Early Warnings for All Overview





WORLD METEOROLOGICAL ORGANIZATION









EARLY WARNINGS for

Overview

"Today I announce the United Nations will spearhead new action to ensure every person on Earth is protected by early warning systems within five years."

António Guterres, Secretary-General of the United Nations, 23rd March 2022



The Sharm el-Sheikh Implementation Plan adopted by the COP-27 emphasized the need to address existing gaps in the global climate observing system, particularly in developing countries, and recognized that one third of the world, including sixty per cent of Africa, does not have access to early warning and climate information services.

It welcomed and reiterated the UN SG's call to protect everyone on Earth through universal coverage of early warning systems against extreme weather and climate change within the next five



EW4All Executive Action Plan 2023-2027

- Launched on 7 November at COP 27
- EW4All Executive Action Plan is available in the WMO online library
- High visibility and political support
- Builds from and aligns with WMO and other stakeholders' foundational elements already in place to pursue the early warning goal



WMO, 2022



Early Warnings for All: Structure & Objectives

Disaster risk knowledge

Systematically collect data and undertake risk assessments

- Are the hazards and the vulnerabilities well known by the communities?
- What are the patterns and trends in these factors?
- Are risk maps and data widely available? ٠



Pillar 4



Detection, observations, monitoring, analysis and forecasting of hazards

Develop hazard monitoring and early warning services

- Are the right parameters being monitored?
- Is there a sound scientific basis for making forecasts?
- Can accurate and timely warnings be generated?

Preparedness and response capabilities

Build national and community response capabilities

- Are response plans up to date and tested?
- Are local capacities and knowledge made use of?
- Are people preapred and ready to react to warnings?



Warning dissemination and communication

Communicate risk information and early warnings

- Do warnings reach all of those at risk?
- Are the risks and warnings understood?
- Is the warning information clear and usable?

Pillar 3

Early Warnings for All: Partners





Pillar 2





Pillar 3



Pillar 4



Led by



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IFRC

Led by



Risk-informed Early Action Partnership

unicef





REAP

Food and Agriculture Organization of the United Nations





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IOM • OIM



Microsoft

Systematic Observations Financing Facil





GSMA[®]



and climate data for

GROUP ON EARTH OBSERVATIONS



Programmatic Approach: Global & Regional Level

Global Level

- High-level Executive Action Plan
- Advisory Panel for EW4All initiative •
- Global inter-pillar coordination group (ITCG): Programmatic planning, implementation strategy, and tools to support countries
- **M&E Framework**: Theory of Change, maturity index, dashboard on country progress, annual report

Regional Level

- Building on existing mechanisms, and regional inter-pillar coordination through WMO, UNDRR, ITU, and IFRC.
- Africa EW4All Roadmap, in collaboration with AU

Country Level

National coordination, led by relevant authorities, UN Resident Coordinator/Development Coordination Office, multi-stakeholder and inclusive







- FCCC/PA/CMA/2023/L.1 Establishment of a Loss and Damage, Section III Para 21 "Initiatives such as Early Warnings for All, Climate Risk and Early Warning Systems, the Systematic Observations Financing Facility and the Global Shield against Climate Risks are welcome, and relevant actors are encouraged to increase their support for activities that enhance response to loss and damage"
- FCCC/PA/CMA/2023/L.17 First global stocktake Section II Collective progress towards achieving Paris Agreement; B. Adaptation Para # 50 "Recalls the United Nations Secretary-General's call made on World Meteorological Day on 23 March 2022 to protect everyone on Earth through universal coverage of early warning systems against extreme weather and climate change by 2027 and invites development partners, international financial institutions and the operating entities of the Financial Mechanism to provide support for implementation of the Early Warnings for All initiative"



Outcomes from the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (COP28) United Arab Emirates, 30 November to 12 December 2023 cont...



