Integrating Spatial Data Infrastructure

• Mgs. Yidda Handal
  • Singapur
  • May 11, 2022

International Seminar on the United Nations Global Geospatial Information Management (UN-GGIM)
COUNTRY BACKGROUND

- **Honduras at the center of Central America.**
- **Area:** 112,492 km²
- **Population:** 9.6 million
- **Adm. Division:** 18 departments, 298 municipalities
- **Parcels:** ± 2.8 million
- **Urban parcels average size:** 1,152.10 square meters (m²) and rural parcels average size 7.31 hectares (ha)
- **Approximately 60%** of the total parcels nationwide have registration irregularities or are not registered, having an extra legality status or no land title.
- **Peoples:** Indigenous peoples 800,000 habitants (9% of the country)
Experiences acquired for the Integration of Geospatial Data with the municipalities and Challenges...
LEGAL BACKGROUND

Before the Property Law:

- Desconcentrated agency from the Presidency of the Republic
- Oversees the property registries, the national cadaster, geospatial information, and land tenure legalization
- Implements the parcel-based registration technique (folio real)

2004 Property Law-The Property Institute:

- With patrimony and legal representation
- Operates with technical, administrative and financial independence
- Oversees the property registries, the national cadaster, geospatial information, and land tenure legalization
- Implements the parcel-based registration technique (folio real)
The Properties Registry is responsible for create and operate an Integrated Property System which includes several registries:

- Land Property Registry
- Cartography Registry
- Commerce Registry
- Vehicle Registry
- Intellectual Property Registry
- Special Registries: integrate Civil Legal Persons, Cartographic Information, Geographic Information, Concessions granted by the State, Historical Heritage, Cultural Heritage, World Heritage, Protected Areas and others.

In 2013 Constituted a Trust fund for the Administration of the National Property Administration System SINAP.
The National Properties Administration System "SINAP":

- It relates high-level Development Planning to intermediate and local schemes.
- It links the actions of public and private institutions that carry out processes related to the physical resource of the Nation.
- It allows local governments to design and execute their development plans based on territorial planning.
- It allows the integration and participation of all actors in the territorial space, with efficient and safe use of resources towards the sustainable development of the Nation.
- It is also responsible for the administration of the National Information Territory System, must include all the information as local plans, land use, zoning, permits, environmental plans, real state, legal documents, etc.
SINAP includes: Unified System of Registries -SURE, National Territory System- SINIT and Territorial Norms Registry - RENOT

**The services SURE provides:**

- Workflows integrated through the presentation of documents in the properties registry with others.
- Approval and integrated transactions of data and documents with the Municipalities.
- Simplified process on the Generation of new titles through the automated regularization process.
- Automatic irregularity alerts.
- Digitalization and protection of historical information of Land Registries and cadastral information.
- Management of cadastral maps (of different categories) and their integration with alphanumeric data and documentary record.
Integrating Services Trough The National System

- Strengthen the different Registries as one Regulatory and Supervisory Entity.
- Decentralization of Properties Services through Associated Centers
- Automation of some Offices.
- Make the data interoperable
- Conducting personnel training and certification.
- Simplify processes within institutions and local governments.
- Provide services in the Associated Centers.
Integrating Services Through The National System

Decentralization of Services towards Municipalities and Associated Centers

**What to Expect:**

❖ Bridging the services with the Associated Centers it is expected to reach the highest standards of productivity and quality.

❖ Define the parameters of measurement of results and service levels through service indicators such as time and costs for each service, including fines and penalties derived from non-compliance but also reducing the cost for the citizens.

❖ Define regulations, processes, certifications, procedures and mechanisms for conflict resolution in services through the creation of a specialized and integrated units.

❖ Prioritize investments within a strategy that includes the administration of trust funds and those of the Property Institute in a comprehensive manner.

---

**Associated Centers (AC)**

Partners (municipalities, banks, and others) that can offer decentralized services of the Property Institute through customer attention windows.

Associated Centers will be responsible for integrating and supporting cadaster and register maintenance and service provision.

