Seventh Session UN-GGIM: Americas

Séptima Sesión UN-GGIM: Americas

Thursday September 10, 2020 @ 8:50 – 9:30 am (UTC-4)

Simone Lloyd, GISP Jamaica Co-chair support UN-GGIM Working Group On Geospatial Information And Services For Disasters & Senior GIS Manager National Spatial Data Management Branch, Ministry Of Economic Growth & Job Creation, Jamaica



UN-GGIM: Americas

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

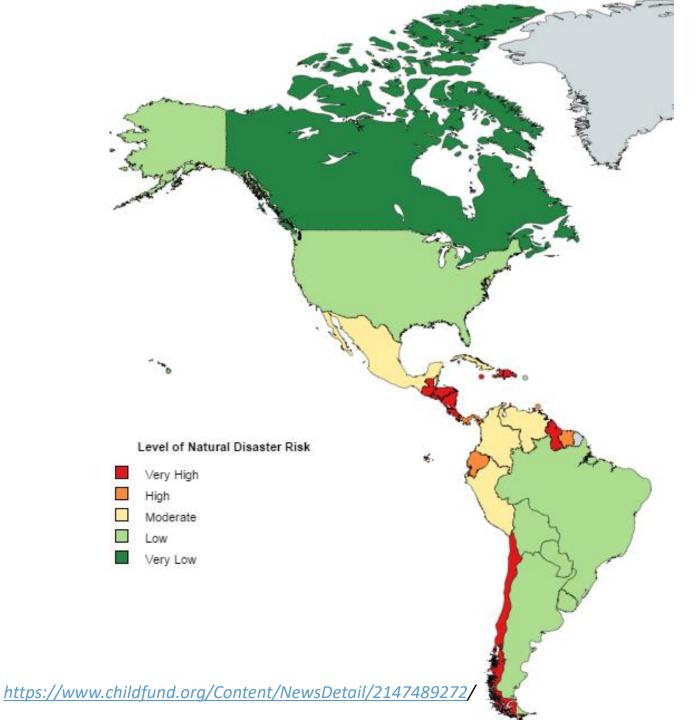


- Americas Disaster Vulnerability
- UN-GGIM WG Disasters Background
- Strategic Framework on Geospatial Information & Services for Disasters
- Status of Strategic Framework Implementation within the Americas
- Opportunities Presented by COVID-19
- COVID-19 Geospatial Response within the Americas



Americas' Disaster Vulnerability





Americas:

North, Central, South America & the Caribbean *(multiple risk zone)*

Natural Disaster Risks:

- Hurricanes
- Tropical Storms
- Tropical Depressions
- Troughs
- Earthquakes
- Volcanoes
- Floods etc.



UN-GGIM WG Disasters



United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) in August 2015, under decision 5/110 supported the proposal to establish a working group to further develop and implement a strategic framework that would be:

Focused in a practical manner;

Aligned with the outcome and follow-up to the Sendai Framework for Disaster Risk Reduction 2015-2030 and its implementation;

Able to take into consideration the special needs of developing countries, especially with respect to capacity building and knowledge sharing and;

Broadly representative of different regions of the world and taking into account regional experiences.



Leadership & Membership



• **Co-chairmanship:** Jamaica and Japan (August 2019 – Present)



 Previous Co-Chairmanship: Jamaica and Philippines (2016 – 2019)





Strategic Framework on Geospatial Information & Services for Disasters

UN-GGIM WG Disasters: Strategic Framework on Geospatial Information and Services for Disasters

Strategic Framework on Geospatial Information and Services for Disasters Working Group on Geospatial Information and Services for Disasters (WG-GISD) The United Nations Committee of Experts on al Information Management

Access the Strategic Framework here:

<u>http://ggim.un.org/documents/UN-</u> <u>GGIM Strategic Framework Disasters final.pdf</u>

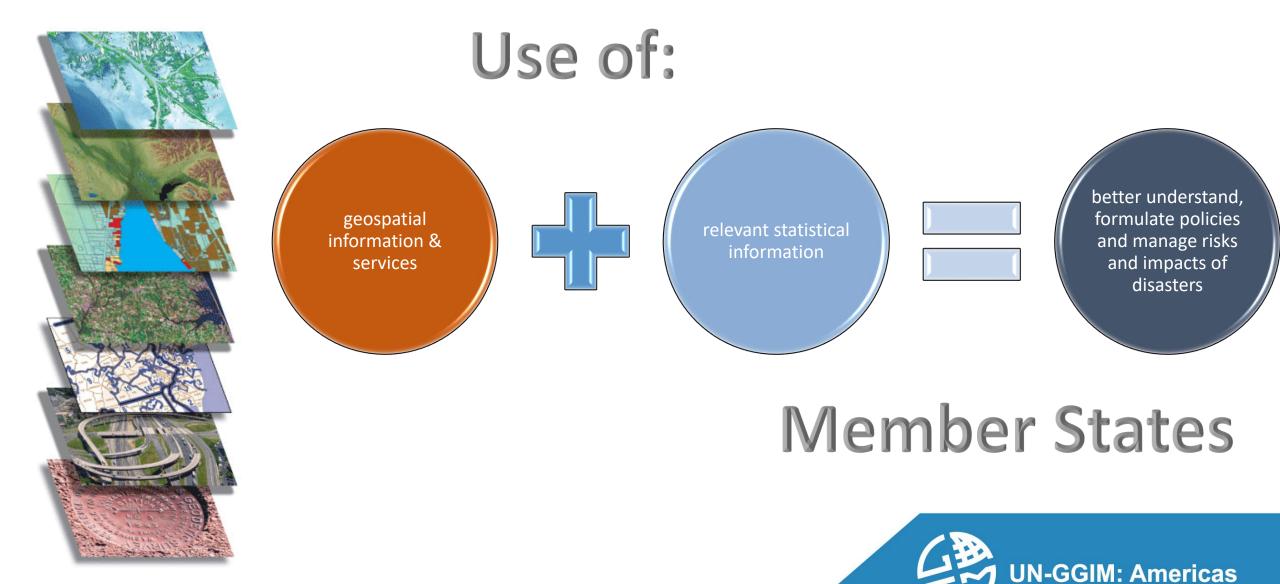
The Strategic Framework on Geospatial Information and Services for Disasters was adopted by the UN Economic and Social Council in July 2018 under resolution 2018/14 (available in all 6 languages, see below, Documents then 2018) Arabic Chinese English French Russian Spanish





