

UN-GGIM:Americas

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

Regional Report UN-GGIM: Americas 2018-2019

Paloma Merodio Gómez Gabriela García Seco

June, 2019

CONTENT

- 1. Background
- 2. Objective
- 3. UN-GGIM: Americas Regional Committee structure
- 4. Activities Work Areas
 - 4.1. UN-GGIM: Americas meeting in the framework of the 8th Session of UN-GGIM
- 4.2. Fifth Session of the Regional Committee
- 4.3. Working Groups
 - **4.3.1.** Working Group on Integration of Statistical and Geospatial Information (WG-ISGI)
 - **4.3.2.** Working Group on Disasters (WG-Disasters)
 - 4.3.3. Working Group on Geospatial Data Infrastructure (WG-SDI)
- 4.4. Work Lines
 - 4.4.1. Academic Network for the Americas (ANA)
 - 4.4.2. Joint Action Plan
 - 4.4.3. Geodetic Reference Framework
 - 4.4.4. Private Sector Network for the Americas (PSN-A)
 - 4.4.5. Cooperation and Regional Collaboration
 - 4.4.5.1. Caribbean Project
 - **4.4.5.2.** Collaboration with ECLAC
 - 4.4.5.3. Chile-México Project
 - **4.4.5.4.** Integration of Statistical and Geospatial Information for Central America Project
- 4.5. Diffusion
- 4.6. Financial and management support for the achievement and monitoring of the Groups and Lines of Work of the Committee
- 4.7. Participation of the Regional Committee in conferences and meetings
- 5. Challenges
- 6. Perspectives and Future Plans
- 7. Conclusions

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

Currently the Regional Committee of UN-GGIM: Americas is composed by 36 Member States and a Board of Directors that is integrated as follows:

- President: Paloma Merodio Gómez, Mexico (2° Period)
- Vicepresident Macarena Pérez García, Chile (2° Period)
- Executive Secretary: Gabriela García Seco, Mexico (2° Period)
- Vocal of North America: Prashant Shukle, Canada (2° Period)
- Vocal of Central America: Max Lobo, 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)

4. Activities – Work Areas

4.1 UN-GGIM: Americas meeting in the framework of the 8th Session of UN-GGIM

In the framework of the 8th Session of UN-GGIM, a meeting of the Regional Committee was held on August 1st, 2018, in which the coordinators of the working groups presented the progress of their activities. In addition, the latest results of the Caribbean Project and the main work objectives of the Academic and Private Sector Network for the Americas were presented. Representatives of 26 countries of the Americas attended the meeting, 12 of which were from the Caribbean region financed by Mexico through the Caribbean Project.

4.2 Fifth Session of the Regional Committee

The Fifth Session of the Regional Committee was held on November 6, 7 and 8, 2018 in Mexico City, within the framework of the Latin American Geospatial Forum (LAGF). The meeting was attended by 84 participants including delegates from 32 countries of the Americas, 13 of which were from the Caribbean region, as well as the following international, regional and national

organizations: the Association of Caribbean States (ACS), the Economic Commission for Latin America and the Caribbean (ECLAC), the National Administration of Aeronautics and Space (NASA), the National Oceanic and Atmospheric Administration (NOAA), the Pan American Institute of Geography and History (IPGH), the Geocentric Reference System for the Americas (SIRGAS), the National Autonomous University of Mexico (UNAM), the UN-GGIM Secretariat. It also had the participation of important partners such as the Academic Network and the Private Sector Network of the Americas.

For this session, a joint agenda was prepared with the Economic Commission for Latin America and the Caribbean (ECLAC) to hold a regional workshop on the integration of statistical and geospatial information for sustainable development. In addition to the focal points of the Geographical / Cartographic Institutes, for the first time, representatives of the National Statistical Offices participated. The main objective of the workshop was to share, present and discuss global and regional perspectives on the integration of statistical and geospatial information, as well as experiences and good national practices in the management of geospatial information. Additionally, the global and regional guidelines on the use of geospatial information were reviewed as support for the implementation of the 2030 Agenda, together with the progress made in the implementation of geospatial data infrastructures at the regional and national levels. Another objective of the meeting was to examine and strengthen regional and international cooperation initiatives and formulate future plans for the Committee. The program of the meeting also included the presentation of the work plans and the progress made by each of the groups of the Committee.

