

Monitoring progress in disaster risk reduction in the Sendai Framework for Action 2015-2030 and the 2030 Sustainable Development Agenda

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Monitoring progress under the Hyogo Framework for Action: 2005-2015

22 Core indicators in 5 Priorities for Action:

1. Ensure that disaster risk reduction is a national and a local priority with a strong **institutional basis** for implementation.
2. Identify, **assess and monitor** disaster risks and enhance **early warning**.
3. Use **knowledge**, innovation and education to build a culture of safety and resilience at all levels.
4. Reduce the **underlying risk factors**.
5. Strengthen **disaster preparedness** for effective response at all levels.

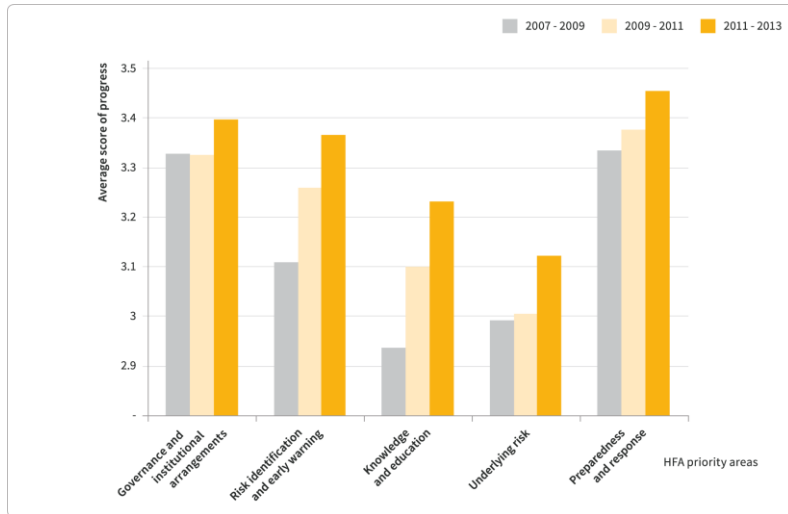
Monitoring progress:

- **HFA Monitor** – on-line, self-assessment monitoring and reporting tool.
- 61 countries (2007-2009); 133 countries (2009-2011); 113 countries (2011-2013); 95 countries (2013-2015).
- Peer review process – Africa, Americas, Europe.

Global repository:

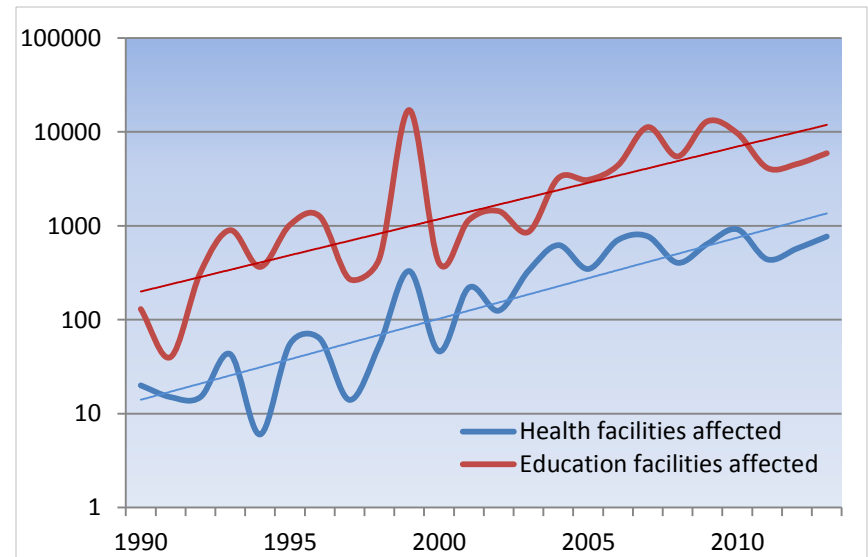
- Single largest repository of the worldwide state of play in DRR.

