Cyclone Emnati

March 1, 2022

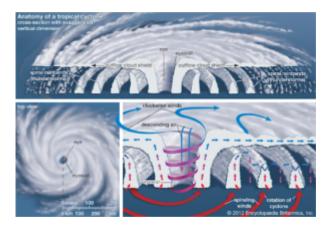
<u>In news</u>—The Cyclone Emnati has lashed the island nation Madagascar recently.

About the cyclone Emnati-

- It made landfall around 2300 GMT just north of the southeastern district of Manakara.
- The storm, which **passed just north of Indian Ocean islands of Mauritius and Reunion**, had weakened slightly by the time it reached the eastern coast of Madagascar.
- Another storm, Cyclone Batsirai struck the island on February 5th claiming 121 lives.

What are tropical Cyclones?

- A tropical cyclone is an intense circular storm that originates over warm tropical oceans and is characterized by low atmospheric pressure, high winds, and heavy rain.
- In extreme cases winds may exceed 240 km per hour, and gusts may surpass 320 km per hour.



- In the North Atlantic Ocean and the eastern North Pacific, they are called hurricanes.
- In the western North Pacific, the storms are referred to as typhoons.

- In the western South Pacific and the Indian Ocean, they are variously referred to as severe tropical cyclones, tropical cyclones, or simply cyclones.
- Tropical cyclones occur every year during the late summer months: July-September in the Northern Hemisphere and January-March in the Southern Hemisphere.
- Several factors are required for these thunderstorms to develop further, including sea surface temperatures of around 27 °C (81 °F) and low vertical wind shear surrounding the system, atmospheric instability, high humidity in the lower to middle levels of the troposphere, enough Coriolis force to develop a lowpressure center, a pre-existing low-level focus or disturbance.
- Characteristic features of tropical cyclones are the eye, a central region of clear skies, warm temperatures, and low atmospheric pressure; the eyewall, the most dangerous and destructive part where winds are strongest and rainfall is heaviest; and rainbands, secondary cells that spiral into the center of the storm.

Naming of Cyclones-

- Cyclones that form in every ocean basin across the world are named by the regional specialised meteorological centres (RSMCs) and Tropical Cyclone Warning Centres (TCWCs).
- In 2000, a group of nations called WMO/ESCAP (World Meteorological Organisation/United Nations Economic and Social Commission for Asia and the Pacific), which comprised Bangladesh, India, the Maldives, Myanmar, Oman, Pakistan, Sri Lanka and Thailand, decided to start naming cyclones in the region.
- There are six RSMCs in the world, including the India Meteorological Department (IMD), and five TCWCs.
- As an RSMC, the IMD names the cyclones developing over the North Indian Ocean, including the Bay of Bengal and

Arabian Sea, after following a standard procedure.

 The IMD is also mandated to issue advisories to 12 other countries in the region on the development of cyclones and storms.

List of Important cyclones that hit India-

- Cyclone Tauktae (Myanmar): It was the first cyclonic storm of 2021 that emerged from the Arabian Sea(mainly hit Gujarat).
- Cyclone Yaas (named by Oman): It was formed in the Bay of Bengal and hit West Bengal and adjoining Odisha coasts in May 2021.
- Cyclone Gulaab: It originated in the Bay of Bengal and hit the country in September 2021 and the IMD assigned it the name Gulab.
- Cyclonic Storm Jawad (Named by Saudi Arabia): It was a weak tropical cyclone that caused major disruptions over Andhra Pradesh, Odisha and West Bengal in December 2021 India.

Further reading: <u>https://journalsofindia.com/the-naming-of-cyclones/</u>