



UN-GGIM:Américas



CARIGEO

Caribbean Geospatial
Development Initiative

GEO-EMPOWERING THE CARIBBEAN

**MACHC Marine Spatial Data Infrastructure Working Group
(MMSDIWG) Meeting**

March 17, 2021

CARIGEO Steering Committee Reps Joining Meeting



CARIGEO Representatives

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To improve Spatial Data Infrastructures at the national and regional levels in the CARIBBEAN

- building on recent and on-going developments*
- leveraging indigenous skills and resources*
- utilising external resources and technical expertise*

Partners



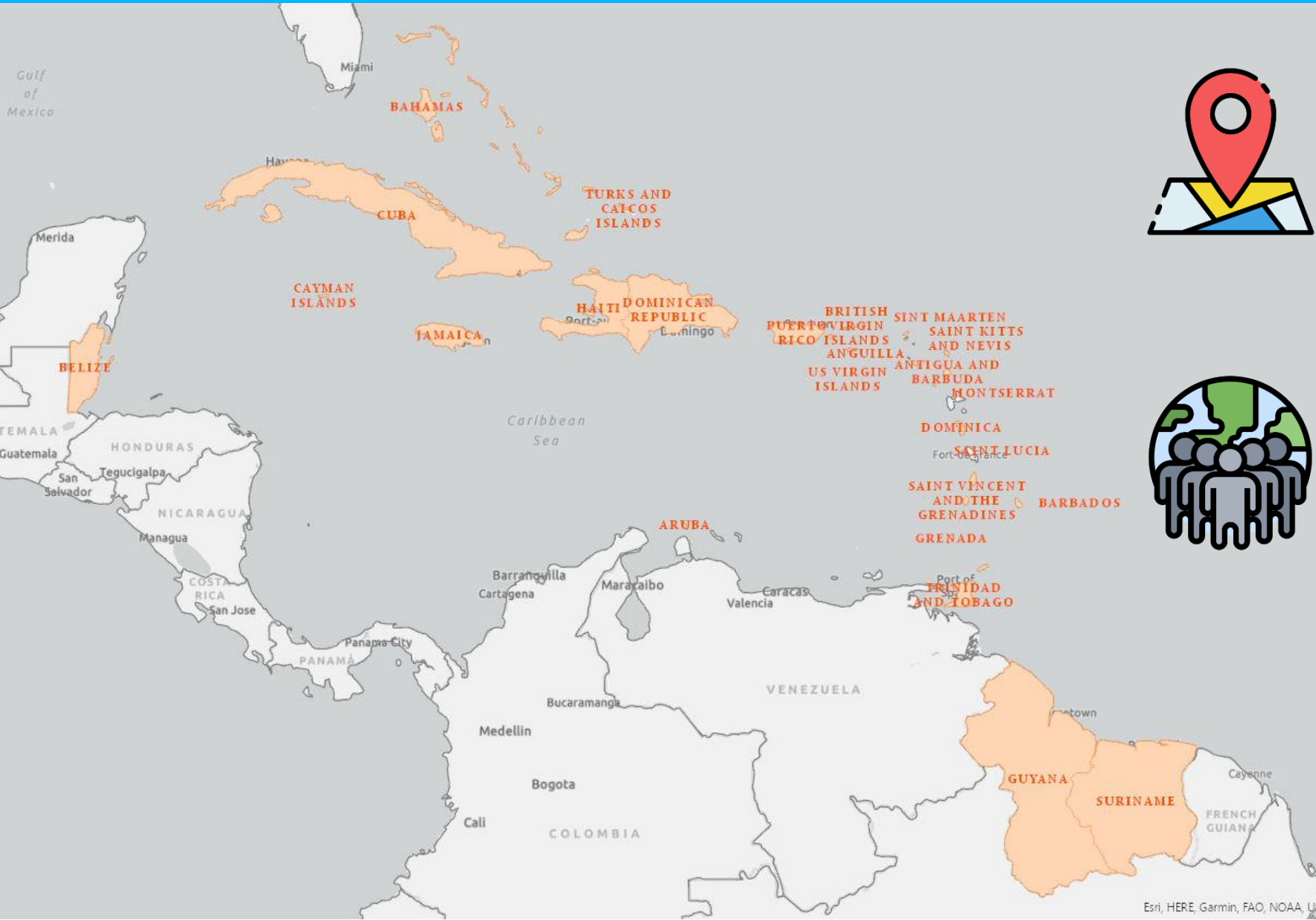
- an Initiative implemented by the Americas Regional Committee of United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM: Americas)



