

The DRR-EWS Data Multi-verse

Tracking Progress of Early Warning Systems in Sendai Framework Monitor and Early Warning for All Dashboard

4th Global Expert Forum for Producers and Users of Disaster-related Statistics

The role of disaster-related statistics in stimulating the development of early warning systems (EWS)



UNDRR

UN Office for Disaster Risk Reduction



SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030

Sendai Framework Target G tracks progress of Early Warning Systems

Global Target G: Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

G-1 (Compound)	Number of countries that have multi-hazard early warning systems.
G-2	Number of countries that have multi-hazard monitoring and forecasting systems.
G-3	Number of people per 100,000 that are covered by early warning information through local governments or through national dissemination mechanisms.
G-4	Percentage of local governments having a plan to act on early warnings.
G-5	Number of countries that have accessible, understandable, usable and relevant disaster risk information and assessment available to the people at the national and local levels.
G-6	Percentage of population exposed to or at risk from disasters protected through pre-emptive evacuation following early warning.

EW4ALL Four Pillars and Sendai Framework Target G

Pillar 1 lead by UNDRR

Pillar 2 lead by WMO

SFM
G-5



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?



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?

SFM
G-2

SFM
G-4



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 prepared 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?

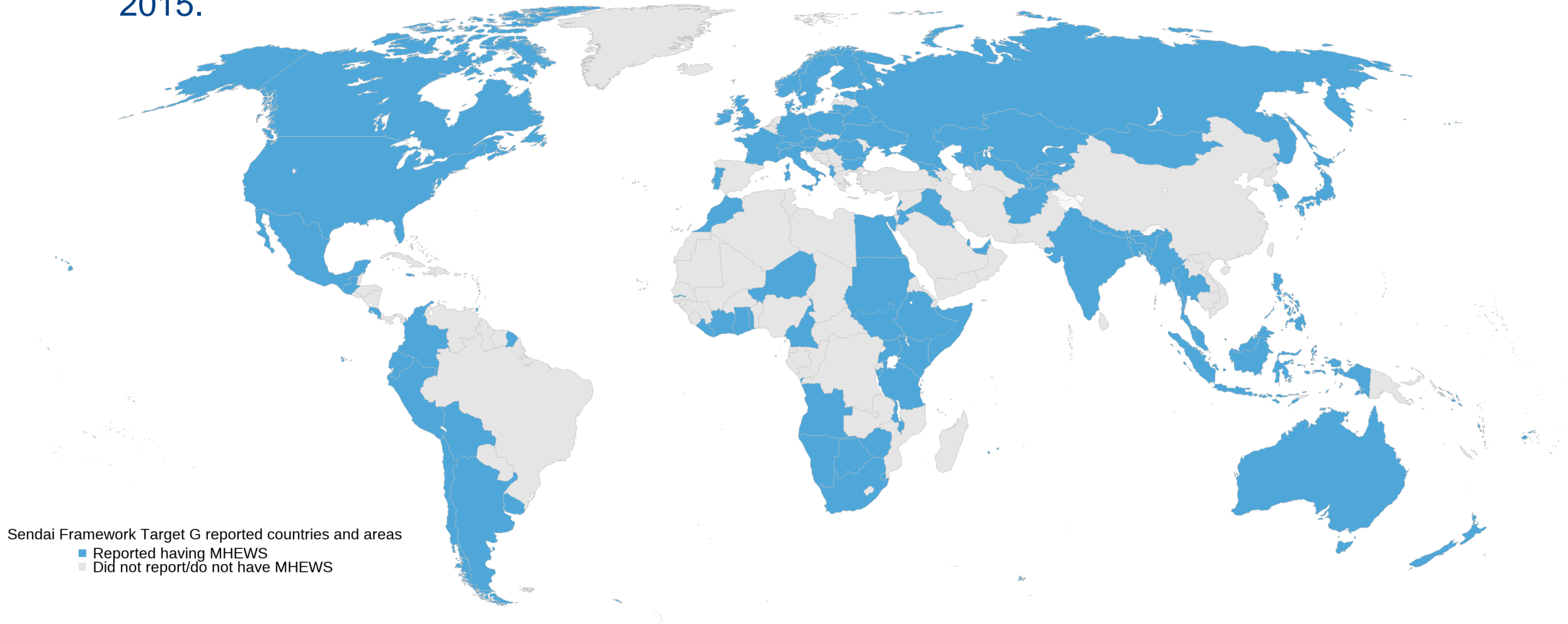
SFM
G-3

Pillar 4 lead by IFRC

Pillar 3 lead by ITU

Progress of Global EWS

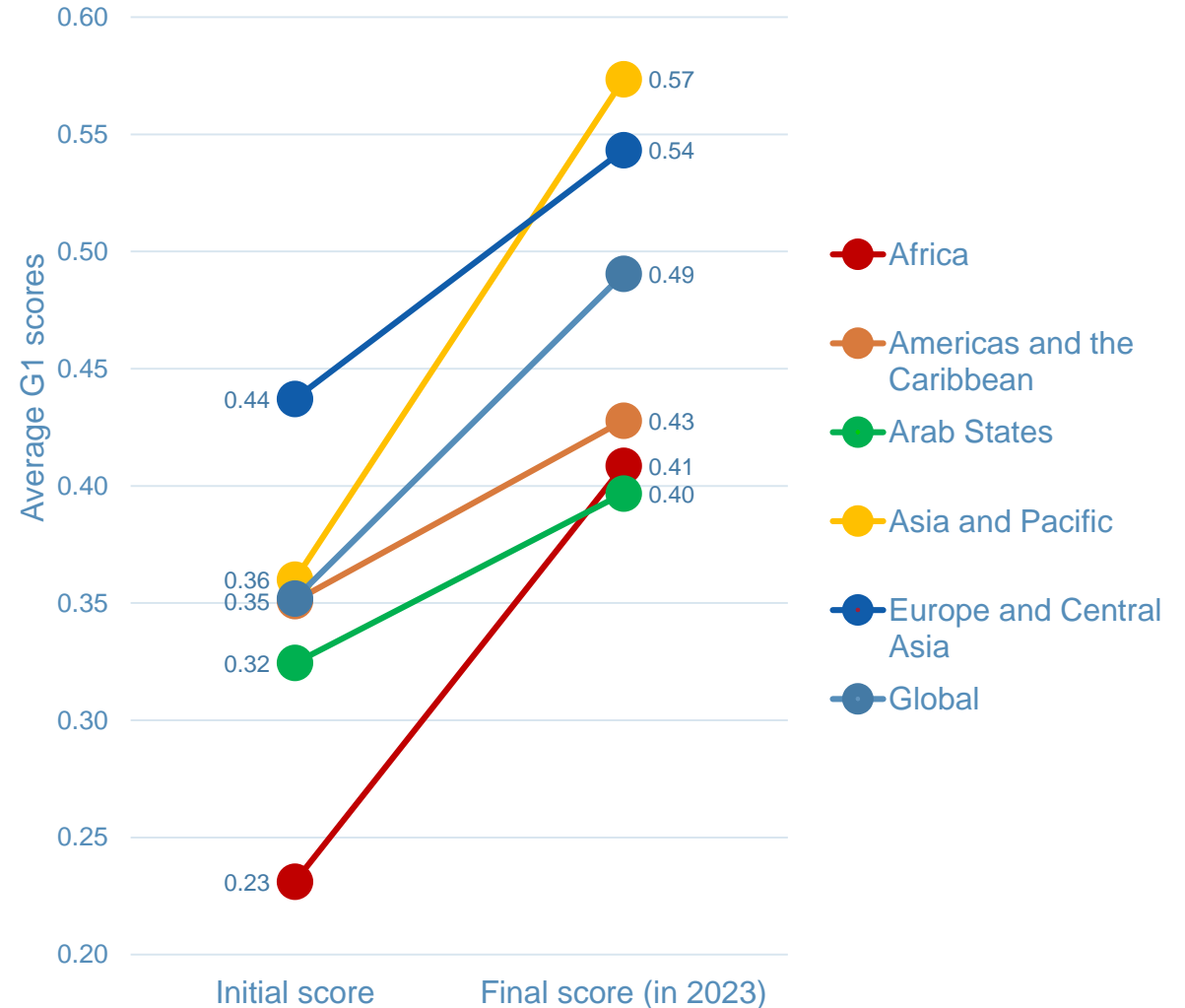
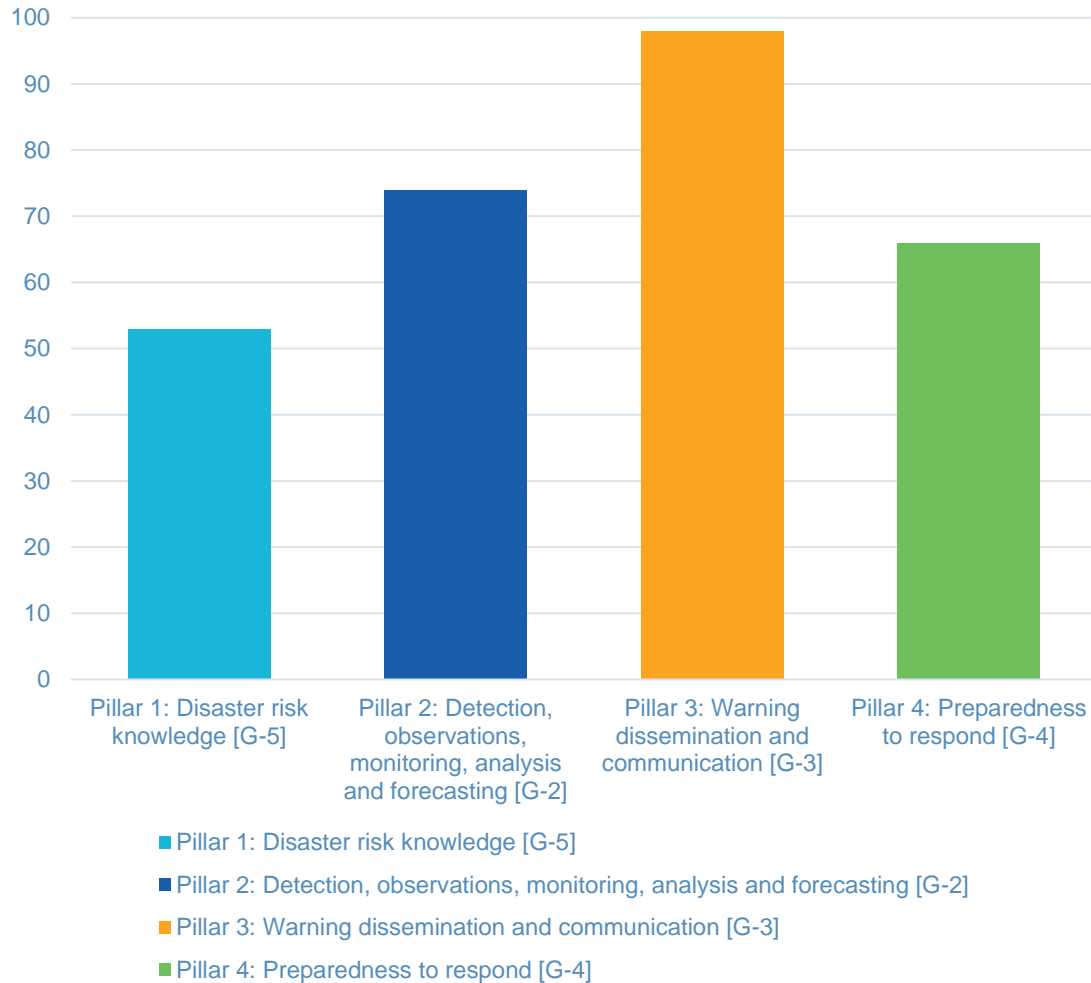
- **108 countries** have reported the existence of MHEWS. This number doubled since 2015.



