

**16 – 05 – 2023**

**News:** Cyclone Mocha

- Cyclone Mocha that made **landfall recently in Myanmar has been categorized as an Extremely Severe Cyclonic Storm by the IMD (Indian Meteorological Department) and as a ‘Super Cyclone’ by global weather website Zoom Earth.**
- It became the **strongest cyclone on earth so far in 2023 according to Typhoon Research Center in South Korea’s Jeju National University.**

## **Tropical Cyclone Mocha**

- **Yemen suggested the name ‘Mocha’, which is supposed to be pronounced as Mokha.**
- The **cyclone has been named after a Red Sea port city known for its coffee production. The city also gave its name to the popular beverage, café Mocha.**
- Cyclone Mocha **originated in the Bay of Bengal.**
- With a **recorded wind speed of 277 kmph, Mocha became the strongest cyclone for all seasons in both Arabian Sea and Bay of Bengal, since 1982, in the North Indian Ocean, tying with Cyclone Fani in terms of speed and intensity.**
- Amphan, witnessed in 2020, was 268 kmph while Tauktae in 2021 it was 222 kmph and Gonu in 2007 recorded a speed of 268 kmph.

# Tropical Cyclones

- A tropical cyclone is a **rapidly rotating storm system characterized by a low-pressure center, a closed low-level atmospheric circulation, strong winds, and a spiral arrangement of thunderstorms that produce heavy rain or squalls.**
- It is **mainly found in closed seas surrounded with land.** For example Bay of Bengal experience formation of tropical cyclone more than Arabian Sea, which is more open.
- Tropical cyclones **rotate Anti-clockwise in Northern hemisphere and Clockwise in Southern hemisphere.**
- Anti-cyclones rotate Clockwise in Northern hemisphere and Anti-clockwise in Southern hemisphere.

## Conditions favouring the formation of tropical cyclone storms

- Large sea surface with a temperature higher than 27° C.
- Presence of the Coriolis force.
- Small differences in the vertical wind speed.
- A pre-existing weak- low-pressure area or low-level-cyclonic circulation.
- Upper divergence above the sea level system.

## 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).
- 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.
- 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, Thailand, Iran, Qatar, Saudi Arabia, United Arab Emirates and Yemen decided to start naming cyclones in the region.
- After each country sent in suggestions, the WMO/ESCAP Panel on Tropical Cyclones (PTC) finalised the list. The list of 169 cyclone names released by IMD were provided by these countries — 13 suggestions from each of the 13 countries.

|                   |         |          |          |          |          |         |
|-------------------|---------|----------|----------|----------|----------|---------|
| <b>Bangladesh</b> | Nisarga | Biparjoy | Arnab    | Upakul   | Barshon  | Rajani  |
| <b>India</b>      | Gati    | Tej      | Murasu   | Aag      | Vyom     | Jhar    |
| <b>Iran</b>       | Nivar   | Hamoon   | Akvan    | Sepand   | Booran   | Anahita |
| <b>Maldives</b>   | Burevi  | Midhili  | Kaani    | Odi      | Kenau    | Endheri |
| <b>Myanmar</b>    | Tauktae | Michaung | Ngamann  | Kyarthit | Sapakyee | Wetwun  |
| <b>Oman</b>       | Yaas    | Remal    | Sail     | Naseem   | Muzn     | Sadeem  |
| <b>Pakistan</b>   | Gulab   | Asna     | Sahab    | Afshan   | Manahil  | Shujana |
| <b>Qatar</b>      | Shaheen | Dana     | Lulu     | Mouj     | Suhail   | Sadaf   |
| <b>Saudi</b>      | Jawad   | Fengal   | Ghazeer  | Asif     | Sidrah   | Hareed  |
| <b>Sri Lanka</b>  | Asani   | Shakhti  | Gigum    | Gagana   | Verambha | Garjana |
| <b>Thailand</b>   | Sitrang | Montha   | Thianyot | Bulan    | Phutala  | Aiyara  |
| <b>UAE</b>        | Mandous | Senyar   | Afoor    | Nahhaam  | Quffal   | Daaman  |
| <b>Yemen</b>      | Mocha   | Ditwah   | Diksam   | Sira     | Bakhur   | Ghwyzi  |