



Ministry of  
the Interior and Safety

 Incheon Metropolitan City

## Symposium on

# ***“Strengthening the Capacities of Public Institutions & Developing Effective Partnerships to Realize the 2030 Agenda for Sustainable Development”***

24-26 October 2018  
Incheon, Republic of Korea

**October 26<sup>th</sup>, 2018– Session Management Note for  
Plenary Session V, Group I**

# Disaster Loss

*Economic Losses, Poverty and Disasters 1998-2017 (CRED, UNISDR. 2018.)*

Between 1998 and 2017 **climate-related and geophysical disasters killed 1.3 million people** and left a further **4.4 billion injured, homeless, displaced or in need of emergency assistance.**

While the majority of fatalities were due to geophysical events, mostly earthquakes and tsunamis, **91% of all disasters were caused by floods, storms, droughts, heatwaves and other extreme weather events.**



Earthquake



Extreme temperature



Earthquake & Tsunami



Flood



Storm



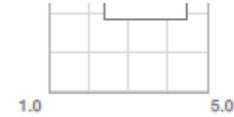
Drought

# The disaster burden is real!

- Disasters continue to cause significant damage, both in terms of lives lost and assets destroyed.
- Mortality is concentrated in very intensive disasters; therefore, it is difficult to perceive trends over relatively short periods of time.
- However, mortality from smaller-scale events continues to increase.
- A large amount of damage occurs in small disaster events; constantly eroding essential development assets.



# 2018 Global Risk Landscape



## Top 10 risks in terms of Likelihood

- 1 Extreme weather events
- 2 Natural disasters
- 3 Cyberattacks
- 4 Data fraud or theft
- 5 Failure of climate-change mitigation and adaptation
- 6 Large-scale involuntary migration
- 7 Man-made environmental disasters
- 8 Terrorist attacks
- 9 Illicit trade
- 10 Asset bubbles in a major economy

## Top 10 risks in terms of Impact

- 1 Weapons of mass destruction
- 2 Extreme weather events
- 3 Natural disasters
- 4 Failure of climate-change mitigation and adaptation
- 5 Water crises
- 6 Cyberattacks
- 7 Food crises
- 8 Biodiversity loss and ecosystem collapse
- 9 Large-scale involuntary migration
- 10 Spread of infectious diseases

## Categories

-  Economic
-  Environmental
-  Geopolitical
-  Societal
-  Technological

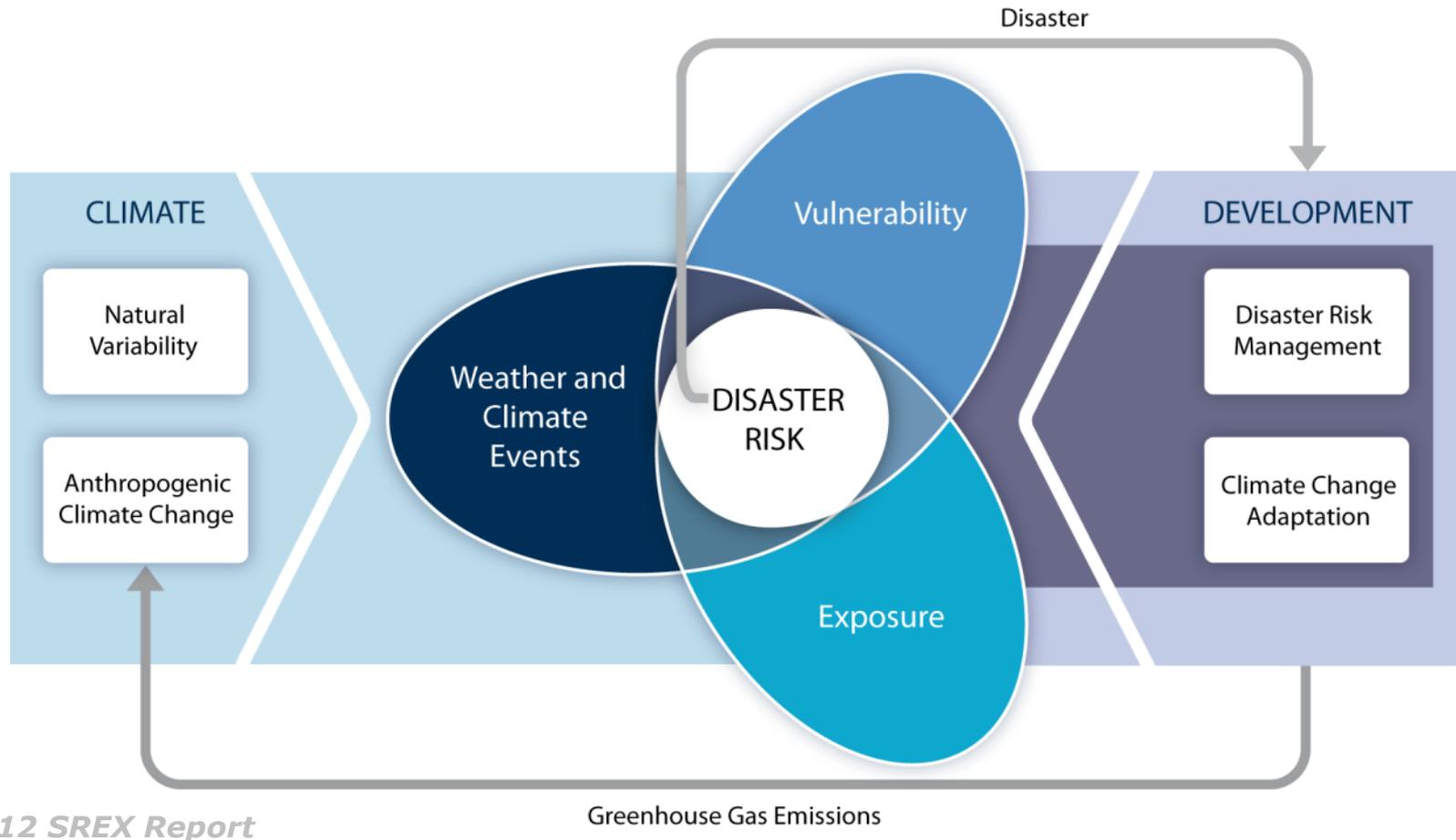
**Source:** World Economic Forum Global Risks Perception Survey 2017–2018.

