

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'](#)