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# Sendai Framework for Disaster Risk Reduction 2015 - 2030

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## Enhancing implementation of the through monitoring and follow-up

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**9 November 2015**  
Cairo, Egypt



# The Sendai Framework and 2030 Agenda for Sustainable Development

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## 69<sup>th</sup> Session of the UN General Assembly

A/RES/69/283 (June 2015)

*Sendai Framework for Disaster Risk Reduction 2015 – 2030* ('The Sendai Framework')

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A/RES/69/284 (June 2015)

Establishment of an *open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction* (OEIWG)

A/RES/69/15 (November 2014)

*SIDS Accelerated Modalities of Action (SAMOA) Pathway*



# The Sendai Framework and 2030 Agenda for Sustainable Development

## 70<sup>th</sup> Session of the UN General Assembly

A/RES/70/1 (September 2015)

*Transforming our world: the 2030 Agenda for Sustainable Development*

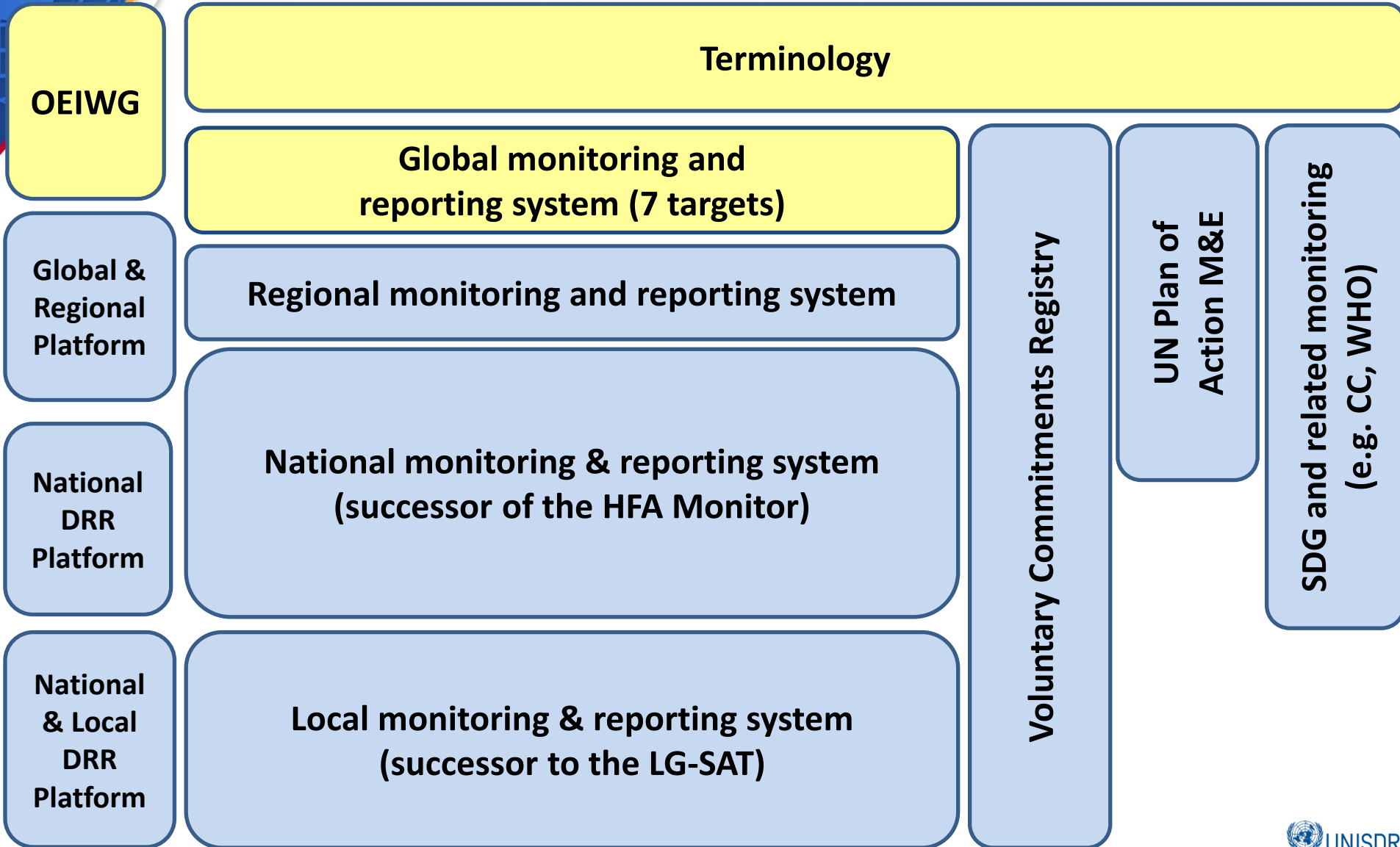
- IAEG-SDGs

*United Nations Framework Convention on Climate Change* (December 2015)

## 71<sup>st</sup> Session of the UN General Assembly

OEIWG completes work and report submitted to the UN General Assembly by December 2016.

# The Development of Sendai Monitoring Mechanism





# Purpose, objectives, outcomes

**Monitoring of implementation through monitoring the 7 global targets of the Sendai Framework:**

- (a) Reduce **Mortality**
- (b) Reduce **Affected People**
- (c) Reduce **Direct Economic Loss**
- (d) Reduce Damage to **Critical Infrastructure** and Disruption of **Basic Services**
- (e) Increase the Number of Countries with **National + Local DRR Strategies**
- (f) Enhance **International Cooperation**
- (g) Increase the Availability and Access to **Multi-hazard EWS** and Disaster **Risk Information + Assessments**



# Purpose, objectives, outcomes

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The **open-ended intergovernmental expert working group (OEIWG)** is currently developing **global core indicators**, which will be used by all countries to report on the 7 global targets.

The OEIWG will finalize the global indicators by December 2016.