ggim.un.org

The Framework aims to guide Member States and other stakeholders in making available and accessible all quality geospatial information and services before, during and after disaster events.



Five Priorities for Action



and Policies

Awareness Raising and Capacity Building



Data Management



Common Infrastructure and Services



Resource Mobilization Advance the use of Geographic information to support **Disaster Risk Reduction in the Americas.**



http://ggim.un.org/meetings/2017-Kunming/documents/Session%207%20-%20UNGGIM%20WG%20on%20Geospatial%20Information%20and%20Services%20for%20Disasters.pdf

Strategic Framework Assessment Tool



Assessment Survey

UN-GGIM WG-Disasters is conducting an Assessment Survey that:

- will help gauge the level and status of implementation of geospatial information and services for disasters initiatives relative to the Strategic Framework among Member States.
- aims to understand the national geospatial information and services landscape across all phases of disasters within Member States.
- can be used by Member States to better develop their national implementation plans for geospatial information and services in support of disaster risk reduction and management (DRRM).



UN-GGIM Strategic Framework on Geospatial Information and Services for Disasters ASSESSMENT SURVEY

The Working Group on Geospatial Information and Services for Disasters (WG-Disasters) of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) has formulated a Strategic Framework on Geospatial Information and Services for Disasters which has been adopted by the Committee of Experts in August 2017, and by the United Nations Economic and Social Council (ECOSOC) on 2 July 2018. The Framework aims to guide Member States and other stakeholders in making available and accessible all quality geospatial Information and services before, during and after disaster events. More about the Framework is available at this link <<u>http://aaim.un.org/documents/UN-GGIM</u> Strateak. Framework Disasters Inal.adD-.

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The Survey will require approximately 30-45 minutes to complete. It is intended to be accomplished by the representative of each Member State in the WG-Disasters or the designated focal organization that has the mandate for national DRRM. While the Survey intends to capture national perspective, the views and opinions of other national government agencies, sub-national government units, private sector and other stakeholders in DRRM is encouraged in order to aid Member States in preparing an integrated national assessment.

The activities in each priority area will be rated using the rating scale shown in the table below. It is important that the assessment be made in reference to established policies, infrastructures, systems or procedures in the national context and NOT at the organizational level. As assessments may be based on perception, additional remarks, and supporting document/s may be attached or provided to make the results as factual as possible. We commit to ensuring that all personal information will be treated with utmost confidentiality.

Category	Description	
4	The initiative is fully implemented in my country	
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Your usual cooperation will be highly acknowledged. Thank you!

