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



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X SESSION

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AMERICAS

October 18, 19 and 20 - 2023

Santiago de Chile, ECLAC

**“CURRENT STATUS OF THE INTEGRATED GEOSPATIAL
INFORMATION FRAMEWORK IN PANAMA”**

Discussion space “Advances and use cases in the
Implementation of the UN-IGIF”

Isis Tejada Higuera

CURRENT STATUS OF THE INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK IN PANAMA

Panama begins its first steps for the GIF in March 2020 with the National Workshop for the implementation of the Integrated Geospatial Information Framework in the Republic of Panama.

Session #1: with authorities, decision makers.

Session #2: group work with the inter-institutional technical committee of the IPDE, specialists and managers of Geospatial Information.

Session #3: coordinators and secretaries of the 5 components of the IPDE, Technical Committee and support staff of the IGNTG.
44 institutions that make up the IPDE participate.



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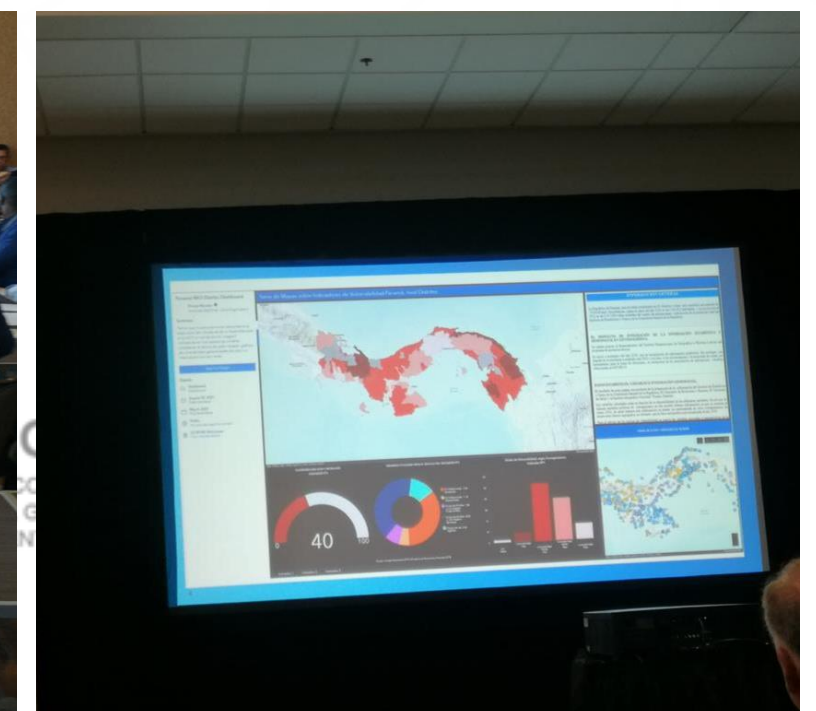
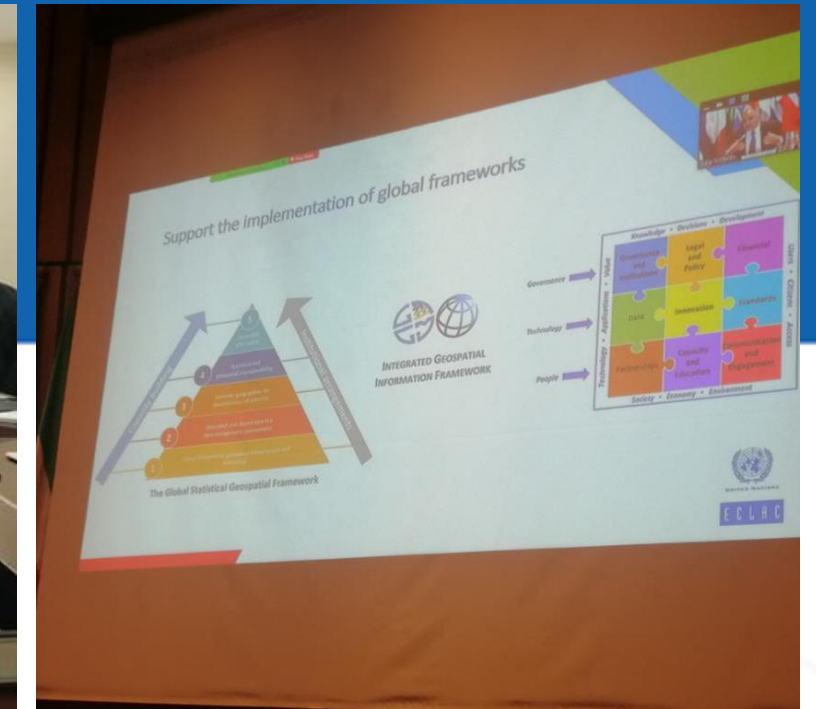


