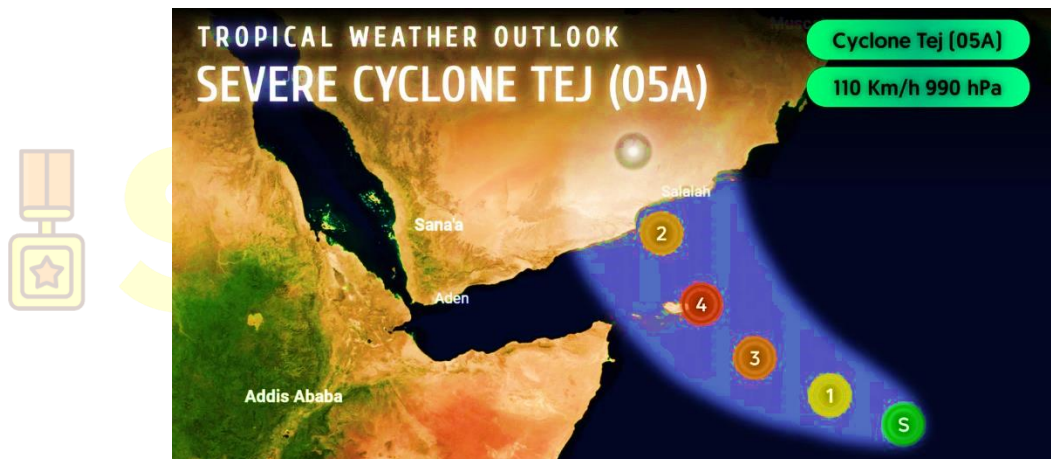


Cyclone Tej Intensifies Over Arabian Sea

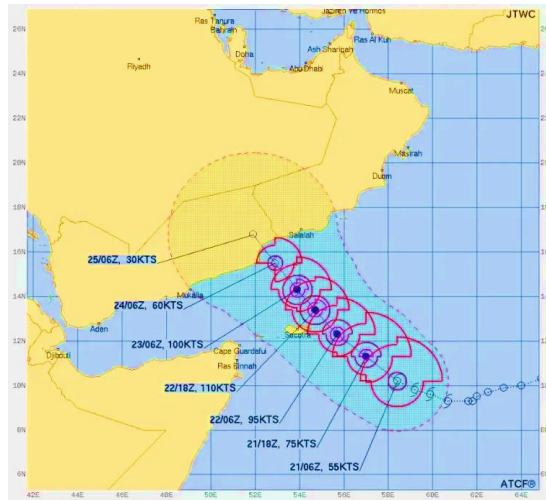
Why In News

- Cyclone 'Tej', brewing over the Arabian Sea, is expected to transform into a Very Severe Cyclonic Storm.
- The India Meteorological Department (IMD) said Cyclone Tej, a depression gathering force in the Arabian sea, intensified into an '**extremely severe cyclonic storm**' on Sunday, near the coasts of Oman and Yemen.



