



"GeoSUR develops geographic services on a free-access web platform"

The Editor's Note

In this newsletter, the interview of the month highlights the development of Geoserver Platform by the Ministry of Environment (in Spanish MINAM) Directorate General on Territorial Ordering of Peru, which has strengthened the national SDI. Permanent columns, on one side include concerns on the relationship between both geographic information production and SDI initiatives, with institutional management stability; and on the other, denote the scientific strategy of PAIGH to consolidate multinational research projects of great depth in the region in the short term.

GeoSUR newsletter seeks to disseminate GeoSUR Program's achievements and characteristics as well as events, projects and best practices for the application of geographic information into sustainable development and decision making in the region, as part of the Geospatial Data Infrastructure of the Americas. The Portuguese translation is performed by Eduardo Freitas, Manager of the GEOeduc Institute of Brazil. Please send your contributions and suggestions to: Nancy Aguirre, Editor of GeoSUR Newsletter, at: cnaguirre@ipagh.org.

Inside this Issue:

- The interview of the month with Adrian Neyra, Ministry of Environment of Peru (MINAM) Director of Territorial Ordering.
- Santiago Borrero, from the GeoSUR Program coordination, speaks on the relationship between stability on institutional steering and the development of national SDI.
- Rodrigo Barriga, Secretary General of the PAIGH speaks about the scientific strategy of the Institute for the development of multinational research projects of great depth.



Adrian Fernando Palomino Neyra, Engineer geographer of the National University of San Marcos, and Magister both of Economy and Regional Management at the Universidad Austral de Chile, and of Corporate Social Responsibility at the Business School in Barcelona (EADA), from January 2012 is Director General of Territorial Ordering of the Ministry of Environment of Peru (MINAM).

The Geoserver has supported and strengthened the SDI in Peru, says Adrian F. Neyra, Director of Territorial Ordering of the Ministry of Environment (MINAM)

The Geoserver Platform, responsibility of the Ministry of Environment of Peru (MINAM) Directorate General of Territorial Ordering, is a technological tool for territorial and environmental information management. Geospatial information access, exchange and dissemination are achieved through this Platform. Its main components include a geo-portal, a web mapping service network (viewers), and a geospatial database. Adrian Neyra speaks on the state of the art of this Platform:

The Peruvian MINAM Geoserver won the GeoSUR Award in its first edition in 2012. Since then, how has this Platform evolved?

Since recognized with the GeoSUR Award in 2012, the Geoserver Platform has made commitments for a high information demand given the high percentage of population now accessing the internet:

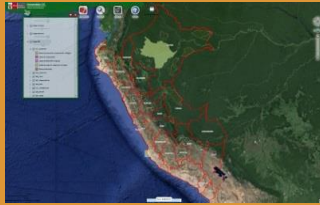
In relation to technological infrastructure, the storage and data server have been renewed while the institutional bandwidth increased to adequately addressing user

queries; likewise, document downloading is now enabled, and both interagency working spaces for information sharing and social media to handle the users' consultations (Facebook, Email and Skype) are now released.

We are also supporting implementation of mapping services in regional governments (i.e. Ucayali, and San Martin) and at Public Institutions by way of accommodating and publishing institutional services in "The Cloud" under a Spatial Data Infrastructure framework.

Applications and mapping services have been enhanced using new territorial analysis tools as well as updated data and their integration with Google Earth services whilst promoting interoperability with other institutions.

And we have also integrated various applications such as GeoBosque, National Program for Ecosystem Services, National Platform for the Peruvian Amazon, and the GeoIDER of the Regional Government of San Martin.



ZEE Proposals in Peru

"...the 'territorial ordering' (TO) process is being developed in regional and local governments in Peru, following phases which begin with proposals for Ecological-Economical Zoning (EEZ)... This information is the most demanded by research, public, and private institutions as well as by civil society more general, much so that an interactive viewer... is available ..."

"Based on experience, capacity building and support provided by the GeoSUR Program, the MINAM has supported and strengthened SDI implementation in Peru, and had also been a reference for other similar national and international platforms."

Adrian F. Neyra... *continues*

What new geographic information services responding to the users' demands have been implemented, particularly on the issue of 'territorial ordering'?

Currently, the 'territorial ordering' (TO) process is being developed in regional and local governments in Peru, following phases which begin with proposals for Ecological-Economical Zoning (EEZ). Various regional governments (14 out of 25) had now completed this phase. This information is the most demanded by research, public, and private institutions as well as by civil society more general, much so that an interactive viewer with relevant information in the context of TO processes in Peru is available at (<http://geoservidor.minam.gob.pe/intro/>).

The published information has caught the attention of a large number of specialized users and is now an input to the various territorial analyses for proper land use.

Currently, who are main users of the Geoserver and which of the applications and information provided are outstanding?

Information is freely accessible, because we seek to strengthen the interpretation capacity and understanding of citizens, students, researchers, civil society, regional and local governments, thus raising awareness and promoting action that contributes to an effective environmental management and decision-making in Peru.