THE UNIVERSITY OF THE WEST INDIES



Participants



**National Mapping
Agencies**

&



**National Statistical
Offices**

The Future We Want



- A **community** of spatial data producers and users is **formed** and remains **active**
- GIS and data management **capacities** are **improved** across the region
- **Increased funding** is available for the creation and updating of **fundamental spatial datasets**
- Spatial data is **shared** more broadly and **more openly** in the Caribbean
- Development decisions and **policy-formulation** take more advantage of geoinformation
- **National Legislation** to regulate and promote the use of geoinformation is enacted
- **Agreements** are instituted for **collaboration** and **corporation** on the use of geoinformation regionally



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Past Initiative



Project for the Strengthening of Spatial Data Infrastructures in Member States and Territories of the Association of Caribbean States (Caribbean Project)

Initiated through the UN-GGIM Americas
Funded by the Government of Mexico with support from Government of Chile
Collaborators: ACS, UWI, CDEMA, URISA Caribbean

Details:

- **Funding Amounts – US \$ 4.5 m**
- **Start Date: 2014**
- **End Date: 2018**
- **Countries:** Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Grenada, Guadeloupe, Guyana, Haiti, Jamaica, Martinique, Dominican Republic, Saint Kitts and Nevis, Saint Lucia, Saint Martin, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago

Successes of Past Initiative



Progress



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**Establish the
Project
Steering
Committee**



**Develop the Terms
of Reference &
Program Proposal
Documents**



**Engage Partners
& Donors**



**Formulate &
Execute Projects
and Activities**

Terms of Reference



Guiding Principles



Collaboration and coordination



Use of and adherence to geospatial standards



Ownership and accountability



Transparency



Respect and confidence

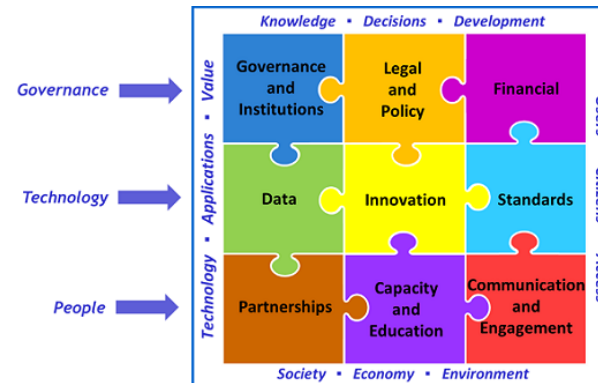


Standards of service



Adherence to law

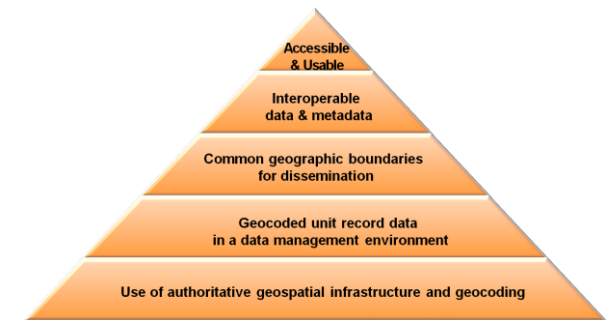
Alignment to International Frameworks



Integrated Geospatial Information Framework



Global Geodetic Reference Frame



Global Statistical Geospatial Framework



Strategic Framework for Disasters

Program Proposal – Scope of Work



- 1 Assessment of Current Situation in the Caribbean**
- 2 Governance & Policies**
- 3 Collaboration & Partnership**
- 4 Datasets & Tools**
- 5 Capacity Development**
- 6 Communications**



3. Collaboration & Partnerships

TRACK



- a) Identify key stakeholders in various sectors**
- b) Develop strategy to assess needs of stakeholders**
- c) Develop service delivery strategy**
- d) Establish general cooperation agreements with stakeholders**
- e) Monitor and evaluate implementation of agreements**
- f) Identify funding sources and develop financing proposals**



4. Datasets & Tools

TRACK



- a) **Develop data inventories**
- b) **Prepare roadmaps for the creation of regional fundamental datasets**
- c) **Implement data management mechanisms**
- d) **Implement national geostatistical frameworks**
- e) **Evaluate Earth Observation solutions for the region**

