

## **15 districts in West Bengal vulnerable to extreme climate events: CEEW**

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

**Kolkata, 27 May 2021:** As many as 15 districts in West Bengal, which are home to nearly 72 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). Districts like Howrah, Kolkata, North 24 Parganas, Paschim Medinipur, and South 24 Parganas are hotspots for cyclones, which have increased five-fold in the state between 1970 and 2019. Storm surges have increased by the same rate during this period.

Extreme flood events have risen seven-fold and affect more than 7.08 million people in West Bengal each year, especially in hotspots like Birbhum, Cooch Behar, Hooghly, Malda, and Nadia. 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, in West Bengal, the mangrove forests of the Sundarbans delta have acted as shock absorbers against previous cyclones and are the perfect examples of nature-based solutions for climate resilience. Preserving them should remain a top priority for the state and central governments."

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. Cyclone Yaas forced the evacuation of more than 15 lakh people, ravaged the livelihoods of thousands, and flooded critical infrastructure located in low-lying areas, including hospitals. 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 should also establish new city-level disaster authorities which focus on building climate resilience for vulnerable communities and preventing long-term displacement. Coastal states like West Bengal should invest in climate-proofing their infrastructure, following standards that will ensure protection from the compounded impacts of cyclones and other extreme weather events. Also, Bengal should accelerate implementation of the National Cyclone Risk Mitigation Project, approved for the state in 2015, to avert losses and ensure faster recovery."

Apart from cyclones and floods, West Bengal has also witnessed a two-fold increase in droughts in the last ten years. Its extreme drought hotspots include Bankura, Ganjalghati, Hirbandh, and Purulia. Once irregular occurrences, droughts (or drought-like conditions) have affected more than 40 per

cent of the state's districts in recent decades. According to the CEEW analysis, even flood-prone regions like Bankura and Purulia 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)

### **About CEEW**

The Council on Energy, Environment and Water ([CEEW](#)) is one of Asia's leading not-for-profit policy research institutions. The Council uses data, integrated analysis, and strategic outreach to explain – and change – the use, reuse, and misuse of resources. It prides itself on the independence of its high-quality research, develops partnerships with public and private institutions, and engages with wider public. In 2021, CEEW once again featured extensively across ten categories in the 2020 Global Go To Think Tank Index Report. The Council has also been consistently ranked among the world's top climate change think tanks. Follow us on Twitter [@CEEWIndia](#) for the latest updates.