face public scrutiny. Perception management thus becomes an imperative to protect the image of armed forces in battle and gain or retain public support. Social media platforms like Facebook, WhatsApp, YouTube, Instagram and others play an important role in the modern world. Terrorists around the globe have been using these platforms to recruit members for their organisations, collect donations and spread fake news to create panic in the society. The Islamic State/Daesh is the best example, as it effectively used social media to spread their ideology around the globe. They have also used these media tools to recruit members for their organisation in Syria and Iraq to fight against government forces. The armed forces, consequently, have a huge additional responsibility to use social media to counter these narratives.

Soldiers are the centrepiece of any armed force. Fighting in built-up areas is a relatively new discourse in the Indian armed forces. Since India is surrounded by unstable and hostile countries, the armed forces have to prepare for every eventuality. Other than war, the army’s preparation for Stability and Support Operation (SASO) is necessitated by India’s power projection in Asia. The increase in population and the growing pace of India’s economy will open new urban centres across the nation. Since urban areas are the country’s nerve centres, the government will need to respond accordingly, to set up specialised security arrangements across all cities to deal with all possible threats spawned by hybrid warfare.