For a full report of the meeting please visit: <u>http://www.un-ggim-americas.org/contenido/reuniones/Quinta-sesion-LAGF-2018/pdf/Resoluciones%205a%20Sesion%20UNGGIM%20Americas.pdf</u>

4.3 Working Groups activities

4.3.1Working 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 integrating statistical and geospatial information in a unified manner for the region with common principles and standards, strengthening dissemination for decision making.

The National Institute of Statistics and Geography of Mexico developed a platform, in which the Statistical and Geospatial Framework for the Americas (MEGA) sent by the countries will be integrated. During 2019, WG-ISGI will implement version 1.0 of the MEGA, generating as a result layers of information from each of the Member States with the defined attributes that will be linked to UN-GGIM: Americas Website. So far, 24 of the 36 countries that make up the Committee of the Americas have entered their information into the MEGA server. It should be noted that, through the MEGA project, the statistical and geographical communities of most of the member states have been integrated for joint work.



Another objective of the GW-ISGI is to promote the use of geospatial information data in decision-making and the design of public policies; a methodology will be developed to

recognize the concept of geospatial empowerment in public policies, as well as a document in which it will be proposed how to evaluate the capacities of the environment in which a public policy is developed under the concept of geospatial authorization. Both products are being developed by Agustín Codazzi Geographic Institute of Colombia and will be shared in July with the Member States of the Committee for feedback A third objective of the WG-ISGI is to develop and implement standards that facilitate and ensure the quality of the integration of statistical and geospatial information. Regarding this last objective, Colombia is preparing a document called *"Identification of statistical standards to be taken into account in later phases of MEGA and be integrated with geographic standards"*, which presents a proposal that is expected to be adopted by MEGA in future versions.

4.3.2 Working Group on Disasters (WG-Disasters)

The WG-Disasters carried out in 2018 a diagnosis of human resources, data and information tools based on the application of a questionnaire that gave a clear vision of the capacity of each Member State with respect to the implementation and use of geospatial information for the reduction risk disasters and climate change.

Irrespective of disaster type, the combined count of average to high importance outweighs that of low importance and or no reply. That is, disasters are generally issues of concern. Floods are considered by a vast majority of countries (88%) as being highly important, that is to say, none of the countries surveyed rated the importance of floods as either "Low" or "No apply"; 55% of participants, rated hurricanes as high in importance; and the earthquakes are the third most highly rated disaster events, with 50% of the surveyed countries rating this disaster as high in importance.

DISASTER	HIGH/AVE %	HIGH %	AVERAGE %	LOW/NO APPLY %
Floods	100	88	12	0
Hurricanes	70	55	15	30
Wildfires	82	41	41	18
Earthquakes	70.5	50	20.5	29.5
Landslides	73.5	38.2	35.3	26.5
Disease	82.3	35.3	47	17.7
outbreaks				

4.3.3 Working Group on Geospatial Data Infrastructures (WG-SDI)

The WG-SDI made in 2018 a diagnosis of the current state of the Geospatial Data Infrastructures in the region, considering the components of the SDI, for this, it elaborated a survey as the first input in a Web format. A dynamic panel was prepared and published on the UN-GGIM: Americas site, which allows the visualization of cartography and comparative graphs. The WG-SDI applied in April-May 2019 an evaluation and monitoring tool regarding the progress of the regional SDI. With this evaluation it will be possible to carry out a processing of comparative results. Likewise, it will elaborate a matrix of base documents by work themes that will be shared on the Web.

http://www.arcgis.com/apps/opsdashboard/index.html#/012713d59a9e451ab3e4df6144a20e2d

The survey to assessment the state of the SDI components, was sent to 36 member countries of the Region, of which 35 responded, getting the following general results: According to the categories established for the performance indicator, 6% (2 countries) of the 35 member states of the Americas region that responded is within the Initial level of implementation of an SDI, 28% (10 countries) at the In Action level, 20% (7 countries) at the Defined level, 20% (7 countries) at the Operational level, and 26% (9 countries) at the Optimal level. This means that the majority of the member states (46%) are within the levels of development of a higher SDI, that is Operational and Optimizing, in comparison with those that are at a lower level of development (34%) corresponding to the Initial and In Action levels.

