

New Geospatial data sources and tools to monitor SDGs

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Geospatial World Forum

Executive Panel: “How earth observation and geospatial play a role in achieving SDGs?”

January 23rd, 2017



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BACKGROUND

MILLENNIUM DEVELOPMENT GOALS

- The **Millennium Development Goals (2000 – 2015)** 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.





THE 2030 AGENDA

There is a new
UN Agenda
2030 for
Sustainable
Development



- The monitoring of the 17 **Sustainable Development Goals** requires data to construct indicators with:
 - Greater opportunity.
 - Greater degree of disaggregation.



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THE 2030 AGENDA



SUSTAINABLE DEVELOPMENT GOALS



**There are 11
SDGs with a
clear geographic
dimension.**



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The 2030 Agenda



- The Agenda is ambitious and comprehensive:
 - Addresses issues that have not generally been subject to “official” measurement.
 - Presents new challenges according to the new information demands:
 - i. Produce statistics for new fields.
 - ii. Highly disaggregated data.
 - iii. Use of **geospatial information** tools.



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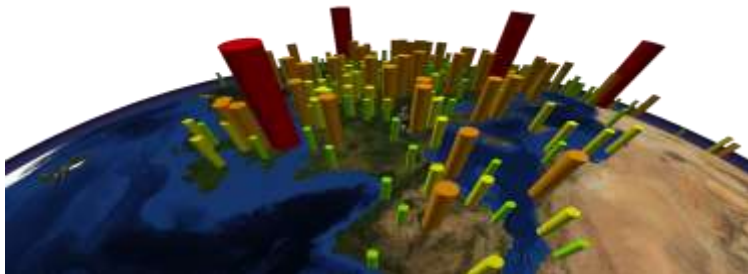
GEOSPATIAL INFORMATION AND THE SDGs

GEOSPATIAL INFORMATION

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



GEOSPATIAL INFORMATION



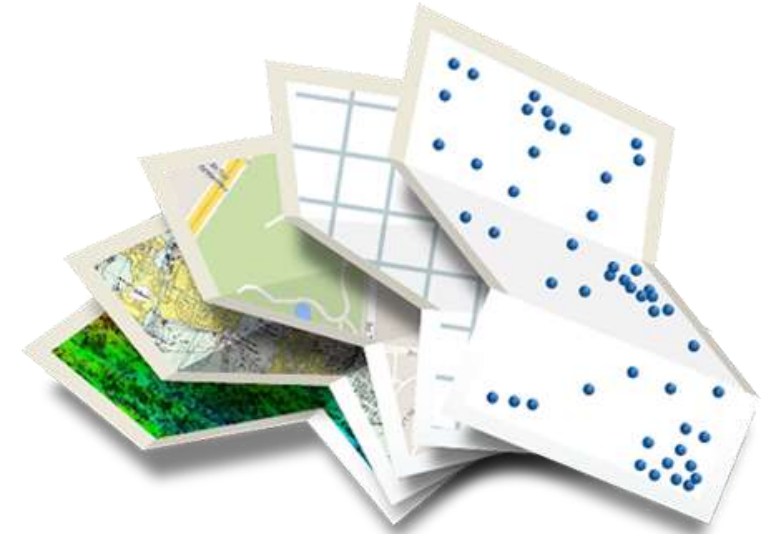
- 65 indicators meet these criteria:
 - Possibility of each indicator to be georeferenced.
 - Determination of the level of geographic disaggregation.
 - Identification of the data producer.
 - Possibility of deriving of information from the processing of remote sensing imagery.



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FUNDAMENTAL TOOL TO TRACK SDGs PROGRESS

- The **integration of statistical and geospatial information** is the ideal mean to monitor the SDGs progress over time.
- The **Geographic Information Systems (GIS)** allow such integration in a natural manner.
- They **promote synergies** between the production and use of geographical and statistical information.



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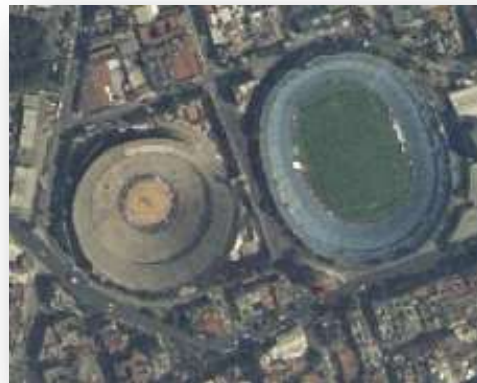
FUNDAMENTAL TOOL TO TRACK SDGs PROGRESS



- INEGI has developed the Geographic Information System: *MxSIG*:
 - Open source web platform that allows the implementation of geomatics solutions that facilitate the use, and **integration of geographic and statistical information.**
 - Produces geospatial indicators and allows their monitoring in space and time.

DIGITAL MAP OF MEXICO

- The ***Digital Map of Mexico*** offers more than 200 vector data layers, more than 71 million geographic objects and 4 raster layers, such as:
 - Geographic limits.
 - Economic establishments.
 - Environmental statistics.
 - Statistical information of the Population and Housing Census
 - Social gap.
 - Terrain.
 - Land transportation.
 - Satellite images.



SDGs AND ENVIRONMENTAL STATISTICS

- This is an opportunity to advocate for statistics on the environment and climate change.
- The available resources offer the possibility of **new methods and lines of work** to boost the production of these statistics.
- **Earth observations** also contribute to the implementation of the 2030 Agenda and the SDGs.



SDGs AND 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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CHALLENGES AND OPPORTUNITIES

CHALLENGES



- **Establishing strategic alliances** with producers of statistical and geographical information.
- Launching a **comprehensive agenda**.
- **Understanding the relationships** between the environment with economy and society.
- Integrating the GIS as an "everyday" tool, especially in the **statistical community**.



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OPPORTUNITIES

- **Innovate and move beyond** the traditional boundaries.
- **Establishing partnerships.**
- Advance towards **the integration** of statistics with the geospatial dimension.



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