**Note:** Survey respondents were asked to assess the likelihood of the individual global risk on a scale of 1 to 5, 1 representing a risk that is very unlikely to happen and 5 a risk that is very likely to occur. They also assess the impact on each global risk on a scale of 1 to 5 (1: minimal impact, 2: minor impact, 3: moderate impact, 4: severe impact and 5: catastrophic impact). See Appendix B for more details. To ensure legibility, the names of the global risks are abbreviated; see Appendix A for the full name and description.

# A Changing Environment

- **Intensifying** disaster **trends** & more **frequent** events
- **Resource scarcity** and degradation (land, water, food, energy, biodiversity)
- Increasing risk of “unchecked” **urbanization** coupled with **high exposure** of population and assets in high risk areas.
- Increasing **governance challenges**, coordination, accountability, legislations, institutional mechanisms, migration, conflict, all affecting human security
- **Equity, poverty, inclusion** – all being fundamental development challenges contributing to vulnerability
- Inter-dependency and **complexity of risk drivers**
- **Climate change** [extreme events, slow onset disasters (drought)]

# Disaster risk management and climate change adaptation can influence the degree to which extreme events translate into impacts and disasters



IPCC 2012 SREX Report

Greenhouse Gas Emissions

# Sendai Framework – Paris Climate Agreement – 2030 Agenda SDGs – Urban Agenda



**HABITAT III**  
NEW URBAN AGENDA

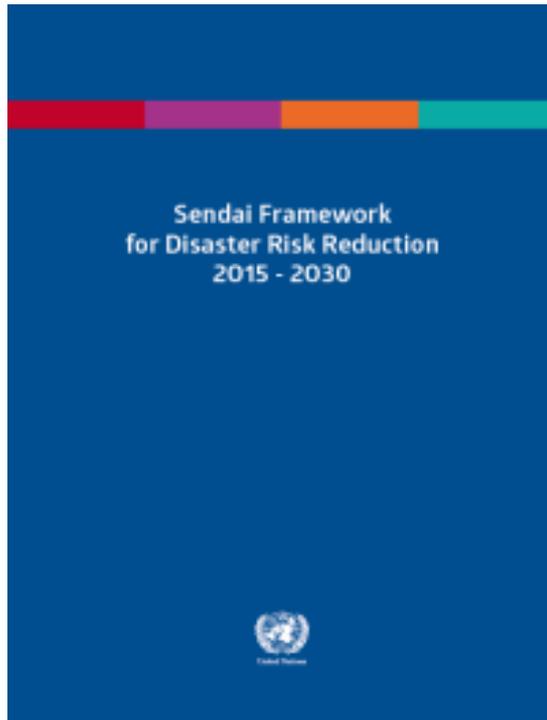
**global frameworks – mutually reinforcing outcomes**



