

## AIR Spotlight - Preparedness and Impact of Cyclone YAAS

AIR Spotlight is an insightful programme featured daily on the All India Radio Newsonair. In this program, many eminent panelists discuss issues of importance which can be quite helpful in [IAS exam](#) preparation. In this article, the topic of discussion is Preparedness and Impact of Cyclone Yaas.

### Participants:

- Professor Rajendra Kumar Jenamani, Senior Scientist, Head of the National Cyclone Warning Centre, New Delhi.
- Ruchika Chitravanshi, Journalist.

### Context:

The panelists discussed the impact of Cyclone Yaas in the eastern states of India and the preparedness against it.

### Comparison between cyclones Tauktae and Yaas:

- Tauktae originated in the Arabian Sea whereas Yaas originated in the Bay of Bengal.
- Tauktae had more speed (150-190 km/hr) than Yaas (140-165km/hr).
- Tauktae took more time in its landfall than Yaas, hence was more destructive.
- Yaas caused more rainfall than Tauktae.
- Tauktae affected more areas than Yaas. All western coastal states were affected by it along with Delhi and Uttarakhand. Rainfall in Delhi due to [cyclones](#) is a rare phenomenon. Yaas affected Andhra Pradesh, Odisha, West Bengal, Jharkhand.

The following table will give further details about cyclones Tauktae and Yaas:

<a href="#">Cyclone Tauktae</a>
<a href="#">Cyclone Yaas</a>

### Why does the Bay of Bengal have more cyclones than the Arabian sea?

- High sea surface temperatures in the Bay of Bengal than the Arabian Sea.
- The Bay of Bengal has another demon on its head, the high rainfall and constant inflow of freshwater from the Ganga and Brahmaputra rivers. The surface water gets refreshed continuously by these large rivers, making it impossible for the warm water to mix with the cooler water below, and depressions keep forming. But the Arabian Sea receives stronger winds

that help dissipate the heat, and the lack of constant freshwater supply helps the warm water mix with the cool water, reducing the temperature.

- Cyclones originating in the Pacific Ocean also cross over to the Bay of Bengal.
- However, due to global warming, the frequency of cyclones has also increased in the Arabian Sea in the past few years.

### Preparedness for the cyclone in the time of COVID

- COVID protocol has impacted the preparedness efforts in Odisha, Andhra Pradesh, and West Bengal in the context of the Yaas cyclone.
- However, lessons learned from last year during the preparedness of [Cyclone Amphan](#) have helped India in preparing for Yaas during the COVID pandemic.

### Categories of Cyclones:

Cyclone Category	Wind Speed in Km/h	Damage Capacity
1	120-150	Minimal
2	150-180	Moderate
3	180-210	Extensive
4	210-250	Extreme
5	250 and above	Catastrophic

Accordingly, Yaas is a category 3 cyclone.

### Steps taken by India to strengthen the forecast of Cyclones:

- The Ministry of Earth Sciences was formed in 2006 and since then it has been responsible for forecasting cyclones.
- India has placed a network of high-resolution radar systems along the coastal states; along with a satellite network to measure the formation and advances of cyclones.
- There are dedicated institutions for looking into the predictions of cyclones. For example, the Indian Institute of Tropical Meteorology, Pune, the Indian National Centre For Ocean Information Services ([INCOIS](#)), Hyderabad, and the Indian Institute of Tropical Meteorology (IITM), Noida.
- India has also developed a global model for the prediction of cyclones.

### Conclusion:

After the 1999 super cyclone in Odisha, India has come a long way to strengthen the forecasting and preparedness of cyclones. Today, India is well equipped with the required infrastructure to reduce the overall impact of cyclones.

