



## **UN-GGIM:Americas**

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

# **Regional Report UN-GGIM: Americas 2020-2021**

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## Summary

During the 2020-2021 period, the United Nations Regional Committee on Global Geospatial Information Management (UN-GGIM: Americas) organized and participated in multiple seminars and virtual workshops on topics of great relevance to the region.

In September 2020, the Seventh Session of the Regional Committee was held within the framework of AmeriGEO Week and was attended by 27 Member States. That same week, in a joint session between AmeriGEO and UN-GGIM: Americas, the *Aguascalientes Declaration, Better Together: Geospatial Information for Decision Making in the Americas*, was issued, a transcendent joint agreement whose purpose is to promote the integration of geospatial data to solve national and regional problems and challenges. As a follow-up to the Aguascalientes Declaration, the "2021-2024 Joint Action Plan" was drawn up, the main objective of which is to improve coordination and dialogue between the Member States and relevant international organizations to share experiences in the application of geospatial data, establish good practices and adopt the use of technologies to support the decision-making process. Despite the pandemic situation, thanks to the commitment of the Committee's Member States, in this period progress has continued in the activities of the different projects, such as 1) Project MEGA version 2.0, which as a first step conducted a survey of Member States with a proposal of topics and indicators from which the standardization document for this second version will be prepared. 2) Project for Integration of Statistical and Geospatial Information in Central America that focused on supporting decision-makers with their response to COVID-19 pandemic through the calculation of the vulnerability index for COVID-19. 3) Interactive Geovisor SDI 2021 that can be consulted through the UN-GGIM: America's website. 4) Chile-Mexico Project to strengthen the open platforms of GEONODO and MxSIG that will benefit the countries of Latin America and the Caribbean and 5) CARIGEO Initiative that has organized in this period a series of seminars and workshops that look for the empowerment of the countries and territories of the Caribbean region, to promote the use and exchange of statistical and geospatial information that supports national and regional sustainable development.

### 1. Background

The United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), established by the Economic and Social Council of the United Nations (ECOSOC), is a formal intergovernmental mechanism to discuss, improve and coordinate availability and use of global geospatial information, through the participation of States Members of the United Nations.

In August 2013, the Regional Committee for the Americas (UN-GGIM: Americas) was created, which replaced the Permanent Committee on Geospatial Data Infrastructure of the Americas (CP-IDEA). This significant action was carried out in accordance with the new mandate of the Regional Committee to improve cooperation and coordination with the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM). The Regional Committee, aligned with the global architecture, would better address regional and global challenges, especially in the context of sustainable development.

### 2. Objective

The Committee determines the relevant regional issues for the management of geospatial information, and takes the necessary measures to maximize the economic, social and environmental benefits derived from its use. The foregoing is based on knowledge and the exchange of experiences and technologies by the Member States, which allows for the establishment of the Geospatial Data Infrastructures in the Americas and other national initiatives, in addition to the contributions to the debates in UN- GGIM.

### 3. UN-GGIM: Americas Regional Committee Structure

The Board of Directors of UN-GGIM: Americas Regional Committee, is integrated as follows:

- President: Paloma Merodio Gómez, Mexico (2° Period)
- Vice president Cristián Araneda Hernández, Chile (2° Period)
- Executive Secretary: Gabriela García Seco, Mexico (2° Period)
- Vocal of North America: Eric Loubier, Canada (2° Period)
- Vocal of Central America: Marta Aguilar, Costa Rica (2° Period)
- Vocal of South America: Sergio Cimbaro, Argentina (1° Period)
- Vocal of the Caribbean: Keith Francis, St. Vincent and the Grenadines (1° Period)

As part of the agreements of the second meeting in 2021 of the Board of Directors of the Regional Committee, which was held on June 2, it was determined that it was important to include within the structure of the Board of Directors, in addition to the Executive Secretariat, a Technical Secretariat that will be in charge of ECLAC. The functions of this Technical Secretariat will be included in the Committee's Statutes document and will be sent to Member States for their final comments and approval.

#### **4. Activities – Work Areas**

##### **4.1. Webinar "Towards the implementation of the Strategic Framework on Information and Geospatial Services for Disasters in the Americas"**

UN-GGIM: Americas and ECLAC organized a Webinar on August 4, 2020, with the objective of disseminating the Strategic Framework for Disasters, including its five priorities for action, to a wide spectrum of institutional actors linked to the management of geospatial and statistics information, together with organizations in charge of risk reduction and disaster management at the national level. During the Webinar, the director of the National Geographic Institute (IGN) of Dominican Republic, Alejandro Jiménez, the deputy director of the Geographic Military Institute (IGM) of Ecuador, Dehivi Salgado and the director of the IGN of Argentina, Sergio Cimbaro, shared their national experiences and good practices related to the five action priorities of the Strategic Framework for Disasters about governance, capacity development, data management, use of technology platforms and resource mobilization. The Webinar was attended by Greg Scott from the UN-GGIM Secretariat, who provided an overview of how the Integrated Geospatial Information Framework (IGIF) supports the Strategic Disaster Framework and how its five priorities for action are linked and enabled by the nine strategic routes of the IGIF.

##### **4.2. Side event "Integration of Statistical and Geospatial Information: perspectives from national statistical offices"**

The United Nations Statistical Commission requested the establishment of a "Statistical-Geospatial Expert Group" at its 44th session in March 2013 (resolution 44/101) and received the endorsement of the United Nations Committee of Experts in Global Geospatial Information Management (UN-GGIM) at its third session in July 2013 (resolution 3/107). This led to the formation of the United Nations Group of Experts on the Integration of Statistical and Geospatial Information (EG-ISGI).

Through resolution 9/106, UN-GGIM adopted the Global Geospatial Statistical Framework (GSGF) in August 2019. A key milestone for the Group of Experts, the GSGF facilitates the integration of statistical and geospatial information through its five principles: 1. Use of fundamental geospatial infrastructure and geocoding; 2. Geocoded unit record data in a data management environment; 3. Common geographies for the dissemination of statistics; 4. Statistical and geospatial interoperability; and 5. Accessible and usable geospatial enabled statistics and other key supporting elements for the production of harmonized and standardized geospatial statistical data.

The purpose of this side event, which was held on August 25, 2020, was to open a space for regional discussion on how to move forward to implement the five principles of the Global Geospatial Statistical Framework at the country level, focusing on the contributions that both communities (statistics and geospatial) should provide in this relevant process. They also

discussed how to carry out regional cooperation, coordination, exchange of best practices and transfer of knowledge, to strengthen national capacities on these issues. The format of the event consisted of an interview by Rolando Ocampo, Director of the Statistics Division of ECLAC, with Tim Trainor, President of the International Cartographic Association.

#### 4.3. AmeriGEO Week and Seventh Session of UN-GGIM: Americas

The United Nations Regional Committee on Global Geospatial Information Management for the Americas (UNGGIM: Americas) organized, in coordination with AmeriGEO, the AmeriGEO Week from September 7 to 11, 2020 that was scheduled to take place in Aguascalientes City, Mexico, at INEGI headquarters, but due to the COVID19 emergency, it was migrated to a virtual format on the Web Switcher platform with simultaneous translation. During that week, three meetings were convened:

1) Symposium of the Americas - September 7 and 8, had as its main objective to bring together representatives from different regional communities to strengthen synergies and the paths towards collaboration of regional efforts related to the integration of Earth Observation, geospatial and statistical information. Throughout these two days, the activities being executed under various regional initiatives, such as management and monitoring of the Sustainable Development Goals, the attention and management of disasters, the environment, the challenges of the economy and health in the face of COVID19 were discussed. At the end of this symposium a joint reflection on the challenges and opportunities that must be considered to guide the priorities in the region were discussed.

