

The Third Multi-Hazard Early Warning Conference (MHEWC-III)

Global Platform on Disaster Risk Reduction (GPDRR) 2022

23 – 24 May 2022, Bali, Indonesia

OUTCOME STATEMENT

More than 750 women and men, representatives of local, national, regional and international institutions, civil society organizations and experts convened at the Third Multi-Hazard Early Warning Conference (MHEWC-III). The Conference was convened under the aegis of the International Network for Multi-Hazard Early Warning Systems and 21 institutions¹, from both the public and private sector, contributed to its organization.

This is the sixth time since 1998^[2], that multi-hazard early warning conferences have taken place. These are key venues for exchanging on early warning science, policies and practices, to develop guidelines, frameworks and norms and assessing progress on early warning systems that enable anticipatory action.

Since 2017, the Early Warning Conferences have been held in the margins of the UN's Global Platforms for Disaster Risk Reduction (GP/DRR) - in recognition that effective early warning systems are an essential element of disaster risk reduction.

The Conference took place shortly following the declaration by UN Secretary-General Guterres that the UN will spearhead new action to ensure every person on Earth is protected by Early Warning Systems within five years. A plan, led by WMO, with many partners will be presented at UNFCCC COP27. It is expected to further accelerate the implementation of Sendai Target G, to substantially increase availability of and access to early warnings. The Conference provided the first opportunity to convene on this topic.

The Conference took stock of progress in the implementation of the Sendai Framework, shared knowledge and lessons learned and identified emerging trends. The participants identified a number of gaps and related needs and priorities:

1. Since 2015, 95 of the 120 countries reporting progress against Sendai Target G, indicated they had multi-hazard early warning systems in place. However, less than half of LDCs and one third of SIDS reported having a multi-hazard early warning system. In addition to the need to increase the number of countries reporting on Target G, the metrics for measuring early warning systems need to be strengthened, in particular regarding availability, access and readiness to act.
2. The accountability of Governments was stressed, including sub-national/local governments to ensure access to people-centered early warning systems, keeping the need for co-ownership in mind and enabling anticipatory early action through impact forecasting. Support for inclusive, enhanced and coherent governance mechanisms and cooperation is required along with the integration of early warning into disaster risk reduction planning and climate change adaptation strategies, within and across sectors.
3. The need for adequate hazard, exposure, vulnerability and impact data was referred to multiple times. 53% of countries that reported through the Sendai Framework Monitor indicate that they do not have accessible, understandable and usable disaster risk information that is fit-for-purpose. Data needs to be findable, accessible, interoperable, and reusable. Standardised processes for data collection, including disaggregated data for each sector/sub-sector, data sharing methods, and capacities and tools, for analysis, that overlay hazard prediction data with risk information are required in many countries to inform decision-making and

¹ Organizing Committee: Anticipation Hub, the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), the CREWS Secretariat, the European Commission Joint Research Centre (EC-JRC), the Food and Agriculture Organization (FAO) of the United Nations, the International Federation of Red Cross and Red Crescent Societies (IFRC), the International Network for Multi-Hazard Early Warning Systems (IN-MHEWS), the International Telecommunication Union (ITU), the Norwegian Refugee Council (NRC), OTT Hydromet, the Risk-informed Early Action Partnership (REAP) Secretariat, the United Nations Office for Disaster Risk Reduction (UNDRR), the United Nations Development Programme (UNDP), the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the United Nations Office for Outer Space Affairs Platform for Space-based Information for Disaster Management and Emergency Response (UNOOSA/UN-SPIDER), UN Women, United Nations Satellite Centre (UNOSAT)-UNITAR the World Food Programme (WFP), the World Health Organization (WHO), the World Meteorological Organization (WMO), and the Water Youth Network (WYN)

enabling impact-based warnings, in particular at the local level. Participants took note of the efforts by the space community to provide access to space-based data free of charge to contribute to improved monitoring of hazards and up-to-date exposure mapping.

4. Modern Information Communications Technology (ICTs) offer opportunities to improve and tailor early warning data and services that can facilitate preventive and anticipatory action. ICT and mobile data are also useful to support the enhancement and validation of risk and vulnerability data. However, challenges remain regarding access or capacity to use these technologies. Further efforts are required to raise awareness about the benefits of the use of novel ICTs and the common alerting protocol to reach those at risk with multiple types of messages and in different formats linking to National Emergency Telecommunication Plan (NETP).

5. Highlighting the necessity of public-private engagement, there was a strong commitment to better understand how to work with private sector actors, including local businesses, SMEs and social enterprises, and a strong recommendation to create space to facilitate transparent and open discussions to better understand each sectors' needs, perspectives and expectations, including putting the right policies in place and developing relevant models to ensure viable collaborations.