4.4 Work Lines

4.4.1 Academic Network for the Americas (ANA)

The main purpose of ANA is to academically support the objectives of UN-GGIM: Americas, the specific objectives for the year 2019 are:

- 1. Disseminate the Academic Network and promote the incorporation of new members.
- 2. To know the status of training in member countries both in the governmental institutions responsible for the generation and administration of geospatial information, and in the linked educational centers.
- 3. Develop academic strategies aligned with the work plan of UN-GGIM: Americas and advise on their capacity building programs, focusing on a thematic axis.
- 4. Creation of a digital platform of academic offers offered by members of the Network, aimed at both members and the general public. The platform can simultaneously operate as a means of disseminating projects of the network.

The following table shows the institutes of the countries that are part of the Academic Network of the Americas so far:

Country	Institution		
Antigua and Barbuda	Institute of Technology		
Argentina	Universidad Nacional del Sur		
Argentina	Universidad Nacional de La Plata		
Brazil	University of Brasilia		
Canada	University of New Brunswick		
Canada	University of Waterloo		
Chile	University of Santiago		
Colombia	University of Los Andes		
México	Geography Institute		
Trinidad and Tobago	The University of the West Indies		
Uruguay	Faculty of Engineering, University of Republic		
USA	University of California, Berkeley		
USA	Texas A&M University-Corpus Christi		
USA	University of Maine		
USA	University of Alabama		
USA	Harvard University		

According to a survey conducted in the countries last year, it was found that there is a greater need for training in the following thematic areas: geoservices, SDI management and data quality of geographic information.

In the current year, this survey was conducted again in the months of April-May in order to update the status regarding training needs.

From the initiative proposed to build a digital platform with academic offers, a first online coordination meeting was held, in which the following points were discussed: 1. Vision and mission of the platform, 2. Existing technologies, 3 Definition of administrative structure, 4. What institution will certify quality and, 5. Study financing options.

4.4.2 Joint Action Plan

Within the framework of the Joint Action Plan between the Pan American Institute of Geography and History (PAIGH), SIRGAS, GeoSUR and UN-GGIM: Americas, it is proposed to accelerate the development of the Spatial Data Infrastructure of the Americas:

The main responsibilities that PAIGH currently contributes to the Joint Action Plan are:

1. The Pan-American Integrated Map (in coordination with GeoSUR and CNIG of Spain).

- 2. The implementation of the Latin American Profile in the countries of the Region.
- 3. Workshop for Executives, within the framework of the realization of the Directing Council.
- 4. Fundamental Geospatial Data (in coordination with UN-GGIM: Americas)
- 5. Financing through the Technical Assistance Program (PAT) for the development of the Project "Integration of Statistical and Geospatial Information in Central America"

The initiatives proposed by GeoSUR for 2019 are:

1. WMS and WMTS of the Integrated Map of South America (MIAS). In the first semester of 2019, the preparation of the data for the preparation of the WMS and WMTS services were carried out, which will then be available in the geoportal of GeoSUR. The adequacy of the platform and the design of the service considering the large volume of regional data is essential to be able to serve on the web. With the support of the National Geographic Information Center of Spain -CNIG and of the Geological Service of the United States - USGS, WMS and WMTS services were created for access by users. The permanent updating of the information through the map services of the institutes allows territorial planning at the regional level.

2. *Implementation of the MIAS light map service*. A light visualizer of thematic maps will be built for access to open queries by users through the Geoportal of GeoSUR. The same layers of information will be incorporated following the guidelines of the integrated maps of Central America and North America.