2) UN-GGIM: Americas/AmeriGEO Joint Session- was held on September 9, with the objective of strengthening and improving collaboration between both organizations on the use of Earth Observation, geospatial and statistical information. During the meeting common objectives and activities were identified that can be achieved through strong collaboration and partnership between the two organizations. UN-GGIM: Americas and AmeriGEO Member States collaborated prior to the Joint Session through working groups to identify these common objectives and activities in three main dimensions: i) communication, cooperation and coordination, ii) capacity development and iii) data, information and knowledge exchange. The results of the meetings of the working groups were shared with all the participants during the joint session and at the end the "AGUASCALIENTES DECLARATION, better together: Geospatial Information for decision making in the Americas" was discussed and agreed on in principle.

c) The Seventh Session of UN-GGIM: Americas Regional Committee - was held on September 10 and 11. The virtual session was attended by one hundred and twenty-eight (128) participants representing delegates from 27 countries of the Americas, as well as representatives of the following international, regional and national organizations: the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC), the Administration National Aeronautics and Space (NASA), the National Oceanic and Atmospheric Administration (NOAA), the Pan American Institute of Geography and History (PAIGH), the Geocentric Reference System for the Americas (SIRGAS), Esri, GeoSUR, the National Autonomous University of Mexico, AmeriGEO, the UN-GGIM Secretariat of the United Nations Statistical Division, the UN-GGIM Academic and Private Sector Network: Americas and National Statistical Offices of the region.

Delegates from the following Member States participated in the meeting: Antigua and Barbuda, Argentina, Bahamas, Barbados, Brazil, Canada, Colombia, Costa Rica, Chile, Dominica, Dominican Republic, Ecuador, El Salvador, United States, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay and Venezuela.

On this occasion, an executive format was chosen for the Committee session, the main objective being to present the status of the most relevant projects and activities, as well as the steps for the implementation at the national level of the global UN-GGIM frameworks: The Integrated Geospatial Information Framework (IGIF), the Strategic Geospatial Information and Disaster Services Framework (GSF) and the Global Geospatial and Statistical Framework (GSGF).

The Seventh Session was divided into two parts. The first was held on Thursday, September 10, 2020, with a duration of 2 hours 22 minutes and the second part was held on September 11, 2020, with a duration of 2 hours 27 minutes.

For the full report of the session, visit:

<http://www.un-ggim-americas.org/assets/modulos/eventos.html?evento=7&t=s>

#### 4.4. Virtual Round Table “Advancing Role of Geospatial Knowledge Infrastructure (GKI) in World Economy, Society and Environment”

In October 2019, the United Nations Statistics Division (UNSD) and Geospatial Media, agreed to develop a collaborative approach to advance the role of GKI in society and the global economy. Numerous international partners from governments, industry and civil society have joined this collaboration, helping together to project value, improve knowledge adoption and develop understanding of geospatial knowledge for social, economic and environmental development in this rapidly evolving digital age. In order to project the value proposition of geospatial knowledge, the project on the role of the Geospatial Knowledge Infrastructure in the world economy, society and the environment was launched in January 2020. It is a three-year project that looks at evaluation in a broader framework during the first year, detailed strategy development in the second year, and transformation in the third year.

The virtual round table of the Americas was held on February 18, 2021 and was divided into two sections. The first section entitled “Geospatial preparation and the value of the GKI” was moderated by Rolando Ocampo, director of the Statistics Division of ECLAC, and the following participated as panelists: Bolívar Troncoso from IGN, Dominican Republic, Cristián Araneda from SNIT-IDE of Chile, Simone Lloyd from the Ministry of Economy and Juan Daniel Oviedo from DANE of Colombia. The discussion delved into the current scenario of geospatial infrastructure, the value and relevance of geospatial infrastructure for development from the Latino perspective, and the preparation for an integrated policy framework. The second section entitled "Collaborative approach and business model for geospatial knowledge" was moderated by the president of UN-GGIM: Americas, Paloma Merodio and the panelists were: Claudio Stenner from IBGE, Brazil, Viviana Ruíz from the Statistics National Institute (INEC) from Ecuador, Isis Tejada from IGN Tommy Guardia from Panama and Sergio Carrera from INEGI, Mexico. The discussion deepened on good practices in partnerships for data production in a broader data environment, potential partnerships that could help national geospatial agencies move up the knowledge value chain, and engagement of stakeholders to achieve GKI.

#### 4.5. 1<sup>st</sup> Virtual Informative meeting of UN-GGIM: Americas

The first informative meeting of the Regional Committee was held on March 16, 2021 in a virtual format. The coordinators of the four working groups on: Geospatial Data Infrastructure, Disasters, Integration of Statistical and Geospatial Information and Geodesy, presented their 2021 work plans and requested the participation of Member States to carry out the activities established within work plans. During the meeting, the status and upcoming activities of the Central America project, the Chile-Mexico project and CARIGEO initiative were presented. The action plans within the 3 working groups formed from the Aguascalientes Declaration were also discussed. Finally, the president of the Committee informed the dates of the next meetings.

#### 4.6. Webinar "Ethics in the use of geographic information in the Americas"

UN-GGIM: Americas in coordination with the Academic Network Americas and the Locus Charter initiative, organized a Webinar on ethics in the use of geographic information that was held on March 22, 2021. During the Webinar, a presentation from Locus Charter was made, an initiative that seeks to build a community of interested organizations around the use, collection and combination of location data sets, to develop shared principles that improve standards of practice, protect people and the wider public interest and increase the overall benefits of using location data. The keynote address on "Consequences of inappropriate use of geographic data and good practices" was given by Denise McKenzie from the Benchmark Initiative and Cristopher Tucker from the EthicalGEO Initiative. After the conference, a panel discussion was held made up of Cristián Araneda from SNIT-IDE of Chile, Fernanda León of IGM of Ecuador, Sandra Moreno of DANE of Colombia and Isis Tejada of IGN Tommy Guardia of Panama, who discussed about ethical and responsible uses of location data in their countries. Charlotte Smith, vice president of the Academic Network of the Americas, presented the results of the survey on ethics in the use of geographic information in the Americas, sent to the Member States of the Regional Committee in October 2020. At the end of the meeting, Rolando Ocampo, director of the Statistics Division of ECLAC, gave the closing remarks.

#### 4.7. Side event under the framework of the twentieth meeting of SCA-ECLAC Executive Committee on the “Earth Observations (EO) for Sustainable Development Goals in the Americas Region”

UN-GGIM: Americas in coordination with ECLAC and the international initiative of EO for the Sustainable Development Goals (EO4SDG), organized a side event on EO for Sustainable Development Goals in the Americas, on April 7, 2021, which were examples of good country practices in the use and promotion of EO solutions to monitor and calculate the SDG indicators in the Americas region, specifically in the case of Colombia, Brazil, Costa Rica and Mexico. The session focused on strengthening the connection between the EO community and the statistical community in monitoring and reporting on SDG indicators. Two initiatives in the region related to the use of EO for Sustainable Development Goals were reviewed: 1. EO Toolkit for Sustainable Cities and Human Settlements and 2. Regional Open Data Cube.

#### 4.8. Virtual Workshop "Exploring the value and challenges of using Earth Observations"

The Australian government, through the Commonwealth of Nations Scientific and Industrial Research Organization (CSIRO) and in collaboration with UN-GGIM: Americas, ECLAC and AmeriGEO, sponsors the project “Building regional capacity and knowledge in Observations of the Earth through data cube technology”. The project aims to promote the use of Earth and Marine Observations technology and contemplates holding 3 virtual workshops during 2021.

The first workshop of the project, entitled "Exploring the value and challenges of using Earth Observations" was held on April 15, 2020. During the workshop, the general context of the project was presented with some international examples, the status and objectives of existing initiatives in the Americas region and priority needs and challenges, both thematic and technical, to guide the development of capacity building.

#### 4.9. Virtual Meeting “Geodesy for Sustainable Americas”

Members of the Americas of the Subcommittee of Geodesy together with UN-GGIM: Americas Secretariat, organized the virtual Geodesy Forum Americas entitled “Geodesy for Sustainable Americas” on May 14, 2021, with the purpose of highlighting the benefits offered by a framework of accurate and reliable global geodetic reference.