**Member states will be asked to report national data to monitor the 7 global targets by 2017, against which progress in implementing the Sendai Framework for DRR can be measured.**



# Sendai Framework - Global indicators (OEIWG deliberation)

**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** Number of **deaths and missing** due to hazardous events per 100,000.

(This indicator should be computed based on indicators A-2, A-3 and population figures)

**A-2** Number of **deaths** due to hazardous events

**A-3** Number of **missing** due to hazardous events



# Sendai Framework - Global indicators (OEIWG deliberation)

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

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|------|---|
| B-1  | Number of <b>affected people</b> per 100,000.<br>(This indicator should be computed based on indicators B-2 to B-6 and population figures.)                 |
| B-2  | Number of <b>injured or ill</b> people due to hazardous events  |
| B-3  | Number of <b>people who left their places</b> of residence due to hazardous events<br>(This indicator should be computed based on indicators B-3a and B-3b) |
| B-3a | Number of <b>evacuated</b> people due to hazardous events   |





# Sendai Framework - Global indicators (OEIWG deliberation)

**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-3b	Number of relocated people due to hazardous events
B-4	Number of people whose houses were damaged due to hazardous events Note: B-4 and B-5 use the same data set as C-5 and C-6.
B-5	Number of people whose houses were destroyed due to hazardous events
B-6	Number of people who received food relief aid due to hazardous events



# Sendai Framework - Global indicators (OEIWG deliberation)

Target C: Reduce *direct disaster economic loss* in relation to global gross domestic product (GDP) by 2030

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|-----|--|
| C-1 | <b>Direct economic loss</b> due to hazardous events in relation to global gross domestic product.<br>(This indicator should be computed based on indicators C-2 to C-7 and GDP figures). |
| C-2 | Direct <b>agricultural loss</b> due to hazardous events  |
| C-3 | Direct economic loss due <b>to industrial facilities</b> damaged or destroyed by hazardous events  |
| C-4 | Direct economic loss due to <b>commercial facilities</b> damaged or destroyed by hazardous events  |