**Certified Associated Centers**
- Notaries
- Banks

**Municipalities and Commonwealths**

**Outsourcing Operator**
- System
- Data Center
- Services

**Properties Registry**
(Policies & Regulations)

**Properties Services**
(Integrated)
LEGAL – Updating the Framework with The Associated Centers

- National Policy according to Territory Planning Law
- Interinstitutional Agreements
- Standards and Norms relations
- Interinstitutional Atributions and Responsabilities
- Update The National System and Data Infrastructure and regulations
Steps and Challenges for the Data Integration and Standardization

SOCIALIZATION

LEGALIZATION

PLANNING

IMPLEMENTATION

With the Associated Centers
HOW WE OVERCOME THE CHALLENGES OF INTEGRATING GEOSPATIAL DATA

❖ Bridging the Interoperability with other institutional platforms
❖ Changing the architecture oriented on Web services, incorporating flexible and scalable technologies.
❖ Developing of Interfaces that work with the Associated Centers that includes online payments.
❖ New publication environment for the system.
❖ Data channel encryption.
❖ Structuring data according to the global themes.
❖ Land survey in areas with no data in the country.
LAND USE STANDARIZATION
Integration of platforms and technologies that seek Data Standardization ...
Integrating Spatial Data Infrastructure with Other Platforms - STANDARIZATION
Integrating Spatial Data Infrastructure with Other Platforms

Chile-Honduras Agreement

- Transfer of technological infrastructure and data configuration
- Transfer of technical knowledge in the use of tools through a training process.
- Accompaniment in the definition of production processes such as production control with Geonode tools and surveys through mobile devices.
- Accompaniment in the publication processes using a geoportal and a control panel (dashboard)
Integrating Spatial Data Infrastructure Platform for Web Services in Connection with The National System
Integrating Spatial Data Infrastructure Knowledge Exchange

Vulnerability Index COVID 19: CENTRAL AMERICA PROJECT
UN GGIM: AMERICAS (US, MEXICO AND COLOMBIA)
ESRI

I. Overview of the Central America Statistical and Geospatial Information Project.

The vulnerability index has been generated from identification and prioritization of these variables:
- Population Over 60 years
- Poor Housing
- Housing Without Water Service
- Overcrowded housing
- Diseases Associated with HIV/AIDS
- Diseases Associated with Tuberculosis
- Cancer Associated Diseases
- Diseases Associated with Diabetes
- Diseases Associated with Heart Disease
- Hypertension
- Obesity

MENU DE HERRAMIENTAS
PANEL DE MAPAS
DATOS GENERALES DE HONDURAS
DATOS GENERALES MS
COVID 19 MS
Indice A Departamental

STORYMAP LINEA TIEMPO
Integrating Spatial Data Infrastructure
Sharing Capacity

Training relationship for Territory Analysis and the management of satellite images through the National Laboratory of Territory Planning LANOT of the National Autonomous University of Mexico UNAM.

Copernicus Open Access Hub
1. A Honduras without poverty, educated and healthy, with consolidated social welfare systems

2. A Honduras that develops in democracy, with security and without violence

3. A productive Honduras, generating opportunities and employment, that sustainably uses its resources and reduces environmental vulnerability

4. A modern, transparent, responsible, efficient and competitive State
3. A productive Honduras, generating opportunities and employment, that sustainably uses its resources and reduces environmental vulnerability.

**WHY Marine Information IS IMPORTANT FOR US:**

- **GOAL 1.1**: Eradicate extreme poverty
- **GOAL 2.4**: Reduce the extralegal land occupation rate to less than 5%
- **GOAL 4.1**: Improve the position of Honduras under the Global Competitiveness Index
- **GOAL 4.2**: Having achieved a decentralization of public investment of 40% towards the municipal level for extralegal land occupation
- **GOAL 4.4**: Develop of electronic and integrated processes for citizen care in the government Institutions
Tourism is a strategic axis according to the country’s plan that has activated and boosted the economy and it is important to provide infrastructure projects in harmony with the environment.

why Honduras needs a policy for marine geospatial information
NEXT STEPS CONSIDERED INTEGRATING MARINE GEOSPATIAL DATA

- Increase the Cartographic Database with the Marine Use
- Generate the necessary inputs for public and private institutions focused on productivity.
- Maintain data updated over time
- Have a Strategic Marine Geospatial database for analysis and new regulations
- Empower the population and Institutions of the work carried out in order to comply with the SDG’s and Country National Plan
- Facilitate access to data
BENEFITS OF THE DATA INTEGRATION

- Reduction of the Fiscal Deficit.
- Integrated Planning with other institutions.
- Data for an easy Territory Analysis.
- A public tool for Communication and Data Access.
- Reports in time about changes in the territory.
- Proper Management of the Resources.
- Not duplications on Data and National Budget.
- Being part of a national and regional PLANNING.
- Contribute to the Protection of the Environment, Health and Safety of the Citizens.
Links

http://www.un-ggim-americas.org/mega/
https://www.geosur.info/
https://geoportal.sinap.hn/geoportal/main
https://www.ign.hn/Geoportal/
https://www.sinap.hn/

Thank you...