

MEASURING AND MONITORING SDGs: THE MEXICAN EXPERIENCE

Julio A. Santaella
President of INEGI

UN-GGIM Forum on the 2030 Agenda for Sustainable Development
“Where is the Data?”
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**INSTITUTO NACIONAL
DE ESTADÍSTICA Y GEOGRAFÍA**



BACKGROUND



The 2030 Agenda for Sustainable Development



- Addresses issues that have **not been subject to “official” measurement**
- Presents new challenges:
 - i. Produce **data for new fields**
 - ii. Use of **geospatial information**
 - iii. Development of **technological and human capacities**

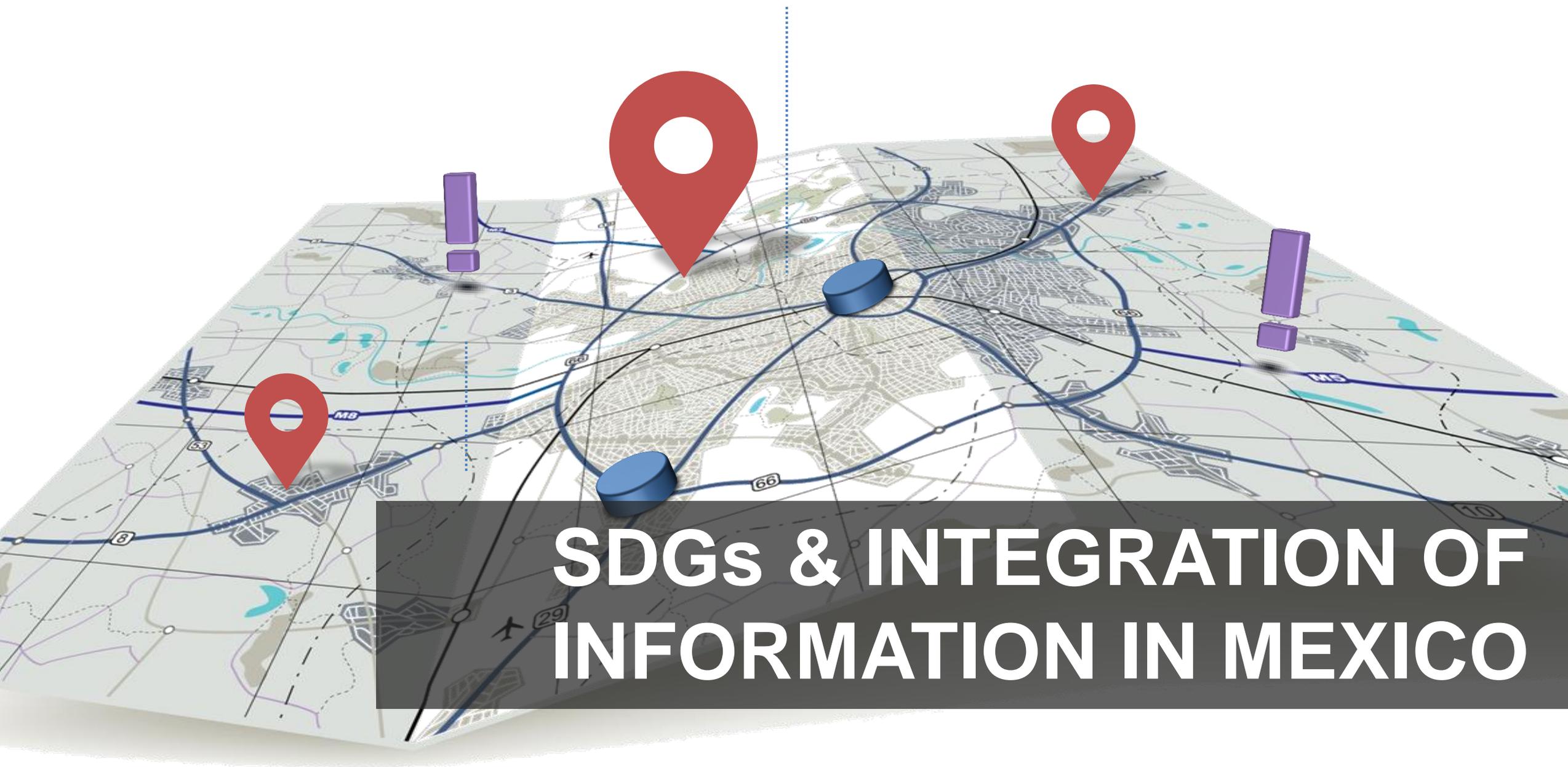


The 2030 Agenda for Sustainable Development



- The measuring and monitoring of the **17 SDGs** requires **data to be:**
 - Timely
 - Disaggregated
 - **Georeferenced**