# The Sendai Framework for Disaster Risk Reduction 2015-2030

## Intended 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.*



- **Adopted at the Third UN World Conference on Disaster Risk Reduction** on March 18, 2015
- **Endorsed by the UN General Assembly** on May 15, 2015.
- **15-year**, voluntary, non-binding agreement with **4 Priorities for Action** and **7 Global Targets**
- Recognizes that the **State has the primary role** to reduce disaster risk but that responsibilities are to be **shared with other stakeholders including local government and the private sector.**

# Common Sendai Framework Targets and 2030 Agenda Common Indicators

Sendai Framework  
for Disaster Risk Reduction  
2015-2030

SUSTAINABLE DEVELOPMENT GOALS



# The Sendai Framework and the Paris Agreement on Climate Change

## Direct implications for disaster risk, including:

- The aim of **holding the increase** in the global average temperature to well below 2 degrees C above pre-industrial levels and pursuing efforts to limit the increase to 1.5 degrees C, recognizing that this **would significantly reduce the risks and impacts of climate change.**
- A **global goal on climate adaptation** that considers enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change.
- **Agreement to enhance understanding, action and support with respect to loss and damage** associated with the adverse effects of climate change. Focus is placed on averting, minimizing and addressing loss and damage associated with extreme weather and slow onset events. **Measures include the tools of disaster risk reduction** - early warning systems and emergency preparedness, comprehensive risk assessment and management and risk insurance facilities, climate risk pooling and other insurance solutions.
- Recognition of the **Sendai Framework for Disaster Risk Reduction.**