The visualizers of thematic maps were specially designed for non-advanced users, with the intention of providing them with a first approach and an easy way to visualize the spatial data of great territorial coverage. All the visualizers are organized by thematic categories based on the ISO standard with the idea of facilitating the query of information of the data by topics of interest.

3. Maintenance of the quality and availability of services in the geoportal of GeoSUR. Monitoring of the wms services will be carried out to better visualize the layers of information provided by the member countries, so that they can be consumed correctly and increase the number of wms services available to users.

4. Training in the Latin American Metadata Profile (LAMP V2). Training in the implementation of the LAMP V2 Profile to collaborate with the use of the profile and its load. The largest possible number of users will be trained through the distance modality through webinars and an online course, in such a way that a large number of participants can be accessed.

4.4.3 Geodetic Reference Framework

SIRGAS, proposed 4 initiatives within the context of the Joint Action Plan for 2019:

1. Strengthening the training and specialization of professionals and technicians of SIRGAS observation centers. Among the proposed activities, two workshops will be held during 2019: one on the implementation of the guidelines of the GGRF in Latin America, another linked with the Geodetic technique "Satellite Ranging Laser" (SLR). Both workshops will allow bringing the latest and most advanced geodesic techniques to users in Latin American countries. Training is necessary for the countries of the region to advance in the implementation of the GGRF.

Although SIRGAS has developed notable advances in geodetic techniques, especially in the processing and adjustment of GNSS networks, in altimetric and gravimetric linkages, much remains to be done with respect to other geodetic techniques essential when implementing the GGRF under the international standards of the International Association of Geodesy.

The workshops will help technicians and professionals from the member countries, and especially those linked to SIRGAS, to access both the knowledge of the most advanced geodetic techniques and the requirements that arise for the implementation of the GGRF in the different countries of the Region.

2. Improvement of the communication within participant institutions in SIRGAS and between SIRGAS and the user community of their geodetic products. To achieve the above, the proposed activity consists of improving existing guides and developing new guides that allow better access to information and the optimization of its use. These guides will be mainly oriented to non-expert users. Some videos related to the new guides will be developed, trying to apply ICT advances in order to reach less specialized users.

3. Maintenance of the terrestrial reference framework on Latin America and preparation of a report that inform the status of its implementation in the member countries of SIRGAS.

4. Report on the state of progress of the implementation of the International Vertical Reference System (IHRF) in the member countries, identification of priorities and main cooperation efforts to be implemented in the coming years.

5. Participation in the 2019 Technical Assistance Project for the Integration of Statistical and Geospatial Information in Central America.

4.4.4 Private Sector Network in the Americas (PSN-A)

The main objective of the PSN-A, in accordance with its 2019 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 alliances between public and private initiative. Participation in PSN-A is free, open to all private sector organizations and related associations; will allow these entities to contribute and expand the capabilities 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 this year are:

- Establish a Committee of the Private Sector Network of the Americas
- Develop corporate webinar series
- Participate in all meetings of the Working Groups of UN-GIM: Americas
- Design and develop a geospatial information newsletter
- Create synergies with the Academic Network of the Americas
- Identify challenges and opportunities perceived by the Global Private Sector Network and by UN-GGIM: Americas in the incorporation of geospatial information for the delivery of the SDG.

4.4.5 Regional Cooperation and Collaboration

4.4.5.1 Caribbean Project

Within the framework of the XIX ordinary session of Foreign Ministers held in Port of Spain on February 14, 2014, the Government of Mexico, through the Mexican Agency for International Development Cooperation (AMEXCID), offered the member countries of the Association of Caribbean States (ACS), to carry out a cooperation in the region, aligned with the United Nations Initiative on Global Geospatial Information Management UN-GGIM.

