



Cyclone Mandous

For Prelims: Cyclone Mandous, Types of Cyclones, Nomenclature of Cyclone

For Mains: Types of Cyclones, Nomenclature of Cyclone

Why in News?

Recently, it has been reported that a [cyclone](#) may impact the Tamil Nadu and Puducherry coasts from 8th December 2022 onwards.

What is Cyclone Mandous?

- Mandous is a **slow-moving cyclone** that often absorbs a lot of moisture, carries a humongous amount of rainfall and gains strength in the form of wind speeds.
- The name has been **suggested by the United Arab Emirates**.
- [India Meteorological Department's \(IMD\)](#) predicted that the storm system **may move in the west and northwestward directions** and intensify into a depression by the evening of December 6.
 - It may subsequently strengthen further into a cyclone over southwest Bay of Bengal and move towards the Tamil Nadu and Puducherry coasts by the morning of December 8.

What is a Cyclone?

- **Cyclones** are rapid **inward air circulation** around a **low-pressure area**. The air circulates in an **anticlockwise direction** in the Northern hemisphere and **clockwise** in the Southern hemisphere.
- Cyclones are usually accompanied by **violent storms and bad weather**.
- The word Cyclone is derived from the **Greek word Cyclos** meaning the coils of a snake. It was coined by **Henry Peddington** because the tropical storms in the Bay of Bengal and the Arabian Sea appear like coiled serpents of the sea.
- **There are two types of cyclones:**
 - Tropical cyclones;
 - **Extra Tropical cyclones** (also called Temperate cyclones or middle latitude cyclones or Frontal cyclones or Wave Cyclones).
- The [World Meteorological Organisation](#) uses the term '**Tropical Cyclone**' to cover weather systems in which winds exceed '**Gale Force**' (**minimum of 63 km per hour**).
 - **Tropical cyclones** develop in the region **between the Tropics of Capricorn and Cancer**.
 - They are **large-scale weather systems** developing over tropical or subtropical waters, where they get organized into surface wind circulation.
 - **Extra tropical cyclones** occur in **temperate zones** and high latitude regions, though they are known to originate in the Polar Regions.

How are Names of Cyclones Decided?

- 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.
- 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. After each country sent in suggestions, the WMO/ESCAP Panel on **Tropical Cyclones (PTC)** finalised the list.
 - The WMO/ESCAP expanded to **include five more countries in 2018** — Iran, Qatar, Saudi Arabia, United Arab Emirates and Yemen.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q. In the South Atlantic and South-Eastern Pacific regions in tropical latitudes, cyclone does not originate. What is the reason? (2015)

- (a) Sea surface temperatures are low
- (b) Inter-Tropical Convergence Zone seldom occurs
- (c) Coriolis force is too weak
- (d) Absence of land in those regions

Ans: (b)

Ans:

- The most proximate reasons for the lack of cyclones in the South Atlantic and South Eastern Pacific ocean is the rare occurrence of the Inter-Tropical Convergence Zone (ITCZ) over the region.
- It becomes very difficult or nearly impossible to have genesis of tropical cyclones, unless synoptic vorticity (it is a clockwise or counterclockwise spin in the troposphere) and convergence (i.e., large scale spin and thunderstorm activity) are provided by ITCZ.
- Therefore, option (b) is the correct answer.

Mains

Q. The recent cyclone on the east coast of India was called “Phailin”. How are the tropical cyclones named across the world? Elaborate. (2013)

Q. Discuss the meaning of colour-coded weather warnings for cyclone prone areas given by India Meteorological Department. (2022)

Source: DTE