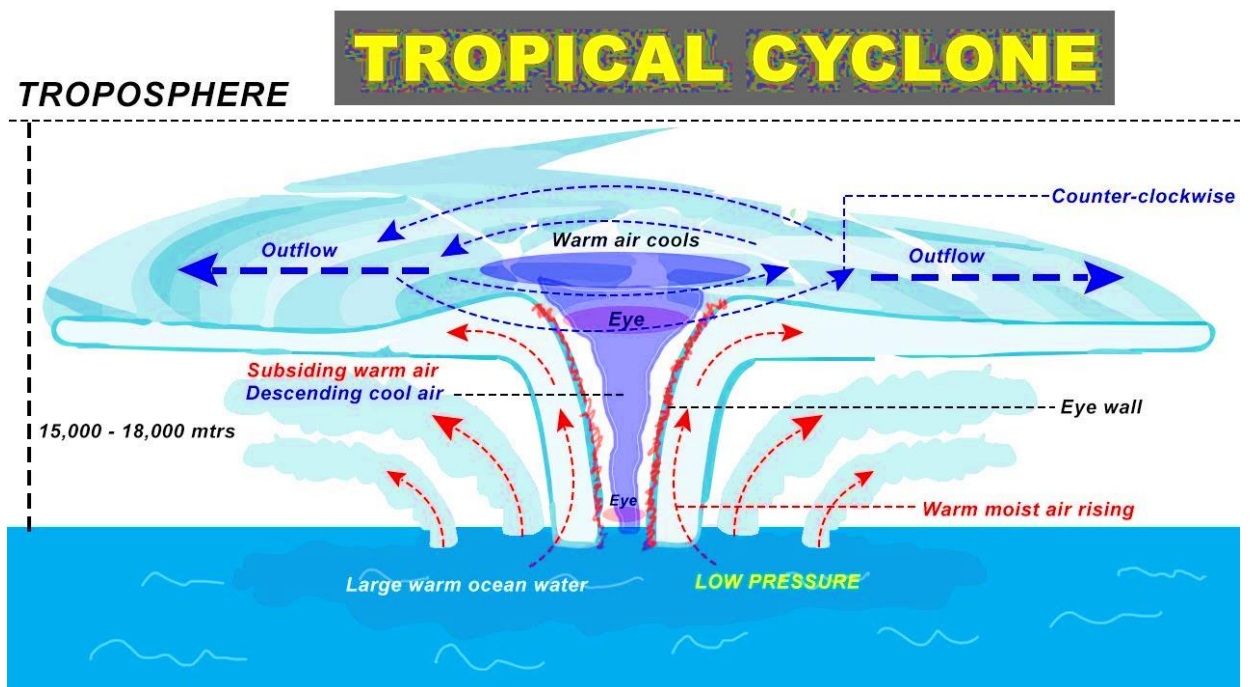
Cyclone Tej

- Extremely Severe Cyclonic Storm Tej is a **tropical cyclone** that formed over the **central-south Arabian Sea** and is currently threatening Yemen.
- The name Tej means speed in Hindi language. The sixth depression and the third named cyclonic storm of the season.
- As of October 21, Cyclone Tej is tracking **west-northwestward** in the Arabian Sea and is expected to make landfall west of the Oman-Yemen border.



Tropical Cyclones

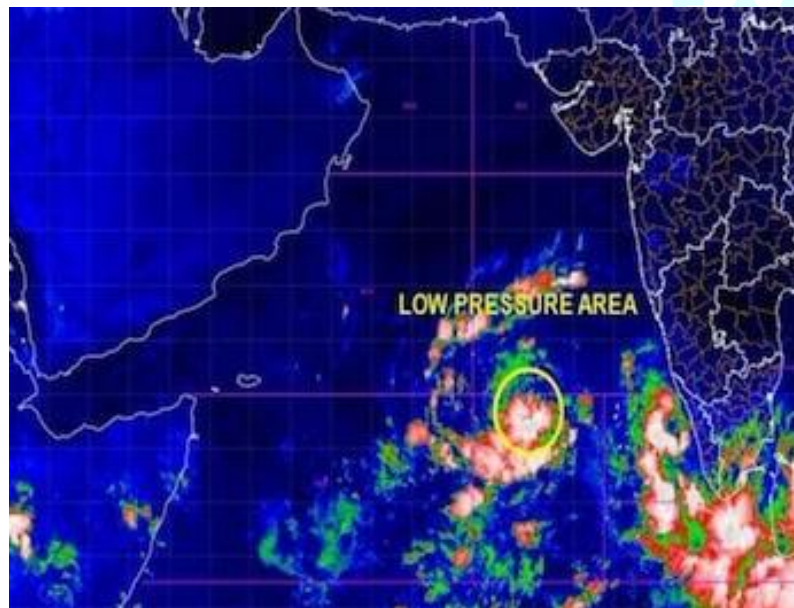
- Tropical cyclones are **violent storms** that originate over oceans in **tropical areas** and move over to the coastal areas bringing about large scale destruction caused by violent winds, very heavy rainfall and storm surges.
- Tropical Cyclones are one of the most devastating natural calamities in the world.
- Tropical cyclones originate and intensify over warm tropical oceans.



- The **conditions favourable** for the formation and intensification of tropical storms are:
- Large sea surface with temperature higher than **27° C**.
- Presence of the **Coriolis force**.
- Small variations in the **vertical wind speed**.
- A pre-existing weak low- pressure area or low-level-cyclonic circulation.
- Upper divergence above the sea level system.

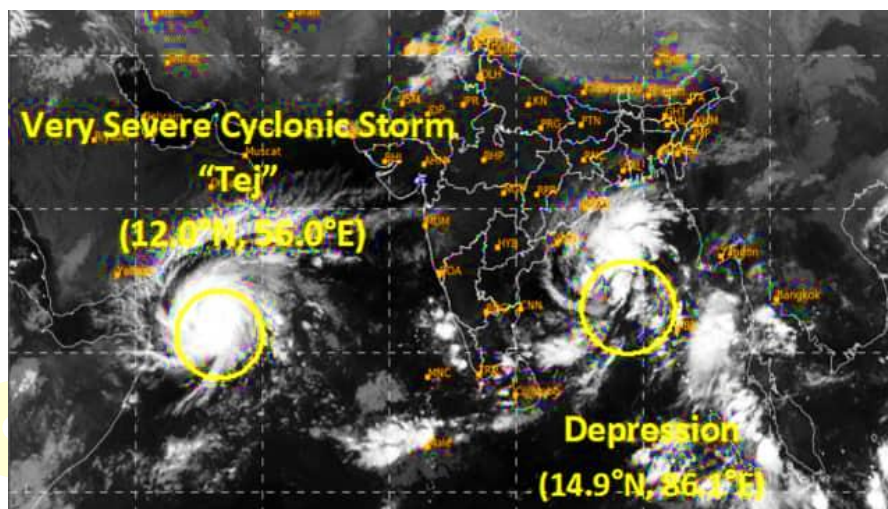
Meteriological History

- On October 16, the India Meteorological Department (IMD) began monitoring the potential for **the formation of cyclonic circulation in the Arabian Sea**.
- In Arabian Sea, the relatively high sea surface temperature, pointing to positive Indian Ocean Dipole, created the favorable condition for tropical cyclogenesis.
- A cyclonic circulation formed over the Arabian Sea on October 16.
- A low-pressure area formed as a result of the cyclonic circulation on morning of October 18. It intensified further on October 20, becoming a deep depression.
- On the same day, the system intensified into Cyclonic Storm, receiving the name Tej.