Conflicting evidence on progress



Gradual progress across all
Priorities for Action

Increasing physical damage and
economic loss



Monitoring the HFA: issues encountered

- Review of the HFA Monitor and process by UNISDR 2013-2015
- HFA Thematic Review 2013-2014 – multi-disciplinary, multi-stakeholder, peer-reviewed research initiative led by UNISDR

- Core indicators were **input** rather than **output** or **outcome** focused
- Focused on **reducing existing risks** rather than on the **generation of new risks** or **resilience** .
- Progress not related to **risk levels** of country
- **Subjective**, not allowing international benchmarking
- Core indicators relate to **multiple policies** and **stakeholders**: Unclear responsibility and accountability
- No clear link to **Millennium Development Goals** and **UNFCCC**

Sendai Framework for Disaster Risk Reduction: 2015-2030 (A/RES/69/283 - June 2015)

- Seven **Global Targets**, four of which are **outcome focused**
- **Goal** focuses not only on **reducing existing risks** also on **preventing new risks** and **strengthening resilience**
- The reduction of disaster losses is assessed **relative to the size of a country's population and economy**
- Outcome Targets are objective and measurable allowing **international benchmarking of progress** relative to a quantitative baseline 2005-2015
- Priorities for Action refer to specific **public policies for disaster risk management**
- Explicit links to the **2030 Agenda for Sustainable Development** and to the **UNFCCC**

Open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction (OEIWG) (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 in **coherence** with the work of the **Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs)**.
- ❑ Expert Meeting to prepare background paper for the **Open-ended Intergovernmental Working Group (OIEWG)** based on UNISDR indicator proposals: 27-29 July, 2015
- ❑ **First formal session** of OIEWG: 29 – 30 September, 2015
- ❑ **Second formal session** of OIEWG: 10 – 11 February, 2016
- ❑ **Informal consultations of the Chair:** 20–21 June, 10-11 October and 9 November, 2016
- ❑ **Feasibility Exercise:** Government of Japan with 17 member States
- ❑ **Third formal session** of OIEWG: 14-18 November, 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.