FCCC/PA/CMA/2023/L.17 First global stocktake Section II Collective progress towards achieving Paris Agreement; B. Adaptation Para # 64 Global Goal on Adaptation "(a) Impact, vulnerability and risk assessment: by 2030 all Parties have conducted up-to-date assessments of climate hazards, climate change impacts and exposure to risks and vulnerabilities and have used the outcomes of these assessments to inform their formulation of national adaptation plans, policy instruments, and planning processes and/or strategies, and <u>by 2027 all Parties have established multi-hazard early warning systems, climate information services for risk reduction and systematic observation to support improved climate-related data, information and services;"</u>





Country Implementation

Overview

Joint roll-out activities

- Multi-stakeholder consultation workshop
- Focus on strengthening coordination across sectors and scales
- Identification of immediate technical support requirements
- National roadmap and financing strategies as needed
- Initial pillar implementation and capacity-building
- Common monitoring framework (30+)
- Country-led and defined content



EW4All: Country Rollout Schedule

14 / 30 completed

18/30 on track

04 - 05 JUL29 – 30 AUG 30 AUG - 01 SEP 14 – 15 SEP 21 – 22 SEP 21 – 22 SEP **04 OCT** 1 – 2 NOV 15 – 16 NOV **15 – 17 NOV** 17 – 18 NOV 20 – 22 NOV 20 – 23 NOV 29 – 30 NOV 12 – 13 DEC 12 - 14 DEC**19 – 20 DEC** 21 – 22 DEC

Maldives Tajikistan **Ethiopia** Madagascar Laos Nepal Cambodia **Barbados** Somalia Uganda Bangladesh South Sudan Mozambique Haiti Antigua & Barbuda Ethiopia Mauritius Burundi

National workshop and gap analysis National workshop and gap analysis National workshop and launch of W@H National workshop and gap analysis **National workshop National workshop National workshop and gap analysis** National workshop and gap analysis **National workshop** National workshop and launch of W@H **National workshop** National workshop and launch of W@H **National workshop** National workshop and gap analysis National workshop and gap analysis Pillar 1 workshop National workshop National workshop & Pillar 1 workshop

EW4ALL NATIONAL WORKSHOP

CURRENT STATUS of EWS

Government-led discussion on current state of EWS

LINK & ALIGNMENT

Consolidation of key stakeholder engagements & linkages with existing EWS projects

PRIORITY AREAS

Introduction to EW4All and calibration with national priority areas on EWS **GAP ANALYSIS**

Application of Minimum Core Capability Checklist for all four Pillars of EWS

NATIONAL STAKEHOLDER COORDINATION

Affirm or establish NSCM to to drive multi-stakeholder efforts to implement EWS

NATIONAL ROADMAP

Leverage existing EWS strategy or develop a multiyear, multi-stakeholder EW4All national action plan



WMO's contribution to EW4All

Overview

WMO EW4All resolutions/decisions

- <u>Resolution 3 (EC-75)</u> United Nations Global Early Warning/Adaptation Initiative (2022),
- <u>Resolution 2 (SERCOM-2)</u> UN Global Early Warnings/Adaptation Initiative (2022),
- <u>Decision 4(2)/1 (EC-76)</u> UN Early Warnings for All Initiative Follow-up (2023),
- <u>Resolution 4 (Cg-19)</u> United Nations Early Warnings for All initiative (2023),
- **<u>Resolution 1 (EC-77)</u>** WMO Contribution to the Early Warnings for All initiative (2024)



EW4AII – WMO Congress update

- Cg-19 United Nations Early Warnings for All initiative
 - Accorded the highest priority in the WMO Strategic Plan 2024-2027
 - EC oversees EW4All progress on WMO's contribution to the EW4All Initiative as a matter of highest priority and to provide advice and direction to ensure there is coordination and consolidation of all relevant WMO activities under the EW4All umbrella;
- Technical Coordination Committee
 - Coordinate WMO's contribution to EW4All
 - 17-19 Oct, 22 Nov, and 15 Dec meetings
 - Refinement of the identification of priority hazards by the Regional Associations
 - Consolidated list of priority activities by the Technical Commissions
 - Consolidation of the materials into the Implementation Plan



EW4AII – Congress update (cont.)

