Annual Inter Agency Coordination Meeting on Industrial Accidents

Cardiff Metropolitan University
29 May, 2018

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

UNISDR
United Nations Office for Disaster Risk Reduction

Monitoring progress of 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.

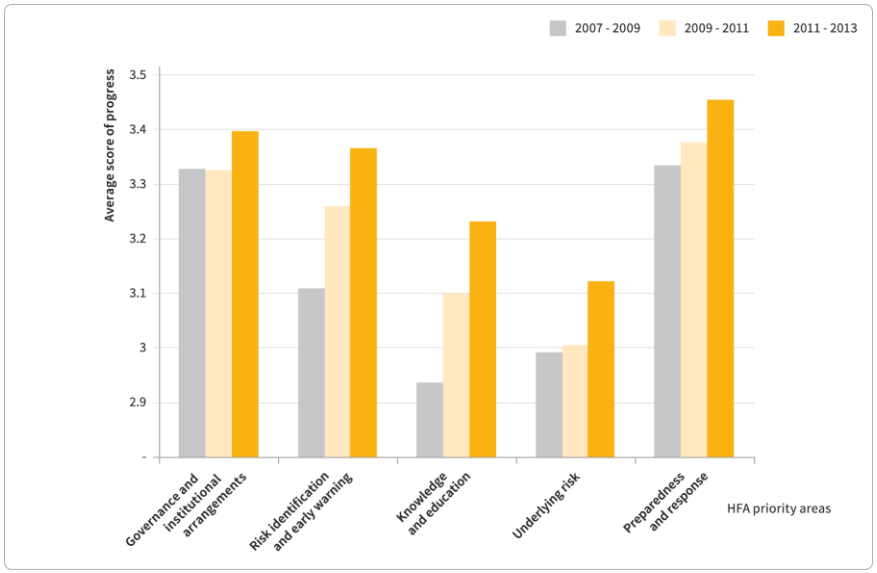
Monitoring progress:

- **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:

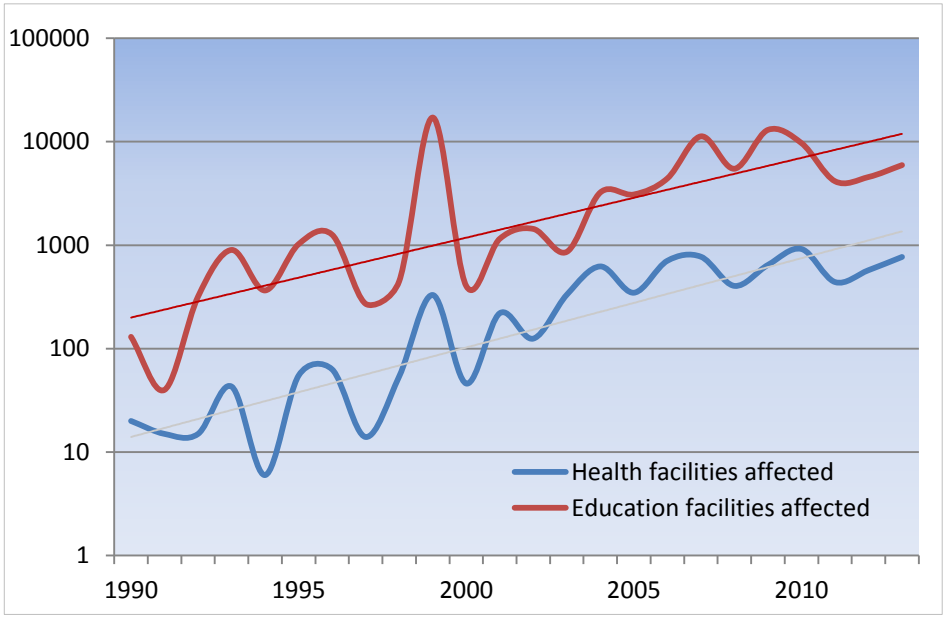
- Single largest repository of the worldwide state of play in DRR.