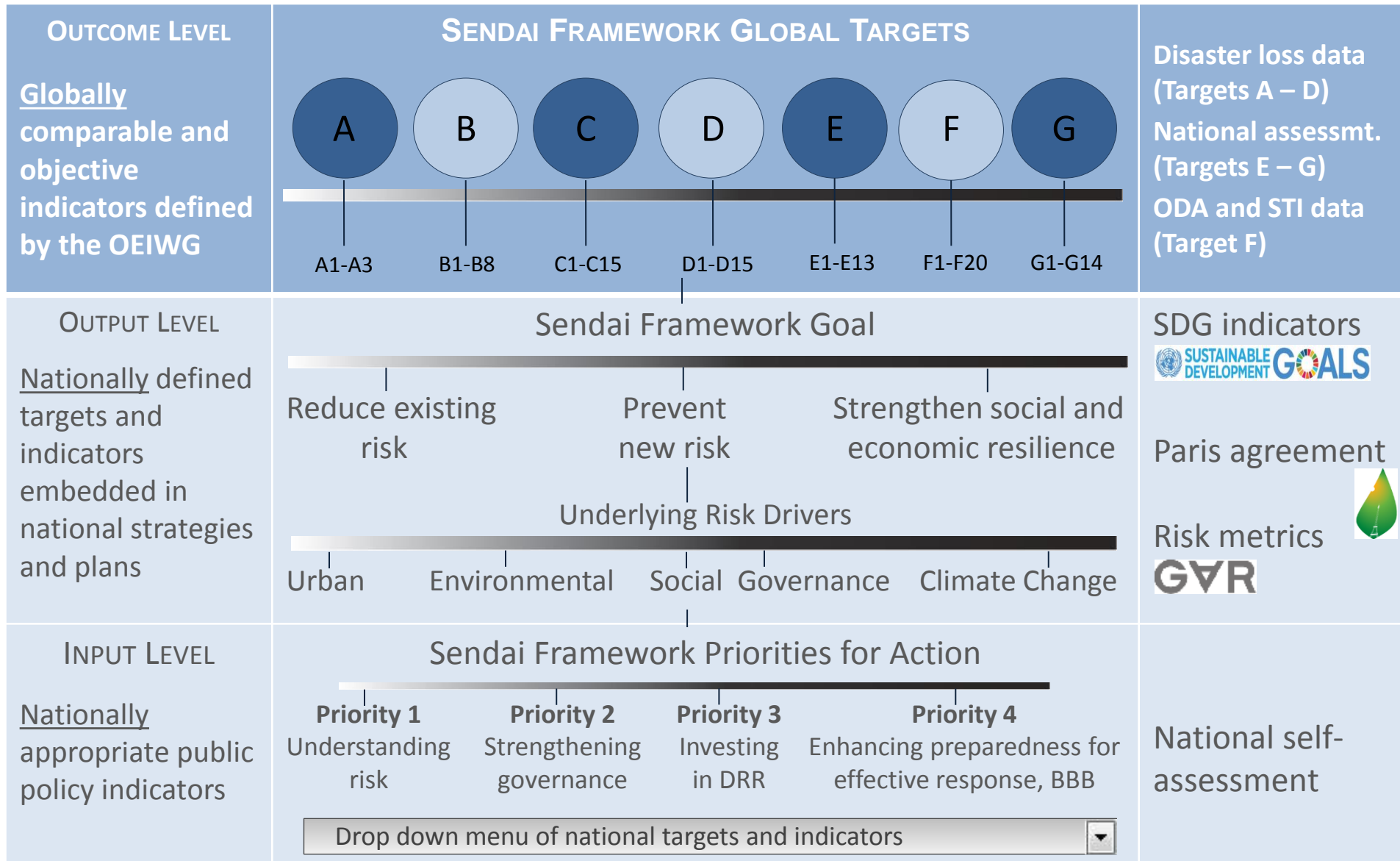
Architecture of the Sendai Framework Monitoring System at National Level

Sendai Framework Outcome

The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries

PROCESS

DATA



Categories of indicators

A, B, C, D, E and G

	Methodology Available	Data Available	Indicator Category
Compound indicator: Indicators to measure the achievement of the Global Target which can be constructed on the basis of a number of specific Global Indicators	Y	Y	C
Global Indicators: 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-assessment	Y	Y	1
National indicators: 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	2
Require long term development) : Indicators for which a methodology has not yet been developed nor is data easily available	N	N	3

Global Target (a) - Substantially reduce global disaster *mortality* by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2015.

A-1 (A-2 + A-3)	Number of deaths and missing persons due to hazardous events per 100,000
A-2	Number of deaths due to hazardous events
A-3	Number of missing persons due to hazardous events

Global Target (b) - Substantially reduce the number of *affected people* globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2015.

B-1 (B-2, B-4, B-5, B-7)	Degree of direct affectedness by hazardous events per 100,000 population
B-2 or B2. alt	Number of injured or ill people due to hazardous events Number of people suffering from physical injuries, trauma or cases of disease requiring immediate medical assistance as a direct result of a hazardous events
B-3a	Number of evacuated people due to hazardous events
B-3b	Number of relocated people due to hazardous events
B-4	Number of people whose houses were damaged due to hazardous events
B-5	Number of people whose houses were destroyed due to hazardous events
B-6	Number of people who received aid including food and non-food aid due to hazardous events
B-7	Number of people whose livelihoods were disrupted, destroyed or lost due to hazardous events

Global Target (c) - Reduce *direct disaster economic loss* in relation to global gross domestic product (GDP) by 2030.