Governance (Task 1)

September 2022. Resolution N°002 is signed, authorising the General Administrator, in his capacity as legal representative of the National Land Administration Authority, to sign the accession to the SDG Data Alliance.

Training on the roadmap to follow for the implementation of IGIF and SDG and at the same time the implementation of processes to improve the efficiency of cartographic production.

We have at least 25 institutions committed to the implementation of the Integrated Geospatial Information Framework (IGIF).



Awareness-raising



On 1 September, the first workshop on institutional collaborative competencies was held with the participation of 55 collaborators from 25 institutions that are part of the Panamanian Geospatial Data Infrastructure. The workshop was conducive to address the tasks to be executed for the Integrated Geospatial Information Framework (IGIF).



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SDG DATA ALLIANCE

ABOUT MARCO?

HOW TO DO?

16 steps to create the National Plan for Geospatial Information

WHAT IS THE NEED?

The 14 Global Fundamental Geospatial Data Themes



DATA IS FUNDAMENTAL TO THE DEVELOPMENT OF GOVERNMENT STRATEGIES AND PLANS



Provide the country with the fundamental basis for the efficient and timely development of Geospatial Information, through the implementation of the Integrated Geospatial Information Framework and the National Data Centre for Sustainable Development.

WHAT DO WE HAVE TO DO?

LEGAL BASIS

Resolución N° 002

STRATEGY AND PARTNERSHIP

ALIANZA DE DATOS PARA LOS ODS (SDG)

MARCO INTEGRADO DE INFORMACIÓN GEOESPACIAL (IGIF)

RESULTS

NATIONAL CENTER

EXECUTION

Improving the management of national geospatial information, an essential element of national digital infrastructures.

Task 7

Decision-makers and high-level workshop

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UN GGIM Country-led approach to development of Country Action Plan

Component One – Planning and preparing

- 1) Project Initiation and Pre-needs Assessment
- 2) Stakeholder Identification and Analysis
- 3) **Plan of Action (to design and develop country-level Action Plan)**

**High-level
Project plan**

Component Two – Assessing and analyzing

- 4) Current and Desired (or Future) Situation Assessment
- 5) Baseline Survey
- 6) Environmental Scanning and Analysis (*understanding national situation*)
- 7) Stakeholder Engagement Workshop
- 8) Strategic Alignment (and Benefits) Exercise
- 9) Vision, Mission and Goals
- 10) Gap Analysis Matrix
- 11) Needs Assessment and Gap Analysis Report

**National needs assessment
and gap analysis report**

Component Three – Designing and developing

- 12) Strategic Pathway Actions and Sub Tasks
- 13) Implementation Schedule
- 14) Budget Estimations
- 15) Success Indicators
- 16) Country-level Action Plan

**Country-level
action plan**



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LIST OF ACTORS (Step 2)

In 2023

- ✓ Executives and producers of all levels
- ✓ Public services and communications
- ✓ Academics
- ✓ Technology, innovation and research
- ✓ Risk and Threats
- ✓ Social and justice
- ✓ Commercial and financial
- ✓ Decentralisation bodies
- ✓ Security
- ✓ Other



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Methodology

PARTICIPATORY WORKSHOPS



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Assessment of the current and desired situation and baseline

OBJECTIVE 1: Effective Management

- Enable geospatial information governance and institutional arrangements management of geospatial information and individual institutional requirements and are aligned with national frameworks.

