Cyclone Nivar

November 25, 2020

In news

Cyclone Nivar to the coasts of Tamil Nadu and Puducherry

About Cyclone Nivar

- It is originated in the Bay of bengal
- According to a recent update from the India Meteorological Department the cyclonic storm NIVAR over southwest Bay of Bengal has burgeoned into a ‘severe cyclonic storm’ and lay 370 km east southeast of Chennai and 310 km southeast of Puducherry
- The cyclone is likely to intensify further into a ‘very severe cyclonic storm’ by noon and make landfall by late evening between the Tamil Nadu and Puducherry coasts, around Karaikal and Mamallapuram with a wind speed of 120-130 kmph gusting to 145 kmph.

What are tropical cyclones?

Tropical cyclones are one of nature’s most violent manifestations and potentially the deadliest of all meteorological phenomena. It is a unique combination of violent wind, heavy rainfall and mountainous waves in sea.

A Tropical cyclone is a non-frontal, synoptic-scale, low-pressure system over tropical or subtropical waters with persistent, organized convection and a closed cyclonic circulation.

IMD classification of cyclones:

India Meteorological Department
Tropical Cyclone Intensity Scale

Category	Sustained winds (3-min average)
Super Cyclonic Storm	≥120 kt ≥221 km/h
Extremely Severe Cyclonic Storm	90–119 kt 166–220 km/h
Very Severe Cyclonic Storm	64–89 kt 118–165 km/h
Severe Cyclonic Storm	48–63 kt 89–117 km/h
Cyclonic Storm	34–47 kt 63–88 km/h
Deep Depression	28–33 kt 51–62 km/h
Depression	17–27 kt 31–50 km/h

Cyclones are classified on the basis of the wind speed.

- The lowest official classification used in the North Indian Ocean is a **Depression**, which has a 3-minute sustained wind speed of between 20–31 mph **(31–50km/h).**
- **Deep Depression:** If the depression intensifies further then it will become a Deep Depression, which has speeds of between 32–38 mph **(51–62 km/h).**
- **Cyclonic storm:** If the Deep Depression develops gale force wind speeds of between 39–54 mph (**63–88 km/h)**, it is called a Cyclonic storm and the Indian Meteorological Department (**IMD) assigns a name to it.**
- **Severe Cyclonic Storm**: They have storm force wind speeds of between 55–72 mph (**89–117 km/h).**
- **Very Severe Cyclonic Storm:** They have hurricane-force winds of 73–102 mph (**118–165 km/h).**
- **Extremely Severe Cyclonic Storm**: They have hurricane-force winds of 104–137 mph (**166–220 km/h**).
- **Super Cyclonic Storm:** The highest classification used in the North Indian Ocean which have hurricane-force winds of **above 138 mph (221 km/h).**