Paloma Merodio gave the welcoming remarks highlighting that it is essential to have a globally coordinated approach to geodesy and that this requires strengthening cooperation. Calvin Klatt, Director of Geodesy for the Canada Geodetic Survey shared a summary of the Global Geodesy Forum on Earth Day, held on April 22, 2021. INEGI's Geodetic Framework Director, Francisco Medina, described the activities of the UN-GGIM Subcommittee on Geodesy and introduced the position and concept papers recently produced for the Subcommittee on Geodesy. Sonia Alves, president of SIRGAS, emphasized the importance of Geodesy to monitor the Earth and the status of geodesy in the Americas. As part of the event, a discussion session was held in which some Member States of the Americas had the opportunity to share their opinion about which were the focal areas of the global geodetic framework that should be addressed first in their country in a way that would contribute to the global and/or regional framework and what were their expectations regarding the establishment of the Center of Global Geodetic Excellence. Member States also raised some questions about their national social needs. The countries invited to this session were the United States, Chile, Costa Rica, the Dominican Republic and Panama.

#### 4.10. Working Groups

##### 4.10.1. Working Group on Integration of Statistical and Geospatial Information (WG-ISGI)

In 2014 the Statistical and Geospatial Framework for the Americas (MEGA) project was established as one of the main work axes of the Regional Committee, for the integration of statistical and geospatial information. The MEGA will allow the integration of statistical and geospatial information in a unified way for the region with common principles and standards, strengthening dissemination for decision-making.

In February 2020, the WG-ISGI delivered the final version of the MEGA version 1.0 Implementation report, which includes summaries from the countries that shared their experiences and lessons learned.

In the first quarter of this year, the metadata for version 1.0 of the MEGA was standardized and the platform was enabled to download information.

Member States were consulted about the proposed themes and indicators for version 2.0 of the MEGA, the deadline for responding to the survey is July 30, 2021. Based on the responses to the survey, they will prepare the Standardization document version 2.0 of the MEGA that will be ready before December 31, 2021.

From the information in the MEGA, 4 heat maps were elaborated that were uploaded to the platform as additional layers to the existing ones.



As a second objective for 2021, the WG-ISGI will develop and implement standards that facilitate and ensure the quality of integration of statistical and geospatial information, for this, the viability of adopting the SDMX standard will be evaluated for its inclusion in later phases of the MEGA. Likewise, the "Guide for preparing metadata" will be updated for the information on the 2.0 project. Lastly, the WG-ISGI will promote the use of geospatial information data in decision-making and the design of public policies; for it, a methodology will be developed to recognize the concept of geospatial empowerment in Member States of the Regional Committee.

#### 4.10.2. Working Group on Disasters (WG- Disasters)

As part of the objectives of the working group for Disasters in 2021, the Terms of Reference (ToR) document for an action plan on capacity building at the regional level will be completed based on the elements identified in the 2019 Diagnostic document and other fundamental documents including the Global Strategic Framework on Disaster Information and Geospatial Services (GSF) and United Nations General Assembly Resolution 59/12 on how to address knowledge gaps in Disaster Risk Management (DRM) .

In 2020 the WG-Disasters created five task teams led by State Members of the Committee based on the five priority areas of the GSF:

- Governance and Policies - Colombia
- Awareness and Capacity Building - Canada
- Data Management - Argentina
- Infrastructure and Common Services - Panama
- Resource Mobilization - Barbados

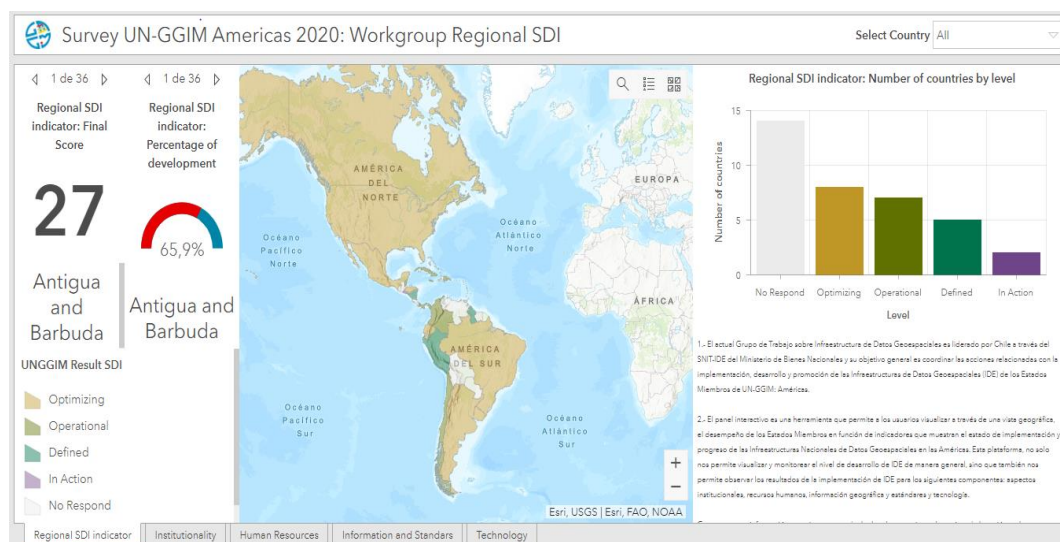
As part of the series of workshops and seminars that the WG-Disasters will carry out this year, Member States were invited to attend the kickoff sessions of the OGC Disaster pilot project that



aims to improve geospatial information flows in all stages of disaster response through geospatial standards.

#### 4.10.3. Working Group on Geospatial Data Infrastructure (WG-SDI)

The coordinator of the WG-SDI designed the 2021 survey as a diagnostic instrument to know the progress of the SDI in each of the countries of the Americas. This survey was sent to Member States at the end of March 2021 through the Secretariat of the Regional Committee. With the results obtained from the survey, a dynamic panel will be developed and comparative results will be processed and published on the UN-GGIM: America's website. Another objective of the WG-SDI for this year is to disseminate initiatives and good practices in the field of geospatial data infrastructure and generate a base guideline document on the operation of SDI. Based on the determination of gaps or components of SDI in the region with different degrees of advancement, the aim will be to promote the holding of workshops, webinars and the transfer of technological tools that support regional SDI, as alternatives for their development and operation.



#### 4.10.4. Working Group on the Geodetic Reference Frame for the Americas (WG – GRFA)

The work plan 2021 of the WG-GRFA is made up of 5 objectives: 1) Improve the governance structure to develop and sustain the geodetic reference framework of the Americas, for this, Member States will be supported to respond to the Resolution of the General Assembly on a Global Geodetic Reference Framework for Sustainable Development, in this sense, a series of resolutions of the GRFA group will be drawn up aimed at the development and sustainability of the Geodetic Reference Framework of the Americas and the participation of a greater number of Member States in the WG will be sought in WG-GRFA and in SIRGAS; 2) Strengthen the geodetic capacities of the professionals and technicians responsible for the maintenance of the national geodetic reference frames, for this, technical documentation will be prepared for GNSS data centers, GNSS data analysis centers and network integration to the SIRGAS reference frame. Likewise, 3 workshops will be held in June, July and October; 3) Promote the open exchange of geodetic data to improve and develop the Reference Frame of the Americas, for this purpose, the opening of geodetic data repositories of the Member States will be promoted; 4) Establish and maintain the Geodetic Reference Frame of the Americas, for which a diagnosis will be made through a survey on the state of the art of the reference frames and geodetic capacities of Member States. An expansion of the SIRGAS network to North America will be carried out with the establishment of three new GNSS analysis centers; 5) Develop communication and outreach programs that allow Geodetic Reference Framework to be more visible and understandable to society in general, for which a series of webinars will be developed that will oversee agencies in the Americas responsible for establishing a national geodetic reference.

#### 4.11. Action Lines

##### 4.11.1. Aguascalientes Declaration and Joint Action Plan

The Aguascalientes Declaration was signed on September 18, 2020, between UN-GGIM: Americas and AmeriGEO, as a result of the joint virtual session between both organizations held on September 9, 2020.