In this sense, through a collaboration agreement between the Ministry of Foreign Affairs and the National Institute of Statistics and Geography, the terms of reference were established to carry out the project, in order to reduce the gap in Spatial Data Infrastructure in the region, strengthen the use of geospatial information and support the integration and participation of 19 Caribbean countries in the UN-GGIM Initiative, through the Regional Committee for the

Americas (UN-GGIM Americas). For its attention, the project was structured in four main components: Diagnosis, Capacity Building, Strengthening of the Infrastructure and Incorporation of the countries to UN-GGIM.

During 2018, as part of the Capacity Building component of the Project for the Strengthening of Spatial Data Infrastructures in the Caribbean (Caribbean Project), the following courses were organized and financed:

1. Fifteenth training course on *Earth Observations and Geospatial Information for the Monitoring of the Sustainable Development Goals*, which took place in the framework of the Eighth Session of UN-GGIM in New York City, July 30 and 31 and was organized by NASA specialists.

2. Sixteenth training workshop, on *Knowledge and Use of the Images of the GOES 16 and Geonet Cast Satellites*, was given by Gabriela Gómez Rodríguez and Víctor Manuel Jiménez Escudero, researchers from the Institute of Geography of the Autonomous University of Mexico, November 4 and 5, in Mexico City, within the framework of the Latin American Geospatial Forum.

As part of the celebration of the *50th Anniversary* of the generation of geospatial information in Mexico, the closing of the Caribbean Project was carried out during the visit to the National Museum of History of Chapultepec Castle in Mexico City, on November 7, 2018. Ambassador Agustín García-López of the Mexican Agency for International Cooperation for Development of the Secretariat of Foreign Affairs of Mexico, June Soomer, Secretary General of the Association of Caribbean States, and Dr. Julio Santaella, president of INEGI.

By 2019 the continuity of the work is being sought through new forms of funding that allow capitalizing the efforts and continuing to strengthen the geospatial capacities of the region.

4.4.5.2 Collaboration with ECLAC

The following is a description of the actions carried out by ECLAC since July 2018 to date to support the management of geospatial information at the regional and national levels, in the process of synergizing with the objectives of the Regional Committee:

During the second semester of 2018, ECLAC developed geospatial technical assistance activities in eight countries of the region (Guyana, Paraguay, Dominica, Ecuador, Costa Rica, Suriname and the Dominican Republic), through inter-institutional workshops convened by the geospatial agencies (focal points of UN-GGIM: Americas) and / or the national statistical offices of the countries, with the participation of public and non-governmental organizations involved in the management of geospatial information.

Within the work programs in these workshops, the most relevant activity has been the conduction of collective / collaborative self-assessment exercises of the countries, around the nine strategic paths of the Integrated Geospatial Information Framework (IGIF) which is being developed under the coordination of the UN-GGIM Secretariat in conjunction with the World Bank. The results of these self-assessments have allowed the prioritization of activities to be carried out in the short and medium term and integrate them into roadmaps, strengthen communication and coordination among public stakeholders and contribute to the design of foundational regulatory instruments to formally install national geospatial initiatives.

In addition to disseminating and projecting actions around the IGIF, the technical assistance workshops have made it possible to disseminate the Global Geospatial Statistics Framework (GSGF) and its five principles, and the Strategic Framework for Geospatial Information and Services for Disasters, in consistency with the objectives of the working group on Integration of Geospatial Information and Statistics and the working group on Access and use of geospatial information for risk reduction and climate change of UN-GGIM: Americas.

A relevant milestone of joint work and collaboration between ECLAC and UN-GGIM: Americas was the organization and execution of the regional workshop "Integration of geospatial and statistical information for sustainable development: from dialogue to action", within the framework of the 5th Meeting of UN-GGIM Americas, in Mexico City (November 2018). This activity brought together the national focal points of the aforementioned regional committee together with the representatives of the National Statistics Offices (NSO), whose participation was the result of a shared financing effort, with ECLAC taking charge of the transfers and stay of the experts from the NSO from 18 countries. Regarding the integration of statistical and geospatial information, ECLAC has provided ongoing support to UN-GGIM: Americas in the implementation of the first phase of the MEGA Project, as a facilitator of the articulation and dialogue between the national statistical offices and the geospatial agencies in the countries of the region, hoping to contribute in the following phases with the necessary coordination to incorporate new thematic data geospatially enabled to the MEGA platform.

