Drone warfare- is it legal?

Drone warfare refers to the use of unmanned aerial vehicles (UAVs), commonly known as drones, to conduct military operations, surveillance, and targeted strikes without placing human pilots directly in harm's way. This modern method of warfare has become a defining feature of 21st-century conflict, transforming how states engage in military actions across borders and territories.

Drones are remotely operated or autonomous aircraft equipped with sensors, cameras, and often weapon systems. They can fly at high altitudes, hover over targets for long durations, and carry out missions with precision. Military drones are generally categorized into two types: surveillance drones used for intelligence gathering and armed drones capable of launching missiles or bombs.

The development of drone warfare began with technological advances in robotics, satellite communications, and remote sensing. The United States was among the first to extensively use armed drones, particularly after the 9/11 attacks. Since then, drone strikes have been employed in countries like Afghanistan, Pakistan, Yemen, Somalia, Iraq, and Syria, primarily to target terrorist groups. The MQ-1 Predator and MQ-9 Reaper are examples of U.S. drones used for targeted killings and reconnaissance.

One of the key features of drone warfare is the ability to carry out precise attacks with minimal risk to military personnel. This makes drones attractive for counterterrorism operations and missions in hostile or inaccessible areas. Drones can track movements, identify threats, and deliver strikes in real-time, often guided by satellite feeds and intelligence inputs. This level of precision reduces the need for large-scale military deployments and allows for a more controlled form of engagement.

However, drone warfare raises several ethical, legal, and strategic concerns. Civilian casualties caused by drone strikes have been widely criticized. The remote nature of drone attacks can sometimes lead to mistakes in target identification, resulting in the loss of innocent lives. This has triggered debates about accountability, transparency, and the psychological impact on drone

operators, who may suffer from moral injury despite being physically distant from combat zones.

Legally, drone warfare exists in a grey area. Critics argue that cross-border drone strikes violate the sovereignty of nations and often occur without formal declarations of war or judicial oversight. International human rights bodies and legal scholars have called for clearer guidelines and accountability mechanisms to regulate the use of armed drones.

Strategically, the increasing use of drones has led to a new kind of arms race. Countries such as China, Russia, Israel, Turkey, and Iran have developed or exported military drones, and non-state actors like terrorist organizations and militias have also begun using drones for surveillance and attacks. This proliferation increases the risks of asymmetric warfare, espionage, and regional instability.

Drone warfare represents a significant evolution in military strategy, offering tactical advantages but also posing new challenges. While it enables targeted and efficient operations, it simultaneously raises critical questions about legality, ethics, and the future of armed conflict. As drone technology continues to advance and spread globally, it is essential for international law and diplomatic norms to catch up with these new realities to ensure responsible and just use of drone power in modern warfare.

Is Drone Warfare Legal?

The legality of drone warfare is complex and highly debated, as it intersects multiple branches of international law, including international humanitarian law (IHL), international human rights law (IHRL), and the laws governing the sovereignty of states. While drone warfare *can* be legal under certain conditions, many of its current uses raise serious legal concerns.

1. Legality Under International Humanitarian Law (IHL)

IHL governs conduct during armed conflict and permits the use of force, including through drones, provided the following principles are met:

• **Distinction**: Drone strikes must distinguish between combatants and civilians. Targeting civilians is illegal.

- **Proportionality**: The anticipated military gain from a drone strike must not be outweighed by expected civilian harm.
- **Necessity**: A strike must be necessary to achieve a legitimate military objective.
- **Precaution**: Parties must take all feasible steps to avoid or minimize civilian harm.

If a drone strike complies with these principles in a declared armed conflict, it may be considered lawful under IHL. However, many drone strikes occur outside recognized war zones, which complicates their legality.

2. Sovereignty and Cross-Border Strikes

Drone strikes conducted in another country without its consent can violate that nation's sovereignty, a core principle of international law. For example, U.S. drone operations in Pakistan, Somalia, and Yemen have been criticized for breaching national sovereignty, especially where there is no formal declaration of war.

Some states justify such strikes under **Article 51 of the UN Charter**, which allows self-defense if an armed attack occurs. However, this justification requires:

- An imminent threat
- That the host state is unwilling or unable to prevent that threat
- Proportional response

This "unwilling or unable" doctrine is controversial and not universally accepted.

3. Human Rights Law Concerns

Outside armed conflict, international human rights law applies. Extrajudicial killings—targeted drone strikes on suspected individuals without due process—may violate the right to life under instruments like the International Covenant on Civil and Political Rights (ICCPR). Critics argue that states using drones to kill individuals outside battlefield conditions act as judge, jury, and executioner.