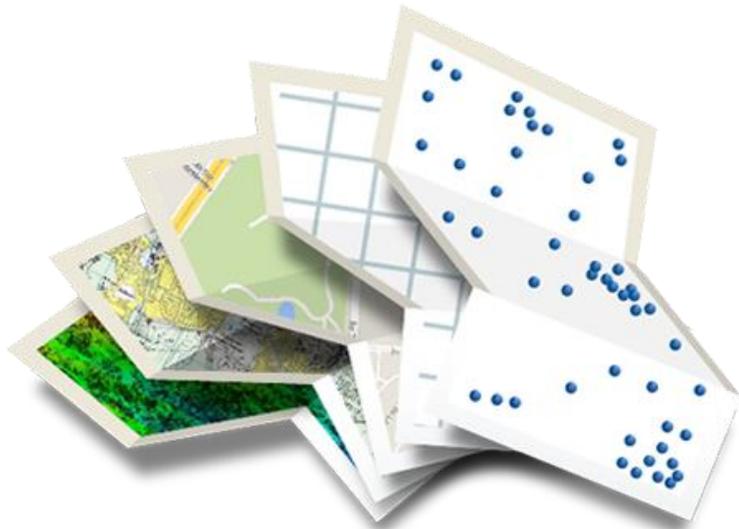
The institutional arrangement in Mexico requires **geospatial and statistical information to be integrated**



SDGs & INTEGRATION OF INFORMATION IN MEXICO

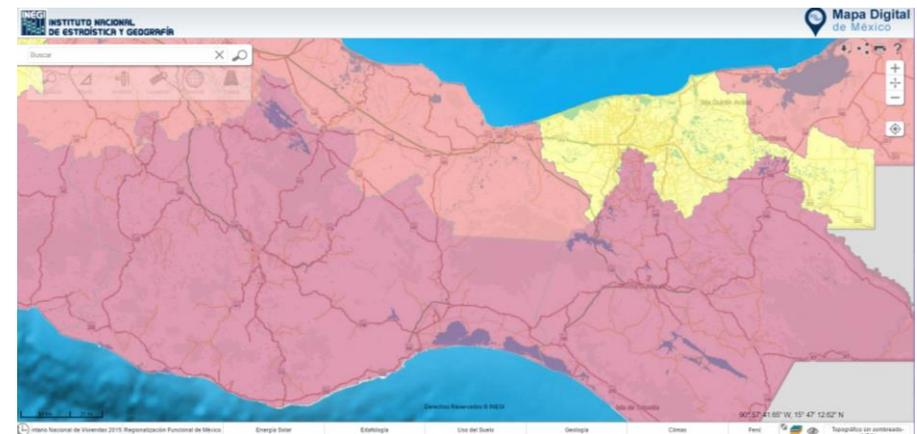
SDGs AND THE INTEGRATION OF INFORMATION

- The **integration of statistical and geospatial information** allows measuring and monitoring SDGs progress over time
- The **Geographic Information Systems (GIS)** enables such integration in a natural way



