UNGGIM Americas Access and Use of GI for Disasters and Climate Change Status of work

Eighth Session of the Committee of Experts on UN-GGIM Side Event

> UN Headquarters, New York 1 August 2018

> > Louis Brown

Positioning geospatial information to address global challenges

United Nations Initiative on Global Geospatial Information Management

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Presentation contents

- The Americas Region
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The Americas Region



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- Spans both hemispheres, north and south
- 40 independent countries plus several Caribbean OCT's
- 16 million square miles
- Population 1 billion plus
- Main languages: English, Spanish, Portuguese, French

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Natural Disasters in the Americas







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Meteorological events:

- Flooding
- Landslides
- Storms & hurricanes
- Droughts
- Forest fires

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Natural Disasters in the Americas





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Geological Events:

- Earthquakes
- Volcanos
- Tsunamis

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Climate Change drivers



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Climate Change drivers



NOAA , Climate at a Glance: July 2018, https://www.ncdc.noaa.gov/cag/

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The Global Strategic Framework

Goal:

Quality geospatial information and services are available and accessible in a timely and coordinated way to support decision-making and operation within and across all sectors and phases of the emergency cycle.

Expected outcome:

The human, economic and environmental risks and impacts of disasters are prevented and reduced through the use of geospatial information and services.

Status:

- Adopted by UNGGIM Committee of Experts on 7 August 2017;
- Endorsed by ECOSOC on 20 June 2018;
- A monitoring tool is being prepared to gauge the status of implementation ٠ among member states.



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The Global Strategic Framework



Governance and Policies

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Awareness Raising and Capacity Building



Data Management

LOCAL NATIONAL

Priorities for Action

REGIONAL GLOBAL



Common Infrastructure and Services



Resource Mobilization

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UNGGIM Americas DRR & CC

Objective:

- To promote the development and shared use of geospatial information in policies, programs and projects for Disaster Risk Reduction and Climate Change;
- To implement the Global Strategic Framework for Disasters.
- Working plan 2018 2020 will focus on:
- (2) Awareness Raising and Capacity Building
- (3) Data Management
- (4) Common Infrastructure & Services



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Work Plan 2018 - 2020

OBJECTIVE	ACTIVITIES	PERIOD	OUTCOMES
Capacity building action plan	Diagnosis of the HR, data and information tools	Q2 2018	View of the capacities of countries in implementation and use of GI for DRR & CC
	Gap Analysis on the diagnosis of countries' capacities.	Q3 2018	Report
	Implementation of capacity building strategy	Q4 2018	Report of the proposal strategy Workshop
Addressing requirements of international initiatives related to disasters	Open Geospatial Consortium Disasters	Q1 2019	Report
	2030 Agenda SENDAI Framework		Report
	Workshop on Information for disasters	Q2 2019	Report
	National Pilot Studies	Q3 2019	Report
Methodology and final report	Methodology and recommendations Final Workshop	Q1 2020	Report
	Final report	Q3 2020	



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Status of the Work

- **2015 Survey** (27 resp.) to identify:
- The most prevalent types of (natural) phenomena causing disasters;
- Countries with thematic (risk/hazard/vulnerability) mapping for disasters;
- State of DMO and public communication means (web portals, early warning systems, mass media) aimed at DRR;
- **2018 Survey** (34 resp.) assessing capacities in GIM for disasters:
- Influence of most prevalent disasters and roles of GIM Org. in disaster response;
- Overview of institutional aspects related to disasters;
- Challenges related to access to GI related to disasters;
- Access to basic resources (IT / staffing) related to GIM for DRM;
- Impacts of- and readiness for- Climate Change related to DRM;



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Survey Results (respondents)

Survey respondents UNGGIM Americas Region

North	Central	South	Caribbean
Canada	Belize **	Argentina	Antigua & Barbuda *
Mexico	Costa Rica	Bolivia *	Bahamas
USA	El Salvador	Brazil	Barbados
	Guatemala	Chile	Cuba
	Honduras	Colombia	Dominica
	Nicaragua	Ecuador	Dominican Republic *
	Panama	Guyana *	Grenada *
		Paraguay *	Haiti *
		Peru	Jamaica
		Suriname	Saint Kitts & Nevis */**
		Uruguay	Saint Lucia
		Venezuela	Sint Maarten
			St.Vincent & Grenadines
			Trinidad and Tobago

* Countries did not participate in 2015 survey

** Countries did not participate in 2018 survey



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Survey Results (disaster types)



Natural Disasters:

56% rate hurricanes as high importance,

- 50% rate earthquakes as high importance;
- 82% rate wildfires high or average importance,
- 73.5% rate landsides as high or average importance

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Survey Results (importance floods)



All but 4 countries regard **floods** as high importance.

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Survey Results (importance hurricanes)



All Caribbean countries regard **hurricanes** as high importance; Hurricanes regarded as high/average importance to Central America;

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Survey Results (internet access)



In 58% of countries **internet access** for disaster management is: to be improved of absent.



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Survey Results (GIS tools)



In 62% of countries, the status of **GIS tools** for disaster management is to be improved or absent.



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Survey Results (geospatial tools)



59% of countries do not have a geospatial resource (geoportal, viewer) that manages risks for disasters?



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Survey Results (geospatial tools)



For 65% of countries the spatial data infrastructure is not an official tool to manage information related to risks and disasters?



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Survey Results (updated disaster information)



For 65% of countries: 0-25% of municipalities have **updated risk and disaster information**.

For only 3 countries more than 50% of municipalities



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UN-GGIM:Americas

REGIONAL COMMITTEE OF UNITED NATIONS ON GLOBAL GEOSPATIAL INFORMATION MANAGEMENT FOR THE AMERICAS



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