Sendai Framework Target G reported countries and areas

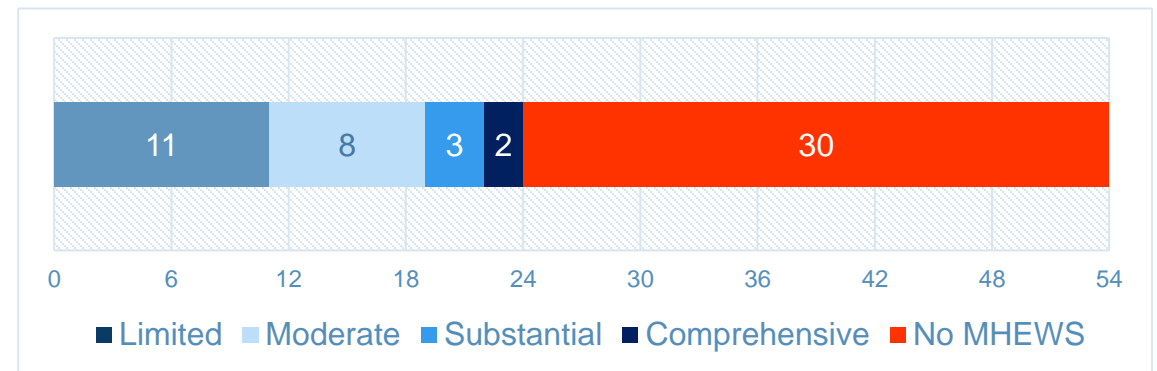
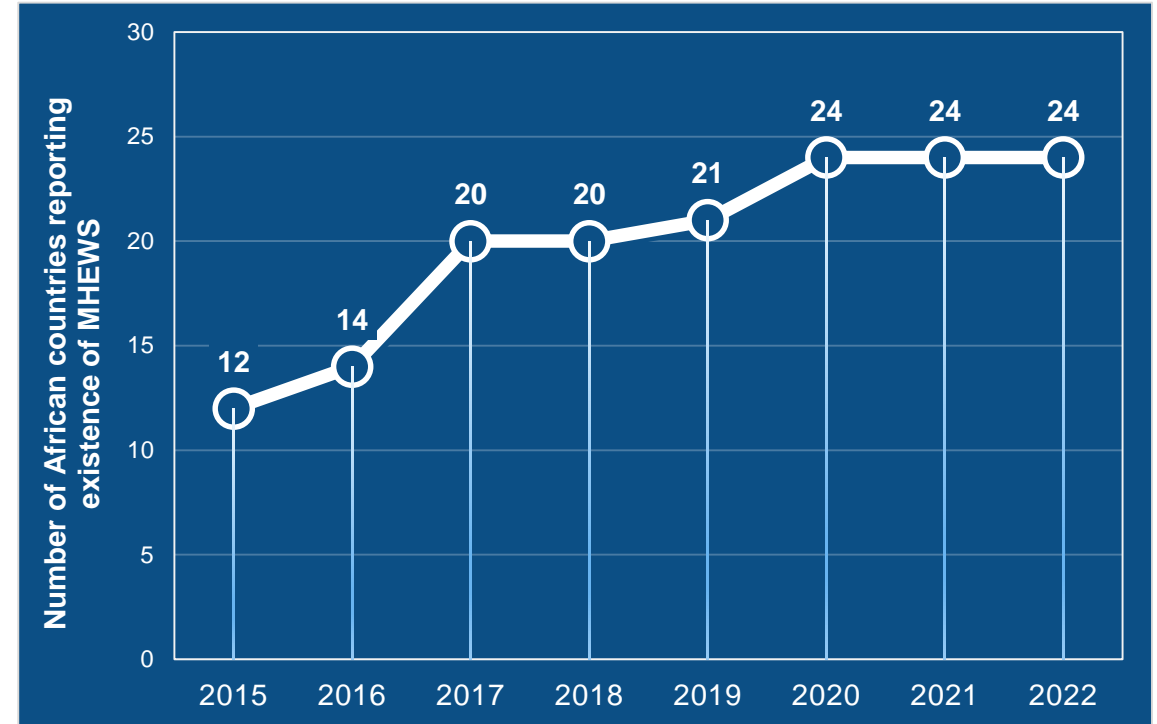
- Reported having MHEWS
- Did not report/do not have MHEWS

