Locusts Appeared Early in Rajasthan

Why in News

Recently, scientists at the **Locust Warning Organisation (LWO)** observed groups of **desert locusts** at Sri Ganganagar and Jaisalmer districts of Rajasthan.

- This has raised the alarm-bell for the authorities as they caused huge damage to the growing rabi crops along western Rajasthan and parts of northern Gujarat during December, 2019-January, 2020.
- The **desert locust (Schistocerca gregaria)** is a short-horned grasshopper. These winged insects differ from normal hoppers.
- The **genesis of present desert locust upsurge** lies in the Mekunu and Luban **cyclonic storms** that struck Oman and Yemen, respectively in 2018.
    - These storms turned large desert areas in remote parts of the southern Arabian Peninsula into lakes, which allowed the insects to breed undetected across multiple generations.

Locust

- A locust is a large, **mainly tropical grasshopper** with strong powers of flight. They **differ from ordinary grasshoppers** in their ability to change behaviour (gregarize) and form swarms that can migrate over large distances.
    - **Gregarization** means transformation of solitary insects etc. into a swarm due to rapid growth in population.
- Locusts are generally seen during the **months of June and July** as the insects are active from summer to the rainy season.
- **Locusts have a high capacity to multiply, form groups, migrate over** relatively large distances (they can fly up to 150 km per day) and, if good rains fall and ecological conditions become favourable, rapidly reproduce and increase some 20-fold in three months.

- **Threat to Vegetation:** Locust adults can eat their own weight every day, i.e. about two grams of fresh vegetation per day. A very **small swarm eats as much in one day as about 35,000 people,** posing a devastating threat to crops and food security.
- **If infestations are not detected and controlled, devastating plagues can develop** that often take several years and hundreds of millions of dollars to bring under control with severe consequences on food security and livelihoods.
- **Locust Control measures** include destroying egg masses laid by invading swarms, digging trenches to trap nymphs, using hopperdozers (wheeled screens that cause locusts to fall into troughs containing water and kerosene), using insecticidal baits, and applying insecticides to both swarms and breeding grounds from aircraft.
    Organophosphate insecticides such as **Malathion** are effective against locusts.
- The **Food and Agriculture Organisation (FAO)** provides information on the general locust situation to the global community and gives **timely warnings** and **forecasts** to those countries in danger of invasion.
    The FAO raised alarm over the locust outbreak in northeast Africa and Saudi Arabia in February, 2019.

Locusts in India

- **Four species** viz. Desert locust (Schistocerca gregaria), Migratory locust (Locusta migratoria), Bombay Locust (Nomadacris succincta) and Tree locust (Anacridium sp.) are found in India.
- The existing series of locust swarms that have entered India via Pakistan had originated in Iran. Movement of locusts is facilitated by summer dusty winds, which flow from the Arabian Sea, taking along these creatures from Sindh in Pakistan to western Rajasthan.
- The **last major locust outbreak that was reported in Rajasthan was in 1993.**
- **Locust Warning Organisation (LWO), Ministry of Agriculture & Farmers Welfare,** is responsible for monitoring, survey and control of Desert Locust in Scheduled Desert Areas mainly in the States of Rajasthan and Gujarat.

Source: IE