

Sendai Framework for Disaster Risk Reduction

Indicators: Development, Operationalization and Reporting

Session 1 – Existing indicator processes: Lessons learned from their development, usage and reporting experiences

Workshop under the UAE – Belém work programme on indicators, 15-17 May 2024, Thimphu



UNDRR

UN Office for Disaster Risk Reduction

SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030

SEDAI FRAMEWORK

FOR DISASTER RISK REDUCTION 2015-2030

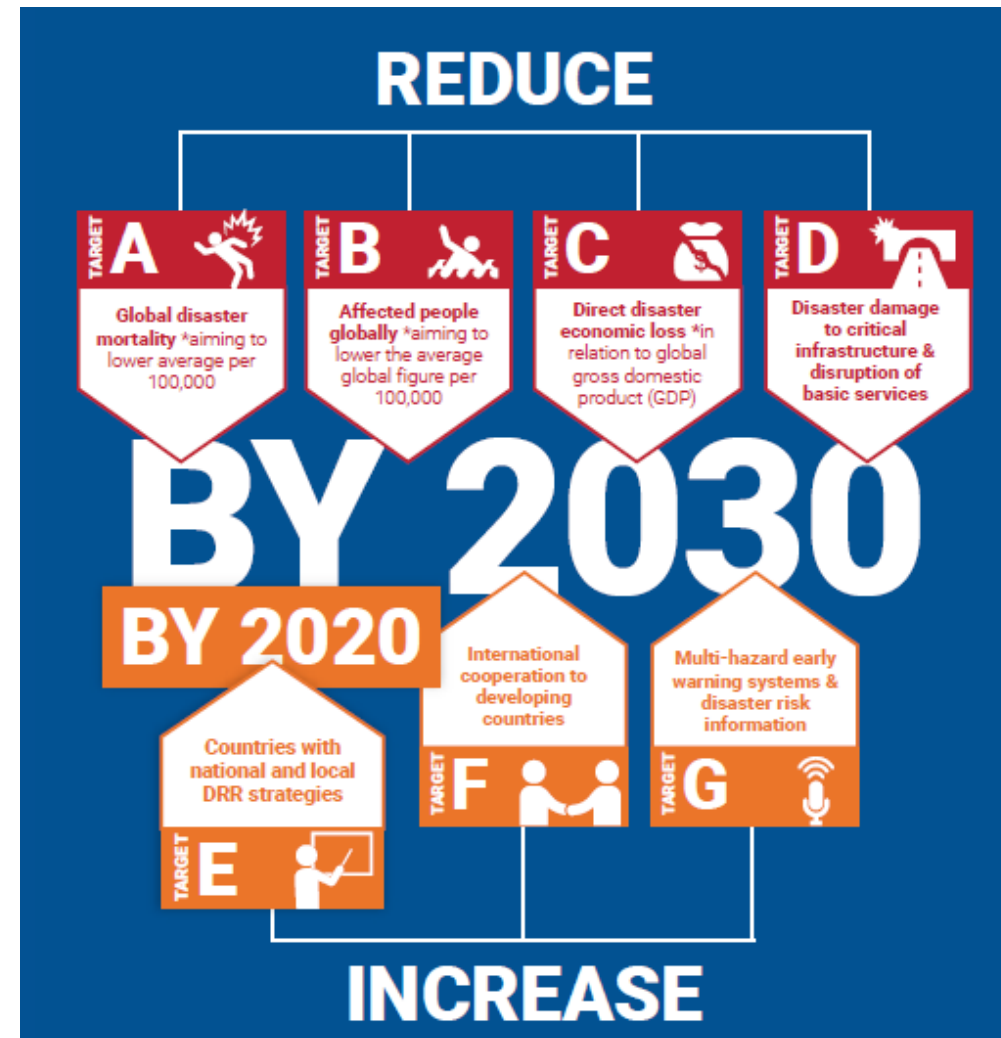
1 GOAL



4 PRIORITIES FOR ACTION



7 TARGETS



38 INDICATORS

- Focus on resilience: Progress in risk reduction measured against losses and damages
- Mix of individual and composite indicators

15 indicators can be directly mapped to GGA targets

Development of the indicators

Open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction (OIEWG) --- (A/RES/69/284 - June 2015)

- Comprised of **experts nominated by States**, for the development of a set of possible indicators and terminology to measure global progress in the implementation of Sendai Framework
- Working in **coherence** with the work of the **Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs)**.
- **Consultations:**
 - Expert Meeting to prepare background paper for the **Open-ended Intergovernmental Working Group (OIEWG)** based on UNISDR indicator proposals: 27-29 July, 2015
 - **Three formal sessions** [September 2015, February 2016, and November 2016]
 - **Informal consultations of the Chair:** [June and October, 2016]
- Supported by **technical papers and non-papers** from the Secretariat produced at the request of Member States – addressing critical issues, including feasibility, computation methodology, data availability etc.

Endorsement of the Sendai Framework indicators

- OIEWG recommendations in report A/71/644, November 2016
- UNGA endorses OIEWG report in A/RES/71/276, February 2017



United Nations A/71/644

 **General Assembly**

Distr.: General
1 December 2016
Original: English

Seventy-first session
Agenda item 19 (c)
Sustainable development: disaster risk reduction

Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction

Note by the Secretary-General

The Secretary-General has the honour to transmit herewith the report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction established by the General Assembly in its resolution 69/284 for the development of a set of possible indicators to measure global progress in the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, coherent with the work of the Inter-Agency and Expert

Salient features of the indicators

■ Official reporting

- All data and information as provided by the UN Member States: aggregated for global reporting

■ Universal applicability

- Applicable in all contexts (geographic and socioeconomic)
- Temporal comparison

■ Quantified

- Mix of composite and individual quantitative indicators; Indexing based on scores
- Standardized: The reduction of disaster losses is assessed relative to the size of a country's population and economy
- International benchmarking of progress relative to a quantitative baseline 2005-2015 (Targets A & B)

■ Data and methodological standards - balance between precision and practicality

- Common taxonomy and definitions
- Minimum standards and metadata (with flexibility to governments to enhance further)
- Desirable disaggregation (sex, income, hazard, location, ..) and data requirements
- Methodologies for the measurement of indicators and the processing of statistical data with technical partners.

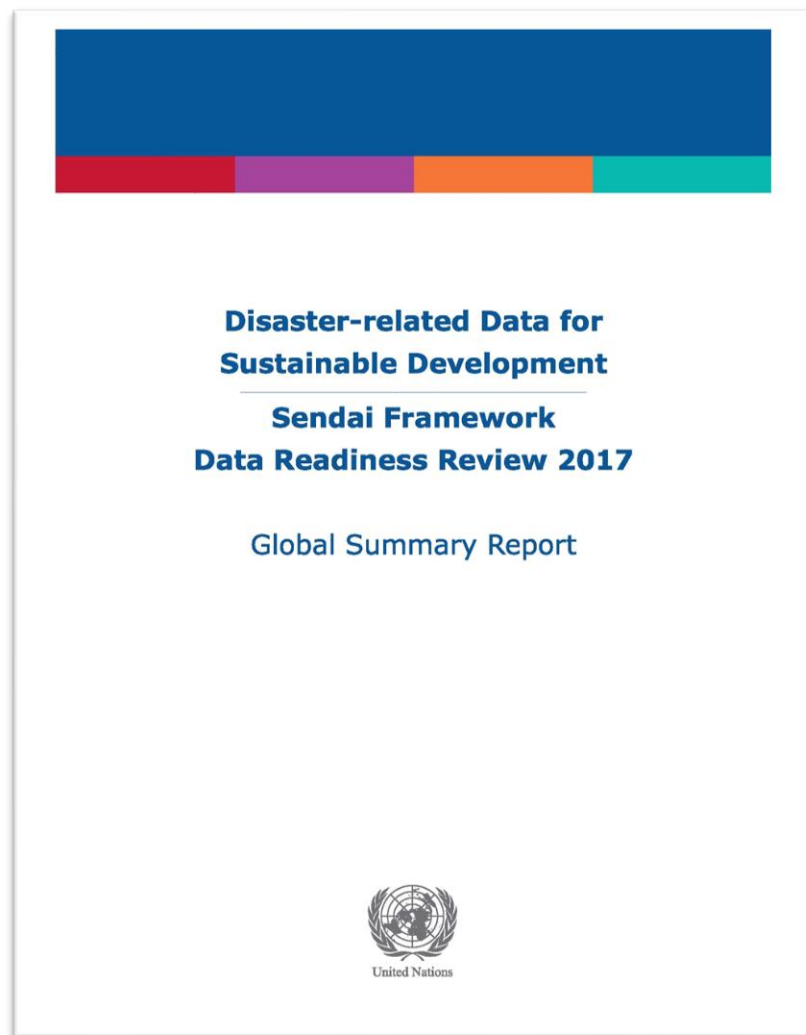
Categories of indicators

Description	Methodology Available	Data Available	Indicator Category	Recommendation for UAE-Belem indicators
Compound indicator: Indicators to measure the achievement of the Global Target which can be constructed based on relevant Global Indicators	Y	Y	C	Composite indices can be developed based on status of indicators per GGA target
Indicators ready to contribute to the global measurement of the target, for which a methodology exists , or has been proposed, and for which data is already available in a significant number of countries or can be easily generated through national self-assessments	Y	Y	I	Mapping with existing indicators (SDGs, Sendai, GBF, climate statistics, others)
Indicators, for which a methodology exists or has been proposed, but for which data is not currently easily available in a significant number of countries . These indicators can be applied nationally in countries where the necessary data is available. When data becomes widely in a larger number of countries, these indicators can potentially migrate to the Global Indicators category.	Y	N	II	
Require long term development: Indicators for which a methodology has not yet been developed nor is data easily available	N	N	III	- Assess the need for such indicators - Liaise with custodian org, specialized agencies, and statistical working groups

The background features a glowing blue globe with a grid of dots, set against a dark blue background. A vertical bar with red, orange, and teal segments is positioned on the left side of the globe. The title text is white and bold, located on the right side of the image.