The following resolutions were included in the document:

1. Call upon stakeholders to work together to further define joint work strategies and programs with the objective of mutually advancing regional integration of geospatial data in the Americas.
2. Endorse the creation of a permanent liaison committee of members of this declaration, with the input of subject matter experts as needed, with responsibility for coordinating work and reporting their progress at each member's annual plenary meeting.
3. Convene a second joint session, recognizing its value, at a time to be determined by both parties to consider and evaluate the progress made post this 2020 Joint Session.
4. Support the creation of a geospatial data technical library/repository containing relevant regional projects, initiatives, a registry of technical experts, methods, models, good practices, legislation, and policies that are accessible and available to support the work of stakeholders.
5. Work together to advance the sharing, interoperability, and integration of geospatial data and other new and emerging data sources, to reduce the information divide, foster effective cross sector and interdisciplinary global, regional and local collaboration and partnerships in support of national development priorities, and improving partnerships among stakeholders.
6. Promote cooperation, partnership, and collaboration between and among all relevant regional stakeholders in establishing and/or strengthening existing regional capacity-building frameworks, common standards and application of good practices for achieving national development priorities and sustainable development.
7. Define mechanisms to establish effective communication that will strengthen and promote continued exchange and collaboration among stakeholders.
8. Work together to strengthen awareness, the participation of national experts and capacities across the region, particularly for the least developed countries, small island developing States, landlocked developing countries and middle-income countries, in the benefits, use, management and dissemination of geospatial data to support national, regional and global development priorities.
9. Support Member States in their efforts to increase the availability, accessibility and sharing of geospatial data and to leverage existing and available human, technical and financial resources to support the implementation and monitoring of the SDG's and Sendai Framework.
10. Invite interested international/regional organizations, private sector organizations and academia, having similar objectives and interests to partner with AmeriGEO and UN-GGIM Americas and contribute to initiatives and projects that will advance the regional objective of Better together: Geospatial information for decision making in the Americas; and
11. Express appreciation to the Joint Virtual Session planning committee and the advisory working groups for their tremendous and valuable efforts in planning and staging of the Joint Virtual Session, for the information made available and training to all participants, establishment of the Academy of the America, to the National Institute of Statistics and Geography, Mexico for providing interpretation services and to participants for their active involvement and interventions.

As a follow-up to the Aguascalientes Declaration, the "Writing Group Joint Plan of Action" was formed, which had the participation and contributions of different organizations, such as UN-GGIM: Americas, CEPAL, AmeriGEO, SIRGAS, Red Clara, PAIGH, the United Nations Environment Program and the Central American Integration System.

The different sections of the Joint Action Plan 2021-2024 were designed based on the objectives and activities established by the three working groups that were formed for the Joint Session in September 2020: i) communication, cooperation and coordination, ii) capacity development and iii) data, information and knowledge exchange.

The main objective of the Joint Action Plan is to improve coordination and dialogue between the Member States and relevant international organizations to share experiences in the application of geospatial data, establish good practices, and adopt the use of technologies to support decision-making. By establishing cooperation mechanisms, the Joint Action Plan seeks to promote the integration of geospatial data to solve national and regional problems and challenges.

The document establishes five duties or obligations:

- 1) Work together to further define joint work strategies and programs with the objective of mutually advancing regional integration of geospatial data.
- 2) Support the creation of a common geospatial data repository containing relevant regional projects, initiatives, technical experts, methods, models, good practices, legislation, and policies that are accessible and available to support the work of stakeholders.
- 3) Advance the sharing, interoperability, and integration of geospatial data to reduce the information divide and foster effective cross-sector collaboration in support of national development priorities.
- 4) Promote cooperation, partnership, and collaboration among all relevant regional stakeholders in strengthening existing regional capacity-building frameworks.
- 5) Establish effective communication strategies that will strengthen and promote continued exchange among the various working groups.

Each of the Working Groups will establish the appropriate method to identify its leadership structure.

The *2021-2024 Joint Action Plan* is intended to be a dynamic document as the organizations involved will continually update it as needed.

The working groups will present their progress reports during the annual sessions of the Regional Committee of the Americas.

#### 4.11.2. Academic Network Americas (ANA)

The main purpose of ANA is to academically support the objectives of UN-GGIM: Americas, specifically, ANA's activities for 2021 are listed below:

- a) Actively participate in the Global Academic Network to carry out joint activities.
- b) Promote and disseminate the network to increase the number of members.
- c) Identify training and research needs related to ethics in the use of geospatial information and make a proposal.
- d) Develop a proposal to improve communication between academia and government, in relation to geospatial information.
- e) Work together with AmeriGEO to create a digital repository of workshops and academic courses, aimed at both members and users in general.
- f) Strengthen ties with other academic networks.
- g) Develop a work plan together with AmeriGEO to strengthen the capacity building.

This year, a survey was conducted in April in order to update the status regarding training needs in the region. Once the results are obtained, they will be shared with the Member States of the Committee.

#### 4.11.3. Private Network Sector Americas (PNS-A)

The main objective of the PSN-A, according to its 2021 work plan, is to support the Regional Committee Agenda by promoting the use of geospatial information to address key regional challenges, enable citizen services and support initiatives aimed at strengthening the alliances between public and private initiative. Participation in RSP-A is free, it is open to all private sector organizations and related associations; It will allow these entities to contribute and expand the capacities of regional policy to develop tools and services for the integration of geospatial information throughout the territory of the countries in the region.

The main objectives of the PSN-A for 2021 are:

- Participate in all UN-GGIM: Americas Working Groups.

- Participate in CARIGEO weekly meetings as part of the Steering Committee.
- Work closely with the Global Private Sector Network.
- Create synergies with the Academic Network Americas (ANA).
- Lead the communication, cooperation and coordination working group within the framework of the *Aguascalientes Declaration*.

#### 4.11.4. Regional Cooperation and Collaboration

##### 4.11.4.1. Collaboration with ECLAC

The following describes the actions carried out by ECLAC from July 2020 to date to support the management of geospatial information in the process of synergizing with the objectives of UN-GGIM: Americas and UN-GGIM Global.

In August 2020, ECLAC collaborated with UN-GGIM: Americas in the preparation and presentation of regional positions for the X Session of the UN-GGIM Committee of Experts, particularly in relation to the Strengthening of Geospatial Information Management, the Integrated Framework Geospatial Information and Use of Information.

ECLAC, together with UN-GGIM Americas, organized the side event "Integration of Statistical and Geospatial Information: perspectives from national statistical offices", on the margins of the XIX Meeting of the Executive Committee of the Statistical Conference of the Americas (SCA-ECLAC).

In September 2020, the Executive Secretary of ECLAC, Alicia Bárcena, participated in the Seventh Session of UN-GGIM: Americas, through an opening presentation "opening Keynote" on the regional impact of COVID-19, the geospatial response to COVID -19 in Latin America and the Caribbean and the platform implemented in ECLAC to follow up on the actions of the countries in this matter.

Between July 2020 and June 2021, ECLAC participated in the "Joint Writing Group", formed after the joint meeting between UN-GGIM: Americas and AmeriGEO, for the drafting of the 2021-2024 version of the Joint Action Plan that will materialize the lines of work established in the *Aguascalientes Declaration*. Within this working group, ECLAC has been collaborating in the task force on Data, Information and Knowledge.

ECLAC is participating in and supporting the CARIGEO initiative, which aims to improve the use of geospatial information for evidence-based decision-making in the Caribbean region. ECLAC, in its role as Technical Secretariat of this initiative, has moderated the weekly meetings of its management team from July 2020 to date.

In October 2020, ECLAC supported the organization of the "CARIGEO Executive Forum" event, the objective of which was to share knowledge and raise awareness among the main decision-makers in the region about the value of taking advantage of geospatial and statistical data with related technologies, to support policy development and decision-making.

In March 2021, ECLAC and UN-GGIM: Americas jointly prepared and presented regional positions related to the integration of statistical and geospatial information, within the framework of Session 52 of the United Nations Statistics Commission.

Between July 2020 and June 2021, ECLAC has been contributing to the Project for the Integration of Statistical and Geospatial Information in Central America, led by the National Section of the Pan-American Institute of Geography and History (PAIGH) of the United States, in conjunction with the Presidency of UN-GGIM: Americas. ECLAC has facilitated coordination with geospatial experts from the national statistical offices of the participating countries.