Conflicting evidence on progress



Gradual progress across all Priorities for Action

Increasing physical damage and economic loss

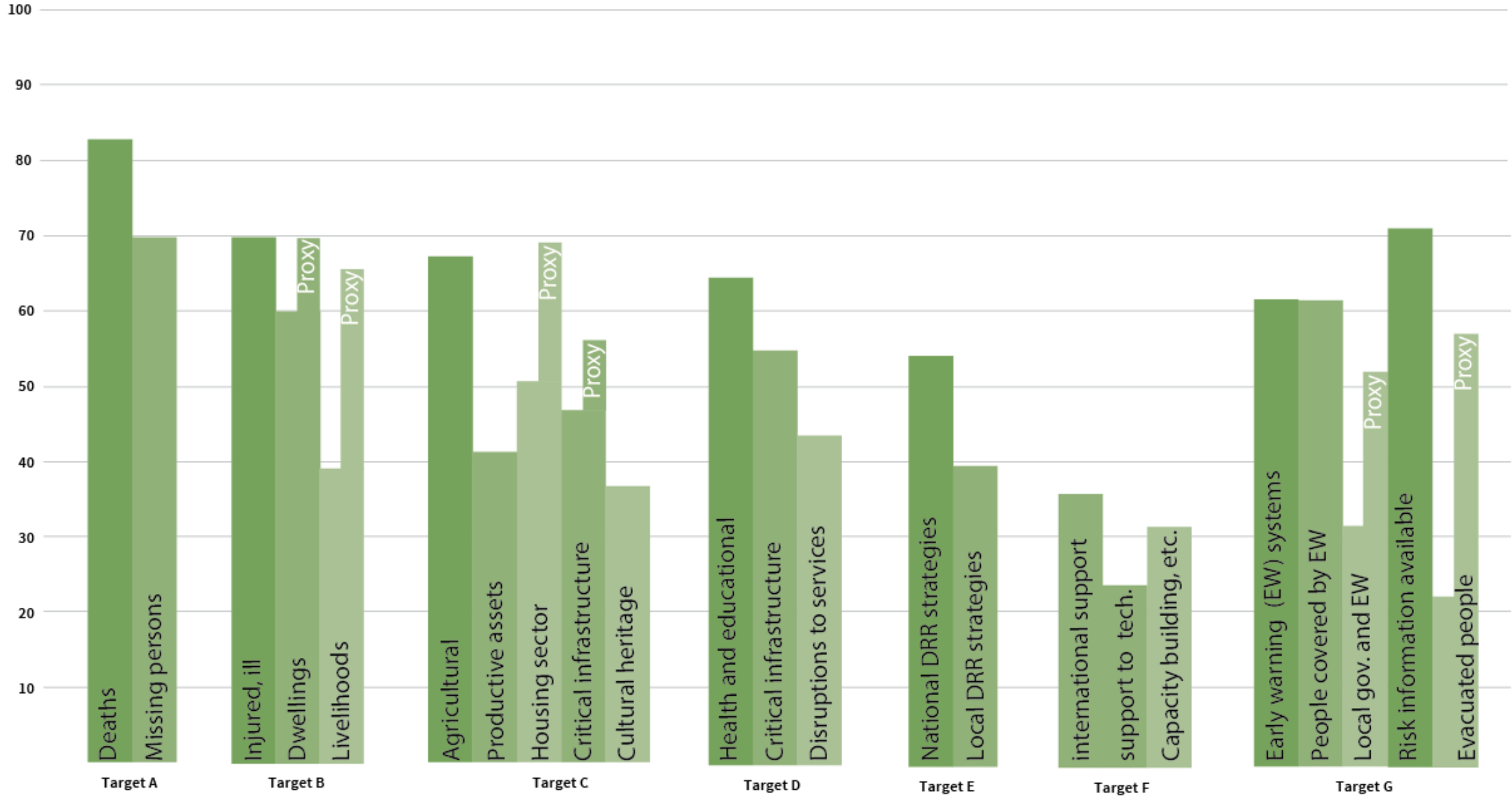


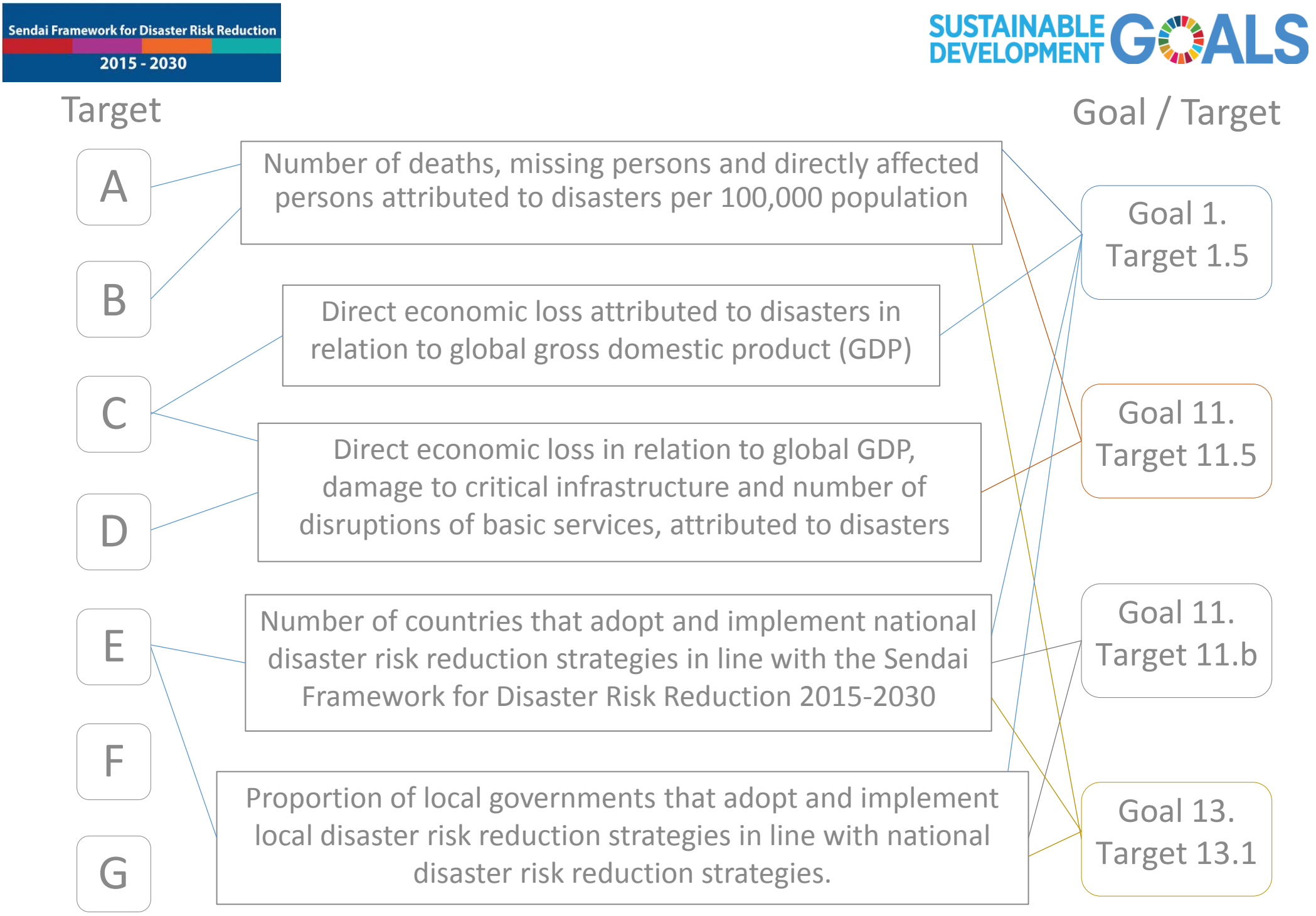
Monitoring the HFA: issues encountered

- **Review** of the **HFA Monitor and process** by UNISDR 2013-2015
- HFA Thematic Review 2013-2014, multi-stakeholder, peer-reviewed research initiative led by UNISDR
- Focused on **reducing existing risks** rather than on the **generation of new risks** or **resilience** .
- Progress not related to **risk levels** of country – risk data and evidence
- **Subjective**, not allowing international benchmarking
- Core indicators relate to **multiple policies** and **stakeholders**: Unclear responsibility and accountability – e.g. agriculture (drought, flood, upstream water management)