Operationalizing the Sendai indicators

Data readiness

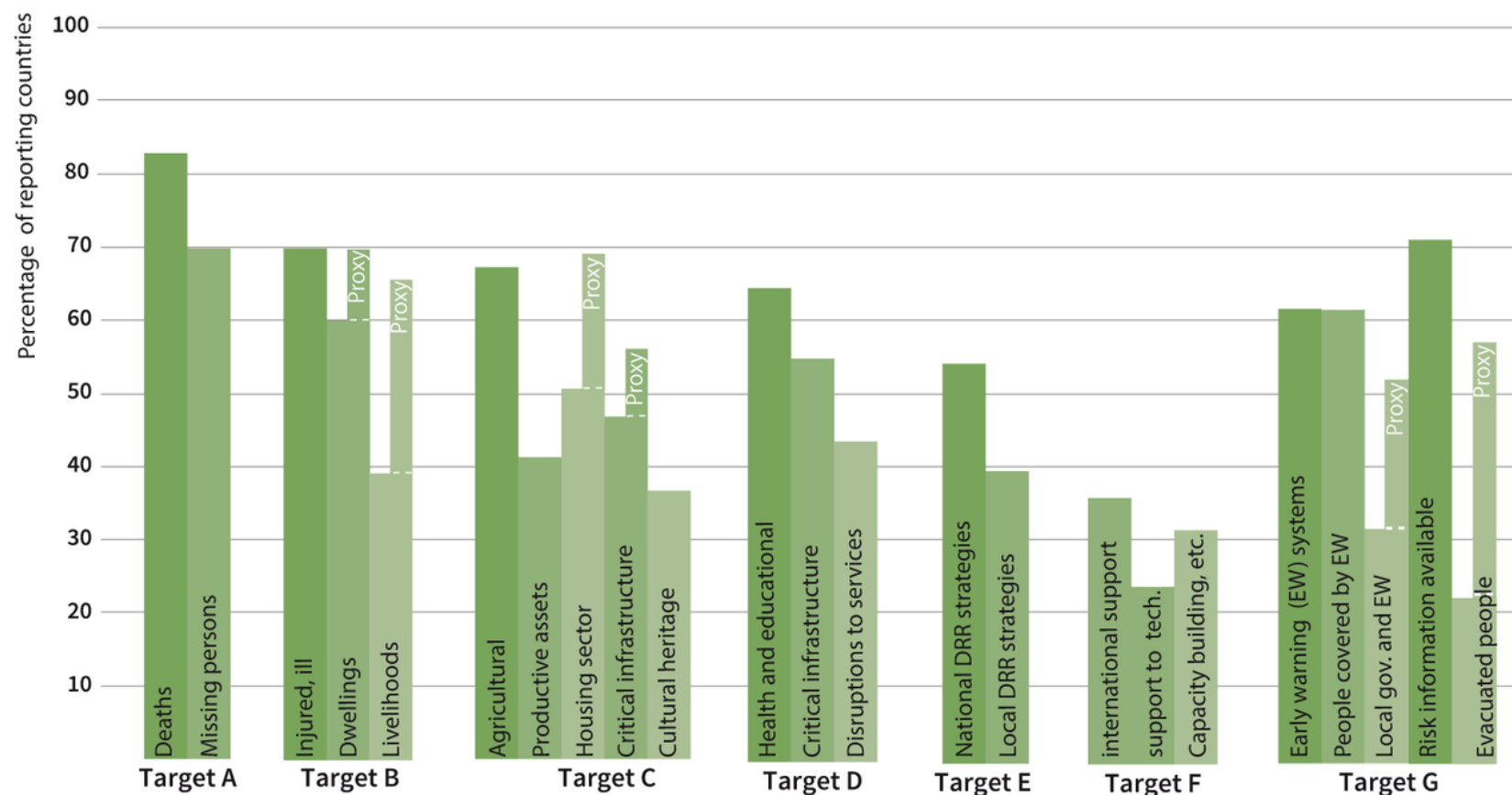


Data feasibility analysis:

- Preliminary check on data readiness

Sendai Framework Data Readiness Review in February 2017 to assess:

- Data availability
- Data quality
- Data accessibility
- Data application



87 countries contributed to the data readiness review

National Coordination for reporting

□ National focal points

- **Data coordinators:** in many instance, but not limited to national disaster (risk) management offices (NDMOs)
- **Data contributors** – sectoral and relevant ministries, and local authorities. When relevant, seeking inputs from civil society, private sector and academia (e.g. on losses in productive sectors, or self-scoring of strategies)
- **Inclusion** of academia and civil society – as observers.
- **National Statistical Offices** (NSOs).

□ National Platforms / coordination mechanisms

- Institutional arrangement and legal frameworks are key to the smooth and success set up of national data coordination mechanism.
- Data coordinators take the lead and conduct a mapping of data producers/owners and contributors per indicator.
- A UN-hosted centralized but country customizable access data portal (e.g. SFM) helps facilitate inter-governmental collaboration.
- National coordination mechanism also helps retain talents and capacity, sustain reporting

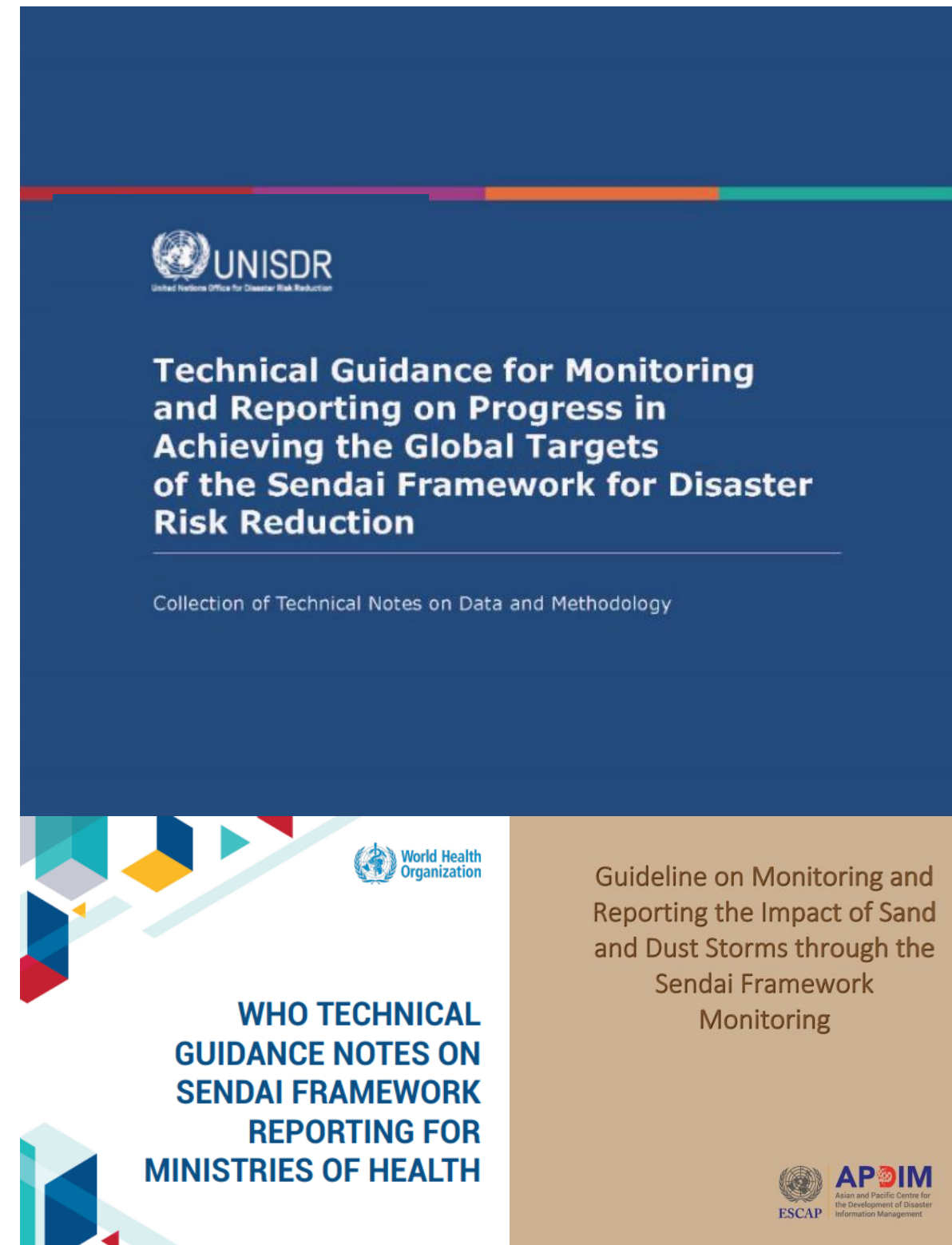
Technical guidance

Technical guidance for reporting, and minimum data standards (builds on OIEWG)