MEASURING AND MONITORING SDGs PROGRESS

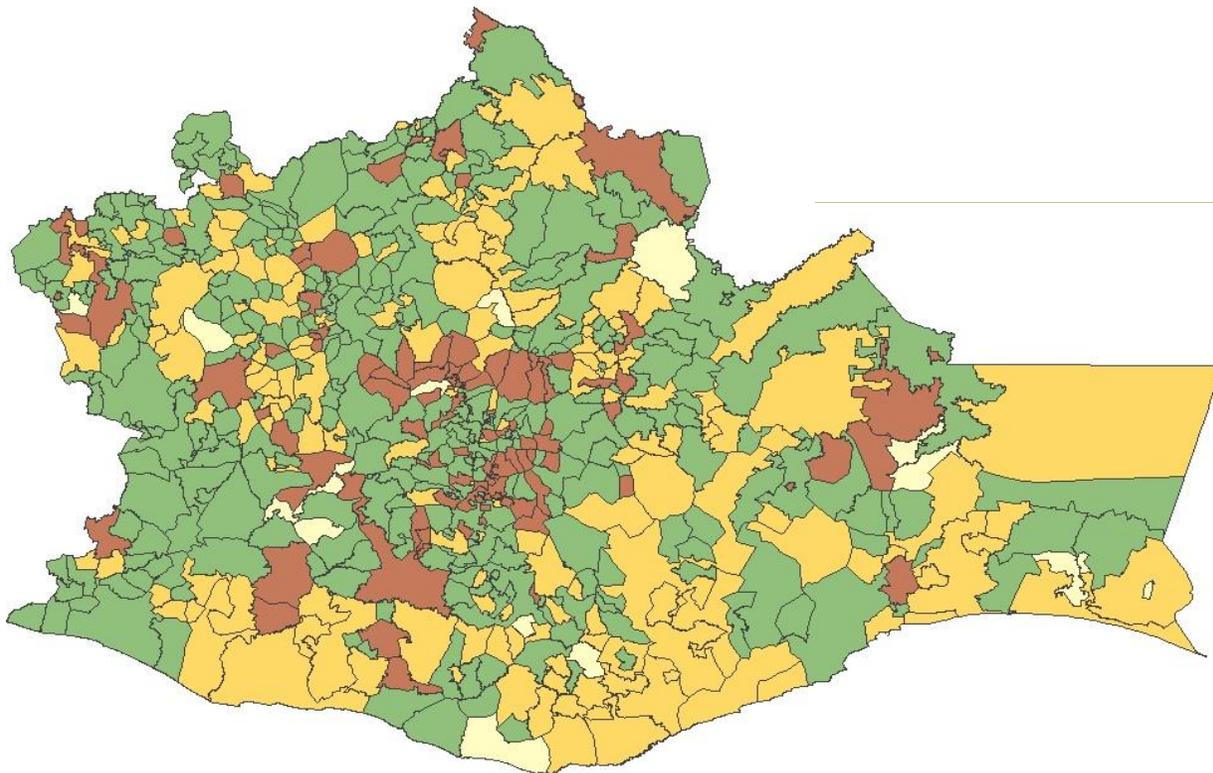
- INEGI has developed an **open source GIS- MxSIG**:
 - **Produces geospatial indicators**
 - Promotes the use of integrated **geospatial and statistical information**
- **The Digital Map of Mexico**, developed with MxSIG, offers more than 200 vector data layers, more than 71 million geographic objects and 4 raster layers



EXAMPLE

Indicator 1.2.1 Proportion of population living below the national poverty line

- **Poverty distribution in the State of Oaxaca**
 - **67.4% of the population of Oaxaca** was considered to be living in poverty, but... how is it distributed by municipality?



% of the population considered poor	Municipalities
0 – 25	15
25 – 50	163
50 – 75	296
75 - 100	96

Source: CONEVAL estimates based on MSC-ENIGH 2014, and the sample of the Population Census 2010

EXAMPLE

Indicator 9.1.1: Proportion of the rural population who live within 2 km of an all-season road