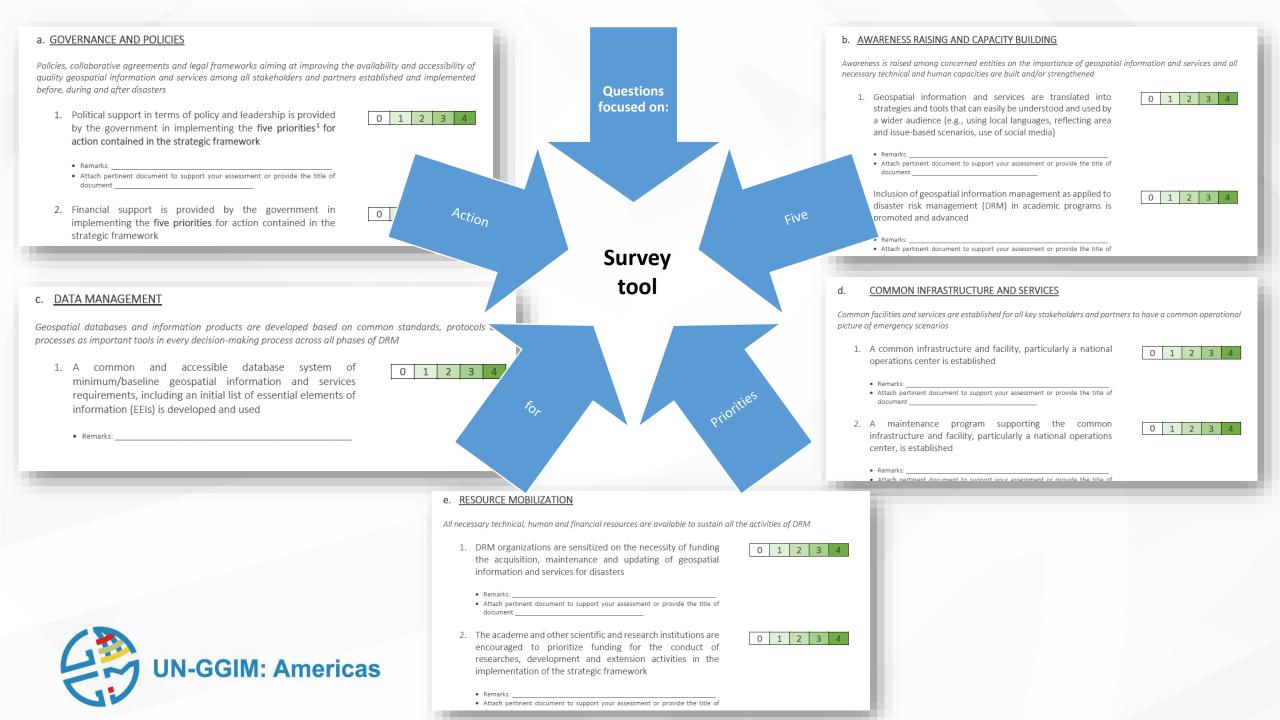
Co-Chairs, WG-Disasters

Description
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Complete Strategic Framework Assessment tool: <u>https://bit.ly/2TxLF0t</u>

Americas Region deadline: August 31, 2020 Global deadline: extended to Oct 2, 2020







Strategic Framework on Geospatial Information and Services for Disasters ASSESSMENT SURVEY

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Required

BACKGROUND INFORMATION

1. Full Name *

Enter your answer



Strategic Framework on Geospatial Information and Services for Disasters ASSESSMENT SURVEY

RATING SCALE AND PRIORITIES

Category Description

- 5 The initiative is fully implemented in my country
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- 2 The initiative is not yet implemented in my country
- 1 Unaware of the initiative, and its implementation in my country

The five priorities of the Strategic Framework on Geospatial Information and Services for Disasters are: Priority 1: Governance and policies,

- Priority 2: Awareness-raising and capacity-building,
- Priority 3: Data management,
- Priority 4: Common infrastructure and services, and
- Priority 5: Resource mobilization.
- (para 12 of the Annex of E/2018/L.15).



Strategic Framework on Geospatial Information and Services for Disasters ASSESSMENT SURVEY

a. GOVERNANCE AND POLICIES

Policies, collaborative agreements and legal frameworks aiming at improving the availability and accessibility of quality geospatial information and services among all stakeholders and partners established and implemented before, during and after disasters.

 Political support in terms of policy and leadership is provided by the government in implementing the five priorities for action contained in the strategic framework (a.1) Select the category (1, 2, 3, 4, 5) that best corresponds to your assessment.

Results of Strategic Framework Assessment Tool within the Americas

Strategic Framework - Survey Results

 While the Survey intends to capture national perspective, the views and opinions of other national government agencies, sub-national government units, private sector and other stakeholders in DRRM is encouraged in order to aid Member States in preparing an integrated national assessment.

 \odot Respondents:

o 42/198 UN-GGIM Member States

o 12/36 UN-GGIM: Americas Member States

 \odot 16 respondents within UN-GGIM: Americas



Priority 1:



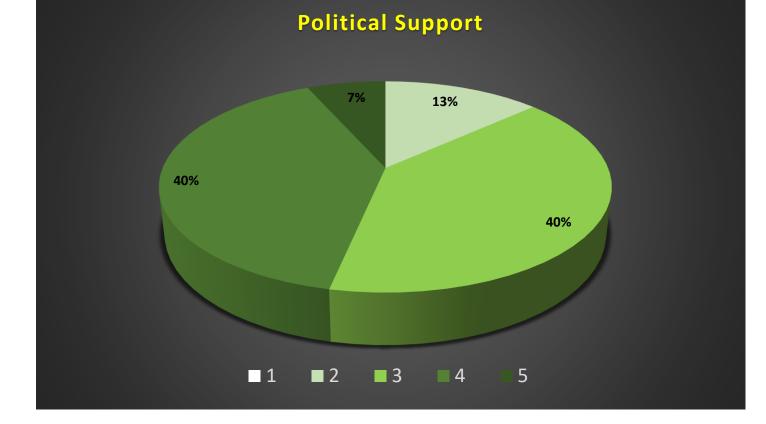
Governance and Policies Good governance and science-based policies are essential Outlines strategies at the National and Local Levels & Global and Regional Levels

To make available and accessible all quality geospatial information and services across all phases of the DRRM

Specific activities:

- Assessment and Planning
- Institutional Arrangements
- Collaboration and Coordination
- Monitoring and Evaluation





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Priority 1:

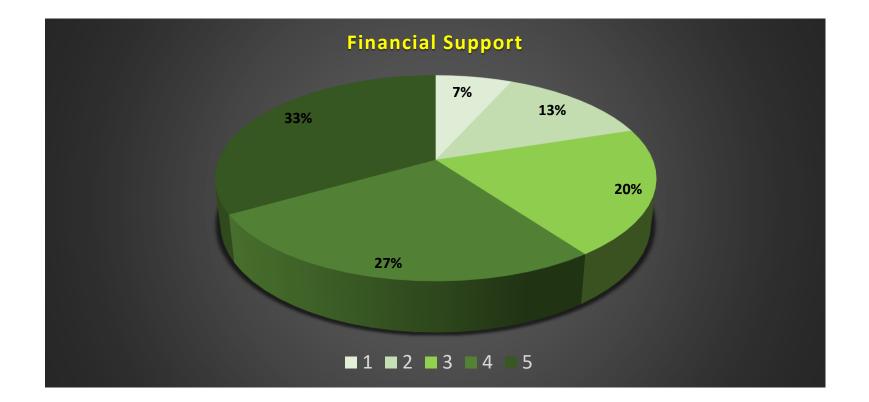
Governance

and Policies

Political support in terms of **policy and leadership** is provided by the government in **implementing the five priorities** for action contained in the strategic framework