GOAL 2: Capacity building, capacity and use of geospatial information

- Mechanisms are established to encourage and use of geospatial information capacity, and build an inventory of government, industry, private and academic centers for geospatial data.

GOAL 3: Integrated geospatial information system

- Geospatial information, including community information, is integrated across the government sector for evidence-based policy and decision making.

Base line

Governance and institutions

The following questions are designed to understand the governance and institutional arrangements, and political acceptance for integrated geospatial information management.

- | Current performance | Desired performance |
|--|----------------------------------|
| <input type="checkbox"/> • Not started | <input type="checkbox"/> • Low |
| <input type="checkbox"/> 2. Minimum | <input type="checkbox"/> 2. |
| <input type="checkbox"/> 3. Moderate | <input type="checkbox"/> 3. |
| <input type="checkbox"/> 4. Extensive | <input type="checkbox"/> 4. |
| <input type="checkbox"/> 5. Achieved | <input type="checkbox"/> 5. High |

The extent to which our government institutions share geospatial data.

- | Current performance | Desired performance |
|--|----------------------------------|
| <input type="checkbox"/> • Not started | <input type="checkbox"/> • Low |
| <input type="checkbox"/> 2. Minimum | <input type="checkbox"/> 2. |
| <input type="checkbox"/> 3. Moderate | <input type="checkbox"/> 3. |
| <input type="checkbox"/> 4. Extensive | <input type="checkbox"/> 4. |
| <input type="checkbox"/> 5. Achieved | <input type="checkbox"/> 5. High |

The extent to which our government encourages research and data center initiatives.

- | Current performance | Desired performance |
|--|----------------------------------|
| <input type="checkbox"/> • Not started | <input type="checkbox"/> • Low |
| <input type="checkbox"/> 2. Minimum | <input type="checkbox"/> 2. |
| <input type="checkbox"/> 3. Moderate | <input type="checkbox"/> 3. |
| <input type="checkbox"/> 4. Extensive | <input type="checkbox"/> 4. |
| <input type="checkbox"/> 5. Achieved | <input type="checkbox"/> 5. High |

The extent to which our government information is easy to find.

Do you have a National Geospatial Strategy or equivalent?

- Yes Name: _____
(Go to question 2)

- No
If the answer is no, which of the following causes applies?
- It takes too long and there are no resources to develop the strategy
- Training in strategy development is required
- It is believed that a strategy is not required
- Others: It is necessary to raise awareness among authorities and decision makers about the need, importance and benefits of GI.

Go to question 7)

Comment

Although the IPDE is made up of 40 institutions, it is committed to sharing their data. Urgent institutions can manage and have their information integrated.

Comment

There are government institutions dedicated to lack of budget they cannot execute the strategy. In fact, we know that it is necessary to have academic centers in order to achieve progress. We need to achieve the participation of companies to promote innovation in new processes and make it more efficient.

Comment

To the extent that institutions disseminate the work of the IPDE, both external and internal users could be reached, as part of a dissemination strategy. There is still a need to integrate the community so that it can use geospatial information to its advantage.



High Level Session



PETS Analysis

ISSUES

Description

Benefit

Obstacles

Policies

- Safe environments for citizens, through government security policies.
- Open data strategies in the portal, according to the National Authority for Access to Information.
- Disaster preparedness, recovery and risk management
- There is a National Census in development that will provide information that must be available and easy to access.
- Regulation of powers and reduction of duality of functions.
- Educational strategies for certain attention to the needs of the sector.
- Promote copyright and credits to information
- Improvement in application of agri-food policies

- Lack of application of climate change policies
- Bureaucracy that prevents effective and timely development.
- From the executive there is delay in determining policies.
- Education of the data consumer regarding copyright and use of sources.