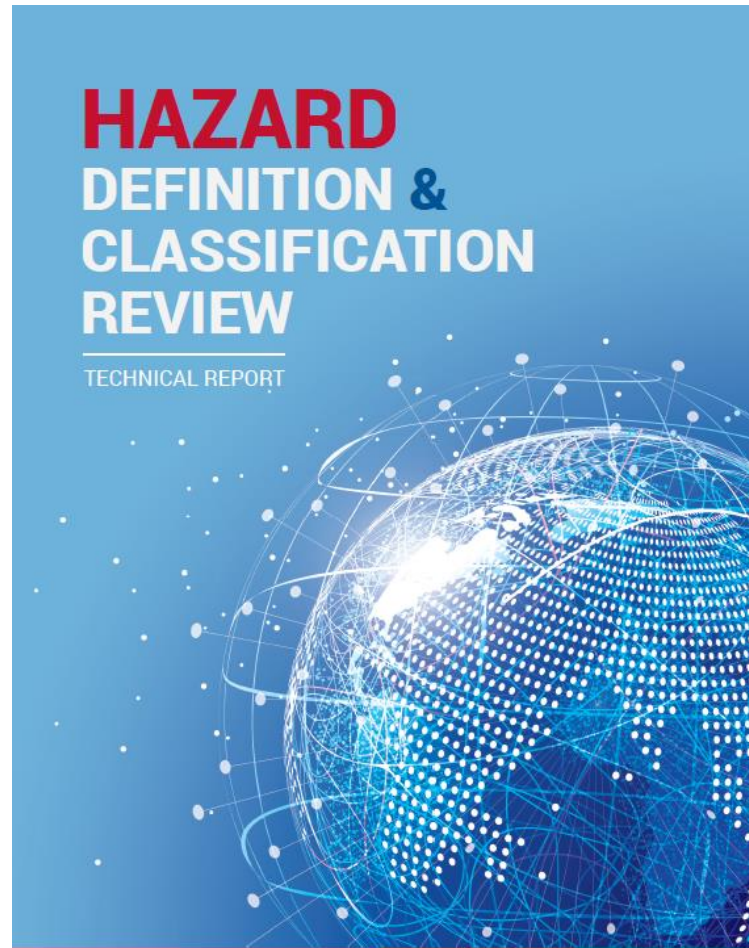
- Draft technical guidance on basis of technical discussions to MS for GP17.
- Living document
- Contribution by partner organisations

For each Target/Indicator the Notes outline:

- Minimum data set required
- Recommended Optimal dataset (including disaggregation)
- Challenges, temporary considerations, etc.
- Offer the options of Computation Methodology (from minimal to recommended datasets) for countries to choose from.
- Metadata: contents, methodology and other possible topics such as coverage, representativeness, quality.



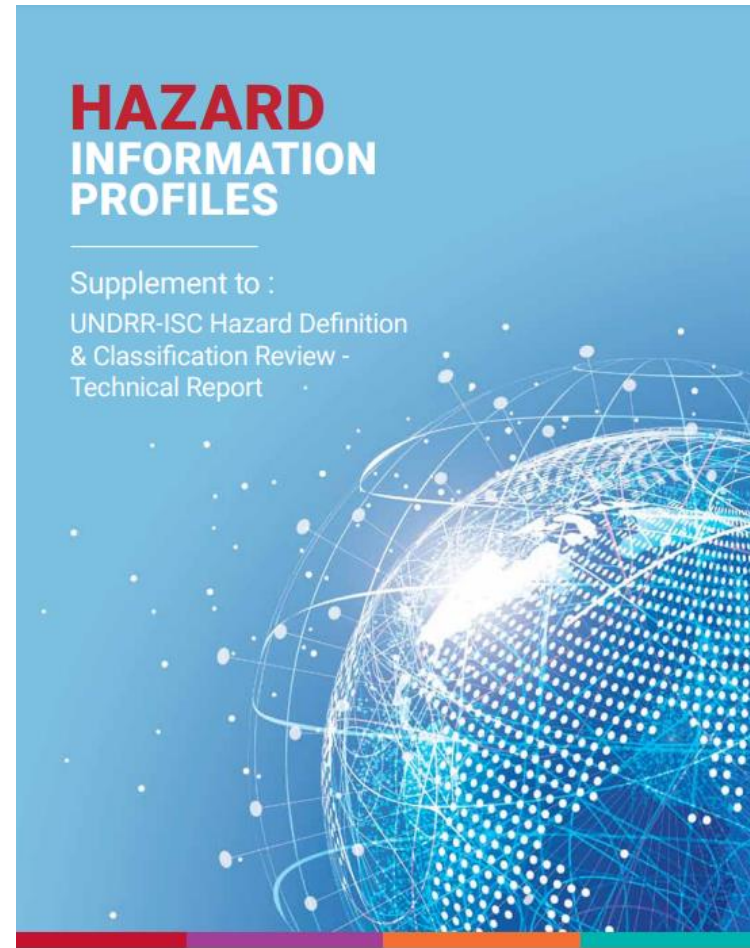
Data standards



SEDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030

International
Science Council
The global voice for science

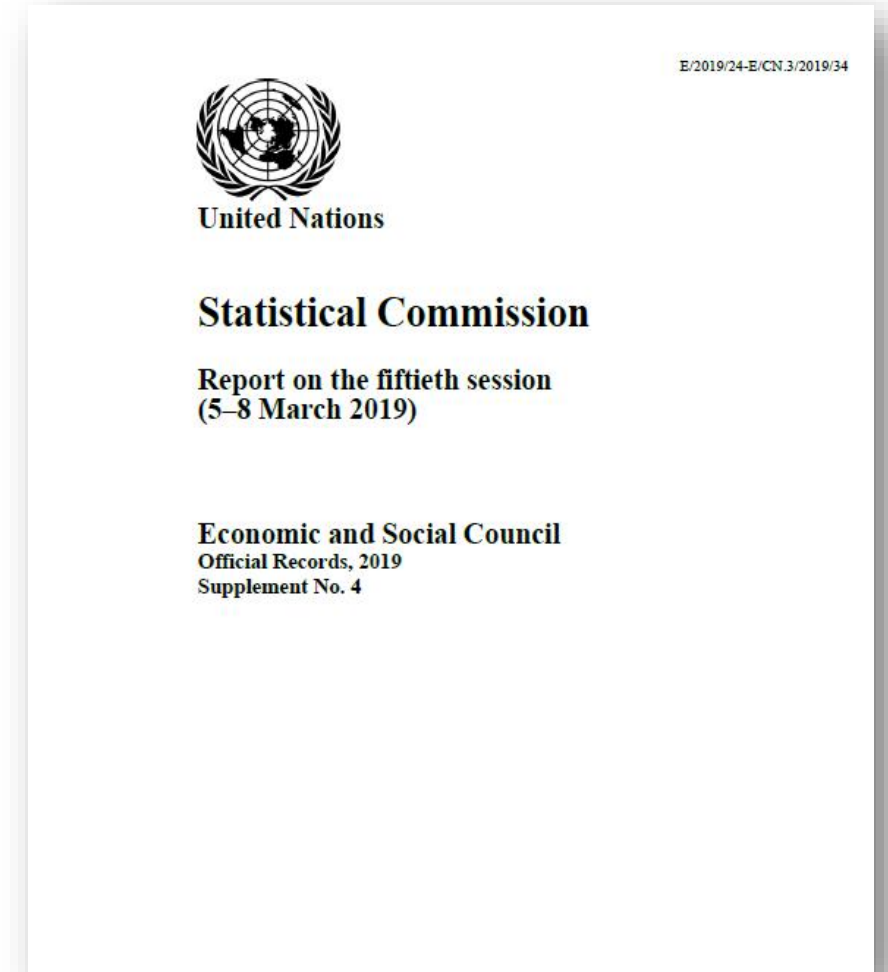
UNDRR
UN Office for Disaster Risk Reduction



SEDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030

International
Science Council
The global voice for science

UNDRR
UN Office for Disaster Risk Reduction



E/2019/24-E/CN.3/2019/34



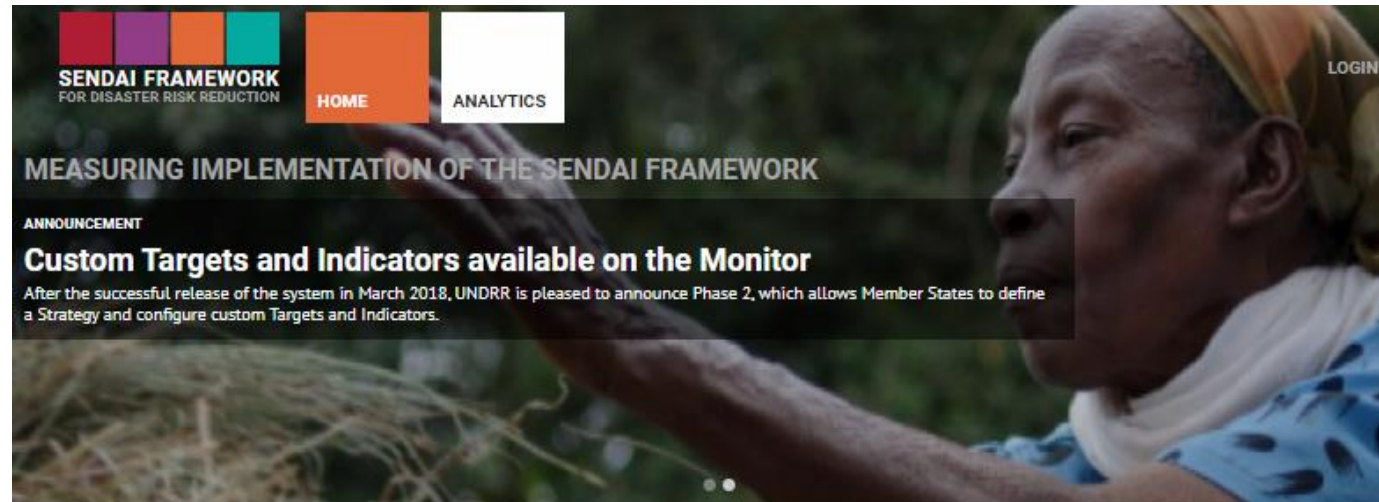
United Nations

Statistical Commission

**Report on the fiftieth session
(5-8 March 2019)**

**Economic and Social Council
Official Records, 2019
Supplement No. 4**

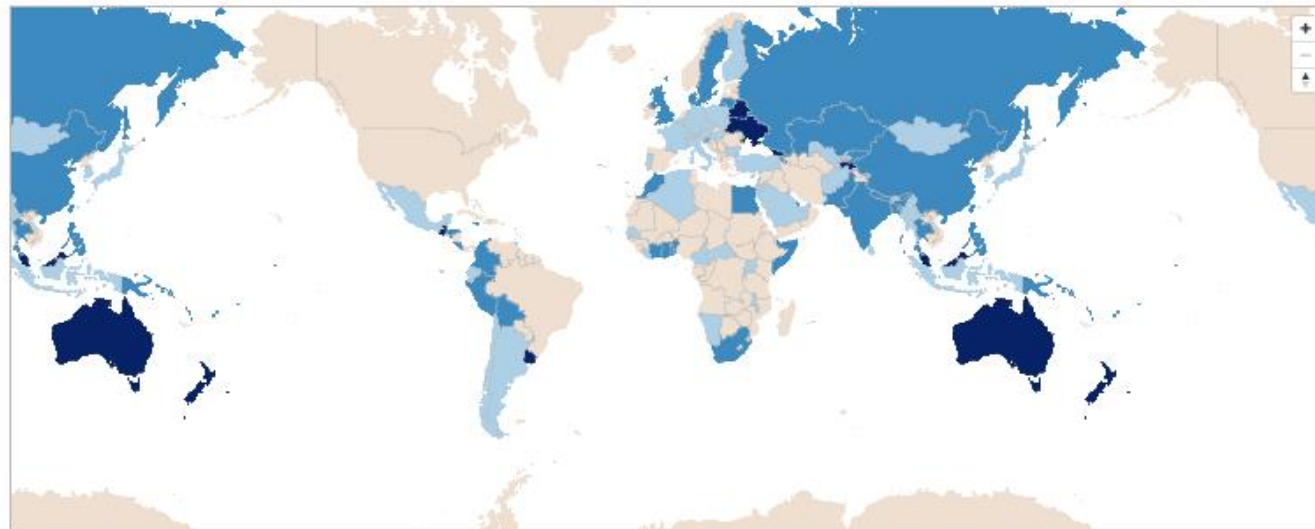
Reporting portal



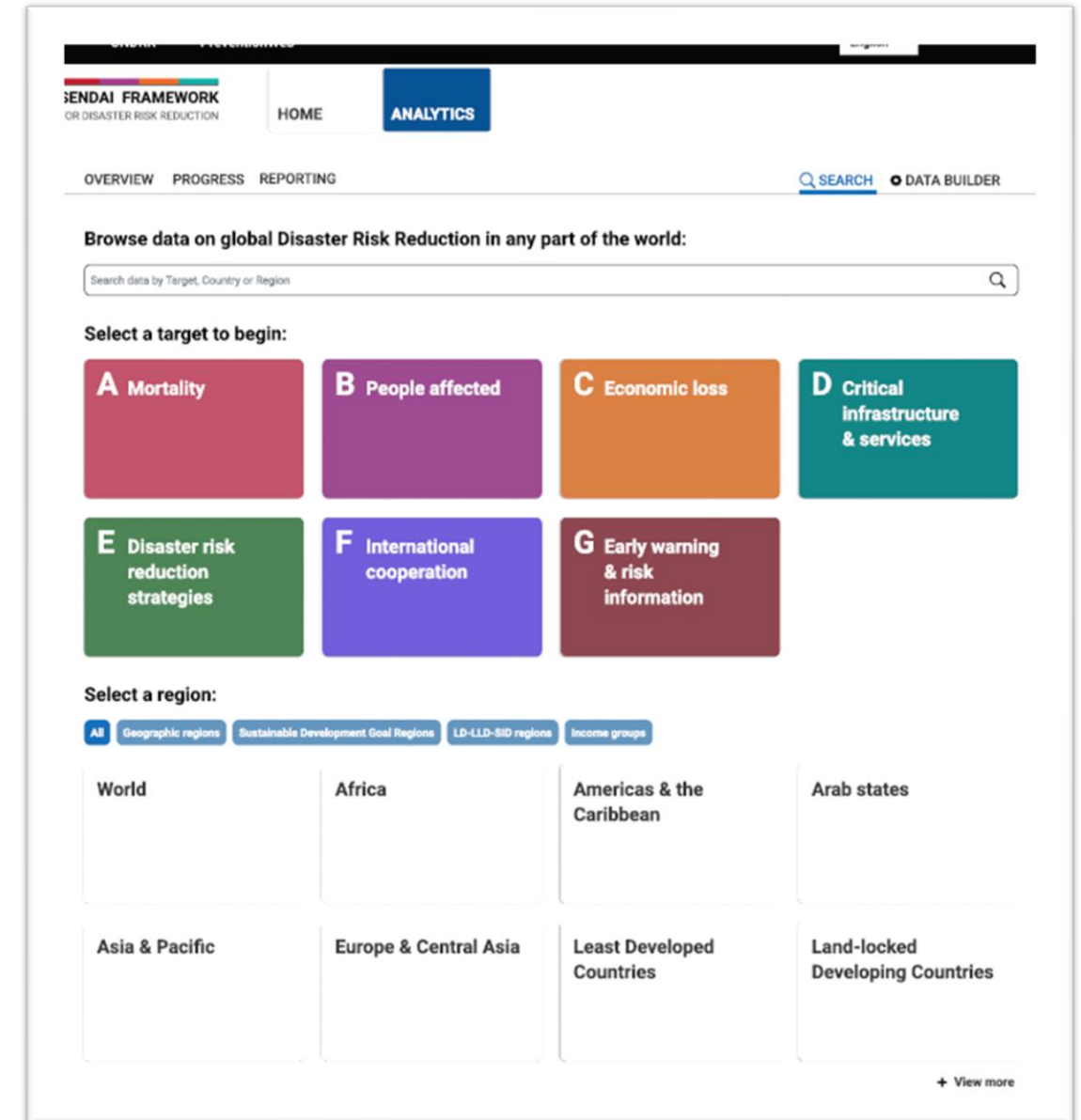
GLOBAL TARGETS

Reporting year: 2020

TARGET REPORTING: MAP



No Data All indicators validated Some indicators validated Reports in-progress



Capacity development

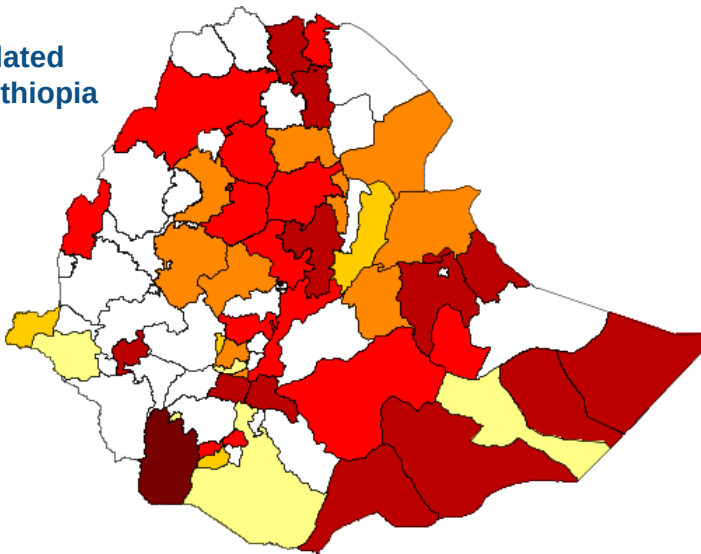
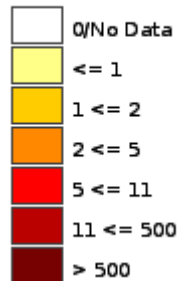
Better data availability



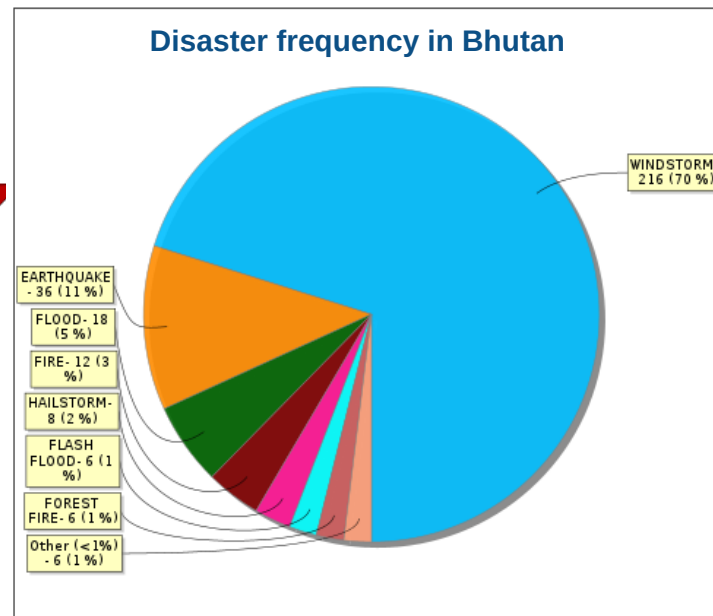
desinventar.net

Flood-related deaths in Ethiopia

Variable: Deaths



Disaster frequency in Bhutan



Training and help desk



Forthcoming:

A new generation tracking system for losses and damages
bit.ly/L-DTracking

Recapitulating ...



Recapitulating ...

Time ➤

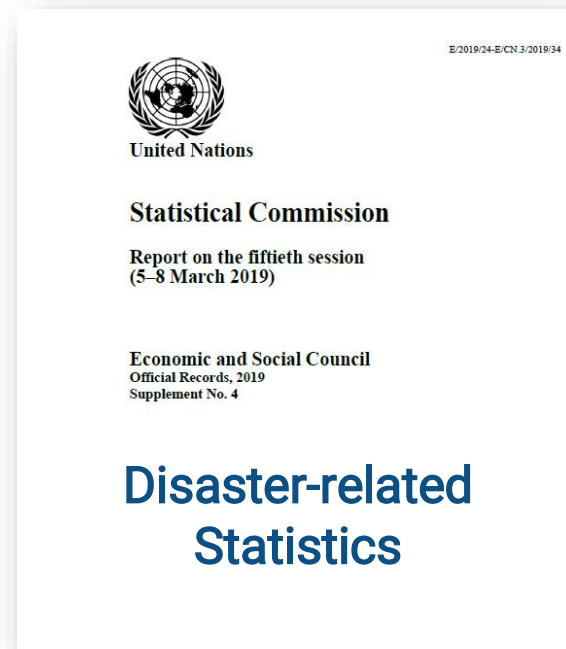
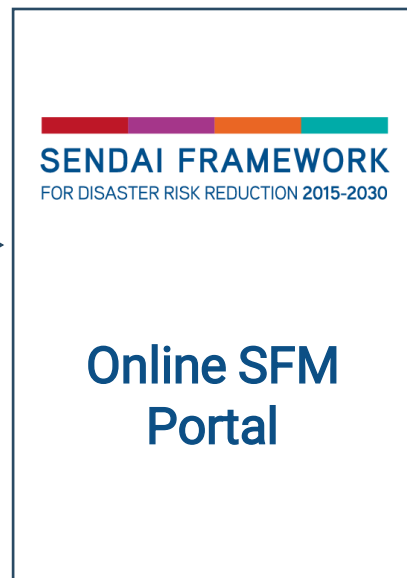
2017

2018 - date

2020

2022

Output ➤



Process ➤ Developed by UNDRR

Intergovernmental process under the Statistical Commission

Technical process coordinated by ISC & UNDRR

Technical process coordinated by UNDP and UNDRR

The background features a glowing blue globe with a grid of dots, set against a dark blue background. A vertical bar with red, orange, and green segments is positioned on the left side of the globe. The text "Reporting against the Sendai indicators" is displayed in white, bold, sans-serif font, underlined, on the right side of the image.

Reporting against the Sendai indicators

Sendai Framework Monitor: Status of Reporting

As of Oct 2023

159
countries
reporting

~2,000
active
users

Level of reporting
(Number of targets
reported)

High reporting: 7

Moderate reporting: 4-6

Low reporting: 1-3

No reporting: 0



With adequate international support, peer-to-peer learnings, and national capacity build-up, **number of countries reporting increased from 88 in 2018 to 159 in 2023.**

Status of progress in achieving the targets

Midterm Review



SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION 2015-2030

13. We express appreciation to the countries, United Nations system entities and stakeholders that engaged in the midterm review process, including by submitting voluntary national reports⁵ and reporting against the seven global targets through the [Sendai Framework monitor](#), and we take note of the report on the main findings and

Target A: Substantially reduce global mortality by 2030



Target B: Substantially reduce the number of affected people globally



Target C: Reduce direct disaster economic losses in relation to global gross domestic product (GDP)



Target D: Reduce disaster damage to critical infrastructure and basic services disruptions



Target E: Increase national and local disaster risk reduction strategies



Target F: Enhance international cooperation for disaster reduction



Target G: Increase availability and access to early warning systems and risk information

