

Project WARDEC: India's AI-powered Wargame Centre

written by iasexam.com | 21/05/2022



[GS Paper 3 - Security Issues, Security Agencies and their Mandates]

Context - The Army Training Command signed a memorandum of understanding (MoU) with Gandhinagar-based Rashtriya Raksha University (RRU) to develop a 'Wargame Research and Development Center (WARDEC)' in New Delhi.

What is Project WARDEC?

- The project 'WARDEC' will be a first-of-its-kind simulation-based training center in India that will use artificial intelligence (AI) to design virtual reality war-games.
- The Wargame Research and Development Center will be used by the Army to train its soldiers and test their strategies through "metaverse-enabled gameplay".
- The wargame models will be designed to prepare for wars as well as counter-terror and counter-insurgency operations.

Where will the center come up and when?

- The center will come up in a military zone in New Delhi, confirmed RRU officials privy to the development.
- The RRU will join hands with Tech Mahindra to develop the center in the coming three to four months.
- The RRU, an institute under the Ministry of Home Affairs (MHA), specializes in national security and policing.
- Located in Gandhinagar's Lavad village, it is an "institute of national importance" – a status granted to it by an Act of Parliament.

How will these simulation exercises play out?

- Soldiers will test their skills in the metaverse where their surroundings will be simulated using a combination of virtual reality (VR) and augmented reality (AR).
- In the metaverse, the players will get a realistic experience of the actual situation.
- If a weapon weighing 5 kg drops or the air pressure falls, they will feel it like anyone would in a live situation, real-time.
- The game would play out player versus player, player versus computer or even computer versus computer.

How will the center help the Army?

- The Army intends to use the war-game center to train its officers in military strategies.
- The Indian Army will provide data to set the backdrop of the gameplay, so that participants get a realistic experience.
- In the Army, it is often said that the enemy can ambush you from 361 directions, where 360 sides are around the soldier, and one is above in case there is an airdrop.

- So, wargame simulation helps the Army think of all possible scenarios.

What promise does AI-based wargame simulation hold?

- Apart from the armed forces, the BSF, CRPF, CISF, ITBP and SSB can also use the metaverse-enabled simulation exercises for better training.
- The use of AI can provide a totally immersive training experience as it can simulate a battlefield close to reality and map several eventualities in the probable event of a war.

How many countries use such wargaming drills?

- Since the 9/11 attacks, use of information technology-enabled wargaming is preferred by several countries like the US, Israel, the UK to prepare for possibilities in case of terror attacks or war.
- In March 2014, several world leaders, including former German chancellor Angela Merkel, former US president Barack Obama and Chinese president Xi Jinping had played a war simulation game.
- It was during the Hague Summit about how to react in case of a nuclear attack.
- In that case, the target of the nuclear attack was a fictional country named Brinia.