- 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**, agreed by Member States in Sendai
- **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 –** including through **Global Platform** (to the **HLPF**)


100
90
80
70
60
50
40
30
20
10
Deaths
Missing persons
Injured, ill
Dwellings
Proxy
Livelihoods
Proxy
Agricultural
Productive assets
Housing sector
Proxy
Critical infrastructure
Proxy
Cultural heritage
Health and educational
Critical infrastructure
Disruptions to services
National DRR strategies
Local DRR strategies
international support
support to tech.
Capacity building, etc.
Early warning (EW) systems
People covered by EW
Local gov. and EW
Proxy
Risk information available
Evacuated people
Proxy
Target A
Target B
Target C
Target D
Target E
Target F
Target G


Sendai Framework for Disaster Risk Reduction
2015 - 2030
SUSTAINABLE DEVELOPMENT GOALS
Target
Goal / 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 1. Target 1.5
Goal 11. Target 11.5
Goal 11. Target 11.b
Goal 13. Target 13.1

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

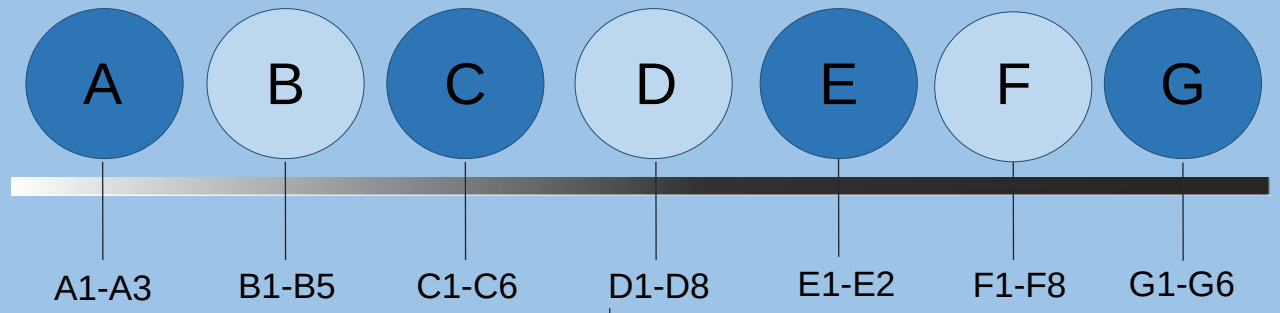
PROCESS

DATA

OUTCOME LEVEL

Globally comparable and objective indicators defined by the OEIWG

SENDAI FRAMEWORK GLOBAL TARGETS



Disaster loss data (Targets A – D)

National assessmt. (Targets E & G)

ODA and STI data (Target F)

OUTPUT LEVEL

Nationally defined targets and indicators embedded in national strategies and plans

Sendai Framework Goal

Reduce existing risk | Prevent new risk | Strengthen social and economic resilience