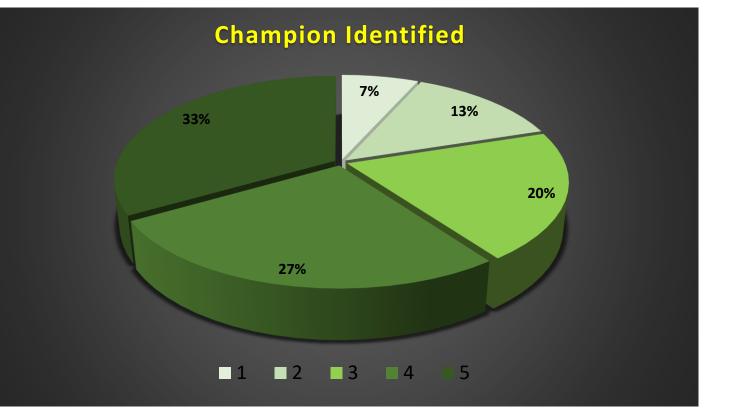




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Financial support is provided by the government in implementing the five priorities for action contained in the strategic framework.





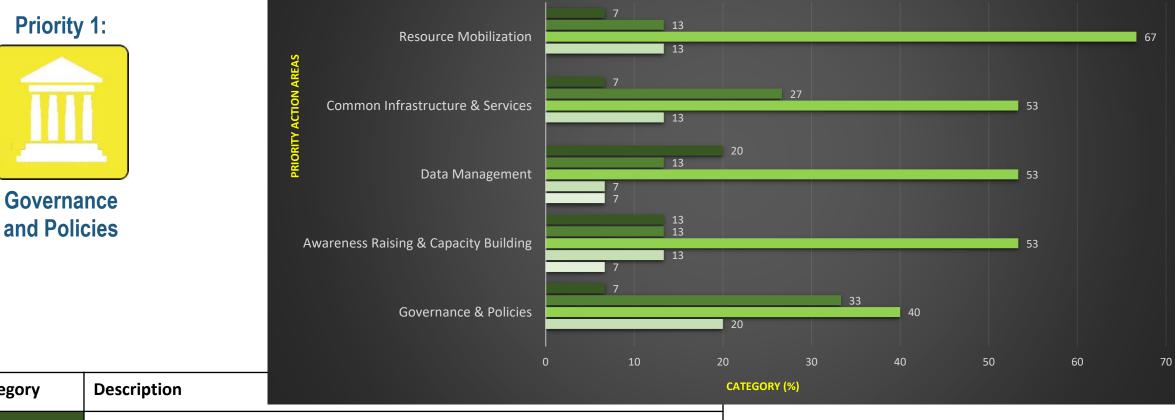
Priority 1:
TIT
Governance
and Policies

Category	Description
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A champion, i.e., individual or organization that oversees the implementation of the five priorities for action and ensures an inclusive participation of all stakeholders and key.



Monitoring & Evaluation Program Implemented to track the Country's Progress



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Category



Priority 2:



Awareness Raising and Capacity Building Involves pursuing awareness raising and capacity building initiatives leading to better understanding and appreciation of the relevance of geospatial data and information to DRRM

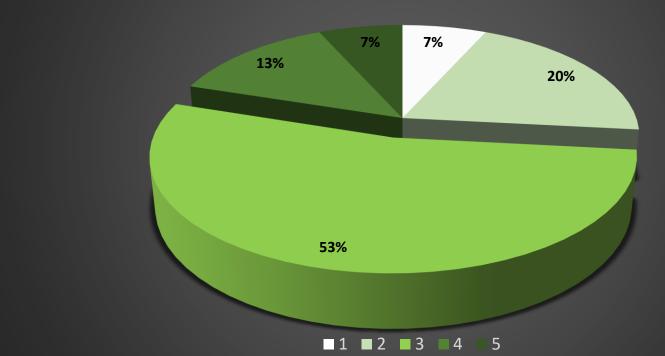
Awareness of geospatial data and information holdings and gaps

Inclusion of geospatial information management as applied to DRM in academic programs

Geospatial information management training programs



Geospatial information and services are translated into easily understood strategies and tools



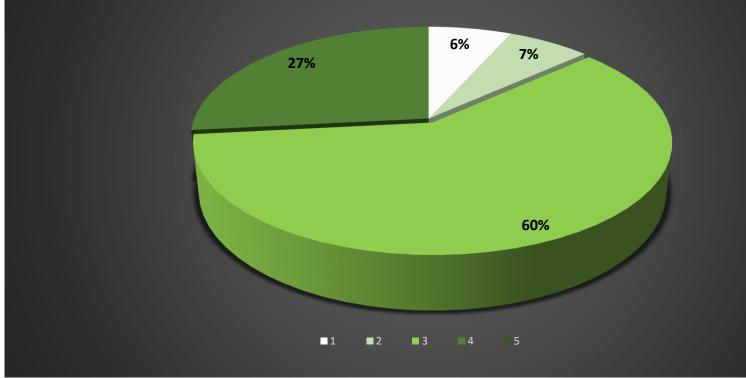
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Priority 2:



GI & Services integrated in Academic Programs



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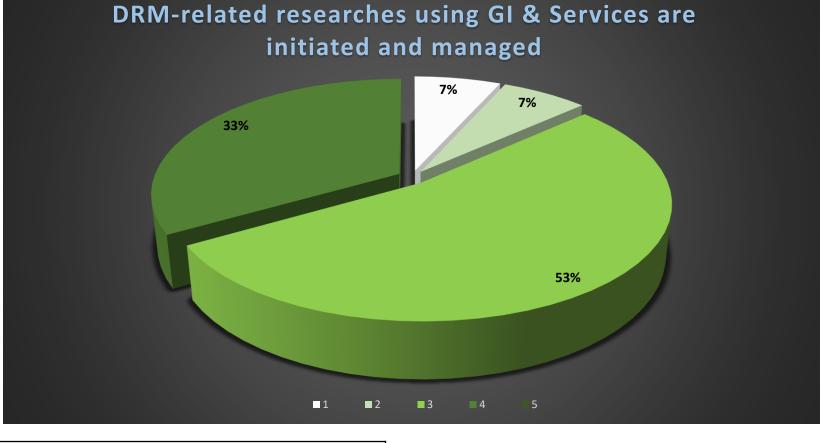
Priority 2:

Awareness Raising

and Capacity Building

Inclusion of geospatial information management as applied to disaster risk management (DRM) in academic programs is promoted and advanced





Priority 2:
Awareness Raising and Capacity Building

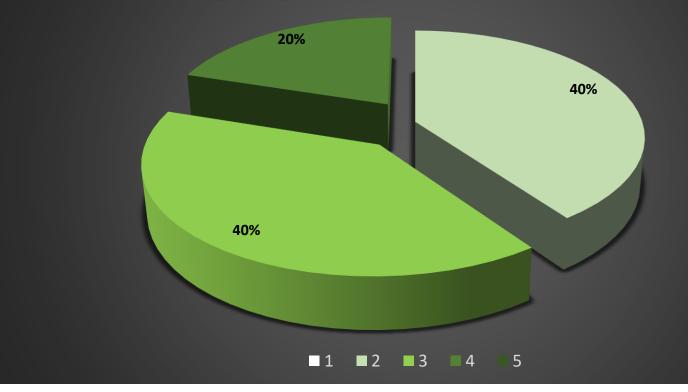
1.4

Category	Description
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Inclusion of geospatial information management as applied to disaster risk management (DRM) in academic programs is promoted and advanced



Training programs on the use of GI & Services



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Priority 2:

Awareness Raising

and Capacity Building

Inclusion of geospatial information management as applied to disaster risk management (DRM) in academic programs is promoted and advanced



Priority 3:



Data Management

Comprehensive methods of collecting and managing geospatial data and information:

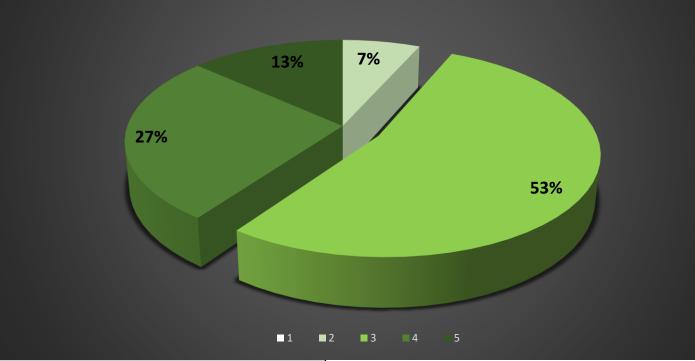
o Data Development

o Data Standards and Protocols

o Data Use Guidelines



Existence of a common and accessible database system



Category	Description
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A common and accessible database system of minimum/baseline geospatial information and services requirements, including an initial list of essential elements of information (EEIs) is developed and...

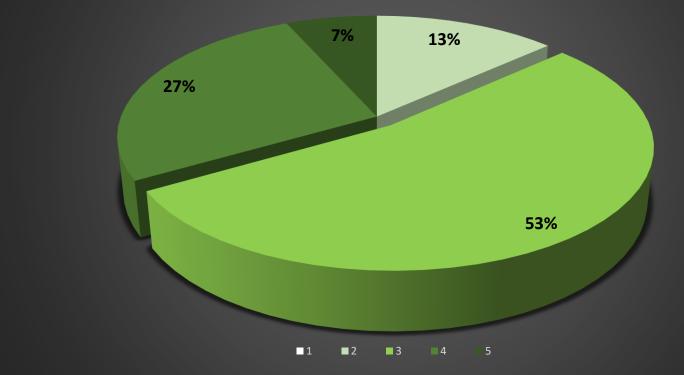


Priority 3:





National and local DRM plans include hazard, vulnerability and disaster risk assessment maps, etc.



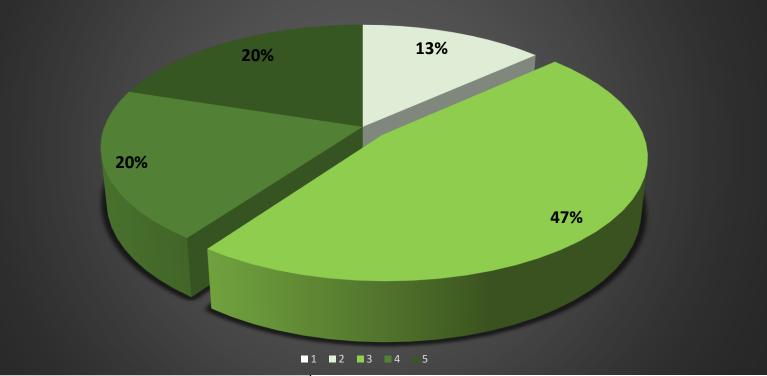
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Hazard, vulnerability and disaster risk assessment maps, and other information products as crucial inputs to national and local DRM plans are developed and used





