

Combined Impacts of Super El Niño and Indian Ocean Dipole

Prelims: Current events of national and international importance | Geography

Why in News?

Recently, World Meteorological Organization (WMO) warned a rapidly intensifying Super El Niño, hotter than 1997-98, will combine with positive IOD (Aug-Oct 2026), driving extreme global climate impacts.

Super El Niño 2026

- **Declared** - By National Oceanic and Atmospheric Administration (NOAA) (U.S.).
- **Sea Surface Temperatures** - Already above **2.9°C anomalies**, hotter than 1997-98 [Super El Niño](#).
- **Forecast** - Could be the strongest since the **1876-78 El Niño**, which caused famines worldwide.
- **Core Driver** - Subsurface warming in top 500 m of Equatorial Pacific, peaking **8°C above normal**.

Indian Ocean Dipole (IOD)

- **Positive Phase** - Western Indian Ocean warmer, eastern cooler.
- **Impact** - Increases rainfall over western Indian Ocean, reduces rainfall in eastern parts.
- **India's Monsoon** - [Positive IOD](#) can partly offset El Niño's suppression of rainfall.

Regional Impacts

- **India** - Mixed monsoon impacts due to El Niño suppression and IOD support.
- **Indonesia** - Dry sinking air, **reduced** rainfall.
- **North America** - Jet stream shifts, altered storm tracks.

- **Timing** - Impacts expected between **August-October 2026**, earlier than usual El Niño peaks (Nov-Feb).
- **Global Impacts**- Extreme heat, droughts, floods, wildfire risks, coral bleaching, marine heatwaves.

Reference

[Down to Earth | El Nino](#)