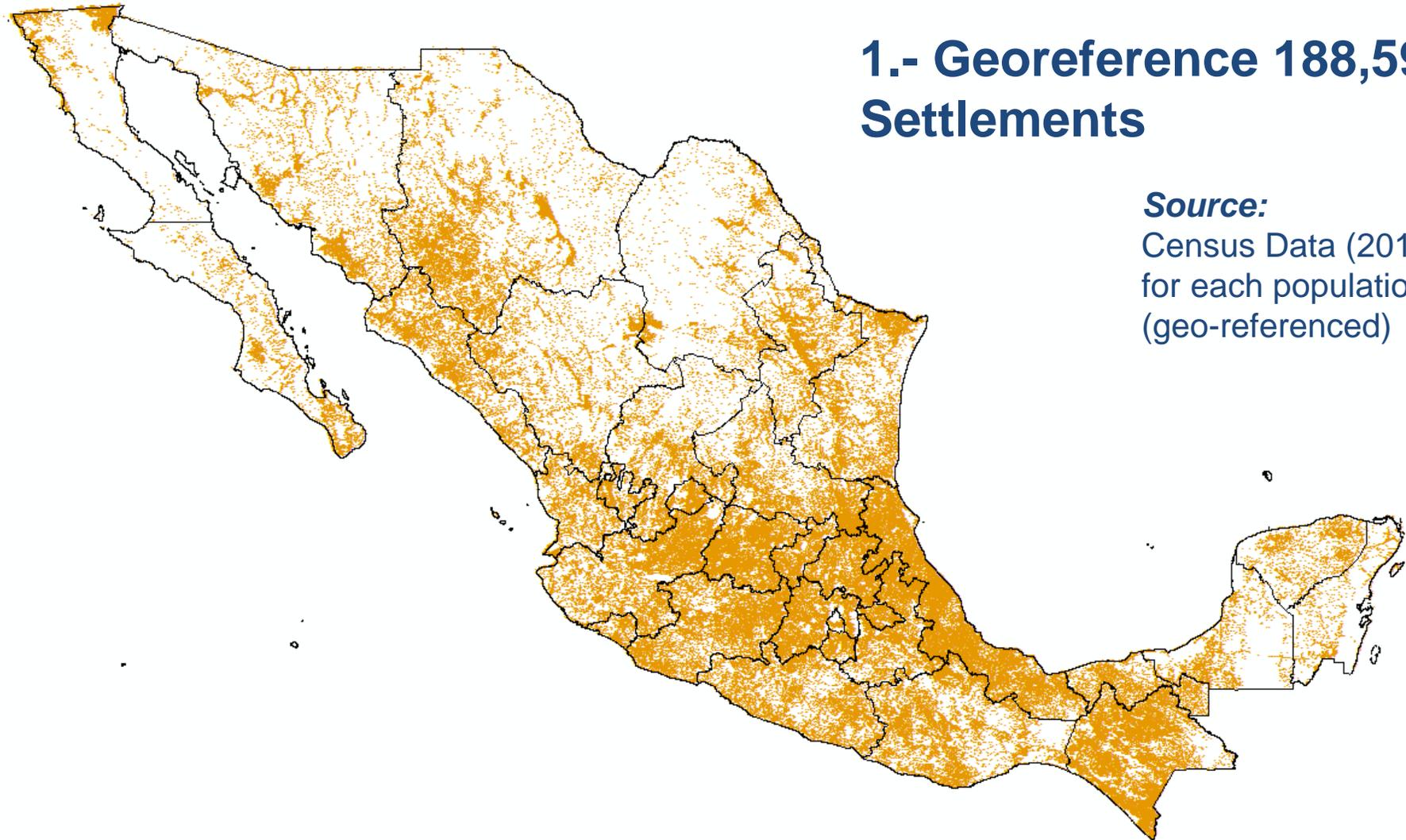
- **SDG 9.** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
 - **Indicator 9.1.1** Proportion of the rural population who live within 2km of an all-season road

What statistical and geospatial information is needed to measure this indicator?



EXAMPLE

Indicator 9.1.1: Proportion of the rural population who live within 2 km of an all-season road