Underlying Risk Drivers

Urban | Environmental | Social | Governance | Climate Change

SDG indicators

Paris Agreement

Risk metrics

GAR

INPUT LEVEL

Nationally appropriate public policy indicators

Sendai Framework Priorities for Action

Priority 1 Understanding risk

Priority 2 Strengthening governance

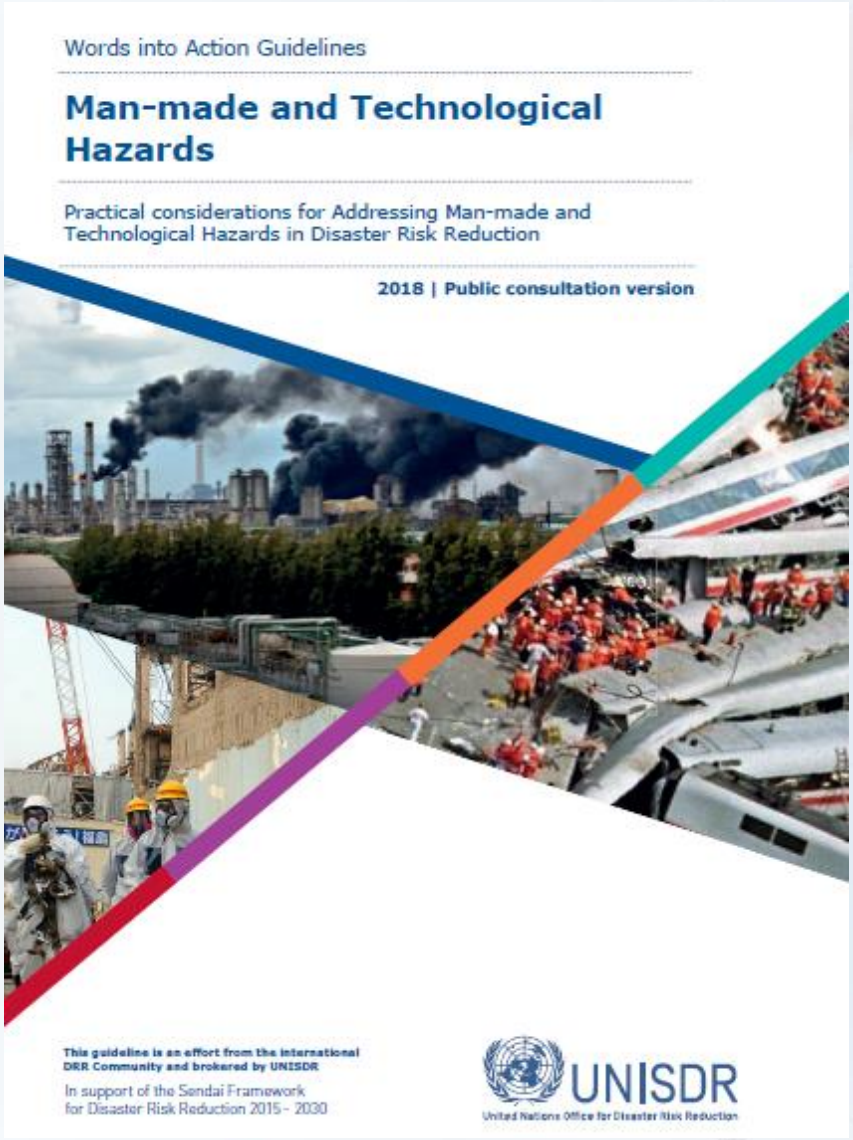
Priority 3 Investing in DRR

Priority 4 Enhancing preparedness for effective response, BBB

Drop down menu of national targets and indicators

National self-assessment

Technological Hazards post-Sendai



- Words into Action
- Public consultation version
- Global Assessment Report 2019 (GAR19)

The Global Assessment Report on Disaster Risk Reduction (GAR)

GAR - a snapshot, contextualising progress in realising global targets of Sendai Framework and the SDGs.

Contributes to the High Level Political Forum on Sustainable Development (HLPF)

The Global Assessment Report on Disaster Risk Reduction (GAR)

GAR19 will also include:

- analysis of progress: national and sub-national losses, implementation and achievement of goals and outcomes of SF and 2030 Agenda
- examination of global trends in risk, with a focus on drought
- drill-down on national and local implementation (Target E)
- introduction to additional hazards and risks

GAR19

Introduction to the **additional hazards and risks** of the Sendai Framework.

