

# INTEGRATING STATISTICS AND GEOSPATIAL INFORMATION: INEGI'S VISION IN GEOREFERENCING INFORMATION

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Geospatial World Forum  
Geospatial & Statistics: Integration for Informed Decision Making  
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**LEGAL  
FRAMEWORK**

# INEGI AS AN AUTONOMOUS ORGANISM

- The Mexican Constitution establishes that Mexico will have a **National System of Statistical and Geographical Information (SNIEG)**.
- The *SNIEG* will be coordinated and regulated by INEGI, giving it the nature of a public organism **with technical and administrative autonomy**, legal personality and it's own assets.



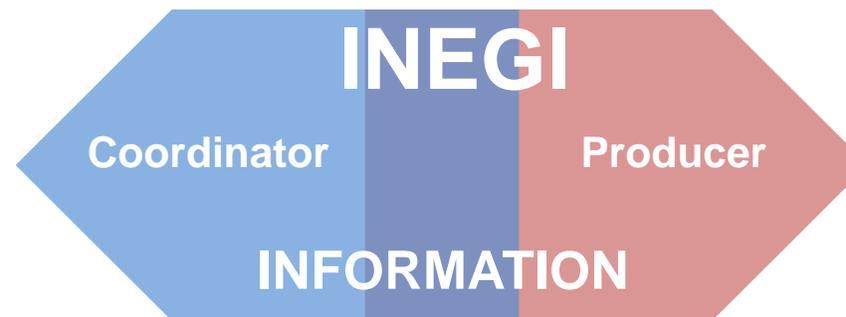
# INEGI AND THE SNIEG



National Advisory Council



- How is the SNIEG integrated?
  - A National Advisory Council.
  - Set of State Units organized through 4 National Information Sub-Systems.
  - INEGI.





# STRATEGIC CONTEXT

# THE DATA REVOLUTION



- New technologies are leading to an exponential increase in the volume and types of data available.
- Significantly affects the way we live, work and think.
- Implies a fundamental transformation regarding the role that the NSOs and NGOs play in society and the economy: more managers and less producers.



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# 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** and **greater degree of disaggregation**.
- There are 11 SDGs with a clear **geographic dimension**.
- Demands the use of **geospatial information** tools.



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# **FACING NEW DATA CHALLENGES**