The Geoserver has received two international awards (i.e. ESRI and GeoSUR) and three national awards recognizing it as a good governance practice to reproduce in the various national, sub regional and local institutions.

In 2015 it was visited by more than 21,500 users. It is contributing towards construction of a Spatial Data Infrastructure (SDI), which leads to that both public and private institutions could have access to updated systematic information.

As a direct result there is now a closer connection of citizens wanting to identify and understand the different environmental topics at national and regional levels that are available on the MINAM's Geoserver website.

Indirectly, the Geoserver has helped to improve information-exchange policies of different public organizations whose primary user is the general public.

What relationships exist between the Geoserver and the GeoSUR Program?

Since 2007, the Peruvian Ministry of Environment (the former CONAM) moved towards an evolution stage on using geospatial technologies thanks to support of the GeoSUR-CAF Program, which provided GIS tools and capacity building for implementing the Geoserver in Peru.

Since then, there have been a variety of approaches for implementation of the MINAM's Geoserver resulting in the launching of the Platform in 2010, which operation has been sustained, nonstop to the date.

In this sense, the Geoserver and GeoSUR, have a great relationship, which started up the use of technological tools and information integration for strategic decision-making in the region.

OGC services currently implemented in the MINAM's Geoserver have allowed linking and registering these into the GeoSUR Portal. Likewise, by way of the GeoSUR Program, technical assistance both from the PAIGH and the IGN of Spain for implementing map services in The Cloud were received.

Based on experience, capacity building and support provided by the GeoSUR Program, the MINAM has supported and strengthened SDI implementation in Peru, and had also been a reference for other similar national and international platforms.

What is said from the Coordination of GeoSUR?

By Santiago Borrero

What is the relationship between institutional-steering stability, and development of the national SDI?

In Latin America and the Caribbean development of national SDI initiatives is 15 years old.

The production of geographic information and SDI initiatives, in addition to long-term financing and institutional sustainability, requires an appropriate regulatory framework including functional competencies, capacity building and the incorporation of spatial information technologies; thus, each situation has its own particular characteristics.

To what extent the achieved pertinent results depend on changes periodically occurring in the steering of organizations responsible for the production of geospatial information, particularly the case of fundamental data?

While there are examples like Costa Rica, Haiti, Mexico and Panama where those responsible for national cartography have more than five years in office, administrations usually change over relatively short periods, between two and three years.

In the past year, changes in management were recorded from countries such as Belize, Bolivia, Chile, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay and Uruguay.

The Director General is no less than the director of an orchestra that must harmonize the different elements of an

SDI ranging from policy drafting, the production of fundamental and thematic data as well as standards and metadata, to the development of geographic information services, licenses of use and data access; in short, quite a complex interdisciplinary and interinstitutional task but so relevant as a prerequisite for the progress of knowledge society in each country.

Experience shows that in terms of SDI, it is not so much a matter of time but of intensity of actions and persistence on the goals beyond the natural administrative cycles.

From GeoSUR we wish every success in 2016 to each of those responsible for conducting the national SDI.

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Santiago Borrero, GeoSUR Program Coordinator

"In Latin America and the Caribbean development of national SDI initiatives is 15 years old... To what extent the achieved pertinent results depend on changes periodically occurring in the steering of organizations responsible for the production of geospatial information, particularly the case of fundamental data?"

From the PAIGH's Secretary General

By Rodrigo Barriga

In its 88 year history PAIGH has contributed decisively to the development, progress, dissemination and application in the Americas of sciences and disciplines covering its field of activity, with an ever-innovative spirit aimed -without hesitation- at a better future. In this sense, it has been defined a Scientific Strategy intended at building, strengthening and consolidating, multinational research projects of great encouragement in the short term to renovate scientific works in strategic and priority areas for member countries.

Therefore, implementation of this strategy needs achieving greater and better associations with universities, research centers and Pan-American and international organizations and inviting their active participation in scientific-technological research and dissemination activities.

In line with the above, the Pan-American Agenda was defined in 2009 as a planning tool that prioritizes studies in areas such as climate change adaptation, land use planning, and natural hazard management, as key components contributing to the Inter-American System coordinated by the OAS, and to sustainable development plans in our continent.

Upon this Agenda, the so-called "Joint Action Plan to accelerate the development of Spatial Data Infrastructures in the Americas" was agreed between the PAIGH, UN GGIM Americas, SIRGAS, and GeoSUR, which essentially aims at harmonizing efforts of each of these organizations as well as their working plans, the promotion of their expertise, the avoidance of duplication, and preparation of

relevant institutions for the continuous technological changes and innovations occurring in this field, -framed within these organizations' independence and proper autonomy.

In this context, the role being developed since 2007 by CAF and the PAIGH through the GeoSUR Program is significant, especially regarding progresses in the integration of digital cartography at scale of 1:250,000 for our region and carried out through specific projects such as the Integrated Map of Central America (Belize, Costa Rica, El Salvador, Honduras, Guatemala, Mexico, Nicaragua and Panama), and the Integrated Northern Andean Map (Bolivia, Colombia, Ecuador, Panama and Peru) as well as the future phase for the Integrated Map of South America, which we hope will soon be launched.