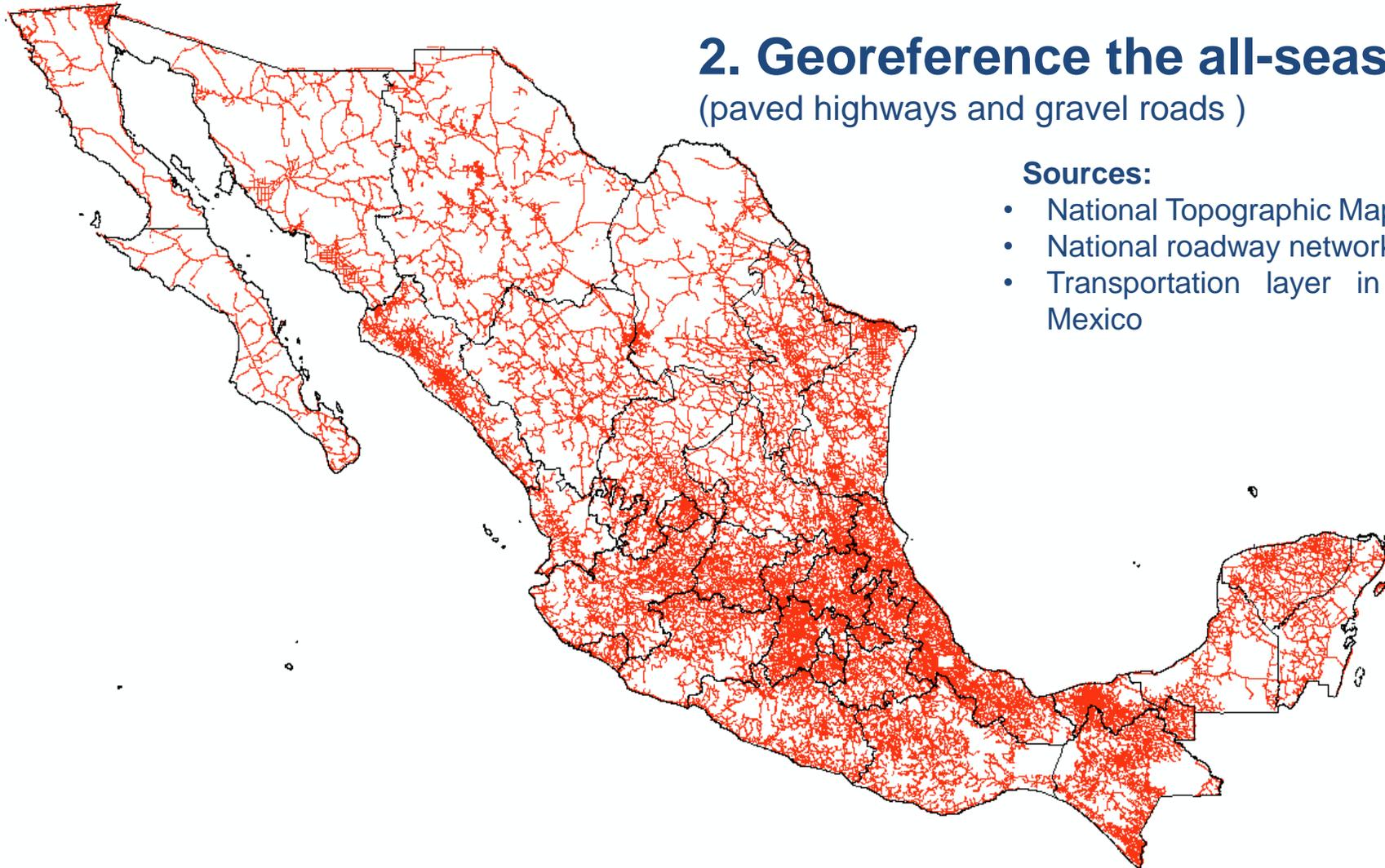


1.- Georeference 188,597 Rural Settlements

Source:
Census Data (2010)
for each population center
(geo-referenced)

EXAMPLE

Indicator 9.1.1: Proportion of the rural population who live within 2 km of an all-season road



2. Georeference the all-season roads

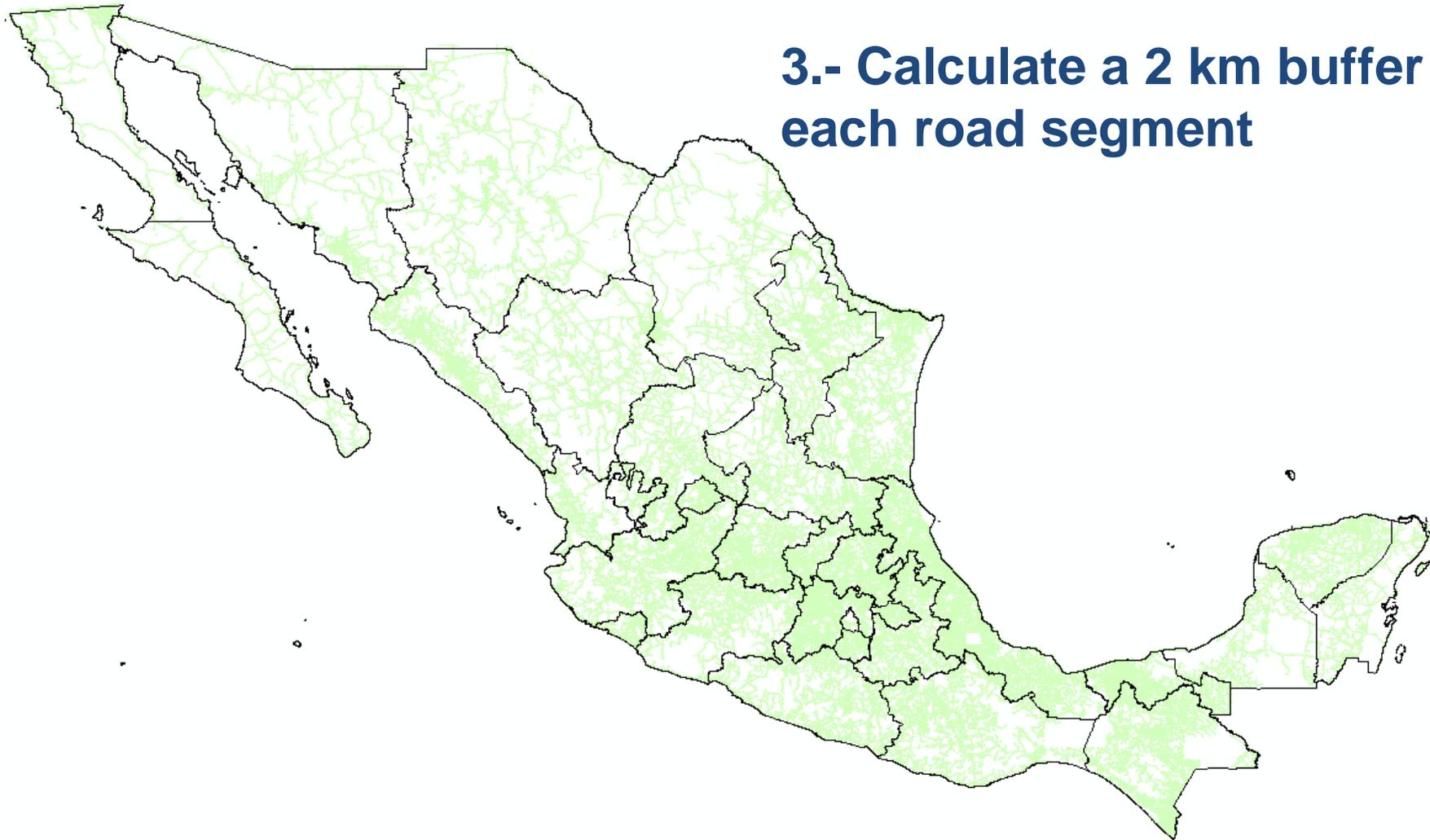
(paved highways and gravel roads)