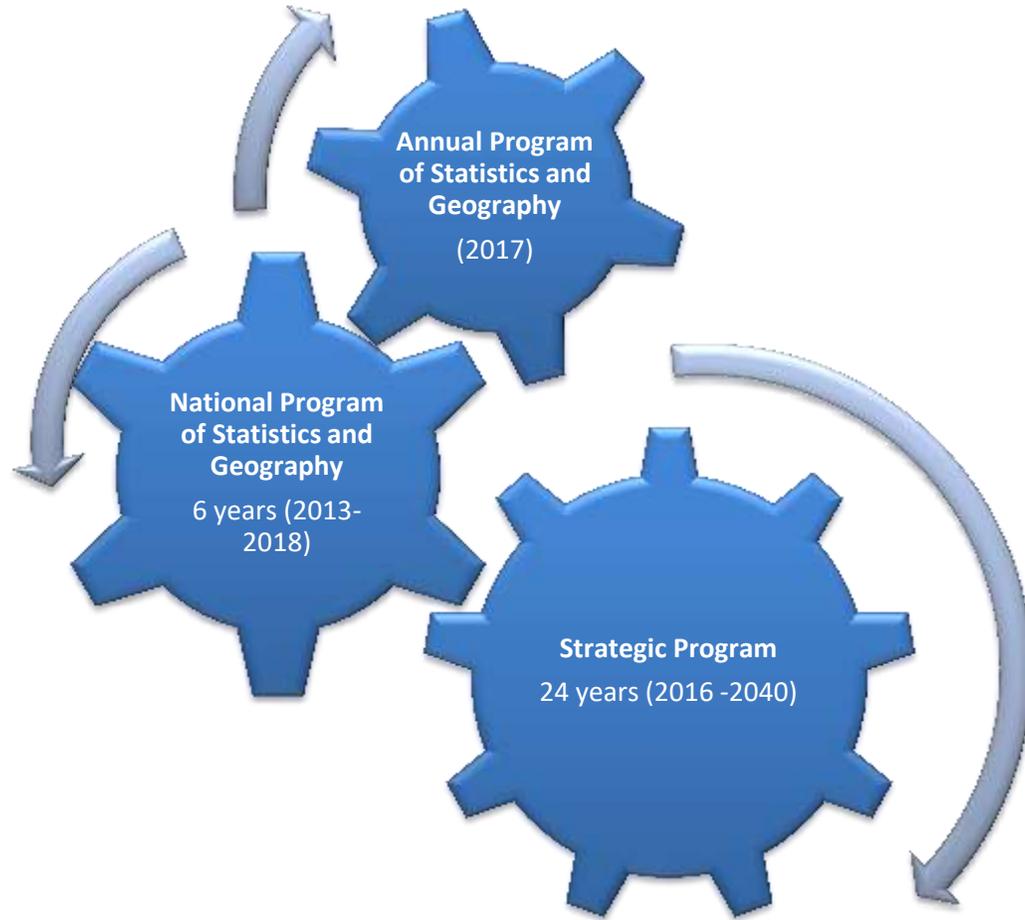
# MODERNIZATION OF THE NSOs & NGOs

- In this context, the NSOs and NGOs require a transformation from the traditional circus to Cirque du Soleil type in order to remain relevant.



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# STRATEGIC PLANNING



- In December 2016, the INEGI Governing Board approved the **SNIEG Strategic Program update for 2016-2040**.
- **The objective is to consolidate and modernize SNIEG** according to the new information needs, considering the new technologies, sources of information and international trends.



# THE 2016 – 2040 VISION

- The SNIEG Vision was updated and framed around **5 Strategic Objectives**.
- It emphasizes that in order to take advantage of these opportunities, it is necessary to **develop and expand the human, technical, technological and organizational capacities** within the SNIEG.
- Also, it is necessary to **meet the new information needs of decision-makers** in an integrated manner.