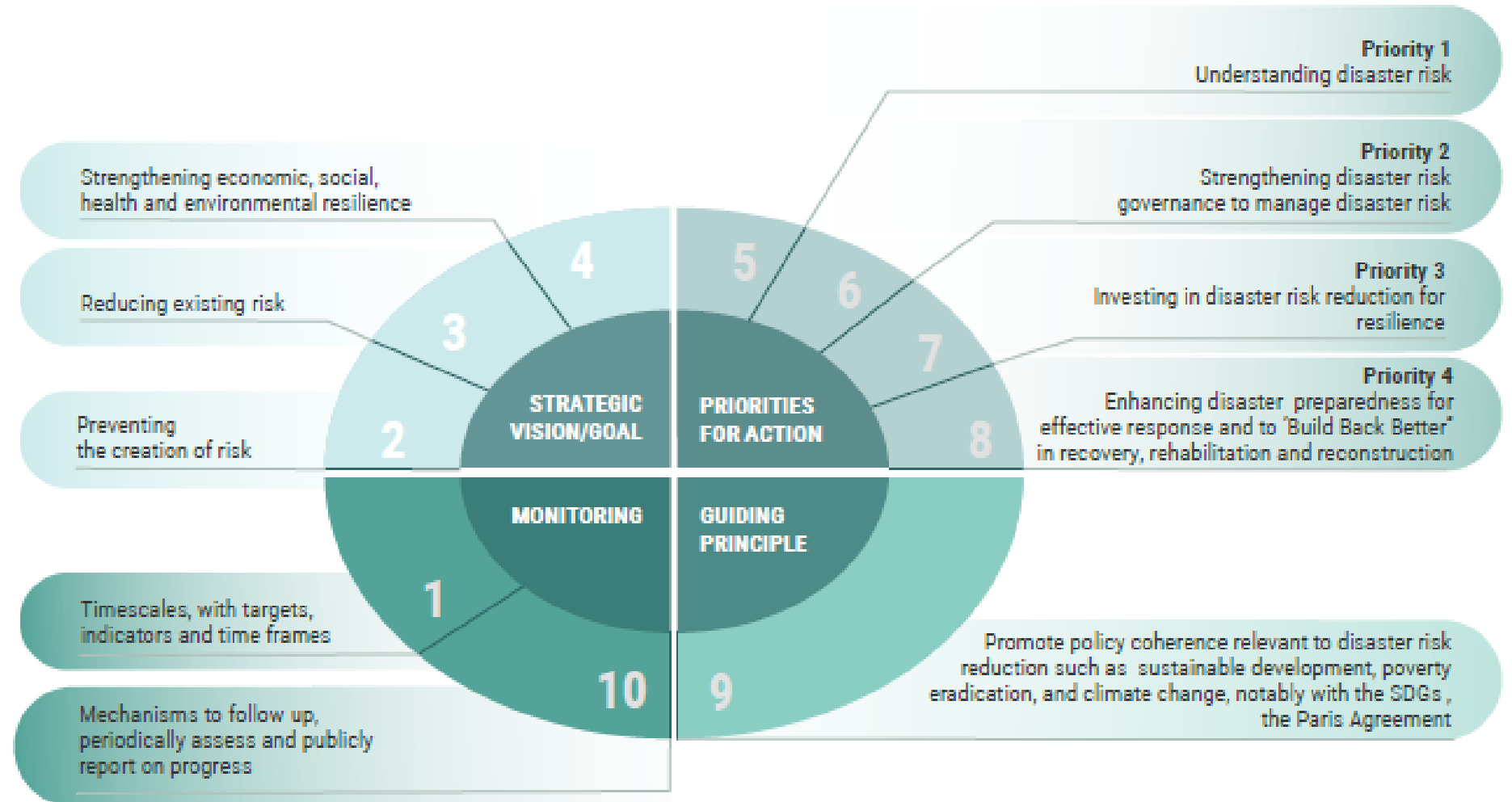


Informing public policy: National strategies and plans

Sendai Target E: Substantially increase the number of countries with national and local DRR strategies by 2020

Using quantitative indicators – including the key elements of a strategy – Member States monitor continuing and gradual improvement in strategy development

Relevant for Target 10b.
By 2030 all Parties have in place ...national adaptation plans....

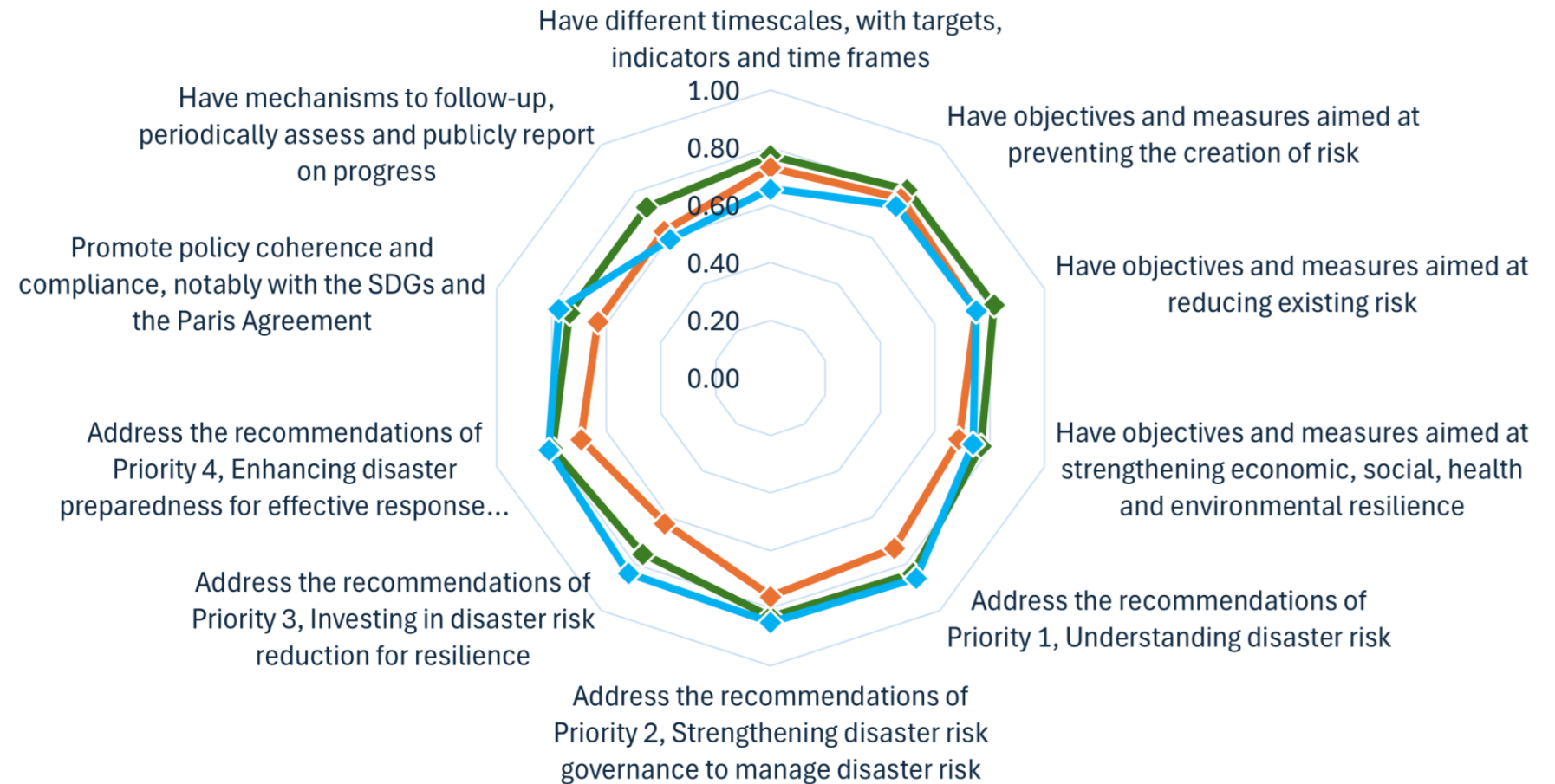


Informing public policy: National strategies and plans

Sendai Target E: Substantially increase the number of countries with national and local DRR strategies by 2020

Using quantitative indicators – including the key elements of a strategy – Member States monitor continuing and gradual improvement in strategy development

Relevant for Target 10b.
By 2030 all Parties have in place ...national adaptation plans....

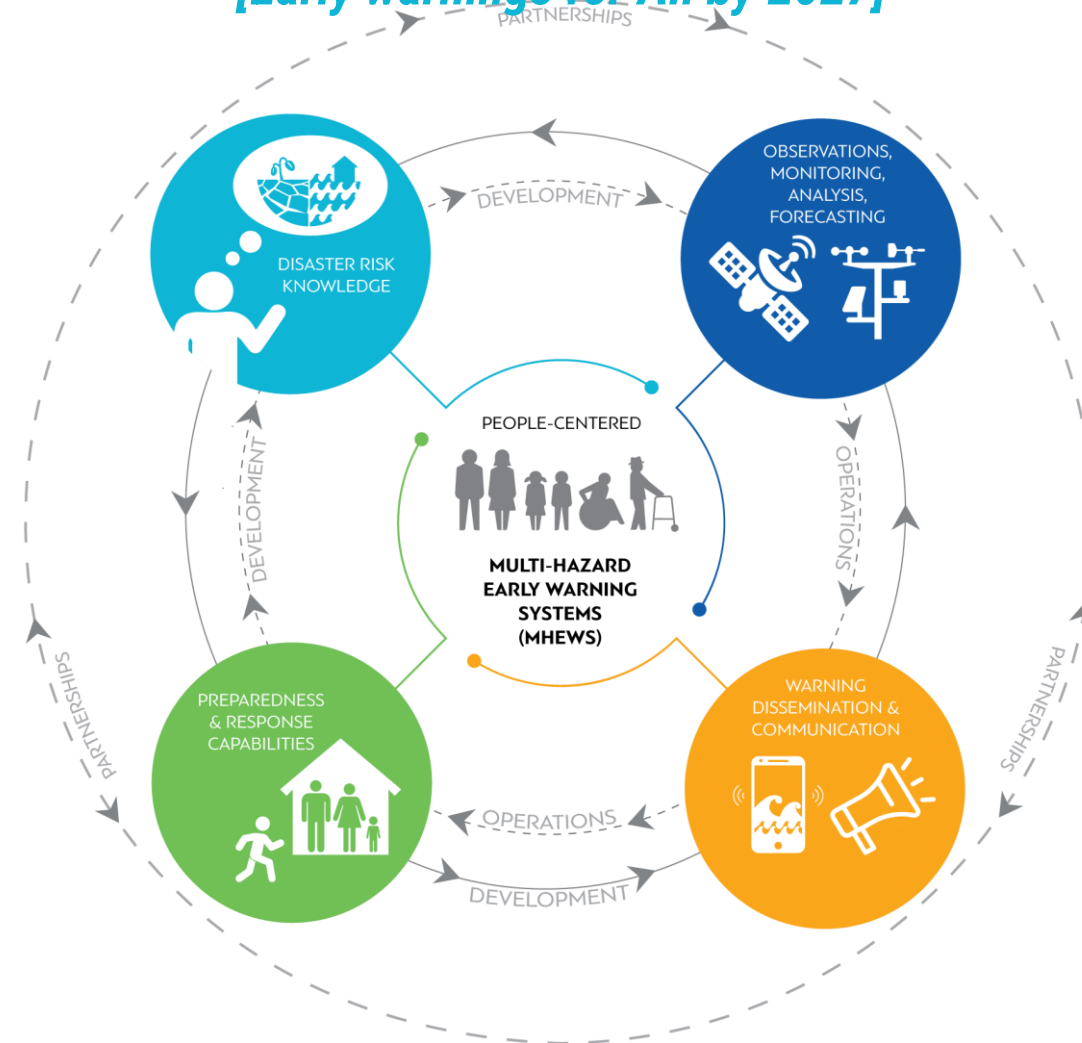


Informing implementation: Early warning systems

Using quantitative indicators – including the key elements of MHEWS – Member States monitor existence and quality of MHEWS

