Locust Swarms

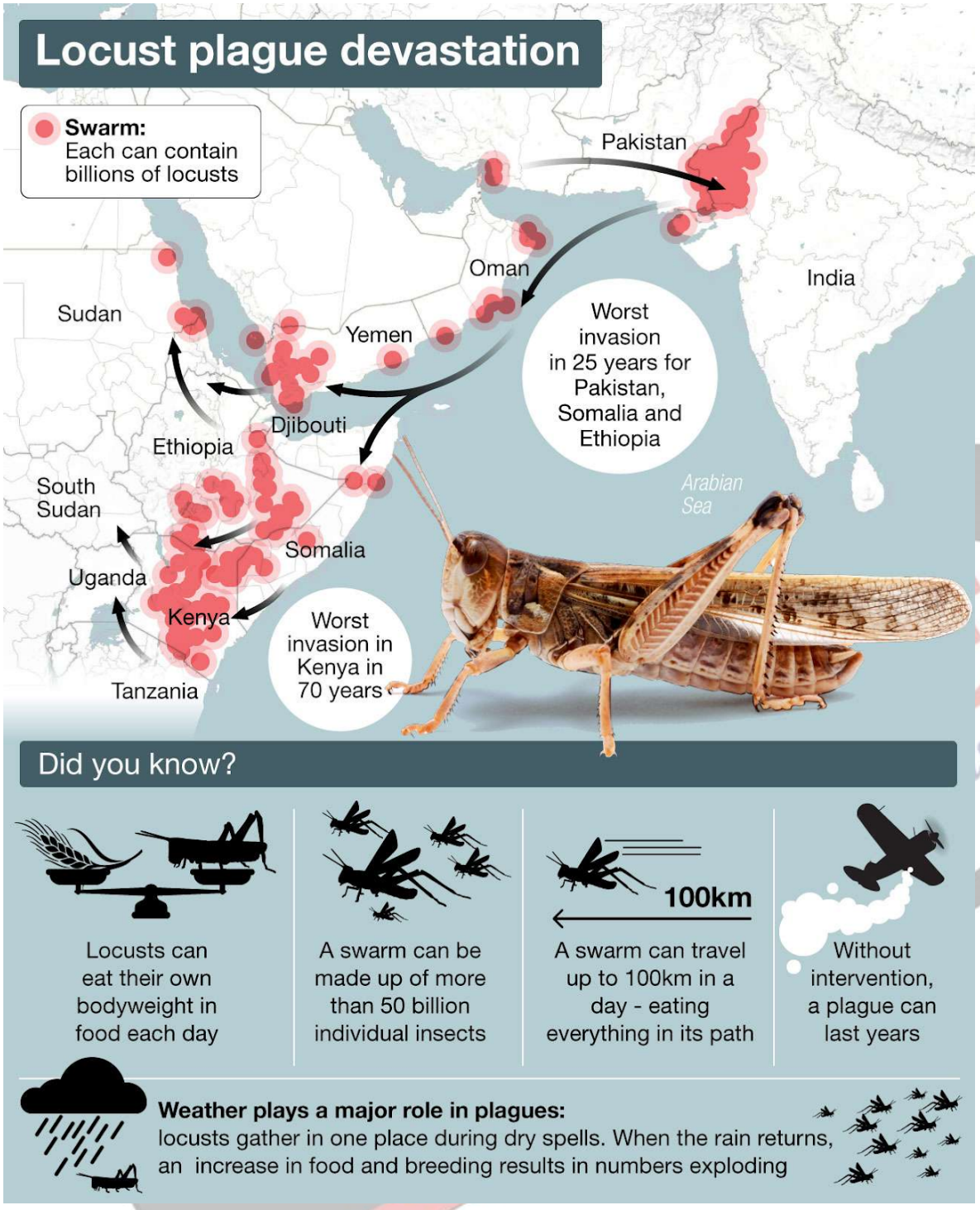
Source: TH

A new study reveals that **locust swarms** are guided by a **cognitive decision-making** model, not random behavior. Locusts use multiple visual cues for movement, leading to coordinated swarms through decentralized decision-making. This model helps predict swarm behavior and improve early intervention strategies.

Locusts

Locusts are a type of grasshopper belonging to the family ***Acrididae.*** The Desert Locust ***(Schistocerca gregaria)*** is considered the most destructive migratory pest.

- Locusts are solitary insects until they undergo a transformation called **gregarisation,** where they become more social and congregate in large swarms.
    - A small swarm (1 km²) can contain **80 million locusts**, consuming as much food as 35,000 people in one day, while a large swarm **can eat up to 1.8 million metric tons of vegetation.**
- Locusts are migratory pests capable of flying hundreds of kilometers in swarms. They are a trans-border pest that travels between Africa, the Middle East, and South Asia.
- India’s Scheduled Desert Area, encompassing the states of Rajasthan, Gujarat, and Haryana, covering over 2 lakh square kilometers, is particularly vulnerable to locust invasions, which often originate from regions such as Africa and the Gulf.
    - **Desert Locust** (Schistocerca gregaria), **Migratory Locust** (Locusta migratoria), **Bombay Locust** (Nomadacris succincta), and **Tree Locust** (Anacridium sp.) are reported in India.
    - India's **Locust Warning Organization,** along with 10 Locust Circle Offices in Rajasthan and Gujarat, monitors, surveys, and controls desert locusts in coordination with state governments in the Scheduled Desert Area.



Read more: [Swarm of Desert Locust]