

Mission Drishti

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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 <u>8-12</u> satellites to be launched successively <u>until 2029</u>.
- 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

- **<u>structural testing</u>** 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 <u>turns space technology into intelligence</u> that businesses, governments, and communities can rely on.

References

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

