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.

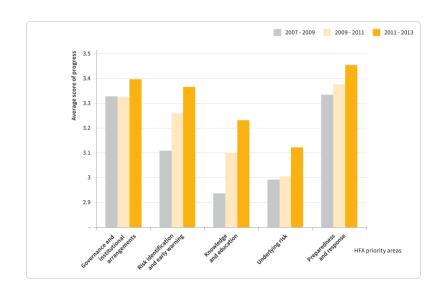
#### **Global repository:**

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





### Conflicting evidence on progress

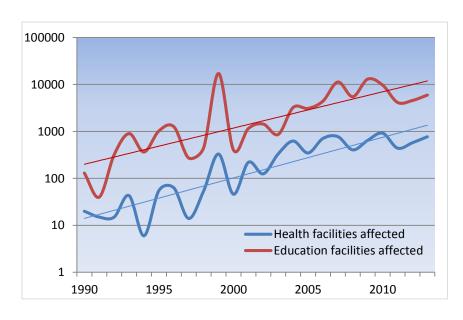




Gradual progress across all Priorities for Action

## 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 OEIWG: 29 30 September, 2015
- □ **Second formal session** of OEIWG: 10 11 February, 2016
- □ Informal consultation of the Chair: 20 21 June, 2016
- □ **Third formal session** planned for 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

cultural and environmental assets of persons, businesses, communities and countries **PROCESS** DATA SENDAI FRAMEWORK GLOBAL TARGETS **OUTCOME LEVEL** Disaster loss data (Targets A – D) **Globally** В F D Ε G comparable and National assessmt. (Targets E – G) objective indicators defined **ODA** and STI data by the OEIWG (Target F) A1-A3 B1-B8 C1-C15 D1-D15 F1-F13 F1-F20 G1-G14 **OUTPUT LEVE** Sendai Framework Goal Nationally defined SDG indicators Reduce existing Prevent Strengthen social and targets and SUSTAINABLE GOALS risk economic resilience new risk indicators embedded in **Underlying Risk Drivers GVR** Risk national strategies metrics and plans Urban Environmental Social Governance Sendai Framework Priorities for Action INPUT LEVEL **Priority 1 Priority 2 Priority 3 Priority 4 Nationally** National self-**Understanding** Strengthening Investing Enhancing preparedness for appropriate public risk governance in DRR effective response, BBB assessment policy indicators Drop down menu of national targets and indicators

#### Input-Output-Outcome Indicators

### **Building codes**

Improved building practice

Housing retrofitted

Housing not destroyed

**Disaster Loss Reduction** 

Policy for development of Early Warning System

Sufficient coverage?

% of population coverage of Early Warning System



Can all people evacuate?

**Disaster Loss Reduction** 





# Global Indicators for the Global Targets of the Sendai Framework

- Subject to the deliberations of Member States in the OEIWG.
- Technical considerations of the Secretariat provided in technical papers and non-papers at the request of Member States.
- Secretariat recommends the following global indicators using the following (readiness) categorization – internationally recognized computation methodology, and data availability (as SDGs).

Compound indicator	Methodology Available	Data Available	Indicator Category
Suggested global indicators	Υ	Υ	1
Suggested global indicators	Υ	N	2
Suggested global indicators	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 / presumed dead due to hazardous events per 100,000.
A-2	Number of deaths due to hazardous events.
A-3	Number of missing persons / presumed dead 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 to B-7)	Number of affected people by hazardous event per 100,000.
B-2	Number of injured or ill people due to hazardous events.
B-3	Number of people who left their places of residence 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.		
	Direct economic loss due to hazardous events in relation to global gros	
J-2 to C-9)	domestic product.	

Direct economic loss due to industrial facilities damaged or destroyed

Direct economic loss due to commercial facilities damaged or destroyed

Direct economic loss due to houses damaged by hazardous events

Direct economic loss due to houses destroyed by hazardous events

Direct economic loss due to damage to critical infrastructure caused by

Direct economic loss due to cultural heritage damaged or destroyed by

Direct economic loss due to environment degraded by hazardous events.

to global gross dofficatic product (ODI) by 2000.		
C-1	Direct economic loss due to hazardous events in relation to global gross	
(C-2 to C-9)	domestic product.	

Direct agricultural loss due to hazardous events.

Financial transfer and access to insurance.

(Total insured direct losses due to hazardous events)

by hazardous events

by hazardous events.

hazardous events.

hazardous events.

