FPV (First-person view) drones

Prelims : Current events of national and international importance

Why in news?

Ukraine targeted and destroyed more than 40 Russian aircraft stationed at 4 key air bases across Russian territory by FPV drone attack named Operation spider Web.

- First-person view means that a ***person piloting a drone can see*** what the drone sees, through a camera attached to its body.
- The live video can be seen through specialized goggles, or on smartphones and other kinds of screens, and the drone can be manoeuvred remotely.
- Such drones are also ***used in filming and other non-defence purposes***.
- FPV drones have a much ***smaller range, of a few kilometres***.
- One major challenge is that the drones' movement through their surroundings cannot be seen by the drone operator.
- This can limit situational awareness and may lead to disorientation.
- At times, another person, a visual observer, may be needed to guide the person controlling the drone.
- Before FPV drones are deployed, a reconnaissance drone with a larger range first goes to survey the area and zero in on a specific region that needs to be targeted.
- **Key advantages -** Cost and deep strike capabilities while remaining largely undetected.

Reference

The Indian Express | FPV drones