SMART Test

Why in news?

India conducted the flight test of a Supersonic Missile Assisted Release of Torpedo (SMART) system.

What are Torpedoes?

- Torpedoes are self-propelled weapons that travel underwater to hit a target.
- They are limited by their range.

What is SMART system?

- The SMART system is developed by the Defence Research and Development Organisation (DRDO).
- The system has a mechanism by which the torpedo is launched from a supersonic missile system with changes that would take the torpedo to a far longer range than its own.
- The system also gives flexibility in terms of the missile system's launch platform.

Who were involved in the development?

- A number of DRDO laboratories have developed the technologies required for SMART. They are,
    1. Defence Research and Development Laboratory (DRDL) and Research Centre Imarat (RCI), both in Hyderabad;
    2. Aerial Delivery Research and Development Establishment, Agra;
    3. Naval Science and Technology Laboratory (NSTL) Visakhapatnam.

What is the significance?

- SMART is a game-changing technology demonstration in **anti-submarine warfare**.
- India's anti-submarine warfare capacity building is crucial in light of **China's growing influence** in the Indian Ocean region.
- The Navy's anti-submarine warfare capability got a boost after the conclusion of a contract for Advanced Torpedo Decoy System Maareech.
- [Maareech is capable of being fired from all frontline warships.]

- India has been indigenously developing and building several anti-submarine systems and vessels in the recent past.
- [In January 2020, DRDO conducted two tests of the K Family missiles.]
- The capability of launching nuclear weapons from submarine platforms has strategic importance in light of the "**no first use**" policy of India.
- These submarines can not only survive a first strike by an adversary but also can launch a strike in retaliation.
- The nuclear-powered Arihant submarine and its class members in the pipeline are assets capable of launching missiles with nuclear warheads.

Source: The Indian Express