Economic

- Savings through the implementation of the IGIF
- Revenue growth opportunity
- Labor cost savings.
- Improving data quality
- Savings on research and development
- Decrease in the allocation of economic resources for geospatial products
- Public – Private Partnership

- Lack of government budget for hiring GIS personnel.
- Skills shortage
- Lack of Innovation in the government and the private sector
- Lack of funding in the geospatial area
- Rotation of personnel in charge of managing geospatial information
- Inflation in the interest rate (they play against the budget)
- Disposable income level of consumers

Social

- Access to new technologies
- Effective transmission of information to the average citizen
- Provision of statistical information on the population
- Development of new capabilities
- Characterization of economic consumption
- Timely alerts in risky situations

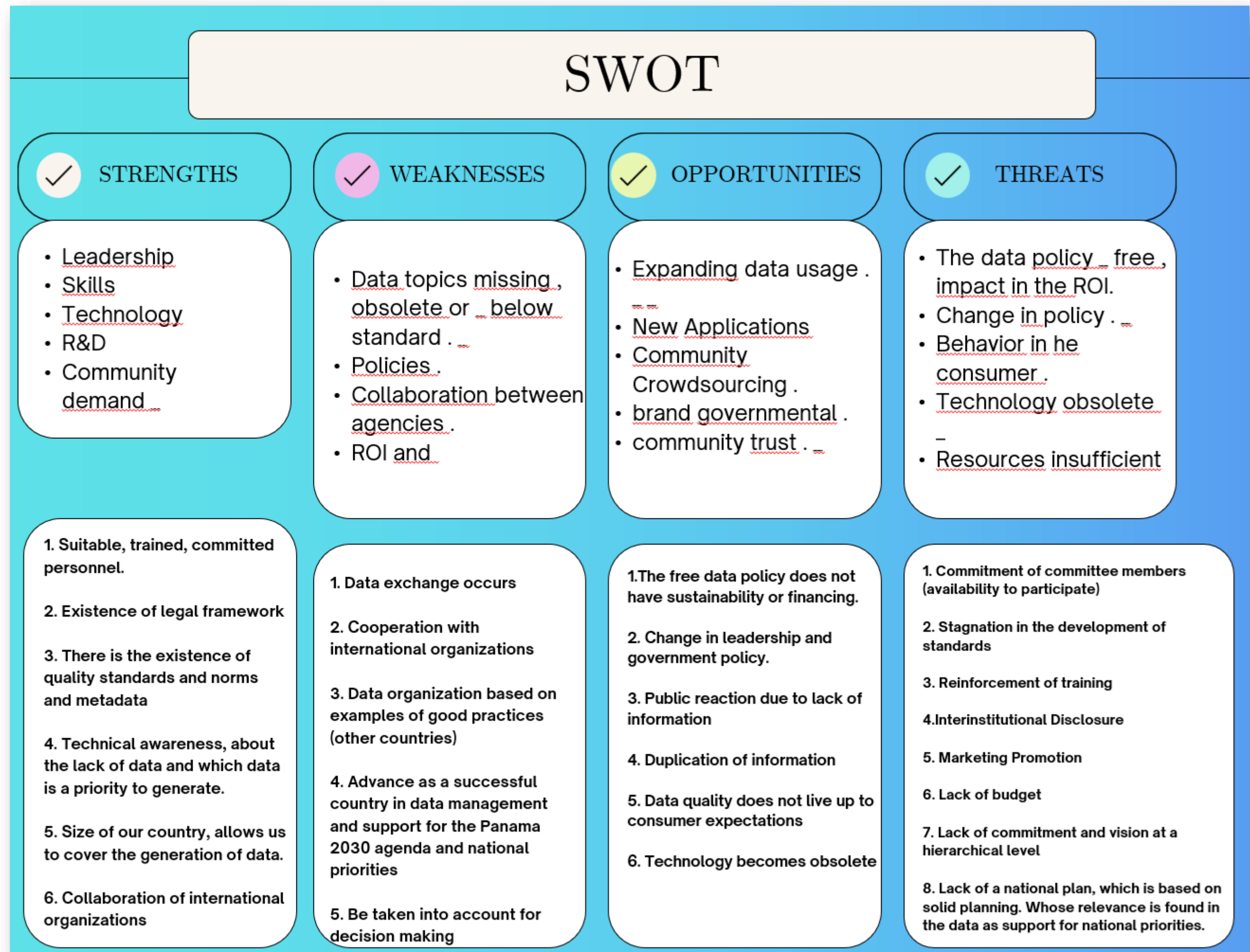
- Outdated educational curriculum
- Lack of training in technological issues
- Democratization of the necessary technological infrastructure
- Public health information available 24/7 to users.
- Nutritional information available to the user
- Lack of knowledge and dissemination about geospatial data.
- Certainty of statistical data
- Lack of knowledge of the import and role of data.