# Sendai Framework - Global indicators (OEIWG deliberation)

**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	Damage to critical infrastructure due to hazardous events (This index should be computed based on indicators D-2, D-3 and D-4 (road).)
D-2	Number of health facilities destroyed or damaged by hazardous events
D-3	Number of educational facilities destroyed or damaged by hazardous events



# Sendai Framework - Global indicators (OEIWG deliberation)

**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-4	<p>Number of transportation infrastructures destroyed or damaged by hazardous events</p> <p>Note: the indicator measures (1) road, (2) railway, (3) port and (4) airport.</p>
D-5	<p>Number of time basic services have been disrupted due to hazardous events</p> <p>Note: Sectors monitored include healthcare services, education services, transport sector, ICT, water supply, sewage system, solid waste management, power/energy system and emergency response.</p>



# Sendai Framework - Global indicators (OEIWG deliberation)

**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
E-3	Number of countries that integrate climate and disaster risk into development planning



# Sendai Framework - Global indicators (OEIWG deliberation)

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**Target E: Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.**

Ê-4	Number of countries that adopt and implement critical infrastructure protection plan
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# Sendai Framework - Global indicators (OEIWG deliberation)

**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**

F-1	Level of non-earmarked support provided by developed countries and reported by developing countries.
F-2	Number of developed countries having a policy marker as part of the legislation on provisions for support to developing countries to enhance the implementation of the Sendai Framework and the fulfilment of the global goals
F-3	Progress on the implementation of paragraph 47 of the Sendai Framework, in particular subparagraphs 47(a) and 47 (b).





# Sendai Framework - Global indicators (OEIWG deliberation)

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**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**

F-4	Progress in using the regional platforms for exchanging experiences and enhancing South-South cooperation for the implementation of the Sendai Framework.
F-5	Level of support provided by international organizations in line with paragraph 48 of the Sendai Framework.



# Sendai Framework - Global indicators (OEIWG deliberation)

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**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 multi-hazard monitoring and forecasting system
G-3	Number of people who are covered by multi-hazard early warning system



# Sendai Framework - Global indicators (OEIWG deliberation)

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**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-4	Percentage of local governments having preparedness plan or evacuation plan
G-5	Number of countries that have multi-hazard national risk assessment with results in an accessible, understandable and usable format for stakeholders and people
G-6	Percentage of local governments that have with results in an accessible, understandable and usable format for stakeholders and people



# SDGs Goal 11.

Make cities & human settlements  
inclusive, safe, resilient and sustainable

**11.5** By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations **Sendai targets a), b), c)**

**11.b** By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels **Sendai target e)**

**11.c** Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials **Sendai targets f)**



# Sendai Framework - Global indicators (OEIWG deliberation)

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## Data to be collected and reported for the 7 global targets:

- National disaster loss data (targets a-d)
- National and local DRR strategies developed and aligned to the Sendai Framework (target e)
- Measurement of International Cooperation (target f, indicators under development), possible linkage to tracking DRR investment
- Early Warning Systems
- Risk assessments in line with SF



# Priorities for countries

## 2015 - 2020

### Sendai Framework for DRR

- **Develop national databases** to start monitoring the 7 Sendai global targets
- **Develop national and local targets and indicators aligned with the Sendai Framework**
- **Develop national and local DRR strategies** aligned to the Sendai Framework



# National (+ global) Indicators

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- **Set of voluntary national indicators**, which can be tailored by countries to fit their national context.
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- A two year **collaboration of UNISDR with experts, and informing the deliberations of States in the OEIWG.**