6. Participants, particularly from African countries, referred to the lack of robust observation networks. Observations are one of the key components for the establishment of early warning systems based on objective data. Participants recognized the Global Basic Observing Network (GBON) and the Global Ocean Observing Systems (GOOS) as meaningful structures to further enhance and expand observation systems. The Systematic Observations Financing Facility was presented and its aim to provide technical and financial support to sustain data generation and the international exchange of data in compliance with the GBON regulations. The recent WMO Data Policy supports the wider international exchange, including of observational ocean and climate data, ensuring that sustained observations are aligned with global technical standards that also meet the requirements and needs of a broad suite of users.

7. The ever-growing need for effective, inclusive and gender-responsive early warning systems and actions and its urgency, was reiterated. Without gender, age, disability and location data, any pre-emptive action will fail to be inclusive. "Leaving no one behind" requires that early warning systems must reach people at risk of displacement and displaced people, enabling them to take anticipatory action. At the same time, early warning systems, anticipatory action and impact-based forecasting should focus on avoiding displacement. Women's full, equal access to early warning information and leadership in early warning communication is crucial for improved early preparation and risk reduction during extreme weather events and health emergencies; enhanced community protection services and referral pathways; and supporting the realization of women's rights and gender equality.

8. Early warning systems remain most effective when the delivery of the warning takes into consideration local requirements and are people-centered. Ideally, they integrate local and indigenous knowledge systems to reduce and manage the multi-hazard risks and adapt to climate change impacts and events. Further, there is a need to better understand cascading risks in the design of early warning systems. A systems approach to understanding and managing the multifaceted nature of risk should be pursued. There is a need to better understand risks of ecosystems and explore nature-based solutions in the design of early warning systems.

9. Targeted development and humanitarian cooperation is essential to strengthen early warning systems, including financing to cover, in a balanced manner, all the elements of the early warning value cycle with a sufficient focus on the so-called "last mile", risk-informed, people-centered early warnings. Financing to scale, that is sustained, flexible, and enables innovative solutions, is required, including as part of efforts to avert, minimize and address loss and damage to climate change, as well as other complex geophysical cascading hazards and to further promote preventive measures and facilitate anticipatory action into reality.

10. Evidence of the value of early warning systems in reducing human, economic and infrastructure losses is critical for justifying investment. However, to target investment it is necessary to go further – to assess the sensitivity of warning value to the performance of each contributor to the production of the warning: including (but not limited to) the observing systems, prediction systems, decision support systems and communication

systems that together work to create and deliver the warning. There is no tool currently available to carry out such sensitivity analyses.

Next steps:

1. A Conference Report will be produced by the Organizing Team, within two months of the event, and shared with all participants.
2. The organizing team will bring the outcomes of the Conference to relevant sessions of the GPDRR and the Summary by its Co-Chairs.
3. The outcomes of the Conference also contributes to:
 - The UN Secretary-General plan for “early warning for all people within 5 years” to be presented at UNFCCC COP27, and the related special event that will be held on the margins of the UN General Assembly high-level week in late September 2022, to take stock of progress, provide a spotlight on outstanding gaps, and highlight key initiatives that can help to close the early warning capacity gap;
 - The ongoing midterm review of the Sendai Framework and the specific report on progress on Target G and the high-level meeting of the United Nations General Assembly on the midterm review of the Sendai Framework for Disaster Risk Reduction, to be held in New York on 18 and 19 May 2023;
 - Validating the Words into Action guidance on early warning systems, produced by UNDRR with many partners.
 - The United Nations Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action, “Water for Sustainable Development”, 2018–2028, to be held in New York from 22 to 24 March 2023;
 - The 2022 United Nations Oceans Conference, to be held in Lisbon from 27 June to 1 July 2022;
 - The UN Secretary-General’s recommendations for strengthened strategic foresight, preparedness for catastrophic risks, and anticipatory decision-making in his report on “Our Common Agenda” and the proposed Summit of the Future in September 2023;
 - The Fourth UN conference for SIDS to be held in 2024, and its regional review meetings to be held in 2023, to further strengthen the capacity of SIDS to develop early warning systems as part of their efforts to achieve the 2030 agenda and the implementation of the SAMOA Pathway.
4. Participants will continue to advocate for increased support and investments in multi-hazard early warning and early action and engage every country in the world through the United Nations and international and regional bodies to adopt coherent policies of people-centered, gender-responsive and risk-informed early warning systems that lead to early action.

Acknowledgements

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24th day of May 2022 at the Third Multi-Hazard Early Warning Conference, Bali, Indonesia.