All the above, without doubt, is undertaken with cooperation of the respective geographic institutes, and of important organizations such as the CNIG of Spain and the USGS, with sponsoring by CAF.

In the midterm, these are concrete contributions to support comprehensive development plans and monitoring the fulfillment of sustainable development goals to which countries and international organizations are fully committed.

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Rodrigo Barriga Vargas, Secretary General of the PAIGH

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How to discover and visualize data in GeoSUR?

Now the sequences for data discovery and visualization may also be seen through videos on the [GeoSUR YouTube Channel](#). This time we include the example of topographic service models available on the GeoSUR website.

By Miguel Blanco, Information Technology Consultant for GeoSUR

This example will show the sequence to access data of the topographical model as a map service.

Please follow these steps:

1. From the GeoSUR Portal main menu, click on "Regional Map Viewer".
2. Then click on "Topographic Models" (Figure 1).
3. In the list of "Topographic Model" select "Data extraction" by clicking on that option (Figure 2).
4. Define the "Input Spatial Extent" to select the area where data (polygon, freehand polygon, rectangle, circle) will be extracted. A floating text appears on the screen "Press down to start and let go to finish" (Figure 3).
5. Then select the area to be extracted from the map. Note that if you choose a too large area the application may send an error, since currently there is this restriction (Figure 4).
6. Select the "Input Dataset" list. In this case, choose "SRTM 30m Color Shaded Relief" and click on the "Submit" button (Figure 5).
7. The display will indicate that the process is running with the notation "Executing ..."
8. Once the process is completed, the "Data Extraction Results" is displayed and by clicking on "Download Data" the download process begins (Figure 6).
9. Finally, after downloading the data that is obtained in compressed format, these must be decompressed and may be used from any GIS Software for further processing and analysis of the respective selected region.



Figure 1



Figure 2



Figure 3



Figure 4

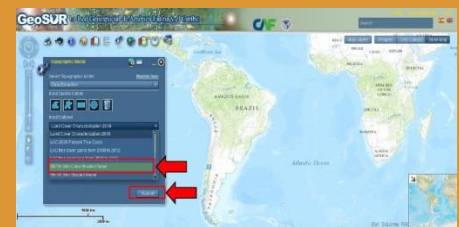


Figure 5

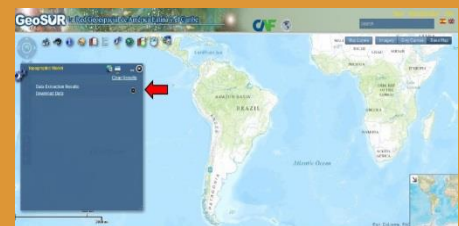


Figure 6

CAF - Development Bank of Latin America

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PAIGH

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GeoSUR Program

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Other events in the region

CAF: REDUCING INEQUALITY, PRIORITY FOR LATIN AMERICA

In recent years Latin America has reduced inequality, but the scenario of low economic growth threatens to reverse this trend. Inequality, one of the historical burdens in Latin America, is among the factors that paralyzes economic and social aspirations of most countries in the region. It is observed when comparing rural and urban landscapes, it can be seen in the unbalanced income between different social groups, and is more than evident in the major Latin American cities.

"A good education and training system can develop the necessary skills to population, and in turn promote greater equality of opportunity", explains the recent report on the Latin American Economic Outlook, prepared by CAF development bank in Latin America - and OECD. However, "with a growth of 2% will not be possible to maintain in the long-term the social progress gained since 2000 in the region," said Enrique Garcia, Executive President of CAF, in a recent interview. "We need to have a long-term vision that allows undertaking fundamental changes that are not possible without consensus."

[Source: CAF]

"Inequality, one of the historical burdens in Latin America, is among the factors that paralyzes economic and social aspirations of most countries in the region... Enrique Garcia, Executive President of CAF, in a recent interview, (explained) "We need to have a long-term vision..."

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11th IDERA Working-Days, Argentina

CALL FOR PAPERS AND POSTERS FOR THE 11th IDERA WORKING DAYS, ARGENTINA

The 11th IDERA Working-Days will be held on June 23-24, 2016 in the city of Neuquen, Province of Neuquen, Argentina. Submission deadline is March 30, 2016. Detailed information on the submission format and on topics for presentations and posters may be found here.

[Source: IDERA Broadcasting]



Guide to Good Practices for Implementing SDI, Peru

PUBLICATIONS

The recently published document "Geospatial Information Management: Guide to Good Practices for the Implementation of Institutional Spatial Data Infrastructures" (in Spanish) was developed over the last three years, based on best practices on geoinformation management as identified in public and private organizations of Peru. More information may be found on the Spatial Data Infrastructure of Peru website (www.geoidep.gob.pe), where you may also download this Guide for free.

[Source: Cesar Leon, Coordinator of the Spatial Data Infrastructure of Peru (IDEP)]