

## 26 districts in Odisha vulnerable to extreme climate events: CEEW

*Cyclones and storm surges have increased three-fold in the state between 1970 and 2019.*

**Bhubaneswar, 27 May 2021:** As many as 26 districts in Odisha, which are home to nearly 36 million people, are exposed to extreme climate events such as cyclones, floods, and droughts, according to an independent analysis released today by the Council on Energy, Environment and Water (CEEW). Coastal districts like Baleswar, Ganjam, Kendrapara, and Puri are hotspots for cyclones, which have increased three-fold in the state between 1970 and 2019. Storm surges, too, have tripled during this period.

Extreme flood events have risen nearly seven-fold and affect more than 12.6 million people in Odisha each year, especially in hotspots like Cuttack, Gajapati, Jajpur, Khurda, and Rayagada. The combined effect of micro-climatic shifts occurring in various parts of India's east coast has triggered more cyclonic disturbances in the Bay of Bengal, leading to storm surges, incessant rainfall, and floods.

Arunabha Ghosh, CEO, CEEW, said, "Two cyclones, Tauktae and Yaas, have struck India in quick succession in the middle of a pandemic. Given the increase in frequency and intensity of such extreme climate events, India needs to build climate resilience at multiple levels. First, it should create a national Climate Risk Commission with statutory authority to convene key stakeholders and publish periodic climate risk assessments. Secondly, it needs decentralised capacity and effective public information campaigns at the regional and local levels to sharpen its response to extreme weather events. Further, new insurance schemes are needed to provide a safety net for livelihoods affected by climate change. Finally, coastal states like Odisha must devote particular attention to nature-based solutions like preserving and restoring mangrove forests, which can act as natural barriers to cyclones."

According to CEEW analysis, after 2005, the yearly average of Indian districts affected by cyclones tripled and the cyclone frequency doubled. In the last decade alone, 258 districts were affected. The last 50 years also recorded a 12-fold surge in the number of associated cyclonic events such as extreme rainfall, floods, sea-level rise, and thunderstorms.

Abinash Mohanty, Programme Lead at CEEW, said, "Cyclones are intensifying faster, reducing the time available for citizens, public authorities, and disaster response personnel to prepare for impact. We can protect livelihoods and infrastructure better by carrying out micro-level climate risk assessments using a Climate Risk Atlas and by issuing impact-based public warnings. We must also work proactively to climate-proof our critical infrastructure to avert losses and ensure faster recovery. While Odisha has already built shelter homes capable of withstanding winds clocking up to 280 kmph, it should take further steps to shore up its other critical infrastructure and protect its citizens. Finally, we must establish new city-level disaster authorities which focus on building climate resilience for vulnerable communities and preventing long-term displacement."

Apart from cyclones and floods, Odisha has also witnessed a four-fold increase in droughts in the last ten years. Its extreme drought hotspots include Angul, Gajapati, Kandhamal, and Sundergarh. Once irregular occurrences, droughts (or drought-like conditions) have affected more than half of the state's districts in recent decades. According to the CEEW analysis, even flood-prone regions like Angul, Cuttack, Dhenkanal, Gajapati, Kalahandi, and Nayagarh have witnessed a shift towards drought events in the past decade.

*The analysis is based on the methodology used in the CEEW study [‘Preparing India for Extreme Climate Events: Mapping Hotspots and Response Mechanisms’](#) released in December 2020.*

Contact: Riddhima Sethi (CEEW) – [riddhima.sethi@ceew.in](mailto:riddhima.sethi@ceew.in) / [mihir.shah@ceew.in](mailto:mihir.shah@ceew.in)

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