- Technical Commissions, RB, CDP, and the HCP
 - Identify high priority activities to address the urgent needs of Members in building effective multi-hazard early warning systems falling within their terms of reference and to incorporate them into their respective work plans for the next financial period;
 - Identify, catalogue, and integrate priority emerging hazards, such as those due to changes in the cryosphere, in support of the development of necessary monitoring and early warning systems for affected Members;
 - Implement the priority activities in a collaborative, coordinated, and synergetic manner;
 - To regularly report progress to the EC for its guidance.



EW4AII – Congress update (cont.)

• The regional associations:

(a) With the assistance of the regional offices to ensure that focused actions on the implementation of the EW4All falling within their terms of reference are prioritized in their respective work plans for the next financial period; and
(b) To regularly report progress to the EC for its guidance;

• The Hydrological Coordination Panel:

(a) To ensure that the outputs of the WMO Plan of Action for Hydrology, which contribute to the EW4ALL, are prioritized for the next financial period; and(b) To regularly report progress to the EC for its guidance;







WMO Approach and Commitment

- WMO Congress, held 22 May to 2 June in Geneva, Switzerland, Accorded EW4All the highest priority in the WMO Strategic Plan 2024-2027
- Rapid Assessment for Members launched during WMO Congress
- WMO Technical Commissions are providing structured support to EW4All initiative through supporting frameworks
- Where possible, the EW4All national consultations are twinned with extrabudgetary resources through CREWS, SOFF, GCF to fast-track resourcing to meet national priorities

Approach to identify priority hazards

- Short-term activities of the WMO technical commissions will focus on improving observations, forecast, and warning preparations for priority hazards
- WMO Regional Association VI: Europe identified heatwave, drought/dry spell, floods, extra-tropical storms and cold waves as priority hazards





Priority hazards approach

- Priority hazard approach reflects on the ambition to support country level implementation
- Identified priority hazards are to be used to prioritize Technical Commissions' activities, including:
 - Develop relevant guidance and training material;
 - Strengthen and establish support under the framework of WIPPS;
 - Develop and consolidate technical regulations and other guidance materials related to early warning services components
- <u>Further development of nomenclature of emerging hazard types</u>, such as those due to changes in the cryosphere, in the framework of the Catalogue of Hazardous Events



Early Warnings Early









WMO Sand and Dust Storms Warning advisory and Assessment System (SDS-WAS)

Godzilla, June 2020



International coordination of research for weather and climate

Identification and assessment of SDS impacts

Promoting the use of current available SDS products

Building capacity and facilitate access to the available services

Dissemination and awareness

https://community.wmo.int/en/activity-areas/gaw/science-for-services/sds-was

WMO SDS-WAS Structure: Regional Nodes



Dust Forecast (RSMC-ASDF)



Daily Dust Products

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http://dust.aemet.es @dust_barcelona

This interactive visualisation tool allows you to access different dust forecasts and dust-related observational products. To find out how to interact with it, please watch the video Tutorial or download the User Guide.

Promoting best practices and guidelines to be used by the international community

Probabilistic forecast



WMO launched in 2007 the international research programme on Sand and Dust Storms, the SDS-WAS







https://community.wmo.int/en/activity-areas/gaw/science-for-services/sds-was



WMO SDS-WAS Regional Center for Northern Africa, Middle East and Europe, conducting research and providing operational products



http://dust.aemet.es @dust_barcelona

Dust Products

EXPLORE ALL

(4) WMO

The WMO Barcelona Dust Regional Center offers a wide range of dust products that serve the need for detailed dust information on a regional scale.

Daily Dust Products

Dust forecasts and dust-related observational products

EXPLORE PRODUCT

Dust Products Catalogue Inventory of available dust observational and modelling products



Access and download the numerical data of dust forecasts

EXPLORE PRODUCT