

Introduction

International Humanitarian Law (IHL) or laws of war is a branch of international law which limits the use of violence in armed conflicts. It protects persons who are no longer taking part in hostilities, and also defines the rights and obligations of the parties to a conflict in the conduct of hostilities. It lays down clear rules for: (i) sparing those who do not or no longer directly participate in hostilities (for example, injured, sick or wounded soldiers; those who have surrendered or been taken prisoners of war; and civilians) and (ii) limiting the violence only to the extent required to weaken the military potential of the adversary—the amount necessary to achieve the aim of the conflict. IHL is applicable in international armed conflicts as well as non-international (or internal) armed conflicts. An international armed conflict means fighting between the armed forces of at least two States. A non-international armed conflict means fighting on the territory of a State between the regular armed forces and identifiable armed groups, or between armed groups. To be considered a non-international armed conflict, fighting must reach a certain level of intensity and extend over a certain period of time. Internal disturbances in a country like riots and struggles between factions are not considered non-international armed conflict and these situations are covered by the civil law of the country.

Sources of IHL

The important sources of IHL are customary rules, international treaties, judicial decisions, teachings of legal philosophers and military manuals. Each source of law plays its own crucial role in advancing the objectives of IHL. The principal IHL treaties are the four Geneva Conventions of 1949 and their three Additional Protocols (APs) adopted in 1977 and 2005. The first Geneva Convention relates to the protection of the wounded and the sick in the field; the second to the wounded and the sick at sea; the third to prisoners of war (POW); and the fourth to civilians. With the exception of one article, viz Article 3 common to all four Conventions, the Geneva Conventions apply to international armed conflicts. The core principles of distinction, proportionality and unnecessary suffering, formerly found only in customary law, have been codified and described in AP 1. In addition, IHL also restricts the means and methods of warfare. In this context, ‘means’ of warfare refer to the weapons of war, while ‘methods’ refer to the tactics and strategy applied in military operations to weaken the adversary. The treaties placing limits on means and methods of war are the Hague Convention of 1907, the 1977 AP 1 and a number of international agreements relating to specific weapons, such as treaties banning poisoned weapons, biological weapons, chemical weapons, certain conventional weapons, anti-personnel mines and cluster munitions.

The increased civilian deaths in recent international as well as non-international conflicts demonstrate that violations of IHL continue to occur with impunity. Air and missile attacks during the recent conflicts in Israel, Afghanistan, Iraq and Libya have resulted in a large number of civilian casualties and damage to civilian property. The evolving means and methods of warfare which could lead to violations of IHL are discussed in succeeding paragraphs.

Cyber Weapons

Cyber warfare deals with the management and use of information in all its forms and at all levels to achieve a decisive military advantage. It has been defined as “an electronic conflict in which information is a strategic asset worthy of conquest or destruction”, where computers and other communication and information systems become attractive first-strike targets. Some of the activities of cyber warfare could be : stealing sensitive information from computers, cyber espionage, incapacitate a computer or computer network, physical destruction, corruption of hardware or software, and flooding it with information to cause its collapse.

Cyber warfare has become a major security challenge as individuals, terrorists, or foreign countries capable of penetrating information systems could wreak havoc with a country’s defence or civilian infrastructures. Cyber weapons are very different from conventional weapons as they are very easy to replicate without spending much money. The attack (whether in offence or defence) can be directed against an individual computer, specific computers within a network, or an entire computer network. Through the application of these weapons, one can adversely affect individuals, organisations and countries—both singly and combined. A cyber attack could disable power plants, cut-off military command and control network, make warplanes to crash, nuclear reactors to meltdown and weapons to malfunction. The cyber warfare systems are currently being developed and used by at least 120 countries. Peacetime cyber attacks have hit the USA, the UK, India, Taiwan, South Korea, Lithuania, Kyrgyzstan, Switzerland and Montenegro. India has been the target of several attacks, allegedly originating from Pakistan and China.¹

Cyber warfare challenges IHL in several ways. First, communication signals from one country can easily transit international borders and thus affect telecommunication systems in distant countries. Such an intrusion could be regarded as violation of territorial sovereignty, a universally accepted international legal principle. Second, the damage that an information operation attack may cause is essentially different from the physical damage using conventional weapons. The devastation caused by conventional weapons is easier to comprehend; in contrast, the destruction of an information network could produce intangible damage to a civilian or government agency. Third, it is difficult to pinpoint whether an information operations attack is “an act of war”, as it would be difficult to define the targets as legitimate military targets, or prohibited civilian targets. Currently, there is no provision in IHL or customary international law that explicitly outlaws cyber warfare carried out independently or during war.