*Relevant for Target 10a.
....by 2027 all Parties have established multi-hazard early warning systems, ...*

Sendai Target G: Substantially increase the availability of and access to multi-hazard early warning systems [MHEWS] by 2030
[Early warnings for All by 2027]

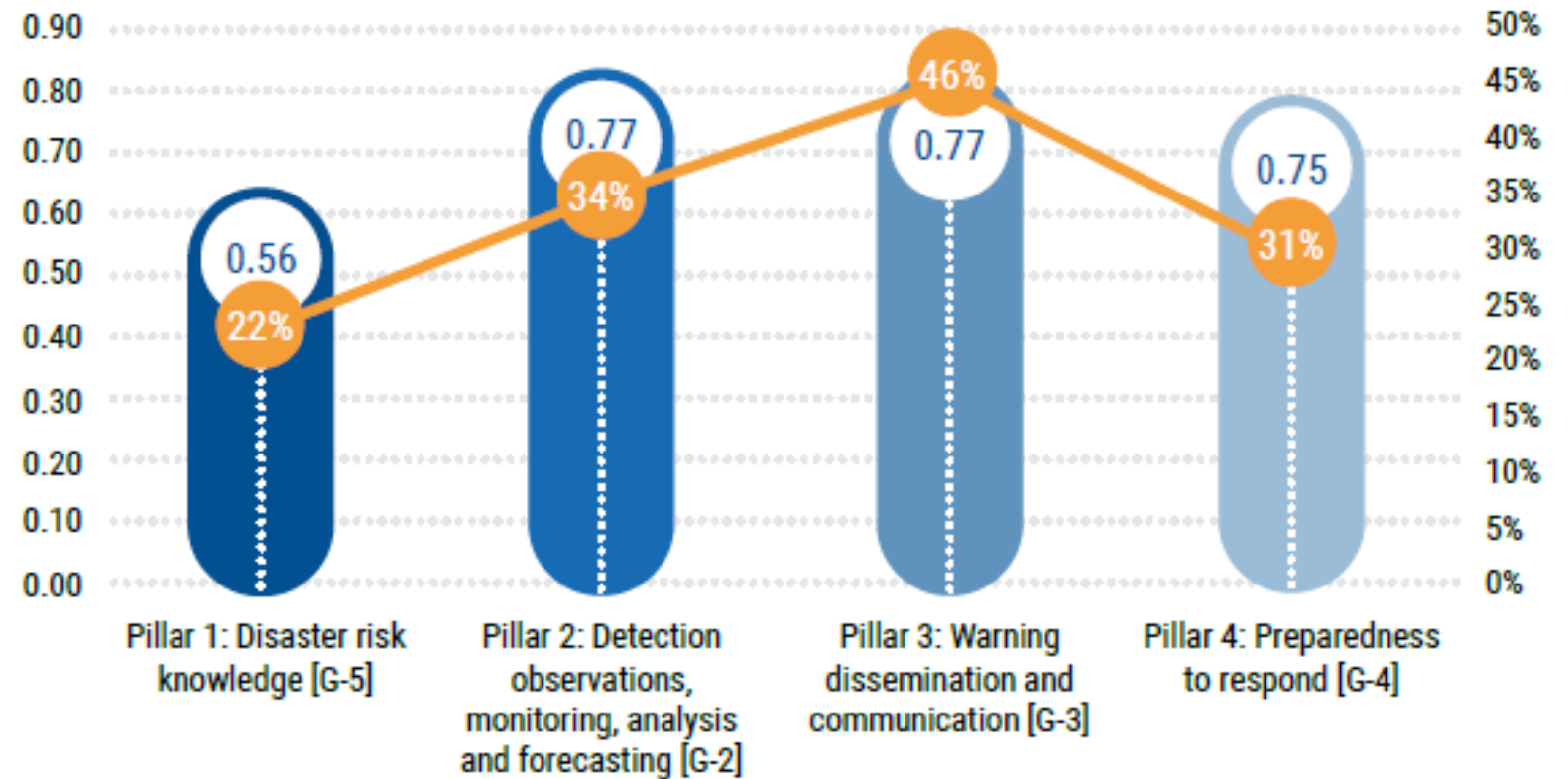


Informing implementation: Early warning systems

Using quantitative indicators – including the key elements of MHEWS – Member States monitor existence and quality of MHEWS

*Relevant for Target 10a.
....by 2027 all Parties have
established multi-hazard early
warning systems, ...*

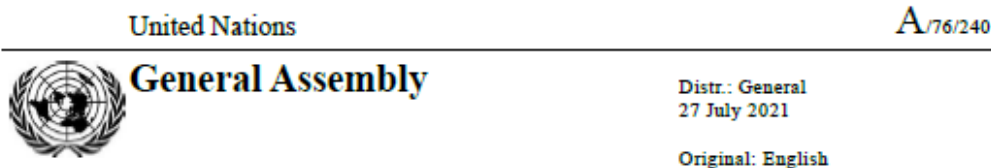
Sendai Target G: Substantially increase the availability of and access to multi-hazard early warning systems [MHEWS] by 2030
[Early warnings for All by 2027]



Assessing Sendai Progress



Global Assessment Report on Disaster Risk Reduction



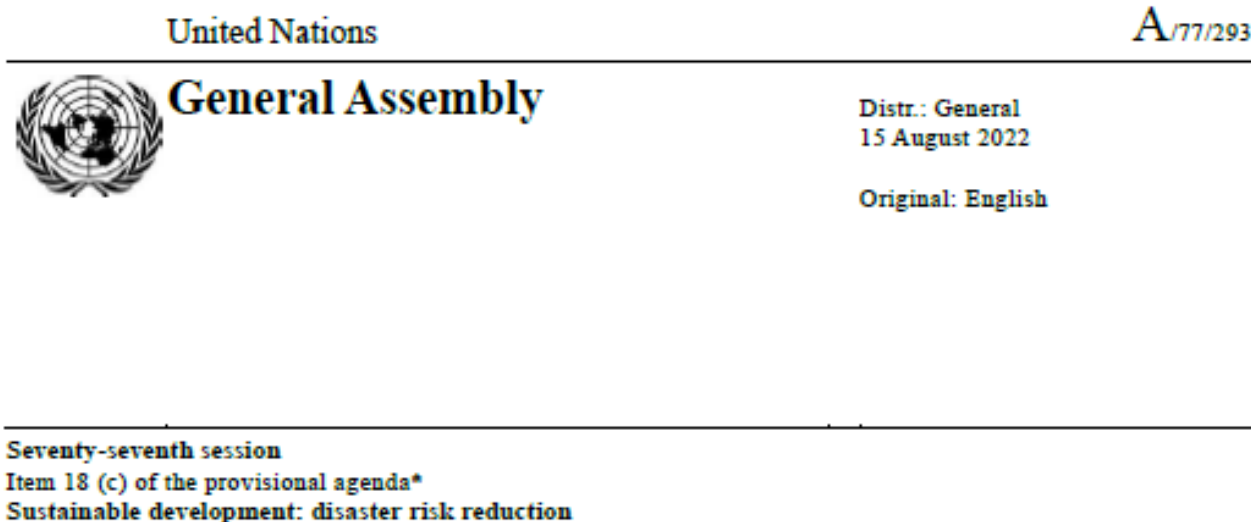
Seventy-sixth session
Item 20 (c) of the provisional agenda*
Sustainable development: disaster risk reduction

Implementation of the Sendai Framework Reduction 2015–2030

Report of the Secretary-General

Summary

The present report has been prepared as requested by the General Assembly in its resolution 75/216 on disaster risk reduction. It contains an overview of progress made towards the goal, global targets and priorities for action of the Sendai Framework for Disaster Risk Reduction 2015–2030 and serves to support countries to overcome challenges to effect the Framework. It contains an overview of the global response to the phenomenon, pursuant to Assembly decision 74/113 on the application of the Sendai Framework in the context of the coronavirus disease (COVID-19); and input for the midterm review of the Framework.