From April to June 2021, ECLAC has worked together with UN-GGIM: Americas to apply the global questionnaire on the level of preparation of countries to implement the Global Geospatial

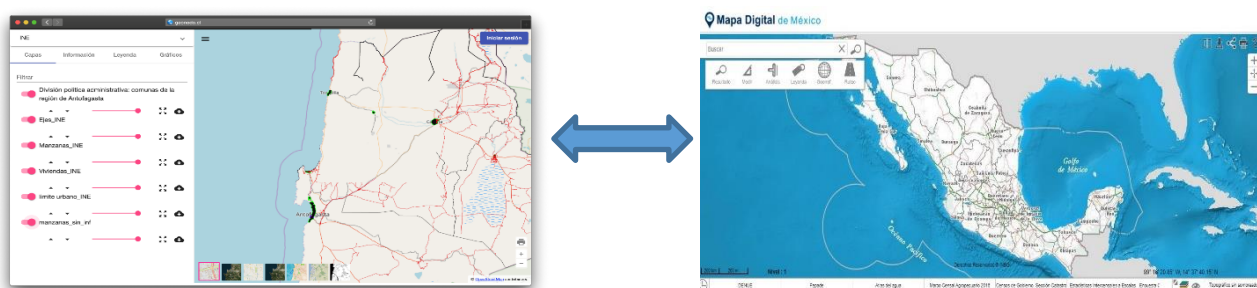
Statistical Framework. ECLAC has coordinated with the region's national statistical offices for the appointment of a technical focal point in charge of providing the answers to this consultation, in coordination with the geospatial counterpart.

In June 2021, ECLAC participated in the meeting of the Board of Directors of UN-GGIM: Americas, in which it was proposed to create a Technical Secretariat for the Regional Committee of the Americas, in charge of the Statistics Division of ECLAC, to give technical support to the annual sessions, support in capacity building, with the continuity of the projects and in the connection with the global works, among others.

#### 4.11.4.2 Chile-México Project

In the project called “Strengthening the geospatial information platforms GEONODO and MxSIG in Chile-Mexico and Latin American and Caribbean countries”, financed by the Mexico-Chile Cooperation Fund and led by the National Institute of Statistics and Geography (INEGI) of Mexico and the National System of Coordination of Territorial Information (SNIT), Ministry of National Assets of Chile, several virtual meetings were held during 2020 in which the interoperability of both platforms was ensured. In the case of MxSIG, the distribution, implementation and commissioning mechanisms were improved from a map viewer to a geographic information system on the web, for this purpose, container technology was used with the Docker platform, which is an open platform. for developers and sysadmins to develop, ship, and run distributed applications, whether on laptops, data center virtual machines or in the cloud. As for GEONODO, a map server was implemented that will be called SDI Server, a tool that solves the management of heavy or large layers.

The versions resulting from the improvements in both platforms will be transferred this year to four Member States of the Committee of the Americas, which is possible thanks to the fact that the components of MxSIG and GEONODO platforms are governed under free software licenses or open-source, which empowers both the Ministry of National Assets of Chile and INEGI - Mexico, to use their platforms in collaborative projects with other institutions without depending on a third party, that is, technological independence is achieved thanks to the use of licensing not restrictive.



GEONODO - MxSIG

Through the achievement of this project, it is intended, therefore, to contribute to the strengthening of Spatial Data Infrastructures for the use of territorial information, to promote transparent access to information by institutions and citizens as a whole, and to facilitate the decision making.

To carry out the transfer of the platforms, virtual capacity-building workshops will be held.

Finally, during the Eighth Session of UN-GGIM: Americas, the results of the project will be presented and the countries that received the technology transfer will share their case of success in using the platform.

#### 4.11.4.3. Project on Integration of Statistical and Geospatial Information for Central America

The Project "UN-GGIM: Americas, United Nations Regional Committee on Global Geospatial Information Management for the Americas: Integration of Statistical and Geospatial Information in Central America" (Central America project) is developed within the framework of the line of action for the regional cooperation and collaboration of the Committee of the Americas, being financed by PAIGH through the Technical Assistance Program and led by the

National Institute of Statistics and Geography (INEGI), Mexico and the United States Census Bureau.

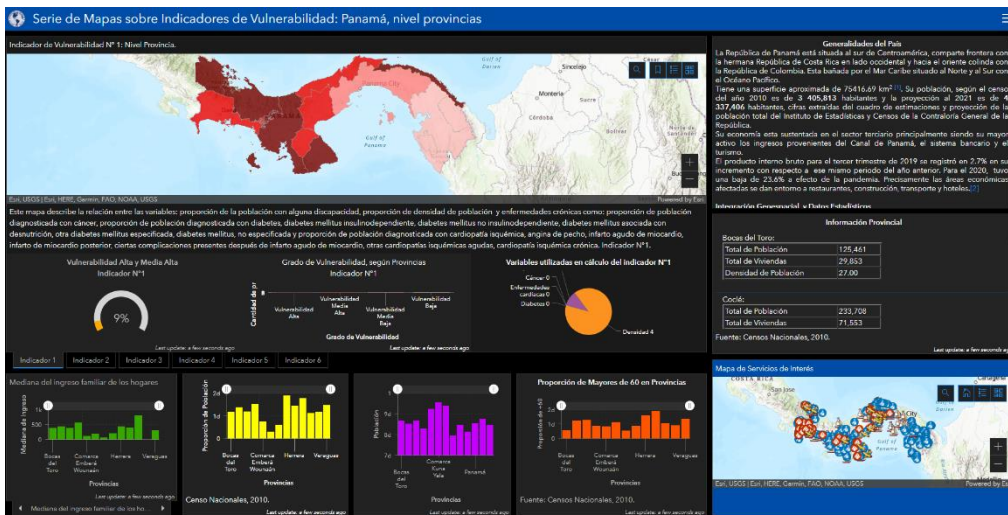
The main objective of the Central America project is to add value and broaden the region's knowledge on the integration of statistical and geospatial information. With the emergence of the COVID-19 pandemic, the project's technical team made the decision to focus on how they could assist decision-makers in Central America with their response to COVID-19; for which the vulnerability index for COVID-19 was replicated. based on the vulnerability index methodology developed by the National Administrative Department of Statistics (DANE) of Colombia.

Vulnerability to COVID-19 means that a population at a certain level of geography may have a greater susceptibility to contracting COVID-19 based on the population, health, and housing data available for a given level of geography. The following data variables were considered in the development of the vulnerability index:

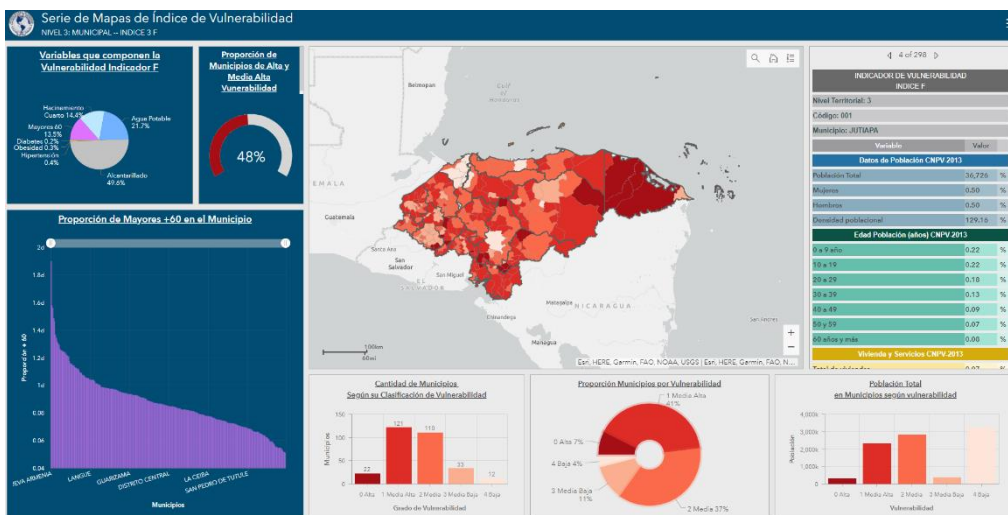
Variables
<b>Population Data</b>
Total Population
Population from 0 to 9 years old
Population from 10 to 19 years old
Population from 20 to 29 years old
Population from 30 to 39 years old
Population from 40 to 49 years old
Population from 50 to 59 years old
Population Age 60 and over
<b>Housing and Population related Data</b>
Total Housing
Households with overcrowded rooms
Households with overcrowded dorms
Households with high intergenerational risk
Households with medium intergenerational risk
Poverty
Income
Households without access to public water
Households without access to public sanitation (sewage)
<b>Health Data</b>
Health conditions
Asthma
Heart disease (stroke, heart attack, etc.)
Diabetes
Cancer
Immune system
Respiratory system
Hypertension
Obesity