Progress remains uneven, among EW4ALL pillars and regions



Early Warning Systems in Africa

- **24** countries have reported the existence of MHEWS, representing **44%** of African countries.
- This represents a **doubling** of the number of countries reporting from 2015, when only 12 African countries reporting having MHEWS.
- Among which, **75%** of the countries has self-assessed to have limited to moderate MHEWS coverage, **25%** of the countries substantial to comprehensive coverage.
- There are still 30 countries, more than half, not reporting on MHEWS.



Monitoring at three levels

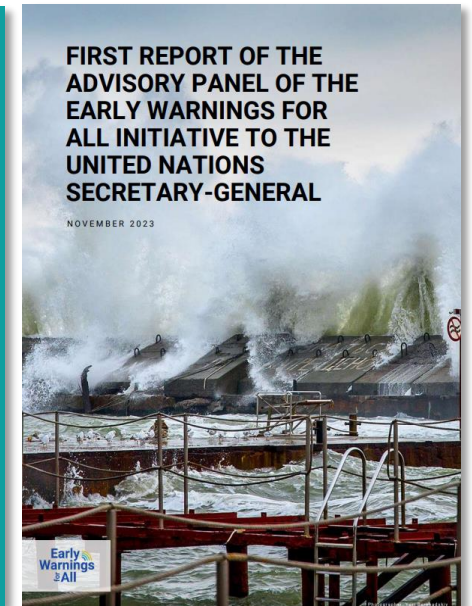
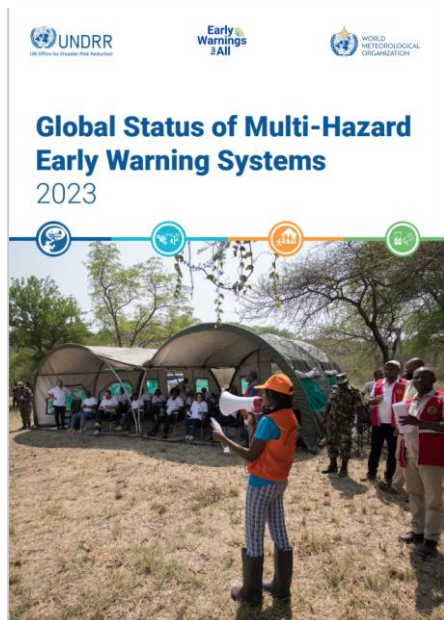
	MEASURED THROUGH:	SHARING MECHANISM:
GLOBAL	Sendai Framework Target G	<ul style="list-style-type: none"> → Sendai Framework Monitor (primary) → Reflected in the EW4All Dashboard
NATIONAL	MHEWS Maturity Index <ul style="list-style-type: none"> → Capacity → Effectiveness 	<ul style="list-style-type: none"> → Under development → To be reflected in the EW4All Dashboard
INITIATIVE IMPLEMENTATION	EW4All M&E Framework: <ul style="list-style-type: none"> - Progress (outputs) - Success (outcomes) 	To be reflected in the EW4All Dashboard



Report Launches November 2024

Global Status Report of Multi-Hazard Early Warning Systems, 2022-2024

UN Secretary-General's Early Warnings for All Initiative – Second Annual Summary Report by the Advisory Panel