C-2

C-3

C-4

C-5

C-6

C-7

C-8

C-9

C-10

**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-#)	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-7	Number of security service structures destroyed or damaged by hazardous events.
D-#	Number of electricity plants and transmission towers destroyed or damaged by hazardous events.



# **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 the Sendai Framework for Disaster Risk Reduction 2015-2030.



**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.

- Member States leading parallel informal consultations in the inter-sessional period, together with the Chair, OEIWG.
- Supported by technical papers and non-papers produced by the Secretariat at the behest of the OEIWG.





Global Target (g) - Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk

	n and assessments to the people by 2030.
G-1 (G-2 to G-4, G-6)	Number of countries that have multi-hazard early warning system.
G-2	Number of countries that have a multi-hazard monitoring and forecasting system.
C-3	Number of people who are covered by and have access to mu

	Torceasting system.
G-3	Number of people who are covered by and have access to multi-hazard early warning system per 100,000.
	Number of local governments having a preparedness plan

G-4	(including EWS) or evacuation plan with standard operating procedures.
G-6	Number of local governments that have multi-hazard risk assessment / risk information, with results in an accessible, understandable and usable format for stakeholders and people.

G-5

Number of countries that have multi-hazard national risk

assessment / risk information with results in an accessible,

understandable and usable format for stakeholders and people.

1 2 to G-4, G-6)	Number of countries that have multi-hazard early warning system.
2	Number of countries that have a multi-hazard monitoring and forecasting system.
3	Number of people who are covered by and have access to multiple hazard early warning system per 100,000.
	Number of local governments having a preparedness plan

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	Number of local governments baying a proparedness plan	

# 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
- □ 4 indicators from the Sendai Framework = currently 9 indicators for SDGs Targets







## Target

B

E

G

Goal / Target

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

Goal 1. Target 1.5

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

Goal 11. Target 11.5

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

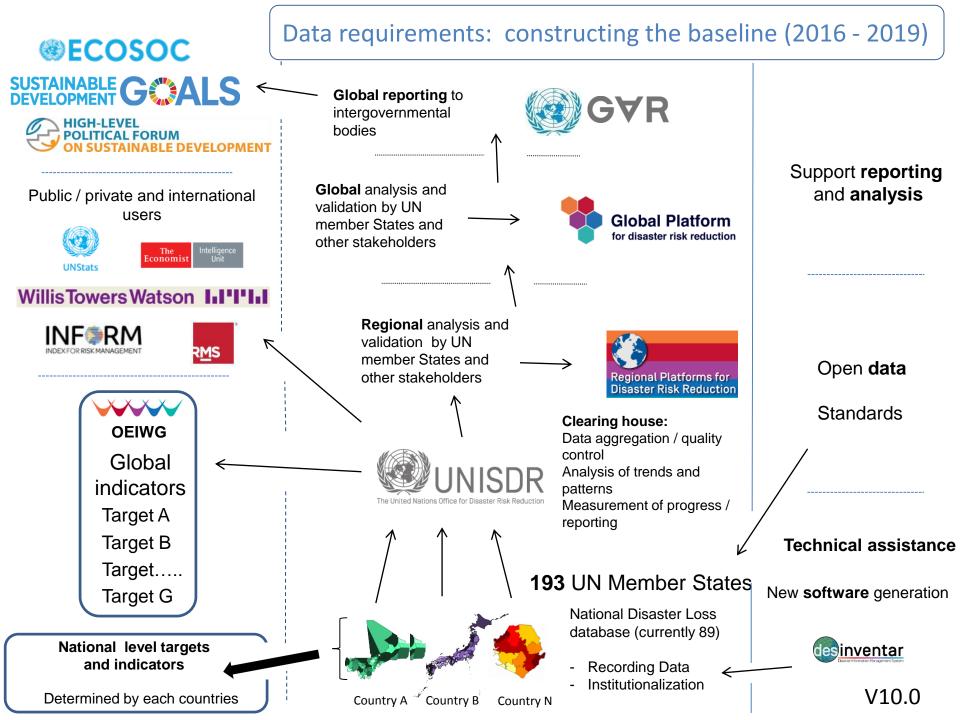
Number of countries with national and local disaster risk reduction strategies

Target 11.b

Goal 11.

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

Goal 13. Target 13.1



## Monitoring the Sendai Framework for Disaster Risk Reduction 2016 - 2022

