India joins Artemis Accord

Why in news?

India became the 27th signatory to the American-led Artemis Accords.

What are Artemis Accords?

- The US established the Artemis Accords together with 7 other founding member nations in 2020.
- The Artemis Accords reinforce and implement key obligations in the 1967 Outer Space Treaty.
- These Accords are a non-binding set of principles designed to guide civil space exploration cooperation among nations participating in the agency's 21st century lunar exploration plans.
- It currently has 27 signatories including India.

> *Artemis mirrors a Chinese-Russian plan for an 'International Lunar Research Station' (ILRS).*

What is done under Artemis Accords?

The Artemis programme this time plans for permanent settlements on the Moon.

- The project plan includes
  - a base on the lunar surface
  - multiple spacecraft to ferry humans and cargo
  - a small orbiting space station called the 'Lunar Gateway'
  - a constellation of satellites to help with navigation and communication
- The Artemis Accords was created by the U.S to act as a soft-law alternative to the Moon Agreement, which limits resource extraction in celestial bodies.
- If Artemis Programme succeed in permanent settlement in lunar surface, resource extraction will be limited to lunar surface.
- A key provision in the Artemis Accords allows for actors to extract and utilise space resources.

> ***Artemis programme -*** *An American-led effort to return humans to the moon by 2025, with the ultimate goal of expanding space exploration to Mars and beyond.*

What is the Moon Agreement of 1979?

- The Moon Agreement of 1979 is directed towards the use of the Moon and other celestial bodies.
- It limits the scope of exploitation of resources from these celestial bodies.
- It establishes that the moon and other celestial bodies are 'the province of all mankind'.
- It declares that these regions of space must only be for peaceful purposes, with no state allowed to establish military bases or place weapons on celestial bodies.
- **Signatory -** Despite being instrumental in the drafting of the Moon Agreement, the United States did not ratify it.
- India is a signatory to the Moon Agreement, but is yet to ratify it.

What is it that India seeks to gain out of Artemis?

- **Gaganyaan -** Parties to the Accords gain greatly from the exchange of information and gain access to NASA's Artemis programme.
- This shared information would greatly help India's own Gaganyaan mission.
- **Benefits ISRO -** NASA and ISRO have agreed to a joint mission to the International Space Station (ISS) in 2024.
- This opens avenues for knowledge sharing, joint research, and technological exchange between the two space agencies.
- Earlier, ISRO and NASA collaborated in the development of NISAR Mission.
- **Bilateral ties -** The ties between India and the U.S. have been on an upswing and this accord improves bilateral space cooperation between them.
- India in its new space policy allows private players to mine any 'space resource,' which presumably includes the Moon.
- **Economic potential -** It allows Indian companies and industries to participate in the global space economy and access new markets.
- **Space industry -** Increased investment in the space sector drives job creation, research and development and the growth of India's space industry.
- **Collaboration -** India can collaborate and gain knowledge from other Artemis signatories.

What is the way forward?

- India has much work to do to make the most of the Artemis programme.
- India will have to increase its budget for space.
- It has to overcome domestic resistance to collaboration with other space agencies.
- India has to enable its private sector to work with other Artemis members, and develop legislation that encourages space activities.

References

1. NASA - NASA Welcomes India as 27th Artemis Accords Signatory
2. The Hindu - India and the Artemis Accords
3. The Hindu - India has signed the Artemis Accords



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