# UNISDR Proposal for National indicators

UNISDR proposal  
“Menu” of possible  
national indicators

Global targets



National DR strategies

- **targets**
- **Indicators**
- **time frame**

Indicators  
not  
selected  
by  
country

Core  
indicators  
to monitor  
global  
targets

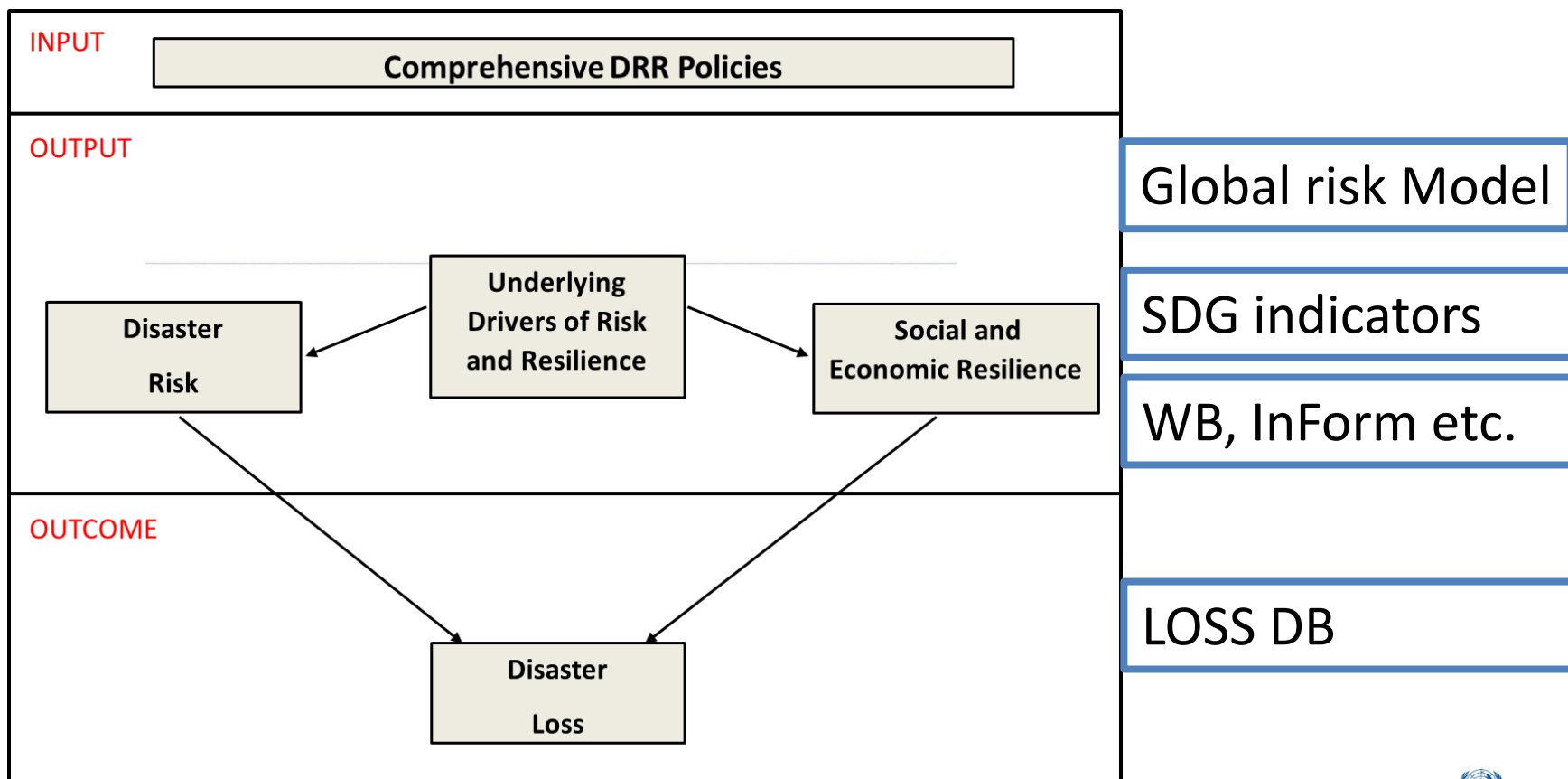
Strongly  
recommen  
ded  
indicators

Optional  
