Mission Drishti

Prelims: *Current events of national and international importance | Science & Technology*

Why in news?

Space-tech startup GalaxEye has announced that it is planning to launch its maiden 'Mission Drishti' in 2026.

- **Mission Drishti –** The ***world's 1st multi-sensor*** Earth observation (EO) satellite.
- It is ***India's largest privately*** built satellite and also the highest-resolution satellite developed in the country.
- **Aim –** To achieve near real-time Earth observation for global applications.
- **Launched in –** 2026, this constellation program comprising ***8-12 satellites*** to be launched successively ***until 2029***.
- **Planned by –** Bengaluru based space startup – GalaxEye

*This company notably is the 1st company in India to develop a synthetic aperture radar (SAR) payload **privately**.*

Key features of mission

- **Combination of sensors –** The satellite will combine multiple sensing technologies on a single platform.
- The satellite will feature GalaxEye's proprietary "***SyncFused Opto-SAR***" imaging, which synchronizes both high-resolution optical payloads and synthetic aperture radar (SAR) sensors.
- **High-resolution imagery –** The satellite, weighing 160 kg and offering ***1.5 metre resolution***, offering high-precision geospatial insights.
- **All-weather & all-time observation –** The combination of sensors will enabling unprecedented earth observation data available through any weather, any time of the day.
- **High endurance –** The satellite has undergone ***comprehensive***

structural testing at ISRO's U.R Rao Satellite Centre (URSC), proving its capability to endure the harsh conditions of space, including extreme temperatures, vibrations, and vacuum.

- **Range of applications –** The satellite will enable governments, defense agencies, and industries to perform advanced geospatial analysis across a wide range of applications, including:
  - Border surveillance, disaster management, defence, utilities and infrastructure monitoring, agriculture as well as financial and insurance assessment.
- **Significance –** This mission places India firmly on the global space map and creates a system that ***turns space technology into intelligence*** that businesses, governments, and communities can rely on.

References

1. The Hindu | Mission Drishti
2. Business Standard | Mission Drishti

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