*Climate Agreement Articles 2, 7, 8 and 10*

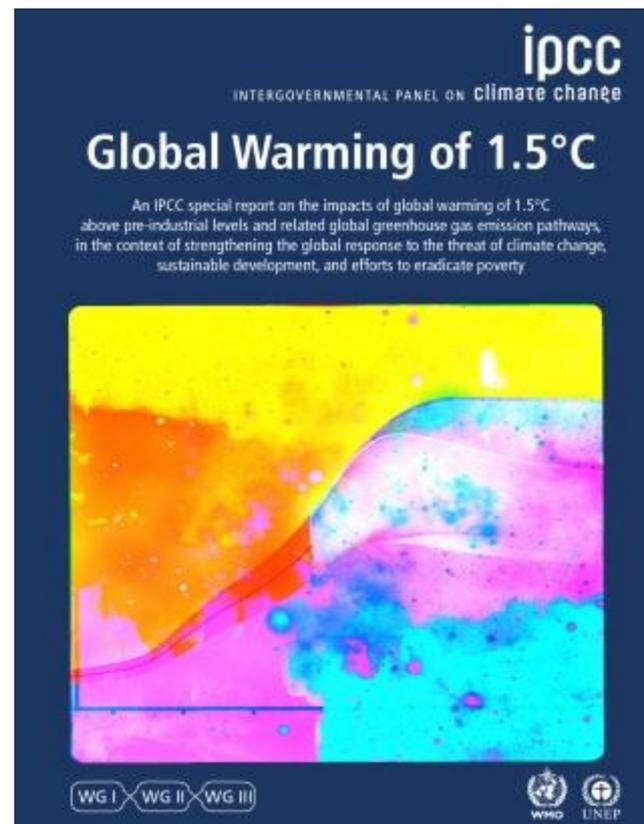


# IPCC Special Report on Global Warming of 1.5 °C Summary for Policymakers

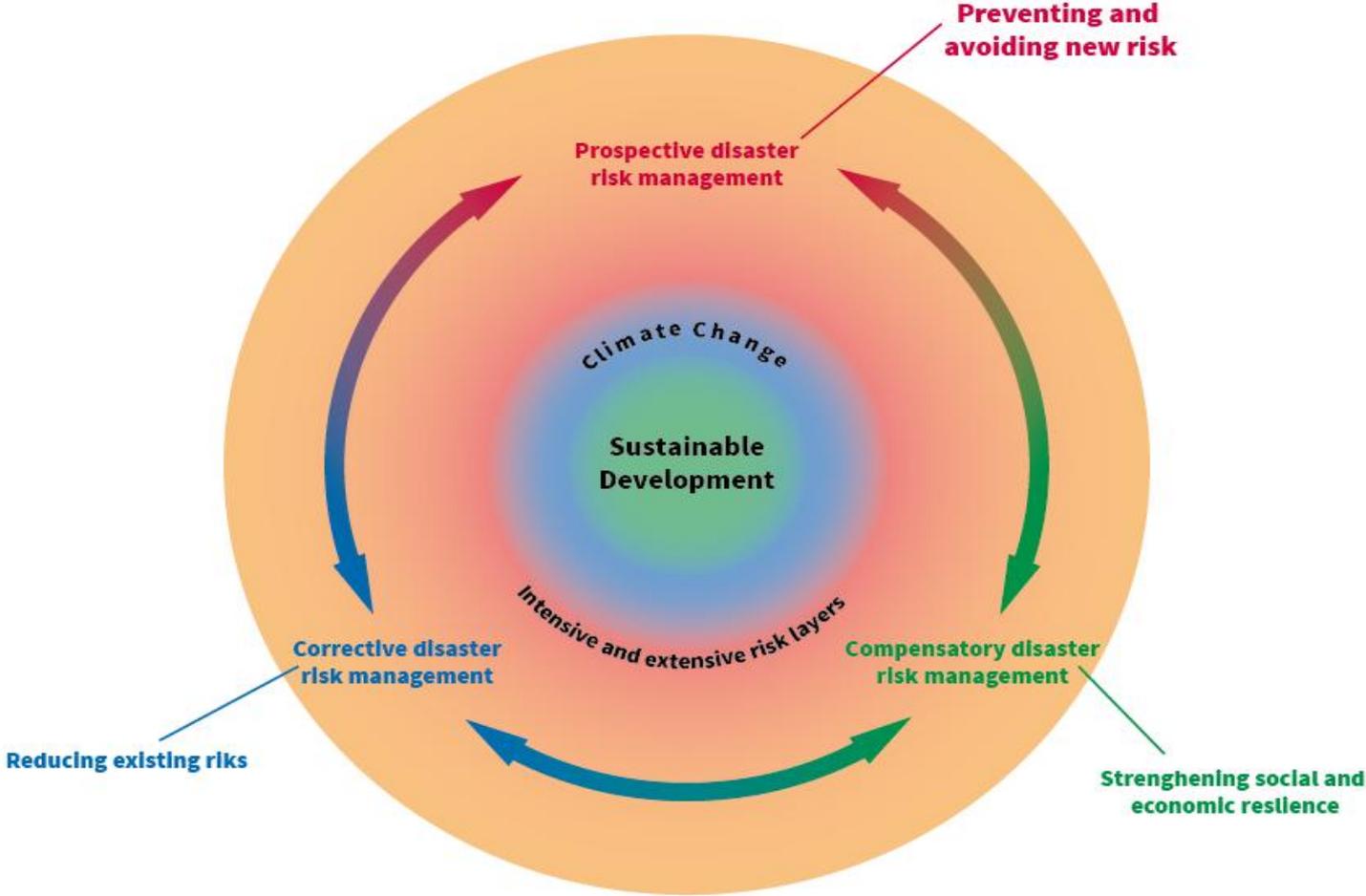
**Climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase with global warming of 1.5°C and increase further with 2°C**

Authors have high confidence that (B5.2)

- Any increase in global warming is projected to affect human health, with primarily negative consequences.
- Urban heat islands often amplify the impacts of heatwaves in cities.
- Risks from some vector-borne diseases, such as malaria and dengue fever, are projected to increase with warming from 1.5°C to 2°C, including potential shifts in their geographic range.



# Managing risk aligns the disaster risk reduction, climate change action and sustainable development agendas



The Global Assessment Report on Disaster Risk Reduction (GAR), 2015



**7 GLOBAL TARGETS**

**Reduce**

**Increase**

a) **Mortality/**  
global population  
2020-2030 Average << 2005-2015 Average

b) **Affected people/**  
global population  
2020-2030 Average << 2005-2015 Average

c) **Economic loss/**  
global GDP  
2030 Ratio << 2015 Ratio

d) **Damage to critical infrastructure  
& disruption of basic services**  
2030 Values << 2015 Values

e) **Countries with national  
& local DRR strategies**  
2020 Value >> 2015 Value

f) **International  
cooperation**  
to developing countries  
2030 Value >> 2015 Value

g) **Availability and access  
to multi-hazard early warning  
systems & disaster risk  
information and assessments**  
2030 Values >> 2015 Values

e)

**Countries with national  
& local DRR strategies  
2020** Value >> 2015 Value

# Challenges Are Opportunities

- What are the key issues or policy barriers to coherent DRR and CCA planning?
- What key actions are recommended? Are there models to follow?
- What key partnerships are required? What works?



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Metropolitan City

# Thank You

UNISDR for Northeast Asia (ONEA) &  
Global Education and Training Institute  
(GETI)

4F Songdo G-Tower,  
175 Art Center-daero,  
24-4 Songdo-dong, Yeonsu-gu, Incheon  
Republic of Korea