Gaurav Glide Bomb

Prelims – *General Science.*

Mains (GS III) – *Science and Technology Developments.*

Why in News?

Defence Research and Development Organisation (DRDO) has successfully conducted the release trials of the long-range glide bomb "Gaurav" from the Sukhoi aircraft.

- Gaurav is a ***long-range glide bomb*** designed for precision strikes ***on land targets*** from a safe distance, specifically beyond the reach of enemy air defenses.
- **Developed by –** DRDO in partnership with the Armament Research and Development Establishment (ARDE), Research Centre Imarat, and the Integrated Test Range.
- **Features - Range** - Capable of operating between 30 km and 150 km, with successful demonstrations nearing 100 km.
- **Weight** - The winged variant, Gaurav, has a mass of 1,000 kg, while the non-winged version, Gautham, weighs 550 kg.
- **Navigation** - It employs an ***Inertial Navigation System (INS)*** complemented by satellite guidance and digital control mechanisms.
- **Importance for India's Defence**
    - This system significantly boosts the Indian Air Force's (IAF) ability to conduct stand-off strikes.
    - It minimizes the exposure of fighter aircraft to enemy air defenses, thereby enhancing operational safety.
    - Furthermore, it reinforces India's capabilities in developing indigenous smart munitions and supports precision targeting, which is crucial in contemporary warfare.

Reference

The Hindu | Glide Bomb 'Gaurav'