Technological

- Potential benefits of using geographic information through GIS.
- Search for mechanisms to promote the use of geospatial information
- Create and implement competencies
- Inventory of technological and personal capacity
- Updated equipment and licenses
- Adequate communication infrastructure
- Create a legal regulation that requires all data to have metadata.

- Allocating resources in areas where they are not needed.
- There must be clear rules regarding information
- Diagnosis and monitoring of the state of technology
- There is no communication between data users and technology managers.

SWOT analysis



With the help of ECLAC...



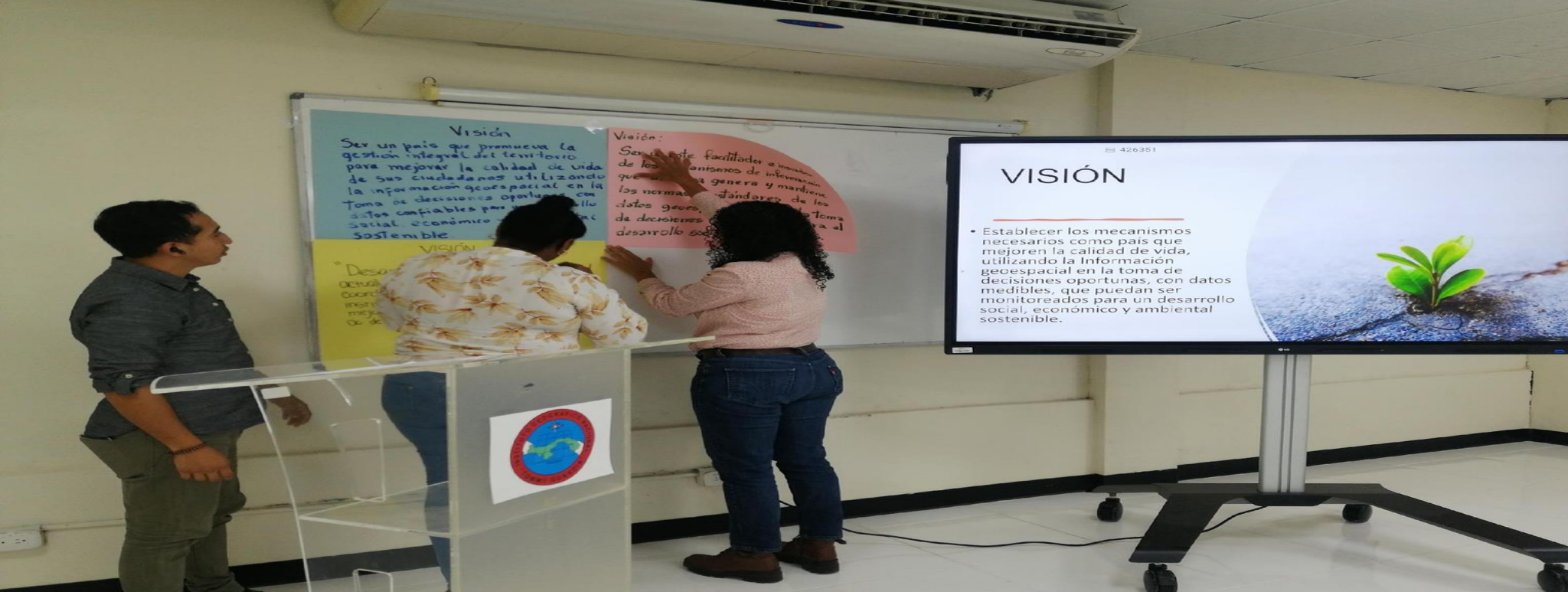
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DE ADMINISTRACIÓN
DE TIERRAS
Instituto Geográfico Nacional "Tommy Guardia"