In July 2020, the virtual workshop called "Vulnerability Index" was held, which was divided into two sessions of two hours each. The first session was theoretical and in it, the methodology and calculations used to build the vulnerability index were discussed. The second session was practical in which the adequacy of the methodology, calculations, scope and limitations for each country was discussed based on the availability of data variables and geographic levels that have said variables. In this year, the countries work on the visualization of results. They prepare a series of web maps, dashboards and story maps that will be published and presented in different forums.

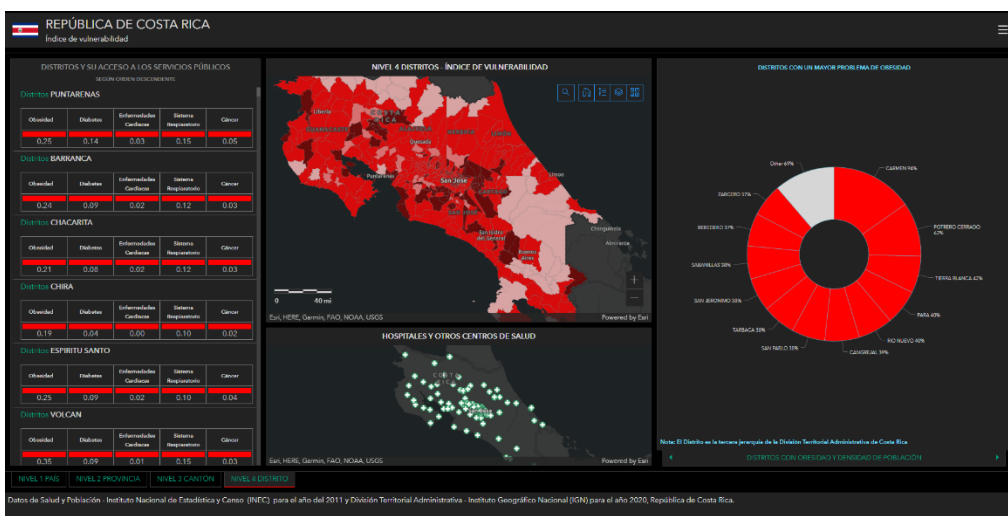
Here are some examples of the dashboards created:



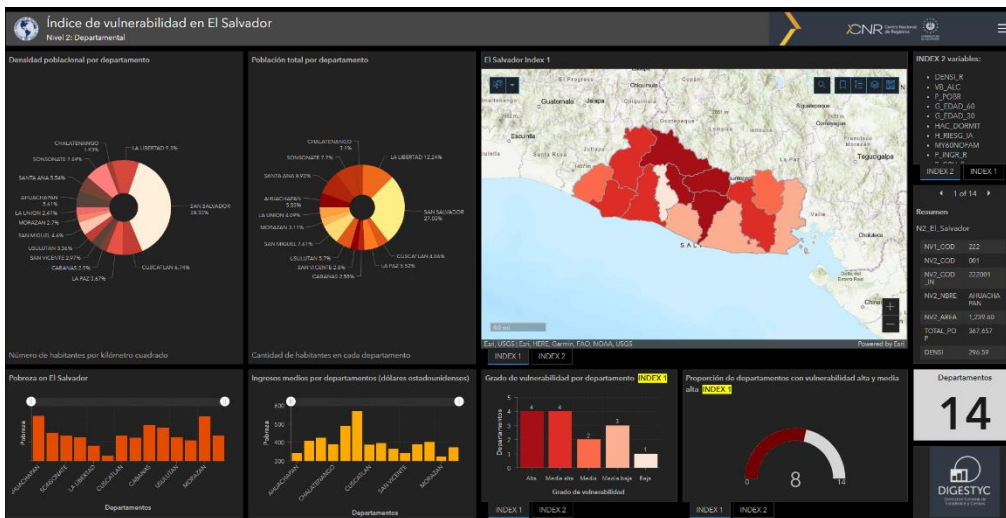
Panamá's dashboard



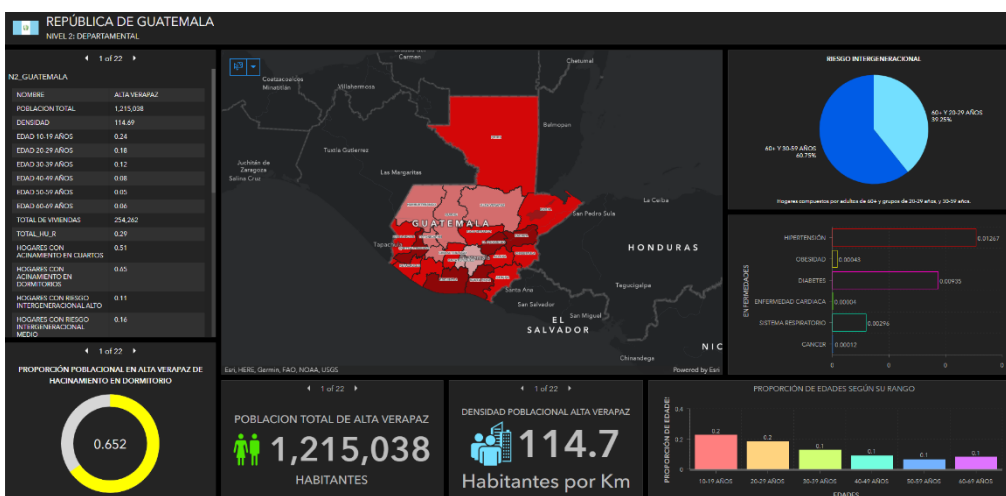
Honduras' dashboard



Costa Rica's dashboard



El Salvador's dashboard



Guatemala's dashboard

#### 4.11.4.4. CARIGEO Initiative

The Caribbean Geospatial Development Initiative (CARIGEO), is a collaborative effort between the United Nations Regional Committee on Global Geospatial Information Management - UN-GGIM: Americas, the Economic Commission for Latin America and the Caribbean - ECLAC, the United Nations Group of Experts on Geographical Names - UNGEGN, public agencies of Member States and Territories of the Caribbean, private sector organizations in the geospatial field, academic institutions and representatives of civil society, which seeks to empower the countries and territories of the Caribbean region, to promote the use and exchange of statistical information and that supports national and regional sustainable development. Prepared in 2020: a) Terms of Reference in which an Executive Board was defined that will be the governing body of CARIGEO, which will report on the activities and progress of the Initiative projects during the annual sessions of UN-GGIM Americas; b) Program proposal that offers a general vision of the actions to be carried out in the Caribbean region to strengthen the management of geospatial information as a tool to support decision-making, public policies, national development strategies and priorities for action to regional level. This Program proposal is structured around six action paths, each of which contains activities that will be carried out separately or through a project that can include and unite activities from different pathways according to the links that can be identified or the project needs. These pathways are 1. Assessment of the current situation in the Caribbean, 2. Governance and policies, 3. Collaboration and partnerships, 4. Data sets and tools, 5. Capacity development and 6. Communications.

The CARIGEO initiative seeks to provide geospatial support to regional challenges, drivers and problems in the Caribbean, addressing issues as relevant as disaster risk management and response, resilience management, climate change, economic development, response to the



COVID-19 pandemic, the implementation of the 2030 Agenda, and national priorities related to development strategies or other important drivers at the country level. Specific actions or broader projects that can be formulated around these drivers could include activities from the different courses of action since, for example, in the event of disasters, the geospatial response involves not only data management, but also governance, partnerships, capacity building and communication support.