Sources:

- National Topographic Map (1:50,000)
- National roadway network
- Transportation layer in Digital Map of Mexico

EXAMPLE

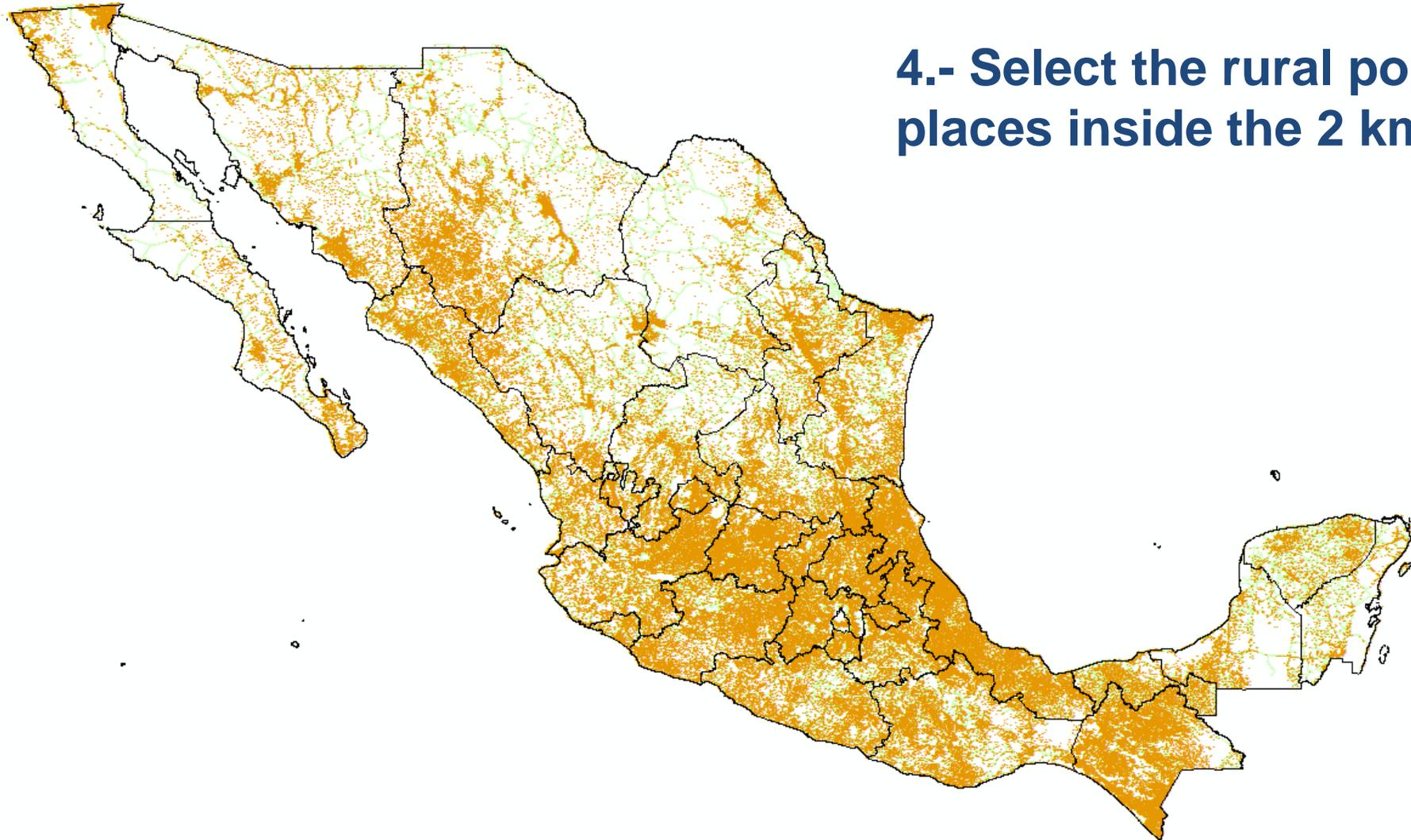
Indicator 9.1.1: Proportion of the rural population who live within 2 km of an all-season road