A common contact database of national and local emergency responders



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A common contact database of national and local emergency responders, as well as a registry of all humanitarian response/assistance organizations are established, maintained and updated





Data management guidelines incorporates key factors 7% 7% 33% 53%

Category	Description	Data management guidelines including, but
5	The initiative is fully implemented in my country	not limited to data sharing; data classificatio
4	The initiative is currently being implemented in my country, with minor tasks still need to be done	data custodianship; data stewardship; metadata; data security and control; and dat backup and recovery
3	The initiative is currently being implemented in my country, with major tasks still need to be done	
2	The initiative is not yet implemented in my country	UN-GGIM: Americas
1	Unaware of the initiative, and its implementation in my country	GP UN-GGIWI: Americas

cluding, but classification; dship; trol; and data

Priority 4:



Common Infrastructure and Services

Infrastructure support is essential towards institutionalizing geospatial information and services

Infrastructure such as hardware, software, network and manpower capacities needed to process and further improve geospatial information and services

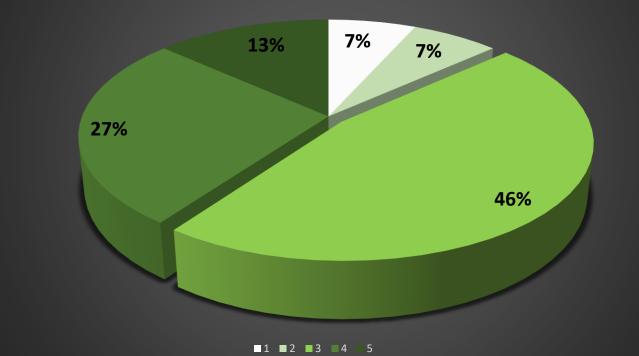
Possible establishment of a **Common Operations Center** by national governments, focused on the interoperability of systems and processes to allow geospatial data and information sharing among all DRM actors







Common Infrastructure and Services A common infrastructure and facility, particularly a national operations center is established



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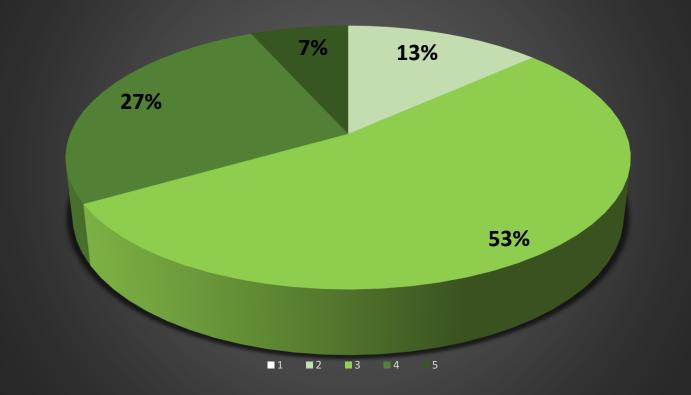
A common infrastructure and facility, particularly a national operations center is established.





Common Infrastructure and Services

A backup facility for online and offline access to geospatial data



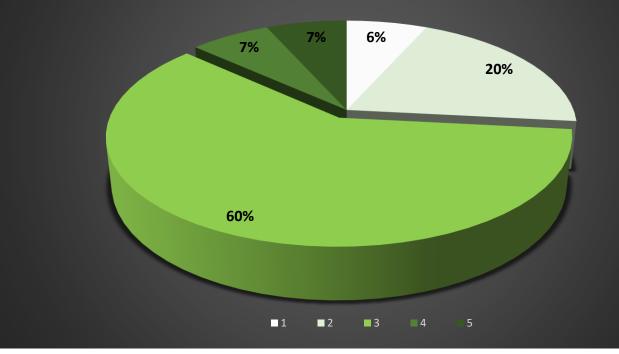
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A backup facility for online and offline access to geospatial data **to sustain operations during disasters** is established.





Interoperability of all systems and processes in DRM organizations



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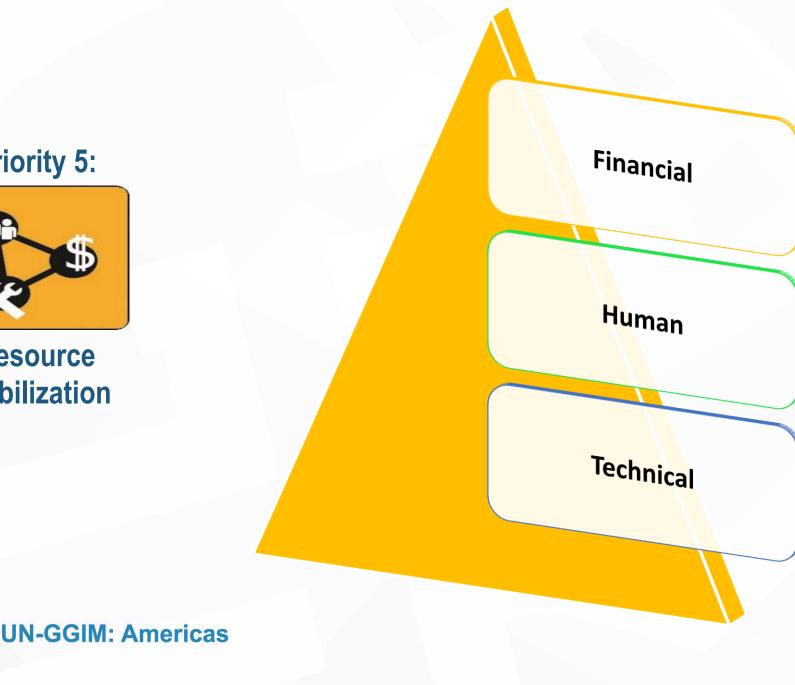
Interoperability of all systems and processes in DRM organizations is ensured.