Drones

Drone or Unmanned Aerial Vehicle (UAV) is a powered aircraft that does not carry a human operator, uses aerodynamic forces to provide vehicle lift, can fly automatically or be piloted remotely, is expendable or recoverable and carries a lethal or nonlethal payload. The drones play an important role in the battlefield and are also used extensively for surveillance purposes. They save the lives of pilots, since the UAV’s are controlled from a site far away from the attack

zone. Drones can fly low and strike targets more precisely. If a drone is shot down, there is no loss of human life. A significant number of States like Belarus, Canada, China, India, Israel, Pakistan, Russia, the UK and the USA have incorporated drones in their military systems.

The use of drones presents a number of concerns relating to compliance with IHL. Although there is nothing inherently illegal about the use of drones in armed conflicts, it is unclear whether all the persons targeted by drones are combatants or directly participating in hostilities, thus raising questions about compliance with the principle of distinction. Drone attacks causing hundreds of civilian casualties have raised questions about compliance with the principle of proportionality. Moreover, accountability for failure to comply with IHL is difficult to ensure when drone attacks are conducted outside the military chain of command and beyond transparent mechanisms of civilian or military control.²

Depleted Uranium (DU) Weapons

It has been alleged that since 1991, the US has staged four wars using DU weaponry, illegal under all international treaties, conventions and agreements. DU weapons have certain advantages: (i) Because of its very heavy density (1.7 times of lead, 2.5 times of iron) and hardness, when used to tip bullets, DU increases the penetration power of the warheads, and displays tremendous capacity to open holes in thick iron plates and concrete; (ii) Even when there are no explosives inside the bombshell, DU weapon explodes upon impact, and the capacity to kill and injure the enemy is high because of the tremendous rise in temperature while burning; and (iii) It is very cheap because its raw materials are radioactive wastes.

When the penetrator hits a hard object, e.g., an armoured vehicle, the penetrator pierces the metal sheet, generally leaving the jacket behind. The DU dust which may be formed during impact can disperse and contaminate the environment. The exposure to DU is critically dependent on whether it is external or internal. External exposure to DU mainly occurs during combat activities when DU aerosols are generated, or when DU fragments are picked up. The affected organ is the skin. Internal exposure to DU can occur through three pathways: ingestion (food and water), inhalation (aerosol) and embedded fragments or contaminated wounds. Direct ingestion of uranium in particular for children, through hand contamination is possible. Direct ingestion of contaminated soil by cattle and sheep as a pathway to humans has also to be considered. DU can also enter the body in the form of uranium metal from fragments and as uranium oxides from oxidized DU formed after impact on hard targets. Uranium is absorbed into the blood, carried and retained in body tissues and organs. Once inside the body system uranium can cause various disorders like abnormal births and birth defects, acute auto-immune symptoms, acute respiratory failure, bone tumours and cancer, chronic kidney and liver disorder, genetic alterations, etc. Several birth defects have been reported in babies born to contaminated civilians in Iraq, Yugoslavia and Afghanistan.³ DU weapons are presently regarded as conventional weapons, though, its military use violates IHL.

White Phosphorous Weapons

The US armed forces have used white phosphorous (WP) based weapons to flush out suspected insurgents in Fallujah in 2005. The Israeli government has admitted that it used controversial WP weapons in its attacks against targets in open ground during its month-long war in Lebanon in 2006. There have been numerous reports that Israeli phosphorus munitions have injured and killed many civilians in Lebanon. White phosphorus is a flare/smoke producing incendiary weapon, or smoke-screening agent, made from a common allotrope of the element. It is used in bombs, artillery shells, mortar shells and hand grenades which burst into burning flakes of phosphorus upon impact.⁴ The armed forces have legitimate requirement of substance that can illuminate the battlefield or to provide cover during day light to mask a target or to set fire to objective such as ammunition or fuel dumps. WP weapon is suitable for many of these tasks because it ignites easily when exposed to oxygen and produces dense white smoke. It is ideal for laying quick smoke screen or as a component of incendiary weapons. WP bombs and shells are essentially incendiary devices, but can also be used as an offensive anti-personnel flame compound capable of causing serious burns or death.