CARIGEO Activity: Caribbean Geoportal



Caribbean GeoPortal

<https://www.caribbeangeoportal.com/>



“

We are deeply committed to supporting innovation in the Caribbean, helping users discover, explore, and understand the vast information available to them through the power of maps

”

Jack Dangermond

President and Founder of Esri

A screenshot of the Caribbean GeoPortal website homepage. The header includes a navigation menu with 'Caribbean GeoPortal', 'Data', 'Tools', 'Learn', 'Map', and 'About Us'. The main banner features a map of the Caribbean and a group of diverse people, with the text 'The Caribbean GeoPortal' and 'Inspiring communities through geography'. Below the banner is a yellow section for 'COVID-19 Resources for the Caribbean are now available.' with a 'Caribbean COVID-19 Response' button. Further down is a section titled 'Why does geography matter?' with a paragraph about location intelligence and a small image of people at a water conservation site. The footer contains the text 'Join the community now and start mapping today!'.

LAUNCH CARIBBEAN GEOPORTAL

Status:
Completed
April 8, 2020

Officially introduced and launched during:

- **UN-GGIM Virtual Geospatial Summit on COVID-19** held on 8 April 2020 under the theme “GIS Response to COVID-19”.
- <https://www.caribbeangeoportal.com/>



CARIGEO WORKSHOPS

- CARIGEO workshop entitled: **"The GIS process and geospatial analysis"** was on October 7-8, 2019, in Mexico City.
- **CARIGEO Informal meeting** - Sept. 1, 2020
- A **High Level Meeting** (virtual) workshop: "Creating awareness among region's Senior Decision makers on leveraging the Value of Geospatial and Statistical Data - October 30, 2020.





CARIGEO NEXT STEPS

Next steps



Obtain funding to support project execution and member states implementation

Seek the support of member states to commit, participate and benefit from the project

Implement strategies to establish communication channels and ways to keep everyone engaged and informed

Project Implementation

Developing mechanisms and capacity for sustainability

Monitoring and Evaluation of Project

Caribbean Sea Importance



- Caribbean Sea is **geographically central to the Caribbean region**, with almost all countries of the region having their shores being completely or partially
- Caribbean Sea is central to the environment, social and economic life and development of the region.
- Core industries founded and dependent on the Caribbean Sea :
 - **Tourism**
 - **Fishing**
 - **Shipping and Navigation etc.**
- **Sargassum seaweed** overgrowth threatens these industries, livelihood and life within the region.



CARIGEO Sargassum Project



Sargassum Satellite Early Warning System in the Caribbean Region



Deep drifts of *Sargassum* seaweed swept ashore on Guadeloupe in April.

HELENE VALENZUELA/AFP/GETTY IMAGES

<https://www.sciencemag.org/news/2018/06/mysterious-masses-seaweed-assault-caribbean-islands>

- Commencing 2021, the CARIGEO Steering Committee is proposing to undertake a **Sargassum Satellite Early Warning System**.
- This system proposes to:
 - support Caribbean Member countries in the **monitoring, management, and mitigation of Sargassum impact**.
 - **estimate the arrival of Sargassum based on satellite data and drone imagery**.

CARIGEO Sargassum Project



Sargassum Satellite Early Warning System in the Caribbean Region

Technical areas:

- To **customize existing algorithms** that allow the identification and estimation of the volume of Sargassum stains,
- **Automate the processes** to identify and estimate aerial extent and the trajectory of the Sargassum,
- Develop a **georeferenced database** to support research and
- Implement a **geoportal** for dissemination of information.



<https://www.thegef.org/news/communities-innovate-address-sargassum-seaweed-coasts-saint-lucia>

CARIGEO Capacity Development & Partnership Initiatives

2021 Webinars



WEBINAR 1: Academic Network Americas: Ethics on the use of geospatial information

WEBINAR 2: Caribbean Geoportal Topic 1 - How to Use (for users) April 21, 2021

WEBINAR 3: UNGEGN on Geographical Names

WEBINAR 4: Maritime SDI (NOAA, IHO) & Caribbean Marine Atlas Data

WEBINAR 5: Caribbean Geoportal Topic 2 - Leveraging the Caribbean GeoPortal for Disaster Planning and Management (June 9, 2021)

WEBINAR 6: Caribbean Geoportal Topic 3 - Metadata, Maintenance, Best Practices On Data Sharing (for data producers) (August 26, 2021)

WEBINAR 7: Integration of Statistics and Geospatial Information

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