Monitoring the Sendai Framework

UNISDR

September 2017

Chart of the Sendai Framework for Disaster Risk Reduction
2015-2030

Scope and purpose

The present framework will apply to the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters, caused by natural or manmade hazards as well as related environmental, technological and biological hazards and risks. It aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors.

Expected 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

Goal

Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience

Targets

Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2015	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	Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030	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	Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020	Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030	Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030

Priorities for Action

There is a need for focused action within and across sectors by States at local, national, regional and global levels in the following four priority areas.

Priority 1
Understanding disaster risk

Priority 2
Strengthening disaster risk governance to manage disaster risk

Priority 3
Investing in disaster risk reduction for resilience

Priority 4
Enhancing disaster preparedness for effective response, and to «Build Back Better» in

Sendai Framework for Disaster Risk Reduction: 2015-2030

- 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

- Input Targets include national and local DRR strategies, international cooperation, MHEWS and disaster risk assessments

- Priorities for Action refer to specific **public policies for disaster risk management**

- Explicit links to the **2030 Agenda for Sustainable Development** and to the **Paris Agreement (UN Framework Convention on Climate Change)**

OUTCOMES of the OIEWG

- **OIEWG** recommendations in Report A/71/644 （Dec 2016)

- ❖ Developed **INDICATORS** to measure global progress in the implementation of the Sendai Framework

- ❖ Updated of **TERMINOLOGY** on disaster risk reduction

- ❖ UNISDR's *technical follow-up* to support Member States in monitoring

- **General Assembly** endorsed OIEWG report in UNGA Resolution A/RES/71/276 (Feb 2017)

OIEWG

In order to support Member States in the operationalization of the global indicators to measure progress towards the achievement of the global targets of the Sendai Framework and relevant targets of the Sustainable Development Goals, the **United Nations Office for Disaster Risk Reduction is requested to undertake technical work and provide technical guidance to**:

- Develop minimum standards and metadata for disaster -related data
- Develop methodologies for the measurement of indicators and the processing of statistical data
- Conduct a review of data readiness with respect to the indicators
- Develop technical guidance material for the testing and roll -out of the indicators and the web -based monitoring system

Technical Guidance Notes (Data/Methodology Document)

For each Target/Indicator:

- Minimum data set required

- Recommended Optimal dataset (including disaggregation)

- Challenges, temporary considerations, etc.

- Computation Methodology (from minimal to recommended datasets)

- Metadata: contents, methodology and other possible topics such as coverage, representativeness, quality

http://www.preventionweb.net/publications/view/54970

PRODUCTS

Web base on-line Monitoring System

- Implementing the Guidelines
- Allowing from minimum to Recommended data sets (including disaggregation)
- Metadata-enabled
- Loss Data Accounting as a SUB-SYSTEM
- With interfaces to SDG's and other frameworks
- Permitting nationally defined (Custom) Targets/Indicators
- Prototype developed and consulted during GP
- Development UNDERWAY

Prototype http://4d49ne.axshare.com/#g=1&p=welcome

Target C

Global target C: Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030.	
C-1 (compound)	Direct economic loss attributed to disasters in relation to global gross domestic product.
C-2	Direct agricultural loss attributed to disasters.
	Agriculture is understood to include the crops, livestock, fisheries, apiculture, aquaculture and forest sectors as well as associated facilities and infrastructure.
C-3	Direct economic loss to all other damaged or destroyed productive assets attributed to disasters.
	Productive assets would be disaggregated by economic sector, including services, according to standard international classifications. Countries would report against those economic sectors relevant to their economies. This would be described in the associated metadata.
C-4	Direct economic loss in the housing sector attributed to disasters.
	Data would be disaggregated according to damaged and destroyed dwellings.
C-5	Direct economic loss resulting from damaged or destroyed critical infrastructure attributed to disasters.
	The decision regarding those elements of critical infrastructure to be included in the calculation will be left to the Member States and described in the accompanying metadata. Protective infrastructure and green infrastructure should be included where relevant.
C-6	Direct economic loss to cultural heritage damaged or destroyed attributed to disasters.