WP weapons are controversial today because of its potential use against humans, for whom one-tenth of a gram is a deadly dose. WP is toxic and can cause blistering of the skin and mucous membranes. Burning WP is difficult to extinguish and tends to reignite unless fully smothered. WP can cause injuries and death in three ways: by burning deep into soft tissue, by being inhaled as a smoke and by being ingested. Extensive exposure in any way can be fatal. It also releases phosphorous pentoxide, which can cause chemical burns, and on contact with water, phosphoric acid, which is corrosive. Smoke inhalation can cause temporary discomfort, however effect could be serious in case of length and severity of exposure. The use of incendiary weapon against combatants is not prohibited under IHL treaties.

Incapacitating Chemical Agents

Since the last decade there has been a keen interest in chemicals that act on the central nervous system to ‘incapacitate’ a person or to alter a person’s mood, emotion, cognition or perception. The NATO defines incapacitating chemical agents (ICA) as: “Chemicals which produce temporary disabling conditions which (unlike those caused by riot control agents) can be physical or mental and persist for hours or days after exposure to the agent has ceased. Medical treatment, while not usually required, facilitates a more rapid recovery”. There are views that ICA’s can be used as a ‘non-lethal’ class of weapons by the armed forces.⁵ At the same time there are arguments that such “agents”, even if described as “non-lethal”, are in fact lethal. The rapid advances in science have made it possible to develop ICA’s that can be used in a consistently non-lethal manner. Their fatality or lethality will be a function of the physiology of the victim, the actual dose of the drug, the proximity of appropriate medical care and the availability of the necessary antidote. In armed conflicts, the potential use of ICA’s poses challenge from the perspective of the principle of distinction between combatants and civilians, particularly in situations where combatants intermingle with civilians or are in close proximity to civilians.

Targeted Killings

In recent years, a few States have adopted policies that permit the use of targeted killings, including in the territories of other States. The States have tried to justify such policies as a necessary and legitimate response to “terrorism” and “asymmetric warfare”. A targeted killing is the intentional, premeditated and deliberate use of lethal force, by States, their agents, or by an organised armed group in armed conflict, against a specific individual who is not in the physical custody of the perpetrator. In a targeted killing, the aim is to use lethal force. Israel has used the targeted killing against Palestinians since 2000. The US has used drones and airstrikes for targeted killings in Afghanistan and Iraq.

Under IHL, targeted killing is only lawful when the target is a combatant. In the case of a civilian, he can be attacked only for such time when the person “directly participates in hostilities (DPH).” Reprisal or punitive attacks on civilians are prohibited. The legality of a killing outside the context of IHL is governed by human rights standards. Under human rights law, a targeted killing in the sense of an intentional, premeditated and deliberate killing by law enforcement officials can never be legal. In case a targeted killing violates IHL, then regardless of who conducts it – intelligence personnel or State armed forces – the author, as well as those who authorised it, can be prosecuted for war crimes.

Human Shields

Human shielding involves the use of persons protected by IHL, such as PoW or civilians to deter attacks on combatants and military objectives. Human shielding has become endemic in contemporary international and non-international conflicts taking place across the legal spectrum of conflict. Iraq used human shields in its 1990-91 war with Iran; in 1990-1991 Operation Desert Storm; and in 2003 Operation Iraqi Freedom. Iraqi soldiers were instructed to ‘use any means necessary’ in resisting the US Marines, including ‘putting women and children in the street’. In the 2002 Israeli operations in the West Bank, resistance groups in occupied territories have also employed human shields. Peacekeepers have even fallen victim to such tactics, in Bosnia and Herzegovina in 1995 and Lebanon in 2006. In Sri Lanka, LTTE used women and children as human shields during the last phase of operation in 2009. The use of human shields violates IHL.

Enforced Disappearance

“Enforced disappearance of persons” means the arrest, detention or abduction of persons by a State followed by refusal to acknowledge the deprivation of their freedom or to give information on the fate or whereabouts of those persons, with the intention of removing them from the protection of the law for a prolonged period of time. Enforced disappearance is irreconcilable with IHL and international human rights law. It violates the right to liberty and security of the person and the prohibition of arbitrary arrest or detention.

Principles of IHL

Today, in spite of near universal ratification of the four Geneva Conventions and increased adoption of weapon regulation/ban treaties, the respect for the rules of IHL during armed conflicts remains a perpetual problem. While the IHL treaty documents contain hundreds of articles, the basic principles of IHL which must be followed by parties to an armed conflict can be expressed in just a few paragraphs.