2024 Report Coming Next Month!

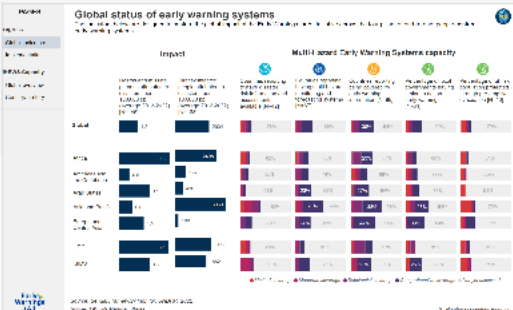
EW4All Dashboard



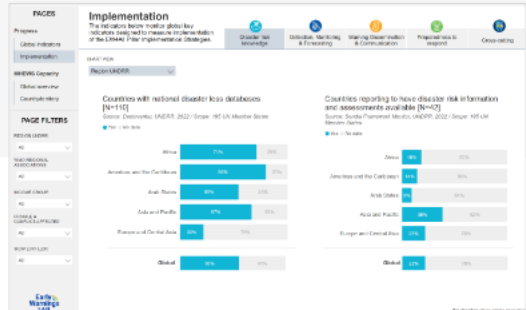
- The Early Warnings for All Initiative dashboard aims at tracking progress, informing decision-making and measuring success as key elements for achieving its five-year goal of the Early Warnings for All:
- To ensure that all people on Earth are covered by early warning systems by 2027



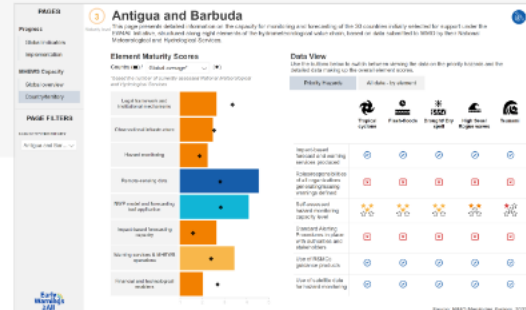
Early Warnings For All



Global indicators



Implementation indicators



MHEWS Country Capacity

Global status of early warning systems

The indicators below are designed to capture the global impact of the Early Warnings for All Initiative across the four pillars of end-to-end, people-centred early warning systems.



Impact

Deaths and missing persons attributed to disasters, per 100,000 ppl. (average 2014-2023)

Directly affected people attributed to disasters, per 100,000 ppl. (average 2014-2023)

Multi-Hazard Early Warning Systems capacity

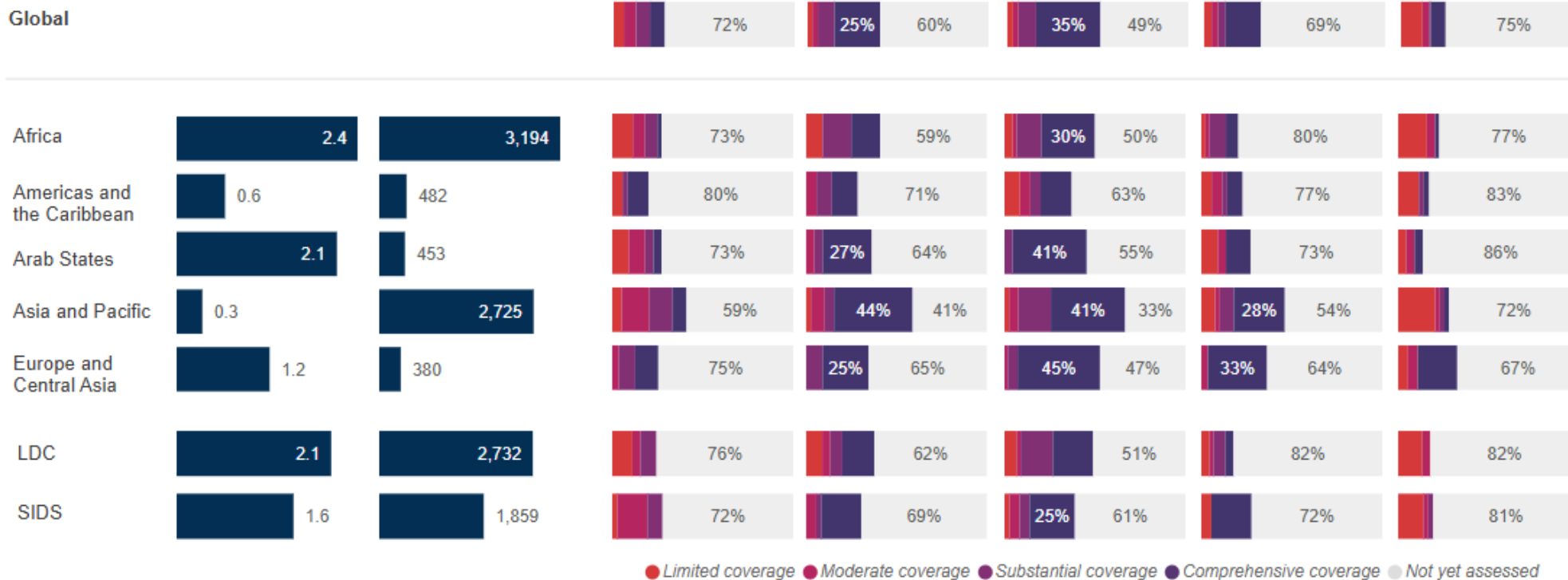
Countries reporting to have disaster risk information and assessments available [N=55]

