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The United Nations Office for Disaster Risk Reduction

Understanding Disaster Risk: foundation for disaster risk reduction and resilience

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Sendai Framework for Disaster Risk Reduction 2015-2030

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.

Goals:

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

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Scope

- Adds slow-onset, small-scale and biological and man-made hazards

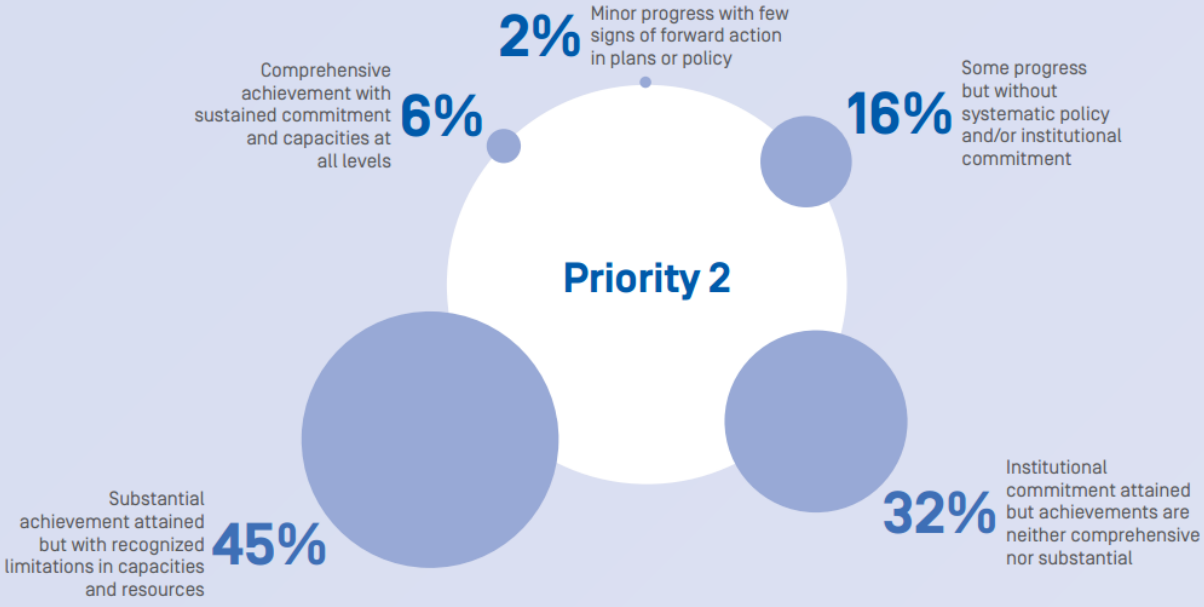
- Increases the scope of action in recovery, rehabilitation and reconstruction

HFA 2005-15: Summary of progress

Priority for Action 2: Identify, assess and monitor disaster risks and enhance early warning.

Summary of PROGRESS **Average Score = 3.4**

The average score for Priority 2 has steadily increased from the average scores of 3.1 and 3.3 reported in the 2007 – 2009 and 2009 – 2011 cycles respectively. Just under half of reporting countries rated their levels as "4" indicating substantial achievement.



Priority 1 Understanding disaster risk

Policies and practices for DRR should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment.

Policies and practices for disaster risk management should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment…

…. for the purpose of pre-disaster risk assessment, for prevention and mitigation and for the development and implementation of appropriate preparedness and effective response to disasters.

National and local levels

- **Collection, analysis, management and use** of relevant data and practical information
- **Development of baseline** and periodically assess disaster risks
- **Location based disaster risk information**, including maps and GIS based information
- Systematically evaluate, record, share and publicly account for **disaster losses** and understand the economic, social, health, education, environmental and cultural heritage impacts
- Promote **real-time access** to reliable data, make use of **space and in situ information**, including geographic information systems (GIS),
- Update **risk information** for biological, man-made hazards
- Identify **baselines & set targets** for risks and DRR action

Global and regional levels

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- Enhance the development and dissemination of **science-based methodologies and tools** to record and share disaster losses;
- Strengthen disaster **risk modelling, assessment, mapping, monitoring** and multi-hazard early warning systems;
- Promote the conduct of comprehensive surveys on multi-hazard disaster risks and the development of **regional disaster risk assessments and maps**, including climate change scenarios;
- Promote and enhance **access to and the sharing and use of non-sensitive data**, information, as appropriate, communications and **geospatial and space-based technologies** and related services.
- Maintain and strengthen in situ and remotely sensed earth and climate observations.

How to?
Challenges

- Capacity to analyze geo spatial information
- Data access/ sharing/ interoperability….
- Lack of national spatial data infrastructure
- Access to high-res satellite imageries and capacity to use them
- National and local level risk assessments
- …

How to?
Key questions

- How to build capacity for use of earth observation data at all level?
- How to promote a culture of continuous risk assessments and use of the risk information at national and local level?
- How to enhance the political will at highest level of governments to carry out risk assessments and promote effective use of earth observation data?
- ….