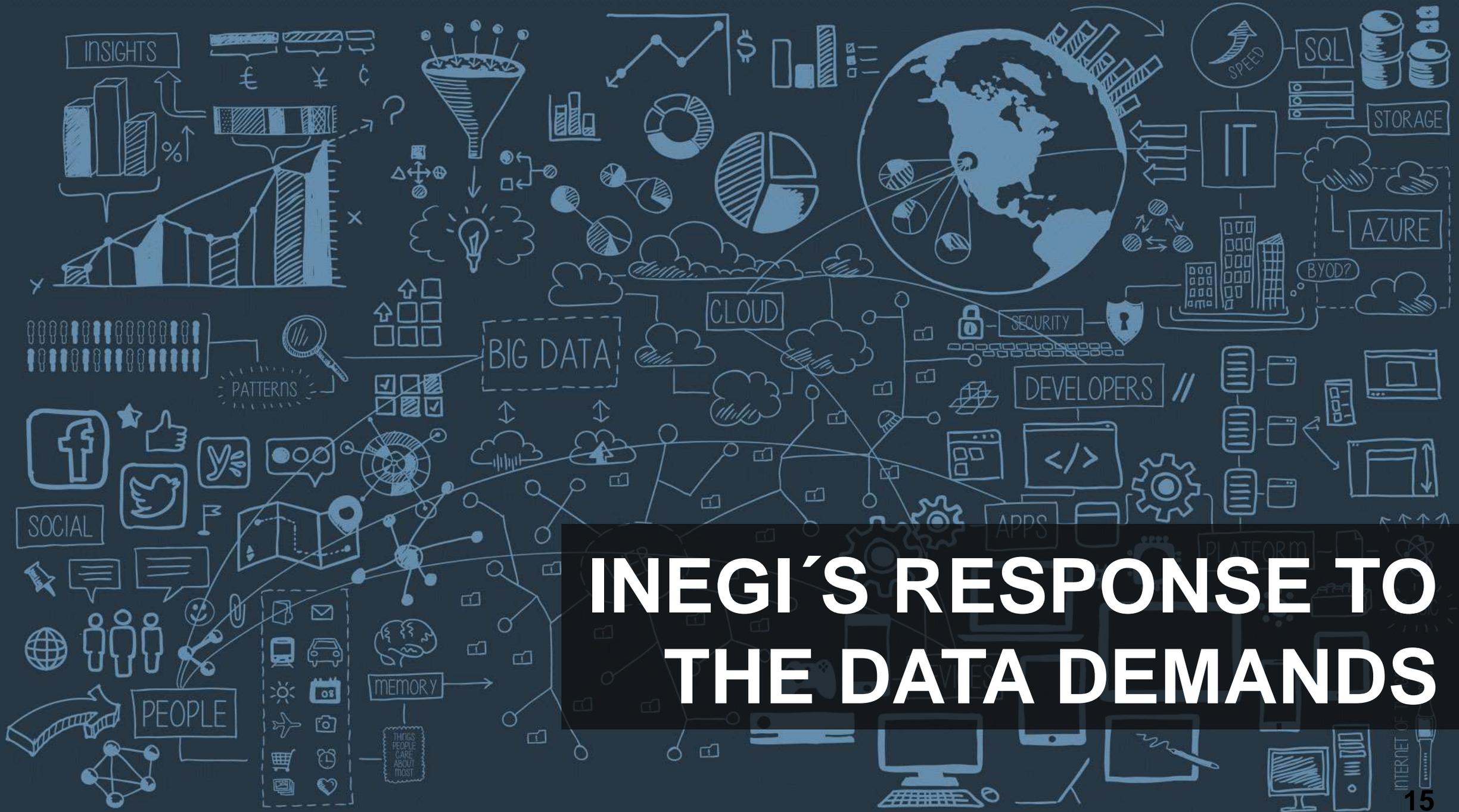


# THE 2016 – 2040 VISION



- The need of taking advantage of administrative records and **alternative sources to produce statistical and geographical** information is emphasized.
- As well as to **keep innovating** in sources, methodologies and technologies for the production of information.





# INEGI'S RESPONSE TO THE DATA DEMANDS

# MODERNIZING STATISTICS AND GEOGRAPHY

- In order to properly respond to the new data demands, INEGI considers **the integration of statistical and geospatial information to be of the utmost importance.**
- As a result, we actively **participate in international experts groups promoting this integration**, both in the statistical and geographical branches.
- INEGI participates in **international experts groups** that pursue the integration of the of statistical and geospatial information.



**UN-GGIM**  
UNITED NATIONS INITIATIVE ON  
GLOBAL GEOSPATIAL  
INFORMATION MANAGEMENT



**UN-GGIM:Américas**  
COMITÉ REGIONAL DE LAS  
NACIONES UNIDAS SOBRE  
LA GESTIÓN GLOBAL  
DE INFORMACIÓN GEOESPACIAL  
PARA LAS AMÉRICAS



**IAEG-SDGs**

Inter-agency Expert Group on SDG Indicators



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# INTEGRATING STATISTICS AND GEOGRAPHY

## Generic Statistical Business Process Model



- The High-Level Group for the Modernization of Official Statistics **promotes standards - based modernization of official statistics**, overseeing the development of frameworks, tools and methods.
- INEGI is working with UNECE´s GSBPM **as standardized framework** to improve the quality of our information.
- Is being implemented in our **statistical and geospatial information** production processes.