C-1 (C-2 to C-9)	Direct economic loss due to hazardous events in relation to global gross domestic product
C-2	Direct agricultural loss due to hazardous events
C-3	Direct economic loss due to industrial facilities damaged or destroyed by hazardous events
C-4	Direct economic loss due to commercial facilities damaged or destroyed by hazardous events
C-5	Direct economic loss due to houses damaged by hazardous events
C-5b	Damage and loss of administrative buildings
C-6	Direct economic loss due to houses destroyed by hazardous events
C-7	Direct economic loss due to damage to critical infrastructure caused by hazardous events
C-8	Direct economic loss due to cultural heritage damaged or destroyed by hazardous events
C-9	Direct economic loss due to environment degraded by hazardous events [forestry]
C-10	Total insured direct losses due to hazardous events

Global Target (d) - Substantially reduce *disaster damage to critical infrastructure and disruption of basic services*, among them health and educational facilities, including through developing their resilience by 2030.

D-1 (D-2 to D-4, D-14)	Damage to critical infrastructure due to hazardous events
D-2	Number of health facilities destroyed or damaged by hazardous events
D-3	Number of educational facilities destroyed or damaged by hazardous events
D-4	Number of transportation units and infrastructures destroyed or damaged by hazardous events
D-4-b	Kilometres of road destroyed or damaged per hazardous event.
D-4-c	Number of bridges destroyed/damaged by hazardous event.
D-4-d	Kilometres of railway destroyed / damaged by hazardous event
D-4-k	Number of airports destroyed / damaged by hazardous event
D-4-l	Number of ports destroyed / damaged by hazardous event
D-1 bis	Number of electricity plants / transmission lines destroyed or damaged by hazardous events
D-14	Number of water and sanitation infrastructures destroyed or damaged by hazardous events
D-5	Number of times basic services have been disrupted due to hazardous events: education (D-5a linked to D-2); water (D-5b linked to D-10)); health (D-5c linked to D-3); sewerage (D-5d); transport (D-5e linked to D-4); government services (D-5f); energy (D -5g); emergency services (D5-h); communications / ICT (D-5i); solid waste (D5-j).

Global Target (e) - Substantially increase the number of countries with *national and local disaster risk reduction strategies* by 2020.

E-1	Number of countries that adopt and implement national DRR strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030
E-2	Percentage of local governments that adopt and implement local DRR strategies in line with national DRR strategies

Global Target (f) - Substantially enhance *international cooperation* to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030.

- 10+10 consultations on indicators for Target (f) - February to November 2016, proposed by the Chair of the OIEWG.
- Organised using principles of global cooperation – SDGs and the Sendai Framework – and the Working Text:
 - a) Financial Resources
 - b) Technology Development and Transfer
 - c) Capacity Building
- Supported by technical non-papers produced by the Secretariat at the behest of the 10+10 and the Chair.
- Categorization analogous to the approach of the IAEG-SDGs.
- Outcomes of the 10+10 consultations to inform 3rd Session of OIEWG

Global Target (f) - Substantially enhance *international cooperation* to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030.

	Methodology Available	Data Available
Global Indicators: 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-assessment	Y	Y
Global Indicators: Indicators, ready to contribute to the global measurement of the target, for which: <ul style="list-style-type: none"> a) a methodology exists or has been proposed to address a component of the indicator, and for which data are already available or can be developed, in a significant number of countries, <i>and</i> b) a comprehensive methodology and data are expected to be available within the timeframe for reporting against this target. 	Y	N
Global Indicators : Indicators, not currently ready to contribute to the global measurement of the target, but for which a methodology and data can be expected to be developed in a significant number of countries, within the timeframe for reporting against this target.	N	N

Global Target (f) - Substantially enhance *international cooperation* to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030.

Category (a) Financial resources.

Option 1

F-6alt	Total official international support (ODA plus other official flows) for national DRR actions that is part of government expenditure .
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Option 2

F-6alt	Total official international support (ODA plus other official flows) for national DRR actions that is part of a government-coordinated spending plan .
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Supplementary indicators.

F-6a	Total amount of national DRR expenditure.
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F-6b	Total official international support (ODA plus other official flows) for national DRR actions provided by multilateral institutions.
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F-6c	Total official international support (ODA plus other official flows) for national DRR actions provided by bilateral entities.
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Category (b) Technology development and transfer..