Countries reporting having multi-hazard monitoring and forecasting systems [N=78]

Countries reporting being covered by early warning information [N=100]

Percentage of local governments having a plan to act on early warnings [N=63]

Percentage of at-risk population protected through pre-emptive evacuation [N=49]



Source: Sendai Framework Monitor, UNDRR, 2023
Scope: 195 UN Member and Observer States

[N= Number of countries reporting]



PAGES

Progress

Global indicators

Implementation

MHEWS Capacity

Global overview

Country/territory

PAGE FILTERS

REGION UNDRR

All

WMO REGIONAL ASSOCIATIONS

All

INCOME GROUP

All

FRAGILE & CONFLICT-AFFECTED

All

SIDS/ LDC/ LLDC

All

Implementation

The indicators below monitor global key indicators designed to measure implementation of the EW4All Pillar Implementation Strategies.



Disaster risk knowledge



Detection, Monitoring & Forecasting



Warning Dissemination & Communication



Preparedness to respond



Cross-cutting



Roll-out

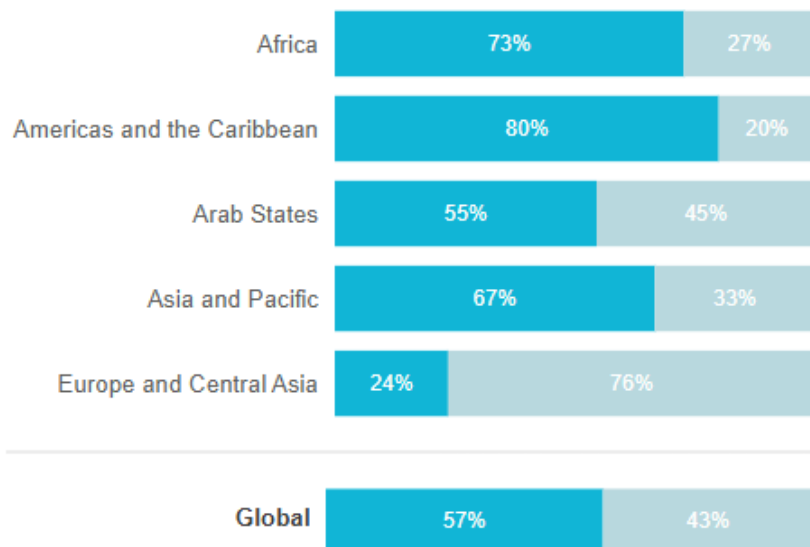
CHART VIEW

Region UNDRR

Countries with national disaster loss databases [N=111]

Source: DesInventar, UNDRR, 2023 / Scope: 195 UN Member and Observer States

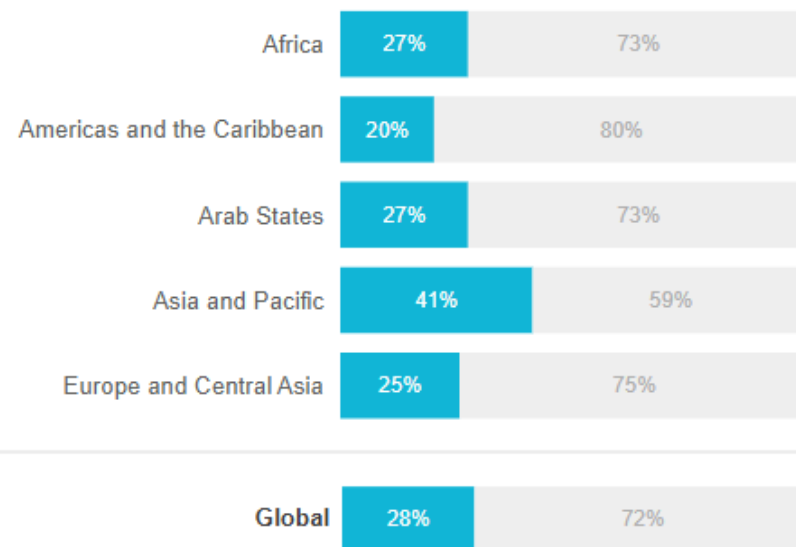
● Yes ● No



Countries reporting to have disaster risk information and assessments available [N=55]

Source: Sendai Framework Monitor, UNDRR, 2023 / Scope: 195 UN Member and Observer States