4. Accountability and Transparency Issues

A major legal challenge is the secrecy surrounding drone operations. Many states do not publicly disclose their criteria for targeting, nor do they investigate civilian casualties transparently. This lack of accountability undermines the rule of law and opens the door for potential war crimes.

5. Use by Non-State Actors

The growing use of drones by non-state actors like terrorist groups is illegal under international law, as they are not recognized entities capable of lawfully conducting warfare under IHL. Their use of drones is generally treated as criminal or terroristic activity.

Drone warfare is not inherently illegal, but its legality depends on how, where, and against whom it is used. Lawful drone operations must comply with IHL and respect state sovereignty and human rights norms. However, many real-world drone strikes raise serious legal questions due to lack of transparency, cross-border actions, civilian harm, and absence of due process. As drone technology proliferates, the international community continues to grapple with how best to regulate it within a clear legal framework.

Laws Binding Drone Warfare in India

India currently does not have a specific statute that comprehensively governs drone warfare in the same way that traditional warfare is governed by the Geneva Conventions or domestic military codes. However, the legal framework surrounding the use of drones, particularly by the military and security forces, is guided by a combination of existing defence laws, rules on airspace usage, and evolving regulatory frameworks. Here is an overview of the legal landscape:

1. Absence of Explicit Drone Warfare Law

India does **not have a dedicated law** that regulates the conduct of drone warfare. The Indian Armed Forces use drones primarily for surveillance, border monitoring, and, increasingly, for combat and precision strikes (e.g., in Jammu & Kashmir or during surgical strikes). These activities fall under broader frameworks like:

- The Armed Forces (Special Powers) Act, 1958 (AFSPA) Grants special powers to armed forces in "disturbed areas," which could include aerial strikes and surveillance.
- The Unlawful Activities (Prevention) Act, 1967 (UAPA) Targets terrorist activities and allows security forces to use force, including aerial platforms, in anti-terror operations.
- The Indian Penal Code (IPC), 1860, and Criminal Procedure Code (CrPC),
 1973 Apply to situations involving violence, civilian harm, or destruction caused unintentionally by drone operations.

While these provide legal coverage for security operations, they do not explicitly regulate drone warfare or ensure compliance with international humanitarian laws.

2. Drone Use Regulation by Civil Aviation Authorities

While warfare drones are handled by the defence sector, India's **Directorate General of Civil Aviation (DGCA)** regulates the civil and commercial use of drones. The key policies are:

- Unmanned Aircraft System Rules, 2021 Repealed and replaced.
- Drone Rules, 2021 (amended in 2022) Current governing framework for civil drone use. It distinguishes between drone categories (nano, micro, small, medium, large) and governs their registration, operation, import, and airspace usage.

However, these rules **explicitly exclude** drones used by the military and law enforcement agencies. Therefore, the Indian armed forces are not bound by DGCA guidelines when conducting military operations.

3. Defence Procurement and Military Use

Military-grade drones, like those procured from Israel (Heron, Searcher) or the U.S. (Sea Guardian), are acquired under:

Defence Procurement Procedure (DPP)

Defence Acquisition Procedure (DAP) 2020

These policies ensure drones are used as per national defence objectives, but again, they focus on acquisition and deployment logistics—not the legal limits of warfare, target selection, or civilian safety in drone-based strikes.

4. International Law and India

India is a signatory to several international treaties that influence its responsibilities in armed conflict:

- **Geneva Conventions** Mandates protection of civilians and proportional use of force in conflict zones.
- United Nations Charter (Article 51) Permits self-defence if an armed attack occurs.

Though India has not developed specific domestic legislation to apply these treaties to drone warfare, Indian military actions—such as cross-border drone surveillance or armed drone use—are expected to adhere to these norms, especially in international or non-internal conflicts.

5. Cybersecurity and Data Regulation

Since military drones depend heavily on software and satellite communications, any cyberattack or misuse can have national security implications. Therefore:

- **Information Technology Act, 2000** Governs digital infrastructure, cyber crimes, and data breaches.
- National Cyber Security Policy (2013) Indirectly impacts drone usage by the armed forces.

6. Recent Developments and Trends

• India is working on indigenizing drone production under the **Make in India** and **Atmanirbhar Bharat** initiatives.

- DRDO and HAL are actively developing combat drones like Rustom, TAPAS-BH, and stealth UCAVs under the Ghatak project.
- India has also used drones for targeted strikes and surveillance during military standoffs with Pakistan and China, suggesting an evolving doctrine of drone warfare even in the absence of codified law.

In India, drone warfare by the military is not governed by a single, comprehensive legal statute. Instead, it is regulated through a patchwork of defence, aviation, and cyber laws, with wide operational discretion afforded to the armed forces. While drone use for civil and commercial purposes is strictly regulated under the Drone Rules, 2021, military drone operations remain largely opaque and policy-driven, not law-bound. There is an urgent need for a formal legal framework that aligns India's drone warfare capabilities with international humanitarian norms, ensures accountability, and balances military necessity with civilian protection.