Option 1

F-6d	Total official international support (ODA plus other official flows) for international and regional exchange of science, knowledge, technology and innovation (STI) in DRR.
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Option 2

F-9	[Number of countries with international and regional initiatives for the exchange of science, technology and innovation in disaster risk reduction.]
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Global Target (f) - Substantially enhance *international cooperation* to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030.

Category (c) Capacity building.

Option 1

F-6e	Total official international support (ODA plus other official flows) to strengthen disaster-related statistical capacities.
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Option 2

F-13	[Financial and other resources made available to strengthen the statistical capacity of developing countries in collection, analysis, management and use of disaster risk information.]
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Suggested for consideration

Option 1

F-12	Number of countries engaging in a voluntary review of progress in the implementation of national DRR strategies.
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Option 2

F-12alt.	Number of countries engaging in a voluntary, self-initiated, nationally determined peer review of progress in reducing disaster risk reduction.
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Analytical function

F-15	Annual percentage of cooperation financing for DRR provided by developed countries and received by developing countries compared with the economic losses registered in developing countries.
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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	Number of countries that have multi-hazard early warning system.
G-2	Number of countries that have a multi-hazard monitoring and forecasting system.
G-3	Number of people who have access to early warning information per 100,000 population
G-4	Percentage of local governments having a contingency or emergency plan in place to respond to early warnings
G-6	Percentage of local governments that have multi-hazard risk assessment / information, with results in an accessible, understandable and usable format for people.
G-5	Number of countries that have multi-hazard national risk assessment / information, with results in an accessible, understandable and usable format for stakeholders and people
G7	Number of people protected per 100,000 population through pre-emptive evacuation following early warnings

Disaggregation and minimum data standards

General Criteria

- All global indicators defined by OIEWG
- All disaster loss and damage reported (no minimum threshold)
- Country (A, B, C, D, E, F, G)
- Geographic location, municipality or equivalent (A, B, C, D)
- Hazard type (A, B, C, D, G)
- Start and end dates of events (A, B, C, D)

Human related indicators

- Income (A, B, G)
- Sex (A, B, G)
- Age (A, B, G)
- Disability (A,B, G)

(aspirational – difficult to apply to 2005-2015 baseline)

Disaster risk reduction indicators in the 2030 Agenda for Sustainable Development

- Inter-Agency and Expert Group on Sustainable Development Goal Indicators (**IAEG-SDGs**).
- **UN Statistical Commission:** Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators, and Note by the Secretary-General E/CN.3/2016/2/Rev.1*

- **3 SDGs:**
 - Goal 1. End poverty in all its forms everywhere
 - Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.
 - Goal 13. Take urgent action to combat climate change and its impacts

- **4 Targets**
- **6 indicators from the Sendai Framework = currently 9 indicators for SDGs Targets**

Target

Goal / Target





Data requirements: constructing the baseline (2016 - 2019)

SUSTAINABLE DEVELOPMENT GOALS

HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT

Public / private and international users



OEIWG
Global indicators
Target A
Target B
Target.....
Target G

National level targets and indicators
Determined by each country

Global reporting to intergovernmental bodies



Global analysis and validation by UN member States and other stakeholders



Regional analysis and validation by UN member States and other stakeholders

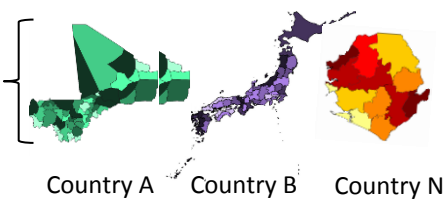


Clearing house:
Data aggregation / quality control
Analysis of trends and patterns
Measurement of progress / reporting

193 UN Member States

National Disaster Loss database (currently 89)

- Recording Data
- Institutionalization



Support reporting and analysis

Open data

Standards

Technical assistance

New software generation



V10.0

Monitoring the Sendai Framework for Disaster Risk Reduction 2016 - 2022