Integrated Geospatial Information Framework in the Republic of Panama Component Two: evaluation and analysis Task: 8 – Strategic Alignment

Strategic drivers	Evidence of government strategic priority	Geospatial theme	Geospatial Information Benefit	Current situation	Investment priority
Improve waste management	<p>Municipal Zero Waste Program Plan (Municipality of Panama). 2015-2035</p> <p>National waste management plan of the Urban and Home Cleaning Authority (AAUD). 2017-2027</p>	<p>Geospatial models to locate the most suitable sites for the deposit and management of waste. (Ex. Land use layer, water network, hydrogeology, etc.)</p> <p>Georeferenced information for monitoring and controlling waste management. (For example, location of collection sites, collection routes, populated places with demographic and service data, location of informal settlements).</p>	<p>It allows real-time monitoring, improves waste collection processes, and reduces transportation and collection costs.</p> <p>Improvement of public and environmental health.</p>	<p>Lack of control in management planning, lack of payments, poor urban waste management, lack of maintenance of collection equipment.</p> <p>Lack of geospatial information available to achieve good waste disposal by users.</p> <p>Pollution of bodies of water.</p>	High





Task 9: vision, mission and objectives

Vision:

To be a country that promotes Geospatial Information management in a coordinated, participatory and efficient manner for sustainable development..

Mission:

To promote the use of up-to-date and reliable geospatial information in the comprehensive and sustainable management of the territory, for timely decision-making, in order to improve the quality of life of its citizens.



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Gap Analysis Matrix

Integrated Geospatial Information Framework in the Republic of Panama

Component Two: assessment and analysis

Item N° 10 - Gap Analysis Matrix

1. GOVERNANCE AND INSTITUTIONS

Current situation	Desired future	Gap identified	Strategy to follow
Minimum percentage of institutions that are committed to share their data	Institutions that are able to manage and make their information available within the PEI.	<p>Technicians state that the state of their data limits their ability to share it with other users.</p> <p>Institutions are not aware of the topics to be published.</p> <p>Temporary political management should not influence the continuous sharing of data.</p> <p>Provide greater empowerment to the PEI.</p> <p>Lack of financial and human resources that are prepared to review and monitor geospatial information.</p> <p>Failure of technical management of the tool.</p> <p>Lack of knowledge of the operation of the PEI at senior level (in 80% of the institutions there is no commitment at senior level for the insertion of geospatial data information).</p>	<p>Implementation of norms and standards applied to data. Elaborate a legal instrument so that entities are obliged to generate data based on their competence, both for public and private institutions.</p> <p>To make known the fundamental data and responsibilities of institutions. Establish a guided process from inception to publication of data.</p> <p>Have dedicated staff within the PEI to execute adequate follow-up on the status of the data.</p> <p>Establish internal technical guidelines for data filtering.</p> <p>Raise awareness at management level within institutions.</p> <p>IPDE dissemination plan.</p> <p>Communication plan for decision-makers to ensure continuity with incoming governments during the transitions of the different institutions.</p>



Other considerations

- **Needs Assessment and Gap Analysis Report**
- **Increased outreach of IGF with the country's provincial units.**
- **Increased outreach to academia**
- **Increased private sector outreach**
- **Design of a plan for the new authorities**
- **Work with the information producing units for the publication of priority data.**
- **Putting together the National Plan for National Information**



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Thanks



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