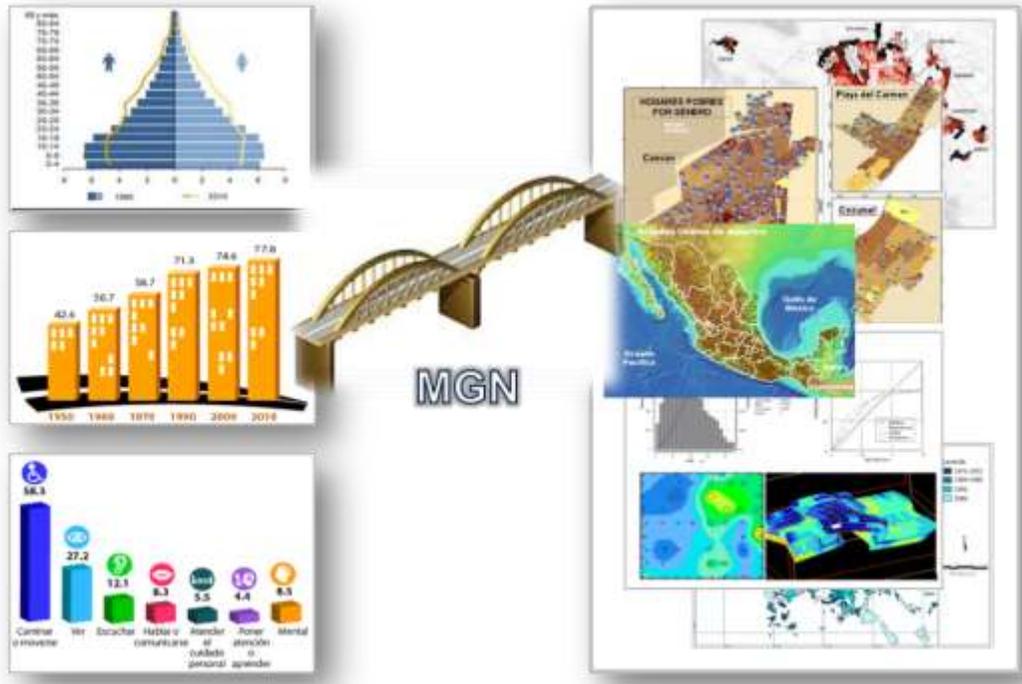


# COMMON REFERENCE FRAMEWORKS

- **This integration of geospatial information with statistics is crucial to keep harnessing the power of data.**
- **The Global Statistical Geospatial Framework (GSGF)**, that is being developed within the UN-GGIM, is a response to the need for a global framework:
  - Concentrates the integration efforts that are taking place.
  - Countries can adapt it to their particular needs.



# NATIONAL GEOSTATISTICAL FRAMEWORK



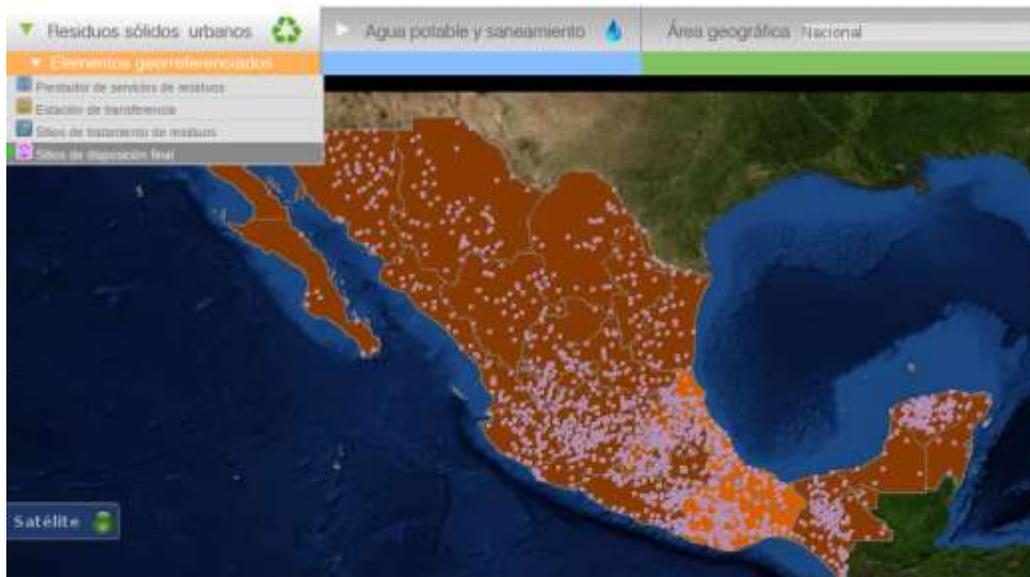
- INEGI has integrated the **National Geostatistical Framework (MGN)** in our open source web platform GIS: **MxSIG**.
- Its objective is the **georeferencing of information** from censuses, surveys and administrative records.