indicators

Country's  
own  
indicators

# UNISDR Proposal for National indicators

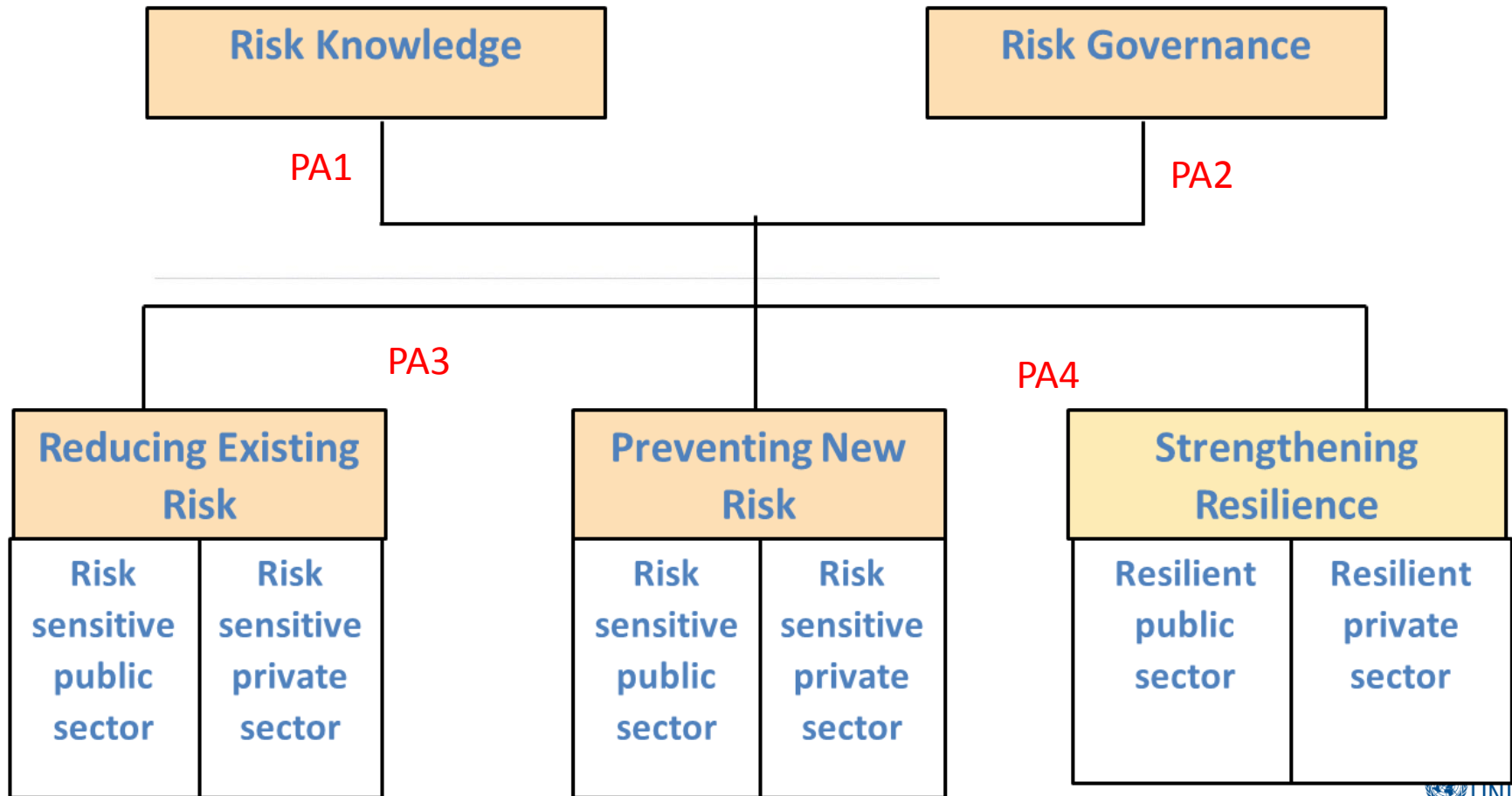
## Proposed successor to HFA Monitor Architecture





# UNISDR Proposal for National indicators

## Proposed successor to HFA Monitor Architecture





# Sendai indicators

## Input-Output-Outcome

**EWS Development Policy**

Sufficient coverage?