- Technological Hazards and Risks :
  - Chemical / industrial
  - Nuclear / radiological
  - NATECH
- Biological hazards and risks
- Environmental hazards and risks

GAR19

Introduction to Technological Hazards :

- Underlying theory
- Existing measures - private and public sector organisations
- Reflection on future options
- Solicit contributions of case studies, describing:
  - Ongoing work / experiences (global, regional, national [sub-national?]) + linkages.
  - Current state-of-the-art for focus areas of each organisation
  - Suggestions for standardisation in the future.

Seeks to create open dialogue

GAR19

- **Coherence** – integrated risk informed and sustainable development pathways; contributions to the achievement of the goals and outcomes of the 2030 Agenda for SD, the Paris Agreement and the New Urban Agenda.
- **Inclusion** – 2019 High Level Political Forum on SD theme - *Empowering people and ensuring inclusiveness and equality.*
- **Systems risk** – disaster risk and its dynamic interactions with social, ecological, economic and political systems.
- **Behavior** – appraising and evaluating behavior, with and without risk knowledge and action, and the conditions that contribute to change.

Global risk assessment pre-Sendai

- Pre-2015 multi-hazard global risk assessment (GRA) = global probabilistic hazard models for earthquake, tsunami, riverine flood, cyclonic wind + storm surge
- Developed by the UNISDR in 2011, provided comparable open-access disaster risk metrics across countries and hazard categories as a means of raising risk awareness
- Reflects the natural hazard scope of the Hyogo Framework for Action

The Sendai Framework – New Hazard and Risk Scope

- The Sendai Framework addresses the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters caused by natural or man-made hazards….
- ……and related environmental, technological and biological hazards and risks
- Demanded re-examination of the current GRA approach, to cover the full scope of the Sendai Framework

Developing a new approach to global risk assessment for the Sendai Framework & 2030 Agenda

End-user assessment conducted with 11 governments (Oct. 2017) on challenges in using risk information :