3.- Calculate a 2 km buffer around each road segment

EXAMPLE

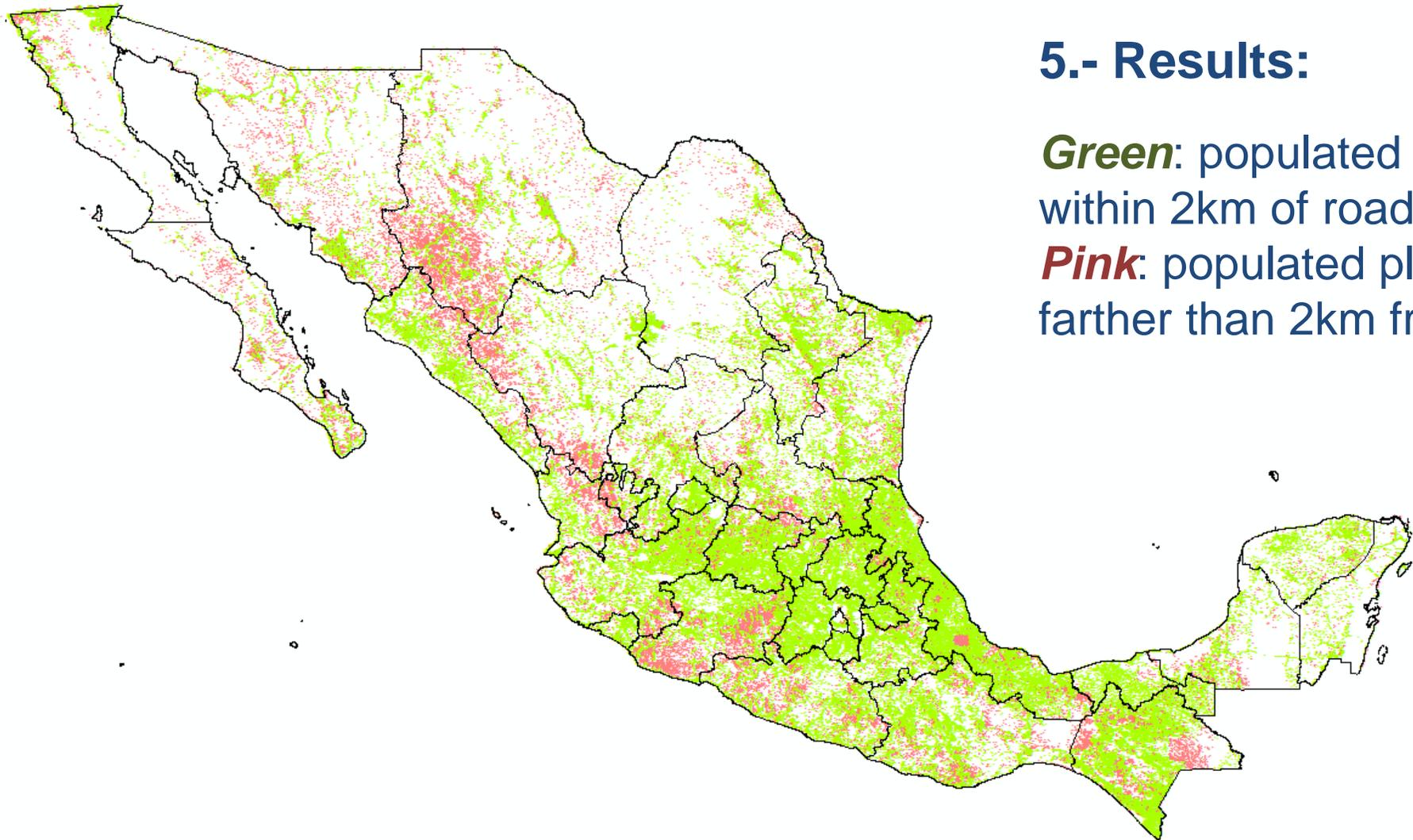
Indicator 9.1.1: Proportion of the rural population who live within 2 km of an all-season road