In a complementary manner and as a permanent task, ECLAC conducts the compilation of practices at a national level on the integration of geospatial and statistical information, as part of the support material for technical assistance activities in the process of providing references that may be useful for countries in their individual processes.

Finally, it should be noted that ECLAC participates regularly in the meetings of the Board of Directors of UN-GGIM: Americas and in the meetings of its three working groups, providing feedback on the execution of its activities.

4.4.5.3 Chile-México Project

Starting this year, a cooperation project between Chile and Mexico will be carried out, entitled "Strengthening geospatial information platforms GEONODO and MxSIG in Chile-Mexico and countries in Latin America and the Caribbean". Its main purpose is to strengthen the GEONODO and MxSIG platforms for the benefit of Chile, Mexico and the countries of Latin America and the Caribbean and to implement them as a component of the SDI of the region.

Project activities:

- Work meeting in Mexico, for initial coordination
- Hiring an external consultant, in Chile, to carry out a diagnosis of the situation of both platforms
- Working meeting in Chile in which the results of the diagnosis are exposed
- Study contract, in Chile, for the design of the technological tool
- Design to be done in 4 months
- Work meeting in Mexico to begin the development stage of the improvements
- Development to be carried out in 5 months
- Working meeting in Chile to launch and disseminate the project
- Carrying out work to transfer the project's results to 4 pilot countries in Latin America and the Caribbean.

The first mission was held in Mexico from April 1 to 5, whose objective was the initial coordination, launching of the project and definition of elements to be considered in the analysis phase of the tools.

During April, a diagnostic report was made which incorporates the current state of the tools in the framework of SDI (Chile - Mexico) necessary to define if a single tool is built or each one of them.

On the other hand, in June, the steps for mission 2 in Chile, which will take place between July 22 and July 26, were carried out.

4.4.5.4 Project for the Integration of Statistical and Geospatial Information in Central America

The purpose of the multidisciplinary project "UN-GGIM: Americas, Regional Committee of the United Nations on the Global Management of Geospatial Information for the Americas; Integration of Statistical and Geographic Information in Central America", is to conduct a series of workshops in order to add value and expand knowledge on the integration of statistical and geospatial information. Specifically, the project works with the seven Central American countries, Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama and the partner countries, Mexico and the United States, to build the knowledge base for the integration of statistical and geospatial information in central America.

The main objectives of the project are:

- Evaluate the statistical and geospatial capacity of each Central American country.
- Know the national and regional efforts of UNSD, UN-GGIM, UN EG-ISGI, UN-GGIM Americas, ECLAC and PAIGH.

• Understand current work in progress to integrate statistical and geospatial information.

• Understand the importance of integrating statistical and geospatial information in the preparation of the censuses of the 2020 round.

• To fulfill the objectives of the 2030 Agenda of the United Nations for Sustainable Development and the Pan American Agenda, and how it can be used in decision-making in Central America.

• Identify the themes and priorities of the Central American countries.

• Identify innovative ways to display and analyze integrated statistical and geospatial data.

• Develop a plan for the integration of statistical and geospatial information and the creation of products.

• Develop reports to share knowledge and findings with the PAIGH, UN-GGIM Americas, ECLAC, UNSD, UN-GGIM and UN EG-ISGI.

The project will be carried out through 4 phases:

• Phase 1: Information collection: identify the statistical and geospatial capacity within each country in Central America.

• Phase 2: Informative Workshop: conduct an informative workshop to share the results of Phase 1 and demonstrate the importance and value of integrating statistical and geospatial information.

• Phase 3: Technical Workshop: conduct a workshop to identify innovative ways to display and analyze integrated statistical and geospatial information that will be used in decision-making in Central America.

• Phase 4: Publish results: publish the results of the project and identify the next steps, including the integration of activities and products.