Seventy-seventh session
Item 18 (c) of the provisional agenda*
Sustainable development: disaster risk reduction

Implementation of the Sendai Framework for Disaster Risk Reduction 2015–2030

Report of the Secretary-General

Summary

The present report has been prepared as requested by the General Assembly in its resolution 76/204 on disaster risk reduction. It contains an overview of progress made towards the goal, global targets and priorities for action of the Sendai Framework for Disaster Risk Reduction 2015–2030. The report provides an update on the midterm review of the implementation of the Framework, including early findings, to inform deliberations of the high-level meeting of the General Assembly.

Better
information
for Sendai
progress
(e.g.
Midterm
Review
and annual
SG-Sendai
Framework
reports)

STATUS REPORT ON **TARGET E** IMPLEMENTATION



INTERNATIONAL DAY
FOR DISASTER RISK REDUCTION

International Cooperation
in Disaster Risk Reduction

TARGET
F



#DRRDay #OnlyTogether

SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030



Global status
of multi-hazard
early warning systems

Target G

SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030



Global Status of Multi-Hazard Early Warning Systems 2023



Disaster risk reduction indicators in SDGs

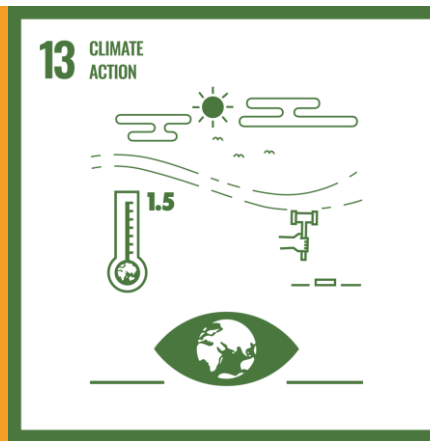
- Inter-Agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs) - recognizes the OIEWG. Identifies UNDRR (then UNISDR) as custodian agency, December 2015
- **UN Statistical Commission, 48th Session, March 2017:** endorsed Report of the IAEG-SDGs | Note by the Secretary-General - E/CN.3/2017/2* proposing the recommended indicators of the OIEWG



Low resilience to
disasters



Disaster-induced
economic loss and
affected infrastructure



Low resilience and
adaptive capacity and
increasing disasters

Sendai Framework
for Disaster Risk Reduction
2015-2030



A

Number of deaths, missing persons and persons affected by disaster per 100,000 people



B

Direct disaster economic loss in relation to global gross domestic product (GDP)



C

Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services



D

Number of countries with national and local disaster risk reduction strategies



E

Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030



F



G

SUSTAINABLE
DEVELOPMENT GOALS

Goal 1.
Target 1.5



Goal 11.
Target 11.5



Goal 11.
Target 11.b

Goal 13.
Target 13.1



Benefiting Intergovernmental Processes



Outlook:

Enhance application of Sendai targets and indicators in formal reporting mechanisms



**5th United Nations Conference
on the Least Developed
Countries (LDC5) - Doha, 23-27
January 2022**

SFM Application by Partners

State of the Global Climate 2023

WEATHER CLIMATE WATER



2021 STATE OF
CLIMATE SERVICES
WATER

WORLD METEOROLOGICAL ORGANIZATION
WMO-No. 1311

Logos: AFD, Adaptation Fund, Climate Policy Initiative, COWI, ECMWF, European Investment Bank, Food and Agriculture Organization of the United Nations, GEF, Green Climate Fund, G80 Group on Earth Observations, UKaid, UNDRR, UN Women, UN@15, UN Women, UN Women



Seizing the Moment

TARGETING TRANSFORMATIVE
DISASTER RISK RESILIENCE



Asia-Pacific Disaster Report 2023



United in Science 2022

A multi-organization high-level compilation of the most recent science related to climate change, impacts and responses

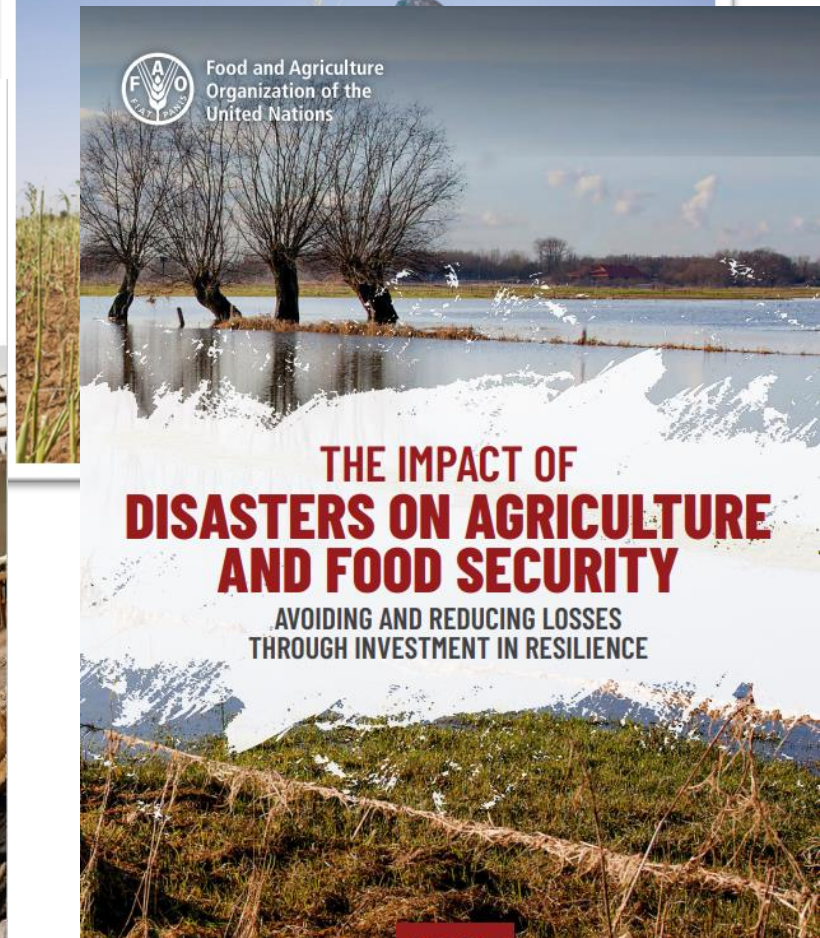


2021 The impact of disasters and crises
on agriculture and food security



THE IMPACT OF DISASTERS ON AGRICULTURE AND FOOD SECURITY

AVOIDING AND REDUCING LOSSES
THROUGH INVESTMENT IN RESILIENCE



Recommendations and Way Forward

- Build on what exists and establish interoperability; Co-benefit from complementary processes (e.g. EW4ALL)
- Enhance data availability and access – need a wholesome effort
 - National-level coordination across all ministries and organisations
 - Active collaboration with custodian organisations, specialized agencies and other organisations
- Collaboration with the statistical community (Inter-Agency Expert Group on Disaster-related Statistics; climate statistics); National statistical offices
- Ensure data disaggregation (including on sex, age, disability as relevant) as a requirement
- Demonstrate data application beyond reporting; and establish feedback loop
- Balance ambition and realism – It can take years to generate data and ensure global comparability

www.undrr.org/bonn

www.sendaimonitor.undrr.org

www.desinventar.net

Thank you

Animesh Kumar
Head of Office, Bonn
UN Office for Disaster Risk Reduction
animesh.kumar@un.org
[@animesh00](https://twitter.com/animesh00)

Key Resources

- **Sendai Framework Monitor:** <https://sendaimonitor.undrr.org>
- **Sendai Framework indicators and terminology:** <https://www.preventionweb.net/terminology/open-ended-working-group> (Also <https://www.undrr.org/terminology>)
- **Technical Guidance on Sendai Framework Monitor:** <https://www.preventionweb.net/quick/11641>
- **Sendai Framework data readiness review 2017 - Global summary report** <https://www.undrr.org/quick/11615>
- **Disaster L&D Databases:** <https://desinventar.net> (Also <https://www.undrr.org/disaster-losses-and-damages-tracking-system>)
- **Hazard definitions and classification:** <https://www.undrr.org/quick/12955> **Hazard Information Profiles:** <https://www.undrr.org/quick/66872>
- **Data and digital maturity for disaster risk reduction: Informing the next generation of disaster loss and damage databases** <https://www.undrr.org/quick/75391>
- **Secretary General's Report on Sendai Framework (2022):** <https://www.undrr.org/publication/report-secretary-general-implementation-sendai-framework-disaster-risk-reduction-2015-4>
- **Global status of multi-hazard early warning systems: Target G:** <https://www.undrr.org/quick/74257>
- **Global Assessment Reports on Disaster Risk Reduction:** <https://www.undrr.org/global-assessment-report-disaster-risk-reduction-gar>