Swarms of locusts

Part of: GS-I- CULTURE (PT-MAINS-PERSONALITY TEST)

Over the last few days, swarms of locusts have been sighted unusually even in urban areas of Rajasthan. Swarms have also been reported from parts of Madhya Pradesh and Vidarbha region of Maharashtra.

Imp Points

- The desert locust (*Schistocerca gregaria*) is a short-horned grasshopper.
- Harmless when solitary, locusts undergo a behavioural change when their population builds up rapidly.
- They enter the ‘gregarious phase’ by forming huge swarms that can travel up to 150 km per day, eating up every bit of greenery on their way.
- These insects feed on a large variety of crops. If not controlled, locust swarms can threaten the food security of a country.

Early Arrival

- The first swarms were sighted along the India-Pakistan border on April 11, months ahead of the usual time of arrival. In India, locusts are normally sighted during July-October along the Pakistan border.
- Reason for early arrival
  - This can be traced back to the cyclonic storms Mekunu and Luban that had struck Oman and Yemen respectively in 2018.
  - These turned large deserts tracts into lakes, facilitating locust breeding that continued through 2019.
  - Swarms attacking crops in East Africa reached peak populations from November, and built up in southern Iran and Pakistan since the beginning of 2020, with heavy rains in East Africa in March-April enabling further breeding.

Impact on Urban Areas

Locusts are being seen in urban areas not historically associated with their sightings, such as — Jaipur, MP’s Gwalior, Morena and Sheopur, and recently stray swarms in Maharashtra’s Amravati, Nagpur and Wardha. There being no crops in the fields, the locusts have moved across states attracted by green cover in search of food. The swarms were aided by high-speed wind and thus they made their way to such urban areas.

Impact on Crops

At present, chances of crop damage are low given that farmers have already harvested their rabi crop.

Orange growers in Maharashtra have expressed concern but as per scientists of the Agriculture Ministry’s Locust Warning Organization (LWO) (Jodhpur), the swarm in Maharashtra would be easy to control.

- The bigger problem will come once the present swarms breed. An adult female locust lays
80-90 eggs thrice in her three-month life cycle. If left uncontrolled, a swarm can grow exponentially to 40-80 million locusts per square kilometre. The locusts will start laying eggs after the monsoon starts and continue breeding for two more months, with newer generations rising during the growth phase of the kharif crop.

Control Measures

- Control involves spraying insecticide on locusts’ night resting places like trees.
- Till date, the LWO has carried out spraying over 21,675 hectares in Rajasthan. India has also put an order of 60 specialised insecticide sprayers with the UK, the country already has 50 such machines.
- Drones will also be used to spray the resting places.
- Coordination between Africa and Asia and India – Pakistan and Iran

Conclusion

At a time India is battling Covid-19, there is a need to take measures so that it won’t pose a threat to food security. There is no quick-fix solution to the locust menace. Beyond chemicals, pesticides, and drones, it is imperative to tackle the root cause of global warming and invest in upgrading climate resilience and adaptation techniques. An expensive and complex process, this will require global cooperation and coordination.