As part of the activities of CARIGEO's work plan, several webinars and side events were organized:

*Virtual seminar "Introducing CARIGEO Initiative"* - was held on September 1, 2020. The main objective of the seminar was to introduce the attendees to the objectives and benefits of the Caribbean Geospatial Development Initiative (CARIGEO) and encourage them to participate. Michelle St. Clair, Barbados focal point in the Regional Committee, presented an overview of the initiative and Simone Lloyd, Jamaica focal point, shared the work plan activities and next steps. On the other hand, Linda Peters from Esri, presented the Caribbean Geoportal, Alix Cantave, from the Kellogg Foundation, spoke about CARIGEO from the perspective of interested organizations, Valrie Grant, from GeoTechVision, spoke about the initiative from the point of view of the private sector and Bhessem Ramlal, Senior Lecturer at the University of the West Indies, St. Augustine Campus, from the point of view of academia.

*CARIGEO Executive Forum* – was held on October 30, 2020. Organized to share knowledge and raise awareness among key decision-makers in the region about the value of leveraging geospatial and statistical data with related technologies to support policy development and decision-making. The Forum also sought to propel countries to action and commitment to participate in CARIGEO, through focused high-level presentations that highlighted the imperatives of geospatial development and good geospatial information management practices.

The Forum began with a welcome remark from Julio Santaella, president of the National Institute of Statistics and Geography (INEGI) of Mexico and Rolando Ocampo, director of the Statistics Division of ECLAC. The president of the Regional Committee, Paloma Merodio, moderated the session of high-level interventions in which Dr. the Hon. William F. Duguid, Minister of Housing and Land of Barbados, June Soomer, Secretary General of the Association of Caribbean States and Diane Quarless - director of the Subregional Office for the Caribbean - ECLAC. Valrie Grant, vice president of the Private Sector Network of the Americas, moderated the session on national perspectives, in which participated: NG Siau Yong, director of Geospatial Data in Singapore, Elizabeth Stair, executive director and Commissioner of the National Lands, Agency of Jamaica and Diana Castillo-Trejo, general director of the Institute of Statistics of Belize.

*Side event "Caribbean Geospatial Development Initiative - CARIGEO"* was held on April 8, 2021, within the framework of the Twentieth Meeting of the Executive Committee of the Statistical Conference of the Americas of the Economic Commission for Latin America and the Caribe (SCA-ECLAC), moderated by Cecille Blake from the UN-GGIM Secretariat. The president of UN-GGIM: Americas, Paloma Merodio, was present for a few words of welcome and Stefan Schweinfest, director of the UN Statistics Division, highlighted the need to strengthen capacities to integrate geospatial data and information. and statistics, through the adoption of regional and global frameworks, standards and methodologies. Michelle St. Clair from the Lands and Surveys Department of Barbados presented the CARIGEO initiative, the purpose of which is for the Caribbean States and territories to improve the use of geospatial information for decision-making, strengthen their Spatial Data Infrastructures (SDI) and support the integration of statistical and geospatial information. Pauline Leonard, an officer of the Statistics Division of ECLAC, presented the relevant indicators of climate change and disasters of small developing islands (SIDS) for evidence-based policies, whose objectives are, among others, to reduce the risk of disasters, including those related to COVID19. On the other hand, Lori-Rae Alleyne from the Anguilla Department of Statistics presented Anguilla's experience in the production and promotion of relevant and quality official statistics for use by the public and private sectors in decision-making. Likewise, Joaquín Triñanes, manager of the Caribbean Coast Watch and Gulf of Mexico, presented the experience in monitoring and tracking sargassum in the tropical Atlantic along the Caribbean Sea and the Gulf of Mexico and, finally, Juan Arturo García Masó from the National Office of Hydrography and Geodesy of Cuba, presented the case of his country on the use of statistical and geospatial information to support the creation of strategies for sustainable development and other relevant issues.

*First Webinar* “Caribbean Geoportal #1 – Learn how to use the Caribbean Geoportal” was held on April 21<sup>st</sup>, 2021 and was organized by UN-GGIM: Americas and CARIGEO. The Caribbean Geoportal is an open cartographic community that provides data and knowledge throughout the Caribbean. Attendees learned about the data and tools that are available to users, as well as applications for solving key problems such as disaster response. Following the presentations, an interactive question and answer session was held.



*Second Webinar* “Use of the Caribbean Geoportal for disaster management and response” – It was held on June 22, 2021.

In this Webinar, participants were taught to use the Caribbean Geoportal to be better prepared and make better decisions based on data in the face of disasters. During the session, different types of accessible data were analyzed, including featured data sets from NASA and NOAA to understand the problems of precipitation, soil moisture, floods, cyclones, hurricanes, earthquakes and much more. The Seminar was divided into four sessions. 1) Simone Lloyd from Jamaica spoke about the recent activities of the UN-GGIM Disaster Working Group and Michelle St. Clair from Barbados mentioned some general aspects of disasters in the Caribbean. 2) In this session, Renee Babb and Oronde Lambert from the Caribbean Disaster Emergency Management Agency (CDEMA) interviewed, addressing some key issues such as understanding the potential impact of disasters, estimation and deployment of resources, evaluation and reporting of disaster damage, effective communication with the public, etc. 3) It consisted of a series of presentations about NASA's disaster data. 4) Lavern Ryan from Montserrat and Dornet Hull from St. Vincente and the Grenadines, spoke about using GIS for disaster response and recovery.

In accordance with CARIGEO's work plan, a total of 8 virtual seminars on various topics will be held during 2021.

In addition to the webinars, as part of this year's activities, CARIGEO Steering Committee will prepare a project for the creation of a satellite early warning system for sargassum in the Caribbean region, in conjunction with some organizations, such as the Association of Caribbean States (ACS) and the Institute of Geography of UNAM, Mexico, which will be presented to the Mexican Agency for International Development Cooperation (AMEXCID) to request financing.

#### 4.12. Diffusion

On the web page <http://www.un-ggim-americas.org/> administered by the National Institute of Statistics and Geography (INEGI), Mexico, you can consult 1) documents generated by the working groups, 2) the interactive Geovisor on the status of SDI in the region, 3) the MEGA platform, 4) the geoportal of the Central America project, 5) the Caribbean Geoportal of the CARIGEO initiative, 5) videos and presentations of the webinars and virtual workshops, 6) resolutions and reports of the annual sessions, 7) name and contact details of the focal points of the Committee, among others.

Events such as webinars and workshops are also published on the Twitter account of the Regional Committee @UNGGIMAmericas.

The Committee is working on the writing of two articles for publication in prestigious scientific journals: 1. COVID-19 vulnerability index in Central America and 2. Ethics in the use of geospatial information in the Americas. The articles are expected to be published before the end of 2021.

#### 4.13. Financial and management support for the achievement and monitoring of the Groups and Lines of Work of the Committee

##### a) Pan American Technical Assistance Program of PAIGH 2019:

PAIGH approved the project on Integration of Statistical and Geospatial Information in Central America and the resources were used for: 1) a technical workshop on the methodology for calculating the vulnerability index in Central America, which was carried out in two sessions. The first session was held on July 9, 2020 and the second session was held on July 16, 2020. The instructor for the workshop was Lelio Alejandro Arias Vizcaino from the Directorate of Censuses and Demography (DANE), Colombia. Forty-three representatives from all Central American countries participated and 2) the creation of an e-learning course on the Global Statistical and Geospatial Framework (GSGF) document in English. This course will serve as support to understand more easily the 5 principles of the GSGF to which the Central America project is aligned and that allow the production of harmonized and standardized geospatially enabled statistical data.

#### 4.14. Participation of the Regional Committee in conferences and meetings

The Regional Committee participated in the following forums:

##### a) GIS Jamaica 2020 “Geospatial Technologies” shaping our future - virtual conference - September 23 and 24, 2020

On behalf of the president of the Committee, the executive secretary, Gabriela García Seco participated in the opening of the conference with a few words of welcome in which she highlighted the key role of geospatial technology for the construction of the future of countries and mentioned that issues such as urban planning, climate change, resource management, Sustainable development and today, pandemic, have in geospatial information a very powerful resource for their treatment.