● Yes ● No data





PAGES

Progress

- Global indicators
- Implementation

MHEWS Capacity

- Global overview
- Country/territory

PAGE FILTERS

REGION UNDRR

All

WMO REGIONAL ASSOCIATIONS

All

INCOME GROUP

All

FRAGILE & CONFLICT-AFFECTED

All

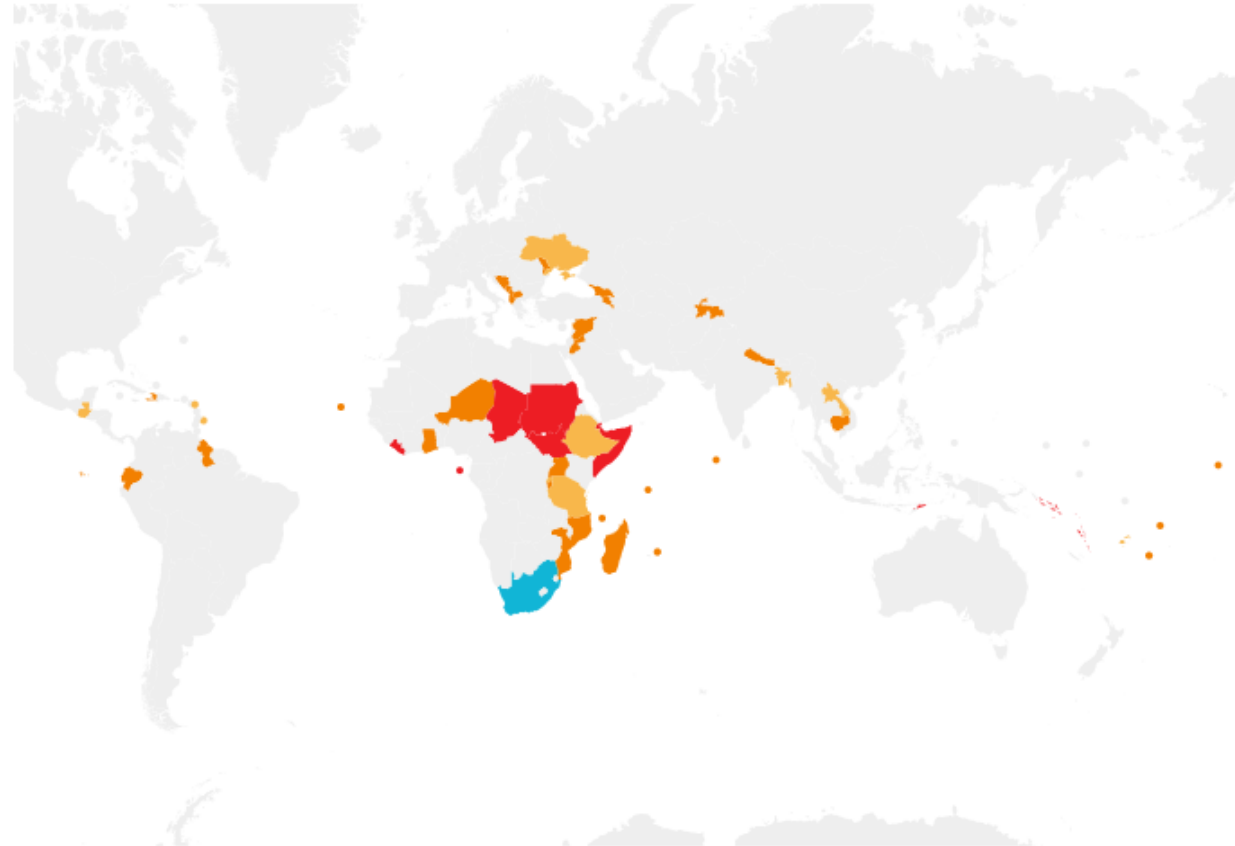
SIDS/ LDC/ LLDC

All

Hazard monitoring and forecasting capacity

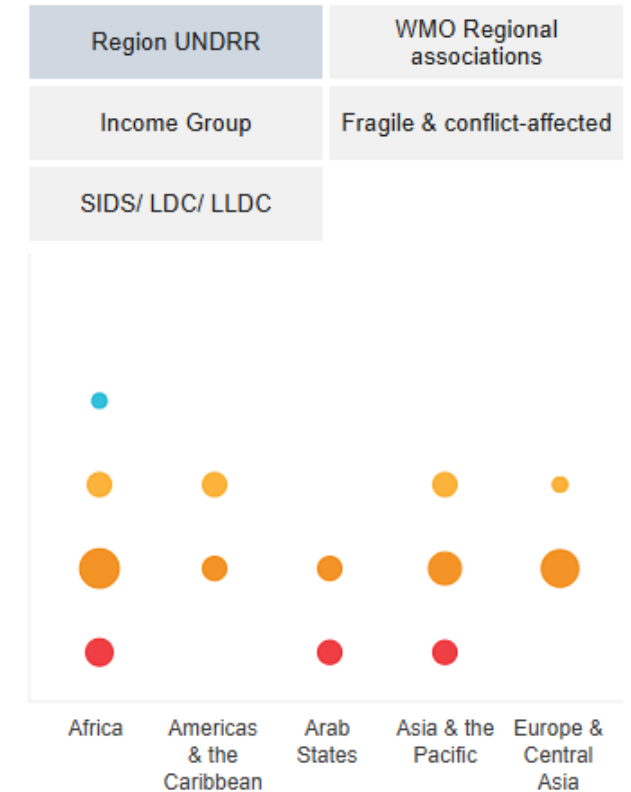
This page presents an overview of the capacity for hazard monitoring and forecasting of the 30 countries initially selected for support under the Early Warnings for All Initiative, based on detailed data submitted to WMO by their National Meteorological and Hydrological Services. All underlying data is available in the [Country/territory page](#) of this report.

