Adopting New approaches to DRR
Understanding Disaster Risk to Inform a Holistic National DRR Strategy

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Coherence Between Sendai Framework for DRR and 2030 Agenda

- Every country is planning and investing towards achieving the Sustainable Development Goals to create a peaceful and prosperous future for all the people and the planet.

- In this process it is important to manage any setbacks and obstacles, including disaster risk and climate change.

- Proactively managing risk is a required element of development.

- Implementation of the Sendai Framework needs to have close linkage and coherence with the 2030 Agenda at all levels.
How does Sendai Framework define disaster risk reduction?

Disaster risk reduction is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.
Target e for 2020

(a) Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020–2030 compared to the period 2005–2015;

(b) Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020–2030 compared to the period 2005–2015;

(c) Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030;

(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;

(e) Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020;

(f) Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present Framework by 2030;

(g) Substantially increase the availability of and access to multi-hazard early warning system and disaster risk information and assessments to people by 2030.
What is Expected from a National DRR Strategy?

Requires a risk informed process and design that is multisectoral and multi-stakeholder, has long term vision, and leaves no one behind.

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<th>Critical requirements of the National DRR strategy</th>
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<td>Legislative and regulatory frameworks</td>
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<td>Defining risk reduction targets and associated timeframes and indicators</td>
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<td>Close linkages with climate change adaptation plan and national development plan</td>
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<td>Mainstream and integrate disaster risk reduction within and across all sectors</td>
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<td>Promote Policy coherence and compliance between national and local level</td>
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<td>Objectives and measures for preventing the creation of new risk</td>
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<td>Objectives and measures for reducing existing risk</td>
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<td>Objectives and measures for strengthening economic, social, health, and environmental resilience</td>
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<td>Defining roles and responsibilities of public and private sectors</td>
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Understanding disaster risk is required for a risk informed DRR strategy and sustainable development planning
What are the components of disaster risk?

Hazard | Exposure | Vulnerability | Capacity

Risk (probable Impact and loss)
What is the Disaster Risk Process?

**Sources of Risk**
- Underlying Drivers of Risk
  - Hazard, Exposure, Vulnerability, Capacity

**Hazard Event**

**Consequences**
- Direct Impact
- Indirect Impact

**Sources of Risk** and **Consequences** are connected through the **Hazard Event**.
Hydromet hazards exacerbated by Climate Change
- Urban flooding due to poor land cover management
- Pandemics and epidemics
- High concentration of assets in high hazard zones (i.e. flood plains)
- Poor building design and construction quality
- Lack of maintenance of infrastructure
- Lack of functioning early warning system
- Lack of emergency response plan and preparation
- Low public awareness on risk and risk management
- Low sovereign financial capacity for disaster response and recovery
- Lack of risk transfer measures
Underlying Drivers of Risk

- Climate Change
- Poverty and inequality
- Weak land management
- Weak management and unsustainable use of natural resources
- Declining ecosystems
- Unplanned and rapid urbanization
- Demographic unbalance of population
- Lack of building code enforcement
- Lack of regulation of public and private investments

Hazard Event

Hazard, Exposure, Vulnerability, Capacity
Hazard Event

Direct Impact

- Loss of life
- Injuries and illnesses
- Displacement
- Loss of housing
- Loss of basic life necessities
- Loss of critical infrastructure
- Disruption to critical infrastructure
- Damage to ecosystems and environmental assets
- Damage to cultural heritage
- Loss of agricultural crops and food insecurity
- Increased crime and insecurity
- Short to mid term economic and social cost

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

Direct Impact

- Long term disability and psychological harm
- Loss of livelihoods
- Disruption to education
- Loss of tourism
- Loss of productivity due to infrastructure damage
- Loss of cultural identity, diversity, and social cohesion
- Increase in poverty and inequality
- Increase in insecurity and crime
- Long term economic and social cost
- Setback of economic and humanitarian development

Indirect Impact
What is Expected from A Disaster Risk Assessment?

- Provides comprehensive understanding of the whole risk System:
  - Disaster risk drivers
  - Main components (hazard, exposure, vulnerability, capacity)
  - The interlinkages between drivers and components
- Includes both direct and indirect impacts
- In the long term can be used for monitoring DRR progress
- It is fit for the purpose and embedded into the development and DRR system of the country
- Provides solutions to manage the drivers, causes, and impacts and building required capacities and resilience
- It uses a variety of quantitative and qualitative methodologies, including probabilistic modeling for certain applications
UNISDR Words into Action Guideline on National Risk Assessment tries to address existing challenges in use of risk assessment outputs in decision making through following elements:

- Political endorsement and ownership
- Creating an institutional understanding disaster risk “Mechanism” in the country that serves various stakeholders long term
- Clarity on the purpose of the risk assessment
- Capacity of the stakeholders in understanding and evaluating risk information
- Availability and accessibility of input and output data
- Effective communication of results with stakeholders
Words into Action Guideline on National Disaster Risk Assessment is under development

This guideline consists of Three Parts:

**Part I:** Guidance on the Process of conducting national risk assessment as part of national development and DRR system

**Part II:** Consists of 20 independent short piece on Special Focus Topics including Climate change incorporation, socio-economic vulnerability, gender and vulnerable people, health etc.

**Part III:** Consists of 24 independent short pieces on hazard specific risk assessment approaches.
Words into Action Guideline on National Disaster Risk Assessment is under development

More than 70 experts from 30+ institutions are contributing to this work, including JRC, GEM, CIMA Foundation, NGI, DG ECHO, Geneva Insurance Association, GFDRR, UNEP, IFRC Climate Center,...

The positive experiences as well as challenges in national risk assessment in few countries have been studied as part of this work.

The interim version will be released in May 2017 for global consultation and there will be events for introduction and consultation at the Global Platform 17.
Concluding points:

- Understanding disaster risk is a non-negotiable requirement for DRR strategy and risk informed development and requires a multi-sectoral and multi-stakeholder process.
- System Thinking approach and tools are needed for understanding the complexities and interlinkages of components of disaster risk and possible DRR and development measures.
- More than ever there is need for accessible data, methodologies and tools for assessing all aspects of multi-hazard disaster risk and their interlinkages, specially assessing capacities.
Thanks!

See you in Cancun!