

LAYING THE GROUNDWORK

Session #1: Foundations of Early Warning Systems

Panelists emphasized integrating local knowledge and trust to improve early warning effectiveness, with sessions exploring multi-hazard challenges, community-driven initiatives, and innovations. Discussions centered around several core themes:

- **Global to local implementation:** Panelists highlighted the importance of moving from global commitments to local action. Collaboration among national governments, UN agencies, and partners like ITU and IFRC was deemed essential for scaling early warning systems at the country level. Erica from WMO and Loretta from UNDRR discussed the need for national consultations, mapping requirements, and funding to develop scalable, inclusive early warning solutions.
- **Reaching vulnerable regions:** A key focus was scaling early warning systems for marginalized and conflict-affected populations. Erica from WMO emphasized the need to address infrastructure and funding gaps in hydrological forecasting, while Loretta shared examples like the Philippines and Bangladesh, where local data integration and government mandates supported disaster resilience.
- **Community-based preparedness:** Vanessa from ITU underscored the role of mobile technology, particularly cell broadcasts, in reaching vulnerable communities with timely alerts. Jonathan from IFRC stressed strengthening community response systems through local infrastructure, training, and trust-building, ensuring that early warnings trigger effective action.
- **Inclusion and resilience:** Panelists also explored strategies to make early warning systems more inclusive, especially for gender, disability, and other marginalized groups. Loretta shared examples like India's accessible cyclone warnings, while Vanessa discussed leveraging AI and satellite technologies to improve communication in underserved areas. Jonathan highlighted the effectiveness of anticipatory action in Bangladesh, where early action protocols helped vulnerable groups during heatwaves.
- **Ensuring ground action:** One of the core challenges discussed was ensuring that early warnings lead to tangible actions. Panelists agreed that the message must be understandable, trusted, and actionable. They emphasized preparing communities in advance, adapting messages to local contexts, and understanding behavioral factors that influence decision-making. Vanessa and Jonathan stressed the importance of pre-agreed financing, local capacity, and smart investments to ensure that technology and early warnings translate into real-world outcomes.