



UNGA RESOLUTION ON AUTONOMOUS WEAPONS (KILLER ROBOTS) - GS MAINS

Q. Recently, the United Nations General Assembly (UNGA) adopted a resolution on Autonomous Weapons (Killer Robots). In this context, critically analyse the issues associated with the Lethal Autonomous Weapons Systems (LAWS). (15 marks, 250 words)

News: *UN to Address Autonomous Weapons Systems*

What's in the news?

- The First Committee of the UN General Assembly, which is responsible for international security and disarmament affairs, has adopted a draft resolution calling for the secretary-general to conduct a comprehensive study of lethal autonomous weapons systems.

Lethal Autonomous Weapons Systems (LAWS)

- Lethal autonomous weapons systems (LAWS), also known as “killer robots”, are a type of autonomous military system that have the capability to select and engage targets without any human intervention.
- They may operate in the air, on land, on water, underwater, or in space.
- An autonomous weapon system is pre-programmed to kill a specific “target profile.”
- The weapon is then deployed into an environment where it searches for that “target profile” using sensor data, such as facial recognition.
- LAWS are controversial and raise ethical, legal, and humanitarian concerns.

What is the Role of Artificial Intelligence (AI) in LAWS?

- **Autonomy in Weapons Systems:** Autonomous weapons systems require “autonomy” to perform their functions in the absence of direction or input from a human actor. Autonomy can be achieved through two Approaches such as
 - **Through Predefined Tasks:** This involves programming the system with a set of instructions to perform specific actions without real-time decision-making based on the current environment.
 - **Through AI:** This involves using AI tools to derive behaviour from data. The system learns from the data it receives, allowing it to make decisions or adapt its behaviour independently.



- **AI as an Enabler:** Artificial intelligence is not a prerequisite for the functioning of autonomous weapons systems, but, when incorporated, AI could further enable such systems.
 - In other words, not all autonomous weapons systems incorporate AI to execute particular tasks.
- **AI in an Assistance Role:** Artificial intelligence can also be used in an assistance role in systems that are directly operated by a human.
 - For example, a computer vision system operated by a human could employ artificial intelligence to identify and draw attention to notable objects in the field of vision, without having the capacity to respond to those objects autonomously in any way.

Benefits of Lethal Autonomous Weapons Systems (LAWS):

- **Force Multiplier and Battlefield Expansion:**
 - LAWS can enhance military effectiveness by acting as a force multiplier. They can potentially carry out tasks autonomously, allowing human forces to focus on strategic planning and decision-making.
 - LAWS may expand the battlefield by providing additional capabilities and coverage, enabling a more comprehensive approach to military operations.
- **Resource Allocation Efficiency:**
 - LAWS have the potential to improve resource allocation efficiency by reducing the costs associated with training, logistics, and personnel.
 - Automated systems can operate for extended periods without the need for rest or extensive training.
- **Reducing Casualties and Human Suffering:**
 - LAWS may contribute to reducing casualties for one's own forces by taking on risky tasks or engaging in dangerous situations where human involvement could lead to higher casualties.
- **Improving Information Gathering and Decision-Making:**
 - LAWS equipped with advanced artificial intelligence, sensors, and algorithms can enhance information gathering, detection, and decision-making capabilities.
 - They can process large amounts of data quickly and potentially provide more accurate and timely information to commanders.

Issues with LAWS:

1. **Ethical Issues:** Delegating the decision to use lethal force to algorithms raises significant questions about who is ultimately responsible and accountable for the use of force by autonomous weapons, particularly given their tendency towards unpredictability.
2. **Legal Issues:** LAWS pose challenges for the compliance with international humanitarian law and human rights law, such as the principles of distinction,



proportionality, and precaution, as well as the accountability mechanisms for violations.

- a. The United Nations Secretary General António Guterres agrees that “machines with the power and discretion to take lives without human involvement are politically unacceptable, morally repugnant and should be prohibited by international law.”
3. **Technical Issues:** LAWS are subject to errors, failures, and vulnerabilities that could compromise their reliability, safety, and security, such as the lack of robustness, interpretability, and adversarial resilience of artificial intelligence, sensors, and algorithms.
4. **Security Issues:** LAWS could increase the risk of armed conflict, escalation, and proliferation, by lowering the threshold for the use of force, expanding the scope and scale of warfare, and enabling new forms of attacks and countermeasures.

India's stand on LAWS:

- At the UN General Assembly in October 2013, India supported a proposal to begin multilateral talks on lethal autonomous weapons systems.
- India is exhibiting a practical attitude towards international affairs by maneuvering in the domain of autonomous weaponry.
- India understands the value of AI in national defense plans despite the UNGA rejecting its proposal for autonomous weapons, particularly in light of the country's military superiority over China.
- Despite its capabilities in AI, India admits it is not as advanced as China and the United States when it comes to using this technology for military purposes.

CONCLUSION

- The ongoing debates surrounding Lethal Autonomous Weapons Systems highlight the need for careful consideration of ethical, legal, and security implications.
- Balancing the potential benefits of autonomous technologies with the need for accountability and adherence to international humanitarian law remains a complex challenge for the global community.