Target C

Table: Example for Illustration of Suggested Metadata for Productive Assets of C3, C4 and C5 indicators

Type of Crop or Livestock or Agricultural Productive Asset	average size of facilities	Average replacement cost per Unit USD $, by YEAR (b) USD of 2015	Additional % Equipment, furniture & materials	Additional % associated infrastructure	Measurment UNIT	Formula	No. Workers
Corn	10000	1,200 2017 1,220 2018 1,245 2019 ….. …..	0%	0%	Hectare		10
Rice	10000	800 2017 805 2018 815 2019 ….. …..	0%	0%	Hectare		50
Wheat	10000	200 2017 220 2018 245 2019 ….. …..	0%	0%	Hectare	..	1000
………. (OTHER)	10000	800 2017 809 2018 ….. …..	0%	0%	Hectare	…	3
Cow	1	600 2017 609 2018 ….. …..	0%	0%	Animal	…	0.1
Pig	1	600 2017 609 2018 ….. …..	0%	0%	Animal	…	0.15
Sheep	1	200 2017 220 2018 245 2019 ….. …..	0%	0%	Animal	…	0.03
Goat	1	300 2017 409 2018 ….. …..	0%	0%	Animal	…	0.03

Target C

- **C–2** Direct agricultural loss attributed to disasters

Data entry options

- ◯ Enter monetary value & hectares manually
- ◯ Enter hectares manually & calculate monetary value
- ◉ Import both from National Disaster Loss Database

- **C–2C** Loss of crops damaged or destroyed attributed to disasters

Loss of crops

YEAR	MONETARY VALUE	HECTARES	SOURCE *
2021 *	USD 103,403	128,309 ha	National Disaster Loss Database
2022			

❯ PREVIOUS CYCLES

Disaggregation (optional)

⌄ TYPE OF CROP

	2021		2022	
CROP	MONETARY VALUE	HECTARES	MONETARY VALUE	HECTARES
Barley				
Millets				
Rice				
Tea				
Wheat				

- **C–2L** Loss of livestock lost attributed to disasters

- **C–2Fo** Loss of forests affected/destroyed by disasters

- **C–2A** Loss of aquaculture production area affected

In support of the Sendai Framework
for Disaster Risk Reduction 2015 - 2030

Sendai Framework for Disaster Risk Reduction 2015 - 2030

SUSTAINABLE DEVELOPMENT GOALS

Target

A

B

C

D

E

F

G

Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population

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

Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions of basic services, attributed to disasters

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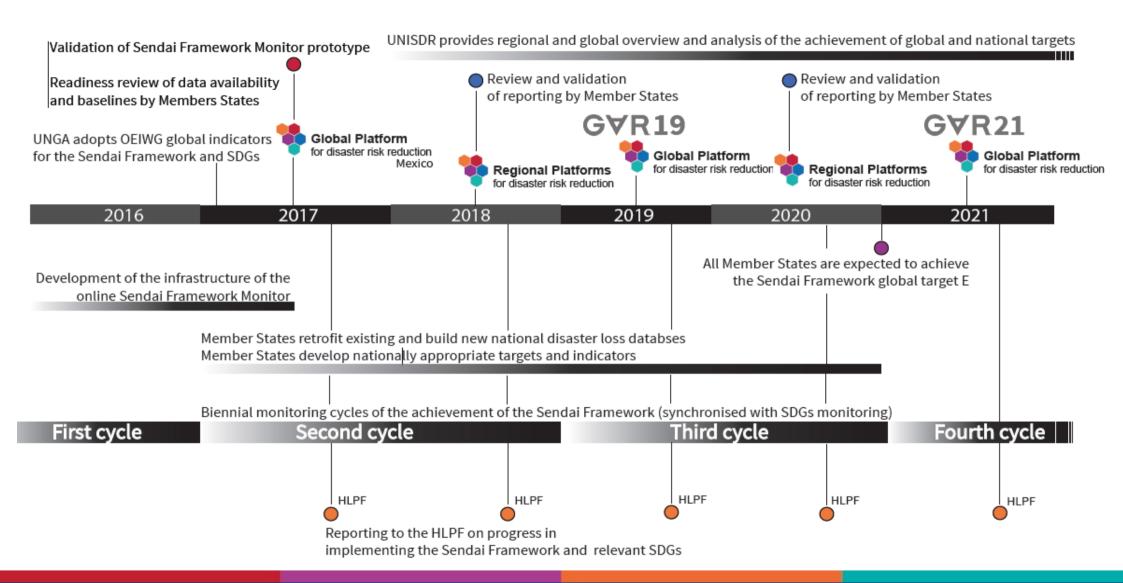
Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies.

Goal / Target

Goal 1. Target 1.5

Goal 11. Target 11.5

Goal 11. Target 11.b

Goal 13. Target 13.1

Monitoring the Sendai Framework for Disaster Risk Reduction 2016 - 2021

Upcoming Meetings

Expert Meeting on the development of Technical Guidelines to ensuring coherence regarding the 2020 Targets. NAPs and National Risk Reduction Strategies – Bonn, 27th - 28th November 2017.

Pre-Launch of the Sendai Framework Monitoring System, Bonn, 6 – 8th December 2017.

Thank-you

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