**% of population coverage of  
EWS**

Can all people  
evacuate?

**Disaster Loss Reduction**



# Input level

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*Continuation of HFA indicators.*

**Examples:**

**C57: Land-use planning (including urban  
planning)**

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**C58: Building codes**

**C59: Building permits**

**C60: Inclusive urban development**

**C61: Architectural Licenses**



# Output level

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Measures the **effectiveness of the public policy** indicators.

Connect input and outcome indicators

Enhance understanding of disaster risk generation

**Example A7: Quality of infrastructure**



# Outcome level

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Indicators on **Disaster Loss** monitor mortality, physical damage and direct economic loss.

Enables States to monitor the state of disaster risk, and if they are reducing disaster risk.

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## Examples:

**Direct economic loss due to housing units damaged by disasters (hazard events)**

**Number of people living in houses damaged due to disasters (hazard events) per 100,000**



# Differences between the HFA and the Sendai indicators

Current HFA indicators	Proposed Sendai indicators
1. <b>Input</b> focused	Link <b>input</b> indicators to <b>outputs and outcomes</b>
2. Measure only <b>risk reduction</b>	Measure not only <b>risk reduction</b> but also <b>risk generation</b> and <b>resilience</b>
3. Progress not related to <b>risk levels</b> of country	Integrate <b>risk levels</b> in the system
4. <b>Subjective</b> , progress level 1-5, not allowing international benchmarking	<b>Objective</b> , binary, supporting peer to peer learning

# What are the differences between the HFA and the Sendai Indicators?

Current HFA indicators	Proposed Sendai indicators
5. <b>Core indicators</b> related to <b>multiple policies and stakeholders</b> : Unclear responsibility and accountability	Refer to <b>specific public policies</b> , identifying stakeholders for each policy
6. No clear link to <b>MDG and CC</b>	Provide clear links to <b>SDGs and CC</b>
7. Not used for supporting <b>decision making</b>	Help countries identify <b>weak policy area</b> by facilitating systematic understanding of disaster risk mechanism



# National (+ global) Indicators

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- UNISDR pilots of the national indicator system.
- **Pilot countries are:  
Mozambique, Armenia, Japan,  
Paraguay, Fiji, Philippines and  
Lebanon**



# Selected, preliminary findings from national pilot studies.

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- Most indicators have been identified as **applicable**.
  - **Strong linkages between SDGs, Sendai Framework and CCA** monitoring systems, and indicators is a **must**.
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- Indicators to be examined for **application to regional and national frameworks**.
  - Some of the **institutional challenges** observed under the HFA Monitor remain.



# Sendai Implementation Country Support

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To support

*Development or revision of a disaster  
risk reduction strategy and plan*

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Grounded in

*Solid understanding of risk and resilience  
including financial and governance  
capacities in the country.*



# Implementing Sendai Framework for DRR

## Actionable risk sensitive DRR Plan and monitoring system

- 1 Status review and report of disaster risk management
- 2 National disaster loss databases
- 3 National risk assessment and risk information platform
- 4 Multi-stakeholder dialogues on risk sensitive investment and financing
- 5 National strategy and plan for disaster risk reduction
- 6 National targets and indicators



# Shukran

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Indicator document for Open-ended Intergovernmental Working Group for Sendai Framework:

[http://www.preventionweb.net/files/45466\\_indicatorspaperaugust2015final.pdf](http://www.preventionweb.net/files/45466_indicatorspaperaugust2015final.pdf)

UNISDR proposal for national indicators:

<https://www.dropbox.com/s/wi4upat99xdtmn8/Doc4-DRAFT%20Indicator%20system%20for%20the%20Sendai%20Framework%20%2822JULY%29.pdf?dl=0>

Global Data Collection from National Disaster Loss Database

[http://www.desinventar.net/index\\_www.html](http://www.desinventar.net/index_www.html)

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