Iron dome system

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In news- In the recent <u>conflict between Israel and Palestine</u>, rockets fired from Gaza were being intercepted by the Israeli Iron Dome air defence system.

More about Iron dome-

- It is a **short-range**, **ground-to-air**, **air defence system** that includes a radar and Tamir interceptor missiles that track and neutralise any rockets or missiles aimed at Israeli targets.
- It is used for countering rockets, artillery & mortars (C-RAM) as well as aircraft, helicopters and unmanned aerial vehicles.
- The system can equally intercept unwanted helicopters, aircraft, or UAVs that enter the airspace without permission.
- Its genesis goes back to the **2006 Israeli-Lebanon war**, when Hezbollah fired thousands of rockets into Israel.
- The Iron Dome was **developed by** Rafale Advanced Defence Systems jointly with Israel Aerospace Industries and deployed in **2011**.
- The Iron Dome has **three main systems** that work together to provide a shield over the area where it is deployed.
- It has a detection and tracking radar to spot any incoming threats, a battle management and weapon control system (BMC), and a missile firing unit.
- It is capable of being used in all weather conditions, including during the day and night.



Similar systems with other countries-

- S-400 air defence systems of Russia.
- Sky Hunter is the US version of the Iron Dome system which has been developed jointly by Raytheon and Rafael.
- India has Akash short-range surface-to-air missiles, and Russian systems including Pechora which are being gradually replaced with more modern systems.

India is buying two National Advanced Surface to Air Missile System-II from the US.