Cyclone Mandous

December 10, 2022

<u>In news</u>— Cyclonic Storm Mandous wreaked havoc across India's southeastern coast recently, bombarding the region with up to extremely heavy downpours and stormy winds.

About the Cyclonic Mandous-

- Heavy rains lashed several parts of south coastal and Rayalaseema districts of Andhra Pradesh early on Saturday after cyclonic storm Mandous made landfall off Mamallapuram in neighbouring Tamil Nadu.
- After cyclone 'Sitrang' which had largely affected Odisha, West Bengal, and North Andhra Pradesh in October, the recent storm Mandous is named after the United Arab Emirates (UAE) proposal; it means "treasure box" in Arabic.
- In April 2020, IMD shared a list containing a total of 169 names including 13 names proposed by each member country, which take turns to name tropical cyclones in a sequential manner.
- The member nations who name such storms are a part of the World Meteorological Organisation and the United Nations economic and social commission for Asia Pacific panel (WMO/ESCAP) on tropical cyclones.

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).
 - 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 low-pressure 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.

Further reading: <u>https://journalsofindia.com/cyclone-emnati/</u>