Overall capacity level ● Less than basic ● Basic ● Medium ● Full ● Advanced



Capacity level distribution

Use the buttons below to show the number of countries at each capacity level in the selected classification



The designations employed in this website are in conformity with United Nations practice. The presentation of material therein does not imply the expression of any opinion whatsoever on the part of WMO concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its borders. The depiction and use of boundaries, geographic names and related data shown on maps and included in lists, tables, documents, and databases on this website are not warranted to be error free nor do they necessarily imply official endorsement or acceptance by the WMO.





PAGES

Progress

Global indicators

Implementation

MHEWS Capacity

Global overview

Country/territory

PAGE FILTERS

COUNTRY/TERRITORY

Ethiopia

3

Maturity level

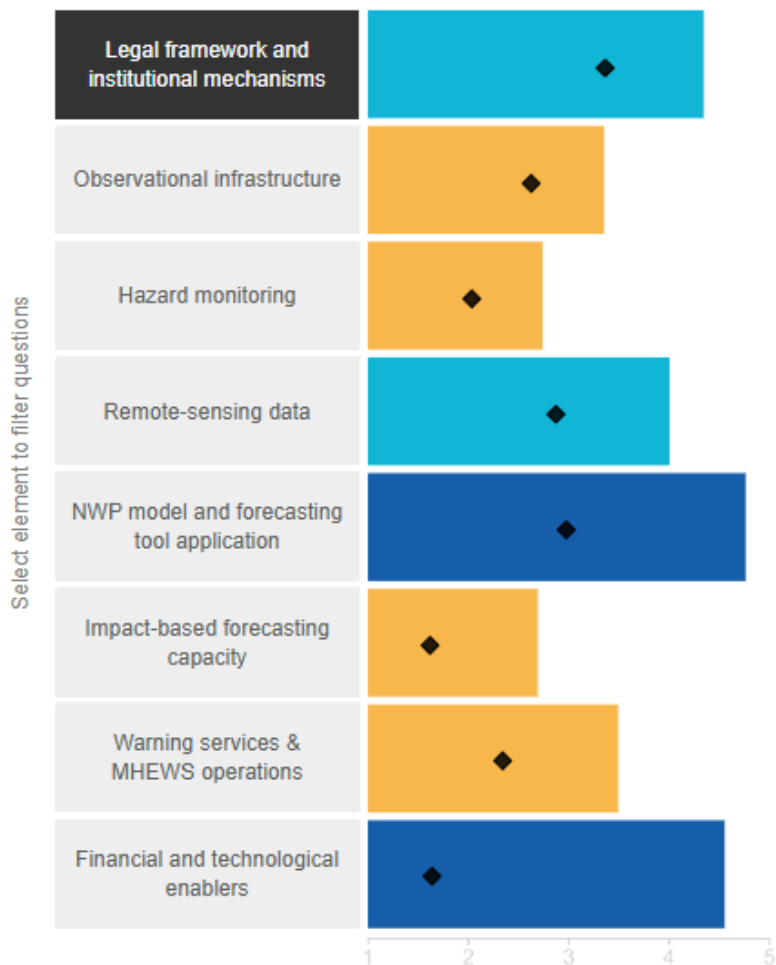
Ethiopia

This page presents detailed information on the capacity for monitoring and forecasting of the 30 countries initially selected for support under the EW4All Initiative, structured along eight elements of the hydrometeorological value chain, based on data submitted to WMO by their National Meteorological and Hydrological Services.

Element Maturity Scores

Country (■) / Global average* (◆)

*Based the number of currently assessed National Meteorological and Hydrological Services



Select element to filter questions

Data View

Use the buttons below to switch between viewing the data on the priority hazards and the detailed data making up the overall element scores.

Priority Hazards

All data - by element

Legal framework and institutional mechanisms

Full

Data point	Value
Type of legislative act covering MHEWS	Other
Title of the MHEWS legislative act	Multi-Hazard Early Warning Strategy (approved by Parliament)
NMHS involved in national DRR coordination platform	Yes
National DRR coordination platform in place	Yes
Roles/responsibilities of all organizations generating/issuing warnings defined: Hazard 1	Yes
Roles/responsibilities of all organizations generating/issuing warnings defined: Hazard 2	Yes
Roles/responsibilities of all organizations generating/issuing warnings defined: Hazard 3	Yes
Roles/responsibilities of all organizations generating/issuing warnings defined: Hazard 4	Yes
Roles/responsibilities of all organizations generating/issuing warnings defined: Hazard 5	Yes
NMHS officially recognized as national alerting authority: Hazard 1	Yes
NMHS officially recognized as national alerting authority: Hazard 2	Yes



Thank you!

<https://earlywarningsforall.org/site/early-warnings-all/early-warnings-all-dashboard>

<https://sendaimonitor.undrr.org/>