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# DIGITAL MAP OF MEXICO

- The Digital Map of Mexico, developed by INEGI, is a system for **consultation and analysis of geographic and statistical information.**

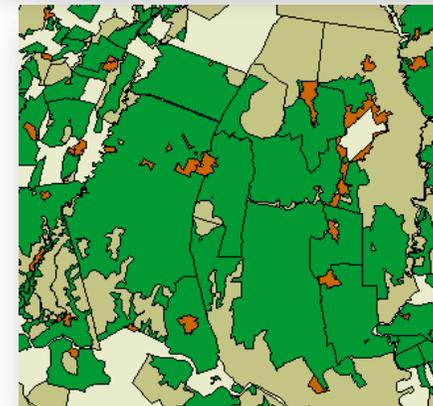


- The use of this tool **boosts the value** of both, statistical and geospatial information, through their natural integration: “Everything that happens, happens somewhere”



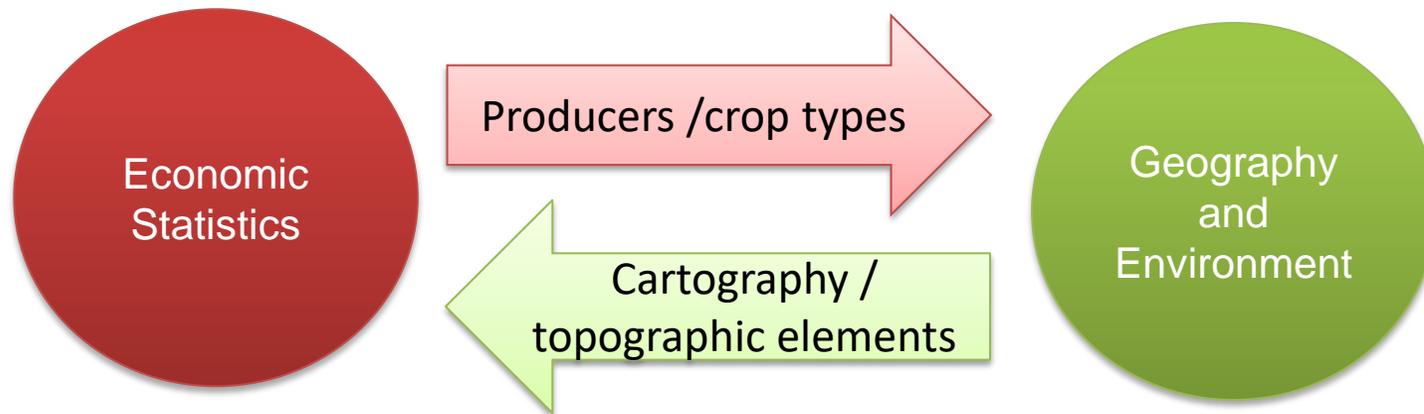
# DIGITAL MAP OF MEXICO

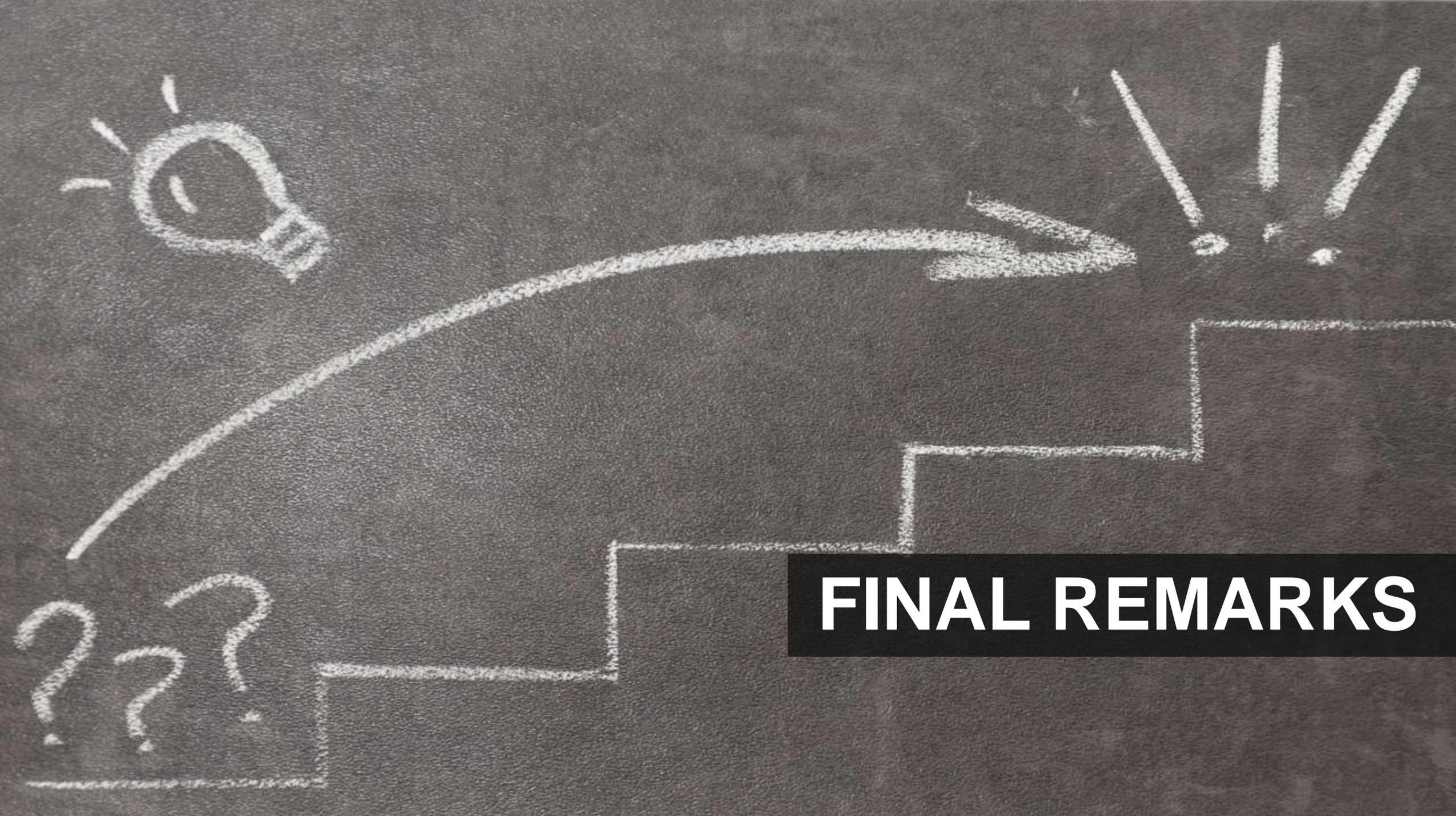
- The ***Digital Map of Mexico*** offers more than 200 vector data layers, more than 71 million geographic objects and 4 raster layers, such as:
  - Geographic limits.
  - Economic establishments.
  - Environmental statistics.
  - Statistical information of the Population and Housing Census
  - Hydraulic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



# EXAMPLE OF A SUCCESS HISTORY

- In 2016, INEGI updated the **Agricultural Census Framework**.
- It **required an institutional effort** from two of our information generating areas: Economic Statistics and Geography and Environment.





**FINAL REMARKS**

# FINAL REMARKS

- The Data Revolution calls the NSO's and NGOs to redefine themselves in order to remain relevant.
- The integration of statistics and geospatial information is indispensable in the new data ecosystem.
- The work that's being carried out at the international level reflects the importance of the current context: the Agenda 2030 and the SDG's
- INEGI is committed to keep promoting this integration, taking advantage of its role as both: NSO and NGO.



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