Advantages and Disadvantages of Drone Warfare

Advantages:

1. Reduced Risk to Military Personnel:

Drones allow for military operations without placing soldiers directly in harm's way. Remote control or autonomous operation minimizes battlefield casualties for the attacking side.

2. Precision Targeting:

Drones can conduct highly accurate strikes with real-time surveillance and intelligence support, making it possible to target specific individuals or facilities while minimizing collateral damage.

3. Cost-Effective Operations:

Compared to manned aircraft, drones are cheaper to manufacture, maintain, and operate. They require less fuel, no life-support systems, and can stay airborne for longer durations.

4. Surveillance and Intelligence Gathering:

Drones are extensively used for reconnaissance, border monitoring, and battlefield mapping. They provide critical, up-to-the-minute intelligence that can inform strategic decisions.

5. Accessibility to Hostile or Remote Areas:

Drones can reach regions where sending troops is difficult or dangerous, such as rugged terrain, enemy-controlled zones, or high-altitude borders.

6. Minimizing Civilian Presence in Conflict Zones:

Remote operations reduce the need for large-scale troop deployments, potentially decreasing the military footprint and limiting civilian interactions during conflicts.

7. Flexible Deployment:

Drones can be quickly deployed, re-tasked mid-mission, or redirected based on evolving intelligence, making them adaptable tools in dynamic conflict environments.

8. Psychological Impact on Adversaries:

Persistent drone presence can deter enemy movement, disrupt operations, and create psychological pressure, weakening the morale of hostile groups.

Disadvantages:

1. Civilian Casualties and Collateral Damage:

Despite precision, drone strikes can misidentify targets or misfire, resulting in civilian deaths. Mistakes in intelligence or execution can lead to tragic consequences.

2. Legal and Ethical Concerns:

Many drone strikes, especially those conducted across borders without host nation consent, raise serious questions about sovereignty, due process, and compliance with international law.

3. Lack of Transparency and Accountability:

Drone warfare is often conducted under secrecy, with limited public oversight or judicial scrutiny. This hampers accountability, particularly when strikes result in civilian harm.

4. Psychological Toll on Operators:

Although physically distant from the battlefield, drone operators may

experience high stress, PTSD, or moral injury due to the nature of remote killing and constant surveillance.

5. Escalation of Conflict:

Drones make it easier to engage in targeted strikes without formal declarations of war, lowering the threshold for use of force and potentially escalating geopolitical tensions.

6. Technology Proliferation:

The increasing availability of drone technology raises concerns about its misuse by terrorist groups, insurgents, or rogue states for surveillance, sabotage, or attacks.

7. Weakening of Diplomatic Relations:

Unauthorized drone strikes in foreign territories can damage bilateral relations, provoke retaliation, or undermine trust between nations.

8. Ethical Detachment and "Video Game Mentality":

Remote warfare can foster emotional detachment, making lethal decisions feel routine or disconnected from human consequences, leading to moral desensitization.

Drone warfare presents a transformative shift in military strategy, offering operational efficiency and reduced risk to combatants. However, it also introduces serious ethical, legal, and humanitarian challenges. The advantages must be balanced with strict regulatory oversight, transparency, and adherence to international norms to ensure that technological progress does not undermine the principles of just warfare.

The legality of drone warfare remains a contentious and evolving issue in international law. While drones offer strategic advantages in modern military operations, their use raises serious legal, ethical, and humanitarian concerns that challenge established norms of armed conflict and state sovereignty. Under international humanitarian law, drone strikes must adhere to principles of distinction, proportionality, and necessity. However, the practical implementation of these standards is often undermined by opaque targeting practices, lack of accountability, and civilian casualties.

The use of drones for cross-border strikes without the consent of the host nation poses significant challenges to the principle of state sovereignty, enshrined in the UN Charter. Claims of self-defense must be grounded in clear evidence of an imminent threat, yet such justifications are frequently invoked without public transparency or judicial oversight. Furthermore, drone operations conducted outside active war zones blur the lines between armed conflict and law enforcement, potentially violating international human rights law by denying due process and the right to life.

India, like many countries, lacks a specific domestic legal framework governing military drone use, relying instead on broader defence and security laws. This legal vacuum underscores the urgent need for codified rules that align drone operations with international obligations.

Ultimately, the legality of drone warfare hinges not just on the existence of law, but on its consistent, transparent, and accountable application. As drone technology advances and its global use expands, it is imperative for states and international bodies to develop binding legal standards that ensure drone warfare is conducted within the framework of international justice and human dignity.