Priority 5:

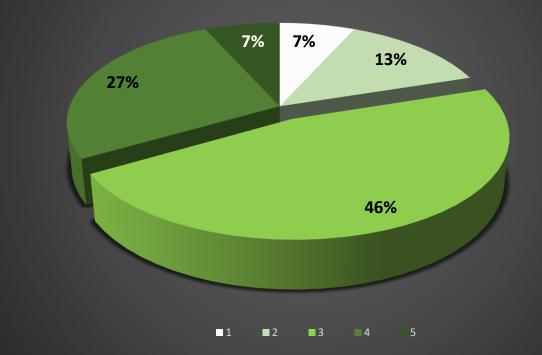


Resource **Mobilization**



Extensive resources needed for the creation, improvement and maintenance of all geospatial information and services in order to sustain all DRRM activities:

DRM organizations are sensitized on the necessity of funding GI & Services for DRM



Priority 5:	
Resource	

Mobilization

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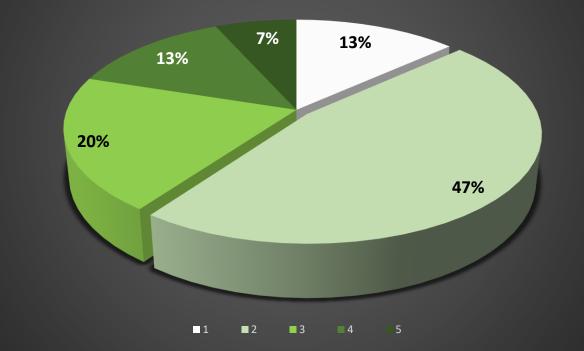
DRM organizations are sensitized on the necessity of funding the acquisition, maintenance and updating of geospatial information and services for disasters.





Resource Mobilization

The private sector encouraged to invest in GI & Services for DRM

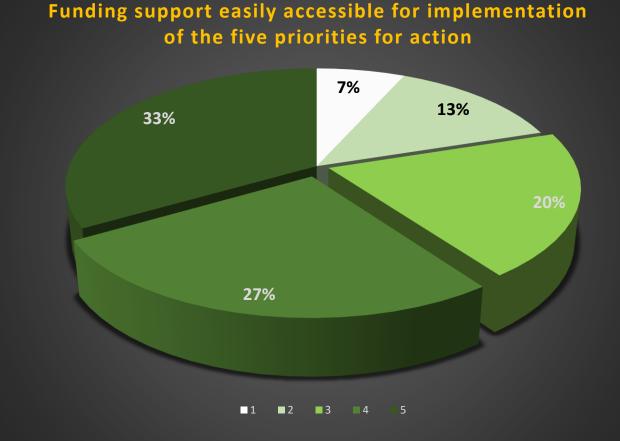


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The private sector, including financial institutions are encouraged to invest in the provision of geospatial information and related services for DRM.



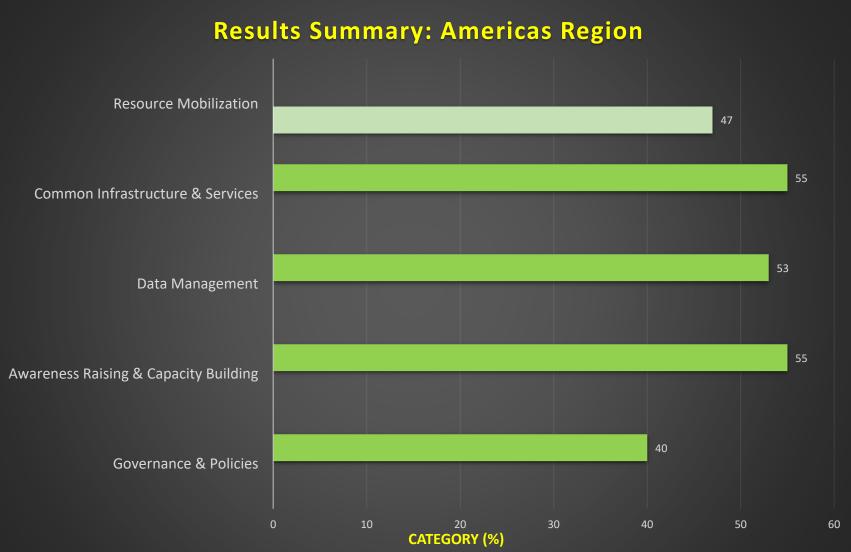
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Funding support for the activities in the implementation of the five priorities for action, including grants, loans and other forms of financial support are easily accessible.





Category	Description	
3	The initiative is currently being implemented in my country, with major tasks still need to be done	UN-GGIM: Americas
2	The initiative is not yet implemented in my country	Ci UN-GGIM: Americas

PRIORITIES OF ACTION

Opportunity presented by COVID-19

Opportunity Presented by COVID-19

COVID-19 pandemic is the largest global disaster challenge recorded. As horrific as it has been, it has created an ideal opportunity to test and apply the Strategic Framework.