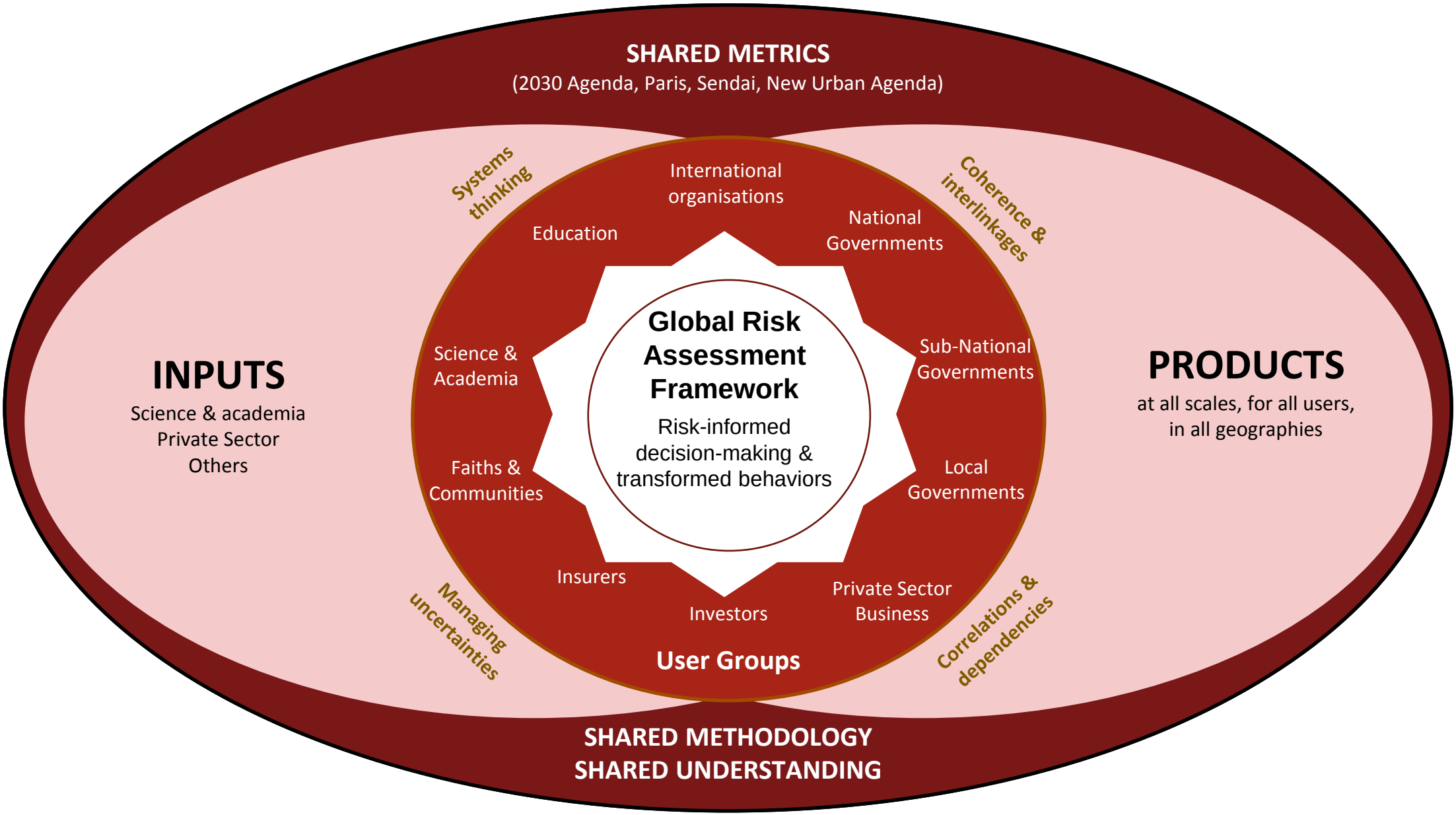
- Many risk models can only be used if adapted to context
- Unavailability of some data impedes application of risk models
- Risk information is not currently unified and standardized by format, content, scale, administrative division
- Most respondents indicated a low level of familiarity with all / most risk metrics or tools

The Global Risk Assessment Framework (GRAF)

Expert Meeting - Recommendations

UNISDR to lead establishment of a Global Risk Assessment Framework (GRAF) for Sendai and the SDGs, bridging existing global with regional, national and local risk information which will :

- be underpinned by robust practices and standards, leveraging existing risk models and assessments
- emphasise / improve understanding of vulnerability, exposure & impact
- develop common list of hazards, common data standards and common risk metrics
- convert and translate risk modelling outputs into usable and applicable information
- meet demand for openly accessible data, products & services
- establish Expert Group to guide design and iterative development


SHARED METRICS
(2030 Agenda, Paris, Sendai, New Urban Agenda)
INPUTS
Science & academia
Private Sector
Others
Systems thinking
Coherence & interlinkages
Managing uncertainties
Correlations & dependencies
International organisations
National Governments
Sub-National Governments
Local Governments
Private Sector Business
Investors
Insurers
Faiths & Communities
Science & Academia
Education
Global Risk Assessment Framework
Risk-informed decision-making & transformed behaviors
User Groups
PRODUCTS
at all scales, for all users, in all geographies
SHARED METHODOLOGY
SHARED UNDERSTANDING

Sendai Framework for Disaster Risk Reduction 2005 – 2015

https://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf

6 UN languages https://www.unisdr.org/we/inform/publications/43291

Sendai Framework Monitor (online)

https://www.preventionweb.net/drr-framework/sendai-framework-monitor/process

UNGA Terminology and Indicators for DRR

https://www.preventionweb.net/drr-framework/open-ended-working-group/indicators/

Global Assessment Report

https://www.preventionweb.net/english/hyogo/gar/

Marc Gordon

gordon6@un.org