(a) **Distinction.** The parties to a conflict must at all times distinguish between the civilian population and combatants in order to spare the civilian population and civilian property. Attacks may be made solely against military objectives, subject to military necessity.

(b) **Unnecessary Suffering.** Neither the parties to the conflict nor members of their armed forces have an unlimited right to choose the means and methods of warfare. It is prohibited to cause unnecessary suffering to combatants; accordingly it is prohibited to use weapons causing them such harm or uselessly aggravating their suffering.

(c) **Proportionality.** An obligation to ensure that actions against legitimate targets do not affect protected persons and targets in a manner disproportionate to the military advantage expected from the attack.

(d) **Military Necessity.** The obligations to use force only in a way that yields a direct military advantage. The principle of military necessity is related to two other principles: unnecessary suffering and proportionality.

(e) **Humanity.** Captured combatants and civilians who find themselves under the authority of the adverse party are entitled to respect for their lives, their dignity and their personal rights. They must be protected against all acts of violence or reprisal. They must enjoy basic judicial guarantees and are entitled to exchange news with their families.

The IHL principles should be used to analyse the legality of means and methods of warfare. IHL prohibits the use of an indiscriminate weapon that cannot be directed at a military target. The principle of military necessity entails the cumulative impact of attacks against particular targets. The principle poses no problem to cyber warfare as long as the systems under attack are purely military targets. A cyber attack against systems that have a dual-use capability among a state’s military forces and its civilian population could be problematic. The conventional military targets like electrical power grids and other telecommunications networks would be unlawful targets because of their interconnection and interdependence with systems serving the civilian population. In addition, the principle of humanity prohibits the employment of any kind or degree of force not necessary for the purposes of war that is for the partial or complete submission of the enemy with the least possible expenditure of life, time and physical resources.

The distinction between civilians and combatants in drones strikes is an undisputed requirement of IHL. The States having drone in their military arsenal must respect the principles of necessity, proportionality and humanity in carrying out drone attacks. As regard the use of DU and WP weapons, if we consider principles of distinction, unnecessary suffering, incendiary, poisonous and chemical effects of these weapons, they need to be banned under IHL. The principle of ‘unnecessary suffering’ prohibits the use of DU and WP weapon as means or method of warfare. The principle of distinction requires that attacks be directed against military objectives without disproportionate incidental

damage to civilian and civilian property. Similarly, the use of ICA for hostile purposes would be a breach of the Chemical Weapons Convention (CWC). Any toxic chemical that has an incapacitating effect is subject to the provisions of the CWC and should, therefore, be banned in war.

Respect for IHL

The obligation to respect and ensure respect for IHL applies in both international and non-international conflicts. Under Article 1 common to the four Geneva Conventions, states undertake to “respect and ensure respect” for these conventions in all circumstances. The meaning of this is twofold: States must do their utmost to ensure that IHL is respected by their own agents (in particular the military) and by all others under their jurisdiction. They must furthermore take all possible steps to ensure that IHL is respected by other States that have ratified the Conventions in particular by the parties to an armed conflict, and to react against violations.

Conclusion

There are currently a number of challenges to IHL that need to be addressed by the international community in areas such as internment, selection of the means and methods of warfare, and the conduct of hostilities. In contemporary armed conflicts, the challenge of upholding humanitarian values is not the result of a lack of rules but a lack of respect for them. IHL essentially distinguishes between two categories of people in an armed conflict; however, in contemporary armed conflicts there is a blurring of civilian and military functions. All States and other parties to an armed conflict have an obligation to respect and ensure respect for IHL in all circumstances. They must use their influence to prevent and end violations of IHL as also refrain from encouraging violations by other parties.

Endnotes

1. The New Warrior: The Cyber Warfare poses a big challenger to India, Geopolitics, Vol. I, Issue IX, January 2011, p. 38-44.
2. Report of the Secretary-General to the UN Security Council on the protection of civilians in armed conflict, S/2010/579, dated 11 November 2010.
3. Moret Leuren, Depleted Uranium: The Trojan Horse of Nuclear War, World Affairs, April-June 2004, Vol. 8 (2), p. 118.
4. MacLeod IJ, and Rogers APV, White Phosphorous and the Law of War, in McCormack Timothy LH (ed.). 2007. Yearbook of International Humanitarian Law, Vol. 10, TMC Asser Press, p. 76-97.
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