- COVID-19 pandemic has demonstrated the critical importance of access to available and trusted geospatial information to support decision-making during all phases of disaster risk management.
- UN-GGIM WG Disasters encourages Member States to consider implementing the Strategic Framework, particularly given that the COVID-19 pandemic provides a unique opportunity for monitoring and tracking each country's progress across the Framework's five priorities for action. *Outlined in draft Decision 10/108, UN-GGIM 10th session (Sept. 2020).*

UN-GGIM: Americas

 Reliable, accurate, available and timely Geospatial information are key towards facilitating better decision making ECLAC and UN-GGIM Americas: "Questionnaire on geospatial support to COVID-19"

(April to May 2020)



Organizational agreements for geospatial support to COVID-19

- Technical groups/committees to define data needs and facilitate provision eg. Brazil, Mexico
- Activation of National Emergency Operation Centers (NEOCS) and provision of geospatial support eg. Sint Maarteen, Antigua y Barbuda, Ecuador, Jamaica - National Emergency Response GIS Team (NERGIST)
- Establishment of National Taskforce eg. Guyana
- **High Level Commission** for the Prevention and control of Coronavirus eg. Dominican Republic



Geospatial Support provided for COVID-19

- Products: Static GIS maps, dynamic web maps and applications, ArcGIS Survey 123 forms
- Incident maps were generated as well as case count per district/neighborhood webmaps
- Mapping of COVID19 cases (confirmed, recovered, deaths, quarantined, contact tracing, etc.)
- Hot spots analysis for COVID-19 cases
- Vulnerable groups mapping and analysis (elderly etc.)





Geospatial Support provided for COVID-19

- Quarantine area mapping
- Isolation centres mapping
- Hospital beds occupancy and availability
- Mapping and monitoring of travel patterns and health status of public health workers





Platforms or dashboards for the integration and publication of geospatial data

- ArcGIS Operational Dashboards were primarily used for visualization, monitoring and management.
- Some were public facing and others private for internal government use.
- Many benefitted from the ESRI Disaster Response Programme.







Chile



Mexico



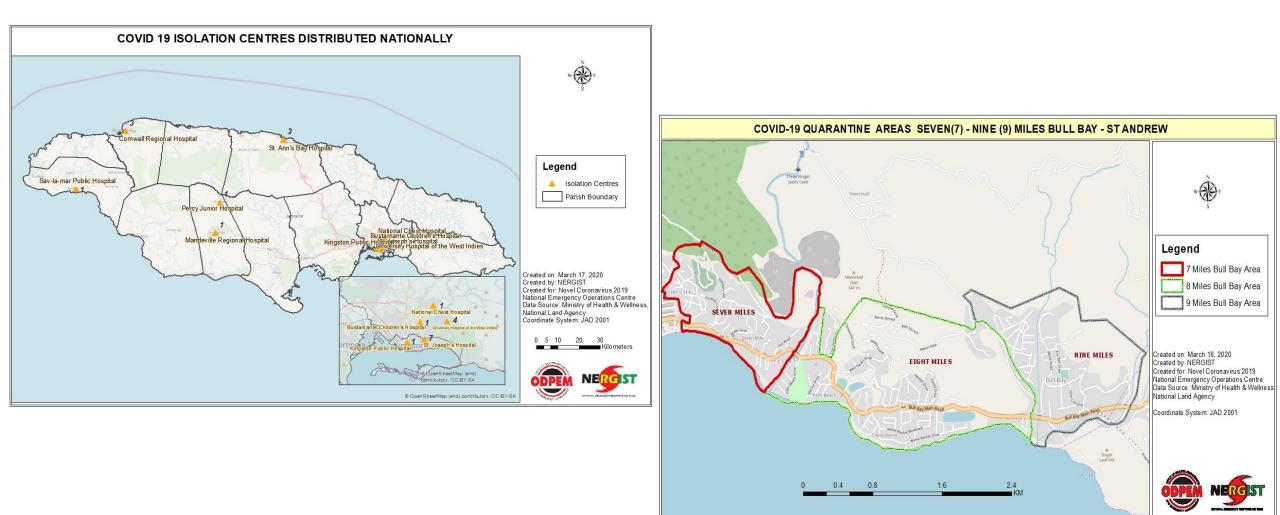
Dominican Republic



Panama



ECLAC and UN-GGIM Americas. 2020. "Questionnaire on geospatial support to COVID-19"



UN-GGIM: Americas

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Use of satellite images for obtaining georeferenced information or statistical data

- **38%** indicated use of satellite imagery eg. optical images, radar images, living atlas and ArcGIS online satellite tiles. Eg. Argentina, Brasil, Jamaica, Dominican Republic, Panama
- 62% did not use satellite imagery. This is a potential area to examine access and capacity building in the use of raster datasets.



Geospatial Gaps Observed While Responding to COVID-19

- Lack of or limited data interoperability
- High levels of data disaggregation between various entities, with little communication among them (silos).
- Lack of human resource with geospatial skills eg. One GIS Officer in some smaller Caribbean countries
- Need for a national address system



Geospatial Gaps Observed While Responding to COVID-19

- Difficulties in data availability at the local level, especially in rural areas
- Need for continuous upgrading of the geospatial skills level
- Need for effective coordination for the exchange and analysis of interinstitutional geospatial information



COVID-19 pandemic provides a unique opportunity for monitoring and tracking each country's progress

Strategic Framework's Five Priorities of Action

Utilize the gaps as areas for opportunity and growth



• Simone Lloyd, GISP Co-chair support UN-GGIM Working Group on Geospatial Information and Services For Disasters & Senior GIS Manager/Trainer National Spatial Data Management Branch Ministry Of Economic Growth & Job Creation, Jamaica W.I simone.Lloyd@megjc.gov.jm



Thank you!