So far it has identified of potential representatives on the statistical, geospatial and academic organizations of each Central American country. A letter was sent to each of them requesting their participation and support. A response was received from 22 representatives of the 33 sent. They were sent a questionnaire in order to be able to establish a planning for the workshops of phases 2 and 3. With the results of the questionnaire, a cross-section of geographies was also made to compare the geographical levels between countries.

4.5 Diffusion

Maintenance and updating of the web page http://www.un-ggim-americas.org/ administered by INEGI, Mexico. The webpage includes: : 1) the interactive platform on the status of the SDI of the region, 2) the repository of base documents by work themes designed by the coordinator of the WG-SDI, 3) the newsletter 2018 of the Committee and its main activities and projects, among others.

4.6 Financing management and support for the achievement and monitoring of the Groups and Work Lines of the Committee

To comply with its mission the regional committee has partner with organizations to finance and support their activities.

1. In 2018, support from the Ministry of Foreign Affairs of Mexico, through its Agency for International Development Cooperation (AMEXCID) to the Project for the Strengthening of Spatial Data Infrastructures in the States and Territories members of the Association of Caribbean States.

2. Geospatial Media & Communications, partnered with the National Institute of Statistics and Geography of Mexico (INEGI) and with UN-GGIM: Americas, to carry out the fifth session of the Committee during the Latin American Geospatial Forum 2018 in Mexico City, which was carried out in November, financing the assistance of 20 Member States of the Regional Committee.

3. Pan American Program of Technical Assistance of PAIGH 2019: PAIGH supported the project on Integration of Statistical and Geospatial Information in Central America that is used to finance the participation of the Member States of the region in two informative and technical workshops.

4. Kellogg Foundation will finance 17 countries in the Caribbean region to attend a training workshop in Mexico City, within the framework of the Geospatial Forum of the Americas and the sixth session of UN-GGIM: Americas on October 7 to 11, 2019. The workshop will be taught by ESRI Company.

5. Geospatial Media & Communications will finance 15 Member States to attend the sixth session of the Regional Committee that will be held within the framework of the Americas Geospatial Forum 2019. The session will take place at INEGI facilities and will be organized by said institution.

4.7 Regional Committee participation in conferences and meetings

The Regional Committee participated in the following forums:

a) Seminar on Strengthening of Geospatial Data Infrastructure of Chile to support public management in the territory - it was held in Santiago, Chile, October 17 and 18, 2018. The main objective of the Seminar was to generate a space for meeting and dissemination of good practices related to the management of territorial information, enriching knowledge regarding the implementation of SDI at different scales. The vice president of the Regional Committee participated in the event, who presented the advances in regional matters regarding SDI.

b) First United Nations World Congress on Geospatial Information (UNWGIC) - a parallel session of the Regional Committee of the Americas was held from November 19 to 21, 2018, in which work areas were examined addressed in the Americas to promote the development of geospatial information management. Speakers included: Macarena Pérez, vice president of UN-GGIM: Americas, Valrie Grant from the Private Sector Network of the Americas, Álvaro Monett from ECLAC and Andrew Nurse from Antigua and Barbuda. Paloma Merodio, president of UN-GGIM: Americas was the moderator of the session.

c) First consultation of experts and meeting on the development of the implementation guide of the "Integrated Geospatial Information Framework" -IGIF- was held at the offices of the World Bank in Washington D.C. from March 22 to 25, 2019. The vice president of the Regional Committee and the representatives of Mexico, United States, Canada and Guyana attended. The meeting consisted of reviewing the 9 documents that make up the "roadmaps" to implement the IGIF, which are: governance and institutions, legal framework and policies, financing, data, innovation, standards, partnerships, training and education and communication and commitment. Three working groups were formed to review the documents, using the SWOT analysis strategy.