The conference was divided into side events in which various topics were addressed, such as water resources, urban and regional planning, social sciences, GIS-based erosion modeling, crime analysis with ArcGIS, climate change, remote sensing, and leveraging geospatial innovation in smart airports.

Michelle St. Clair, Barbados focal point presented the CARIGEO initiative, outlining the activities carried out in 2020 and the next steps and Linda Peters from Esri demonstrated the Caribbean Geoportal that is being developed as part of the CARIGEO initiative. Likewise, Sandra Moreno, technical director of the Geostatistics area of DANE Colombia and coordinator of the WG-ISGI of UN-GGIM: Americas, presented during the second day of the conference, the progress of the Statistical and Geospatial Integration Framework Project for the Americas (MEGA).

##### b) Regional School Conference Program "New geodetic techniques for Latin America and the Caribbean" - April 5 to 10, 2021

The Virtual Format Regional School, run by the Montevideo Group University Association (AUGM), offered a conceptual and practical overview of a set of novel geodetic tools in the region and essential to address the challenges of the future. The Faculty of Astronomical and Geophysical Sciences of the National University of La Plata, Argentina, provided the faculty. Classes were organized around a series of virtual visits to the Argentine-German Geodesy Observatory (AGGO). Specialists from agencies and organizations such as SIRGAS, IAG, GGOS, PAIGH and UN-GGIM: Americas, oversaw conferences at the end of each day.

The conference on Wednesday, April 7, 2021, entitled "United Nations Global Geodetic Reference Framework for Sustainable Development" was led by UN-GGIM: Americas. On this occasion, the vice president of the Committee's Board of Directors, Cristián Araneda, spoke about the working groups, project and activities that are carried out in UN-GGIM: Americas, Diego Piñón, coordinator of the Committee's WG-GRFA and vice president of SIRGAS, presented the guidelines for the implementation of the Geodetic Reference Frame in the Americas and Rosario Casanova, president of the Academic Network of the Americas (ANA), pointed out how the Network is formed and encouraged attendees to have an active participation in the network.

- c) Global Geodesy Forum: The Power of Where - The Value of Geodesy in Society - virtual format - April 22, 2021.

The Forum was organized by the UN-GGIM Subcommittee on Geodesy and focused on the importance of geodesy for the well-being and improvement of society, the environment and the economy. During the Forum it was highlighted how the Global Geodetic Reference Framework (GGRF) helps to create safer and more resilient communities. The panelists highlighted the economic value of investing in geodesy and the important role it plays in helping developing countries with efficient and effective environmental and land management. The president of the Regional Committee of the Americas, Paloma Merodio, participated as a panelist with the theme "Geodesy is the basis of Sustainable Development" where she highlighted that a global geodetic reference supports satellite positioning technology, provides the framework for the entire geospatial activity and is a key enabler of spatial data interoperability. She noted that societies, economies and our environment have always been changing, but today's global community must deal with changes of unprecedented complexity and speed, and with devastating effects, if we do not address them in the right way and governments and administrations can only deal with these problems with better information that is available faster and with a higher level of detail. The integration of geospatial and statistical data, she said, is one of the most promising ways to provide more timely, reliable, relevant and detailed information.

- d) GEO Symposium on the theme "Strengthening Inclusive Partnerships Across the GEO Work Program (GWP) - June 22, 2021.

The president of UN-GGIM: Americas, Paloma Merodio, participated as a speaker in the GEO virtual Symposium on June 22 in a side event entitled "Strategies, alliances and services of Earth Observations (EO) for disaster risk reduction". In this session, speakers provided insight into ongoing projects and activities to address gaps, user needs, and efforts to transform data into decisions for disaster resilience. Paloma Merodio mentioned that the relevance of collaboration, alliances, and articulation among the Member States, regional organizations, academia, industry, the private sector, and civil society, was manifested in the "*Aguascalientes Declaration: Better Together: Information Geospatial for Decision Making in the Americas*" signed between AmeriGEO and UN-GGIM: Americas in 2020, which considers the 2030 agenda, the Sendai Framework for disaster risk reduction, among other global agendas, and calls for coordinated actions in new approaches to the acquisition and integration of information that use data and technology for sustainable development and disaster risk reduction. She stressed that in 2018 the UN-GGIM: Americas Working Group on Geospatial Information and Services for Disasters, prepared a survey on current practices and problems in the Americas. The survey findings were analyzed in a report titled "Gap Diagnosis and Analysis," which highlights the problems in the region for managing geospatial information to mitigate disasters and become more resilient. She reported that this group is currently working on a regional action plan for capacity development.

## 5. Challenges

The main challenge for the Regional Committee is to get the Member States to adopt and work on the implementation of the Global Frameworks developed by UN-GGIM for the management of geospatial information, with the purpose of closing gaps and leaving no one behind in the region.

Another important challenge is to make the information fluid since due to the COVID-19 pandemic continues to be a problem in 2021 for the achievement of good communications among the Member States of the Regional Committee of the Americas. Some geospatial institutes have seen their human resources reduced and/or have the limited technological

capacity to send the information requested, reasons that have impacted the performance of the activities of the different projects. This problem has been most evident in the Caribbean region.

Finally, it is worth mentioning that it is important to achieve a greater institutional commitment from the Member States to ensure continuity in terms of the participation of the representatives or official focal points in the work and activities of the Committee.

## **6. Perspectives and Future Plans**

In September 2021, a second information meeting of UN-GGIM: Americas will be held to follow up on the progress of activities and projects and report on the selection process for the new authorities of the Regional Committee.

Short-term plans of the Regional Committee contemplate the activities that will be carried out around the Eleventh Session of UN-GGIM, which on this occasion will be held virtually on 23-24 and 27 August 2021. The Board of Directors of the Committee will coordinate and participate in the development of regional positions for the Eleventh Session.

In July 2021, the Committee will send a request to the UN-GGIM Secretariat to hold a side event within the framework of the Eleventh Session, in order to present the results of the Central America Project and formally launch the digital platform where the products and materials of the project can be consulted.

The Eighth Session of UN-GGIM: Americas will be held in virtual format from November 17 to 19, 2021 and will be attended by the Member States of the Committee and national, regional and international organizations, such as the Secretariat of UN-GGIM; the United Nations Economic Commission for Latin America and the Caribbean (ECLAC); the National Institute of Statistics and Geography (INEGI); SIRGAS; the Pan American Institute of Geography and History (PAIGH); the Urban and Regional Information Systems Association (URISA), Caribbean Chapter; the National Autonomous University of Mexico, AmeriGEO Caucus, among others.

Once the Eighth Session is over, the new Board of Directors of the Regional Committee will assume the responsibility of giving continuity to the projects and generating new activities according to the needs that the region has.

## **7. Conclusions**

Despite the difficulties generated by the COVID-19 pandemic, the United Nations Regional Committee on Global Geospatial Information Management for the Americas remained dynamic since a large part of the project activities continued to be carried out through the virtual modality.

During this period, active regional cooperation was carried out through the joint session and the symposium that the Regional Committee of UN-GGIM: Americas organized together with AmeriGEO in September 2020 in a virtual way, in order to create synergies between both communities. The Joint Action Plan document is currently being prepared, which will mark the lines of action for collaborative and cooperative work among the various regional organizations.

The work and activities of the four working groups and lines of action of the Regional Committee of the Americas are aligned with the UN-GGIM Global Frameworks, in order to contribute to the standardization and interoperability of geospatial information, not only at the regional level but also global.

This year the selection processes of the new authorities of the Regional Committee will be carried out and the results will be announced during the Eighth Session.

The representatives of the current Board of Directors are especially grateful to the UN-GGIM Secretariat for working closely with the Committee and supporting regional efforts in geospatial information management.

The representatives of the current Board of Directors will continue to participate and actively collaborate committed to strengthening the management of geospatial information for better decision-making and with the slogan of leaving no one behind.