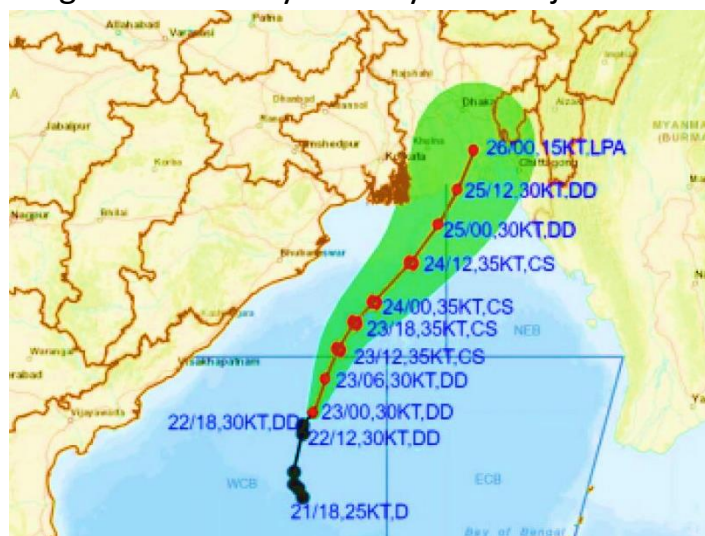


Current Scenario

- Originating in the **Arabian Sea**, the storm is currently moving **northwestwards** and is expected to cross the Yemen-Oman coast between Al Ghaidah in Yemen and **Salalah in Oman**.
- The cyclonic storm is predicted to cross the Yemen-Oman coasts on October 24 as a very severe cyclonic storm with wind speeds of 115-125 kmph, gusting to 140 kmph.



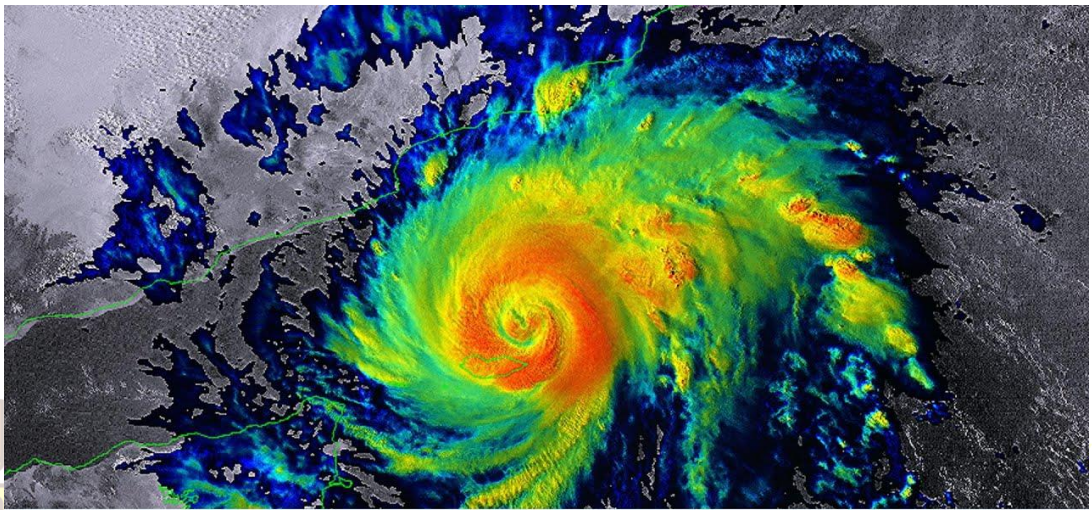
- The India Meteorological Department (IMD) has warned that the deep **depression formed over Bay of Bengal** may intensify into a cyclone by Monday evening. The warning comes shortly after Cyclone Tej formed in the Arabian Sea.



- After its formation, **the cyclone will be called Hamoon**, a name given by Iran. The Persian word reportedly refers to forests or wilderness. According to the

IMD, the system is currently located in west-central Bay of Bengal after moving northeastwards on Sunday night. It lies centred around 400 km from Odisha's Paradip and 550 km south-southwest of Digha in West Bengal.

- The cyclone is expected to **impact regions of coastal Odisha as well as West Bengal.**
- The IMD predicted it will cross the coasts between Yemen's **Al Ghaidah** and **Oman's Salalah** on Tuesday. The formation of twin cyclones, simultaneously in the Bay of Bengal and Arabian Sea, is a rare phenomenon.



Cyclone Tej remains powerful as it passes Socotra