d) Annual UN-GGIM Expanded Bureau meeting within the framework of the Geospatial World Forum - was held in Amsterdam on April 1, 2019. The president of the Regional Committee attended. The agenda of the 9th Session of UN-GGIM was reviewed and it was commented that one of the main topics in the session will be the Global Framework of Statistical and Geospatial Information that will be put to the consideration of the Committee of Experts. It was reported that the document for ECOSOC on the activities of UN-GGIM is already being elaborated in which it is highlighted how the geospatial information contributes in the measurement of the Sustainable Development Goals. It was also reported that the 6th UN-GGIM High Level Forum in the United Kingdom will be held in April in 2020 and urged all participants to prepare for it.

e) Forum of the Countries of Latin America and the Caribbean on Sustainable Development - was held in Santiago, Chile from April 24 to 26, 2019. The president of the Regional Committee participated remotely, with the theme, Global Guidelines on the use of geospatial information in support of the 2030 Agenda. During his presentation, he spoke, among other things, about the restructuring of the 2017-2021 Agenda of UN-GGIM: Americas and how it is aligned with the Strategic Framework of UN-GGIM.

5. Challenges

The main challenge for the Region is to achieve the continuity of the projects in order to reach the programmed goals. The progress obtained so far in each project is the result of the significant effort of each of the parties in which the Member States are involved through the best qualified persons of governmental and private organizations. Such is the case, for example, with the implementation of the regional SDI, since it implies a serious commitment to participation and collaboration at institutional, academic and governmental levels and, in this sense, the representatives of the Member States play a decisive role in to achieve that the authorities of their countries commit themselves and ensure their participation, both in the face-to-face sessions of the Committee, and in the activities of each of the Working Groups. Active participation of member states is a binding constraint to succeed in our mission.

6. Perspectives and future plans

The short-term plans of the Regional Committee contemplate the activities to be carried out around the Ninth Session of UN-GGIM in New York in August 2019, in addition to a parallel meeting of the Member States of the Regional Committee, which will be held August 5, to discuss some topics of the lines of work, evaluate the progress in the work programs of the working groups and discuss some regional positions to be presented during the plenary.

On October 7 and 8, 2019, a capacity building workshop will be organized for the Caribbean region, which will be held within the framework of the Americas Geospatial Forum in Mexico City at the National Autonomous University of Mexico and will be taught by ESRI Company.

Within the framework of this same Forum, the Sixth Session of UN-GGIM: Americas will be held, on October 11, 2019, in which a workshop on the implementation of the Integrated Geospatial Information Framework is planned, a global proposal that provides a reference to develop, integrate and strengthen the management of geospatial information at the national level.

It will be attended by the Member States of the Committee and by national, regional and international organizations, such as: the UN-GGIM Secretariat; the Economic Commission of the United Nations 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 Association of Urban and Regional Information Systems (URISA), Caribbean Chapter; the National Autonomous University of Mexico.

The Committee of the Americas, in coordination with the Census Bureau of the United States, plans to hold an information workshop and a technical workshop as part of the project for the Integration of Statistical and Geospatial Information for Central America.

7. Conclusions

During the last period of work, the Regional Committee of the Americas has focused on the development of several projects to generate specific products. Such is the case of the interactive platform of the Geospatial Data Infrastructures of the region, the platform for the Geospatial Statistical Framework of the Americas - MEGA in its version 1.0 and the document of diagnosis and analysis of gaps in risk reduction disasters. It should be noted that the willingness and enthusiastic participation of most of the member states has been key to achieving results and having products that will serve as the basis for subsequent regional studies, as well as for decision making.

It is also important to highlight that the work plans of the groups and lines of action of the Committee are aligned with the Global Strategic Framework of UN-GGIM and that an active

regional cooperation is carried out with GeoSUR, SIRGAS, PAIGH and ECLAC that allows, among other things, the consolidation of Geospatial Data Infrastructures.

The relevance and perspective of these works is the main encouragement to continue the efforts to obtain financing and ensure the continuity and active participation of the representatives of the member countries in the annual meetings of the Regional and Global Committee.

Member States of the Regional Committee of UN-GGIM: Americas, as well as regional organizations, have shown through their serious and professional work, to be committed to the strengthening of geospatial information, considering it strategic for the healthy development of the region.