15th Conference of the International Association for Official Statistics (IAOS)

New data sources and tools to monitor SDGs

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Background

Millennium Development Goals

- The monitoring process left several lessons:
  - Challenges regarding data gaps
  - A broader knowledge regarding various phenomena
  - Population and groups of interest have been left out of the statistical count

Background

There is a new UN Agenda 2030: Sustainable Development Goals

- Monitoring requires data to construct indicators with
  - ➢ Greater opportunity
  - ➢ Greater degree of disaggregation

The 2030 Agenda

- The agenda is ambitious and integral:
  - ➢ It addresses issues that have not generally been subject to “official” measurement
- Challenges from the new demands for relevant information:
  - ➢ Produce statistics for new fields
  - ➢ Meet the demand for highly disaggregated data
  - ➢ Use of geospatial information tools

Geospatial information

- It facilitates the targeting of indicators to support public policies
- INEGI conducted a preliminary exercise to analyze the global indicator framework

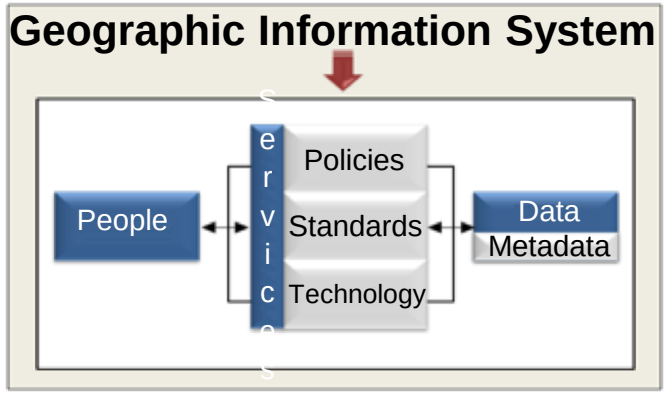
Geospatial information

- 65 indicators meet these criteria:

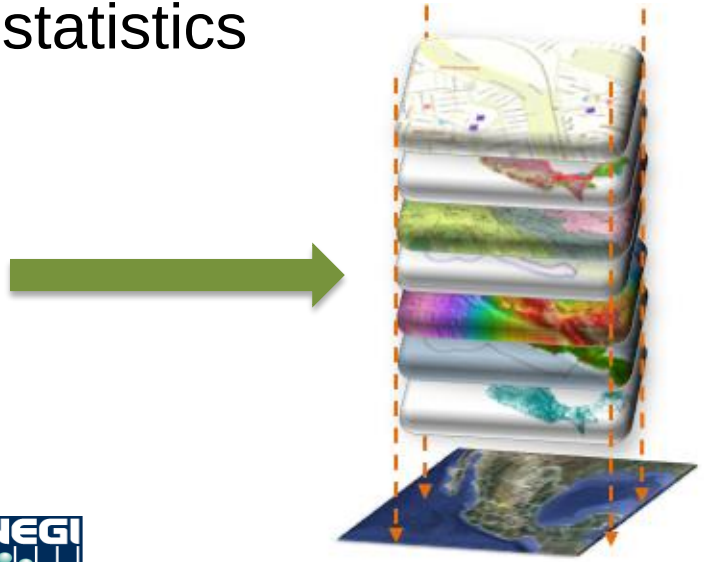
- ➢ Possibility of each indicator to be georeferenced
- ➢ Determine the level of geographic disaggregation
- ➢ Identification of the data producer
- ➢ Possibility of deriving of information from the processing of remote sensing imagery

Fundamental tool to track SDGs progress

- The GIS allows the visualization and analysis of geospatial data
- Promotes synergies between the production and use of geographical information and statistics



The Spatial Data Infrastructure (SDI) as the means to acquire and process data from different sources



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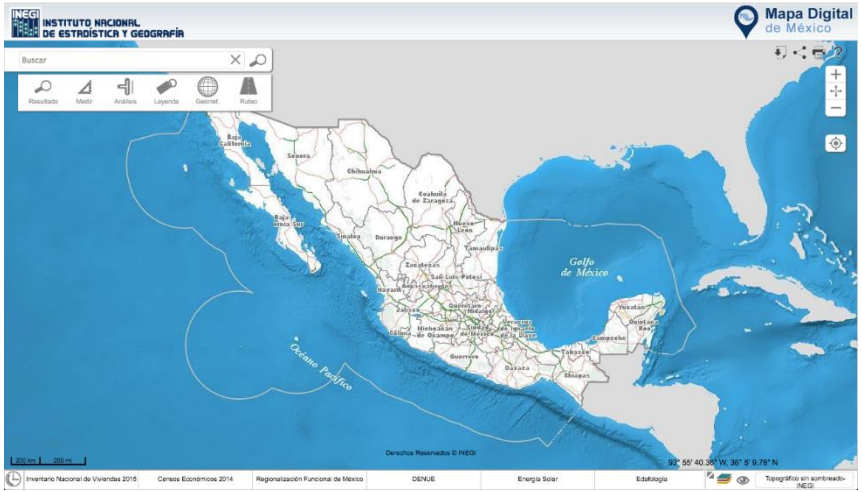
Fundamental tool to track SDGs progress

- INEGI´s platform Digital Map of Mexico offers more than 200 vector data layers, more than 71 million geographic objects and 4 raster layers
- Its information and spatial representation can produce geospatial indicators and monitor them in space and time



SDG´s and Environmental Statistics

- This is an opportunity to advocate for statistics on the environment and climate change
- The available resources for this subject are valuable and offer the possibility of new methods and lines of work to boost the production of these statistics
- Data from the environment must be collected with the aid of satellite imagery, and statistics may be produced regularly

SDG´s and Earth Observations

- The data and information from remote sensing observations could support policies aimed to protect the environment

- Earth observations also contribute to the implementation of the 2030 Agenda and the SDG

SDG´s and Satellite Big Data

- The sensors and models that measure, monitor and forecast our planet produce millions of data for the environment

- Big Data has the potential to transform how environmental impacts can take action on sustainability

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Satellite Data and SDG

- The value of satellite data:
  - ➢ It produces varied information through different sensors
  - ➢ It can be used to make measurements of natural resources
  - ➢ It contributes to transparency of information

Satellite Data and SDG

- Advantage of satellite images:
  - More frequency and opportunity
  - More value to monitor the results of public policies
  - The potential of data can be very high
  - Costs reduction
  - Feasible in zones which are difficult to access

Opportunities

- To innovate and move beyond the traditional boundaries of official statistics
- To have the capacity for establishing partnerships to take advantage of the technologies and the great amount of data at our disposal
- To advance towards the spatial dimension, which is becoming increasingly important

Challenges

- Establishing strategic alliances with producers of geographic information
- Mexico´s INEGI challenges:
  - Launching a comprehensive agenda
  - Understanding the interrelationships of the environment with the economy and society
  - Integration of GIS as an "everyday" tool

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