4.- Select the rural populated places inside the 2 km buffer

EXAMPLE

Indicator 9.1.1: Proportion of the rural population who live within 2 km of an all-season road



5.- Results:

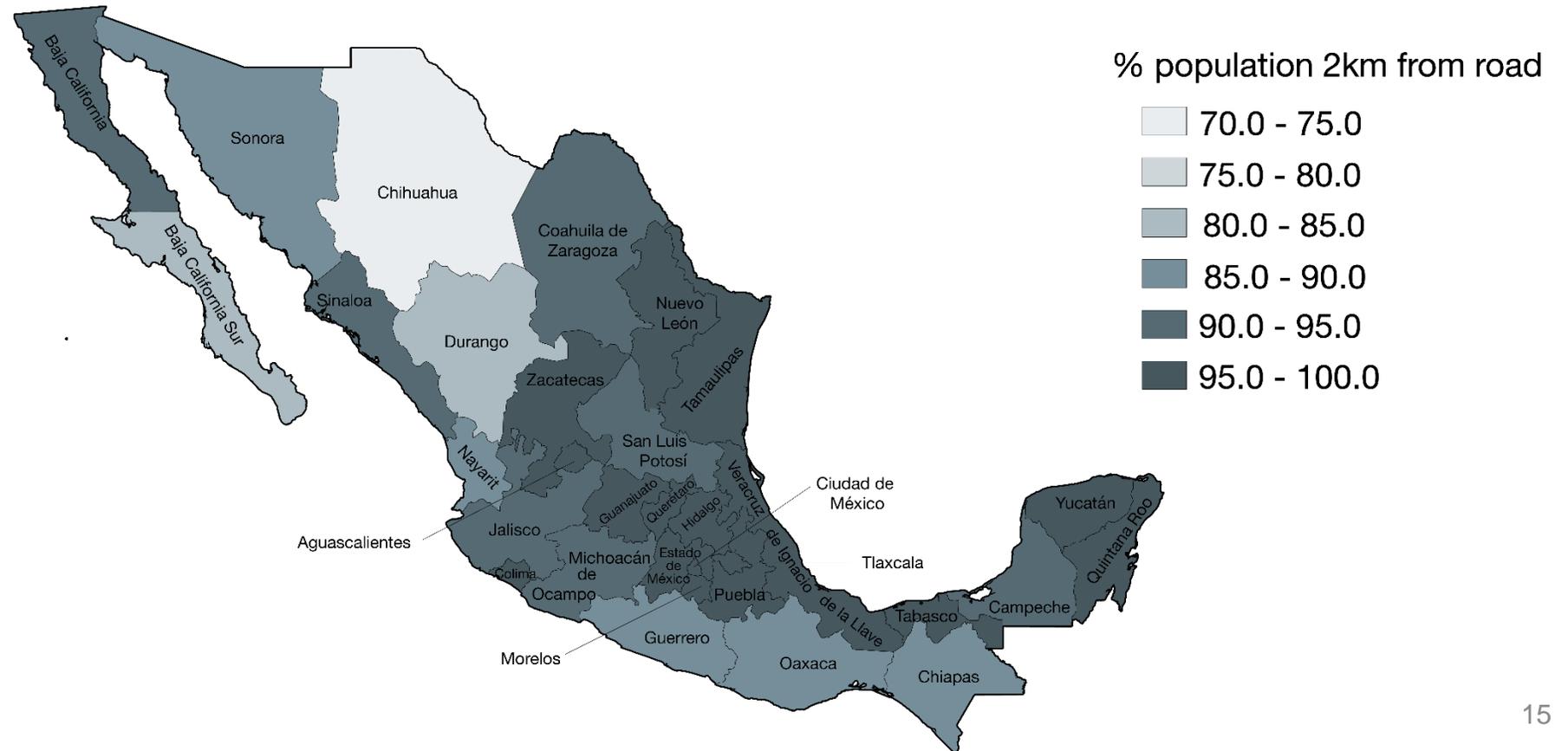
Green: populated places within 2km of roads

Pink: populated places farther than 2km from roads

EXAMPLE

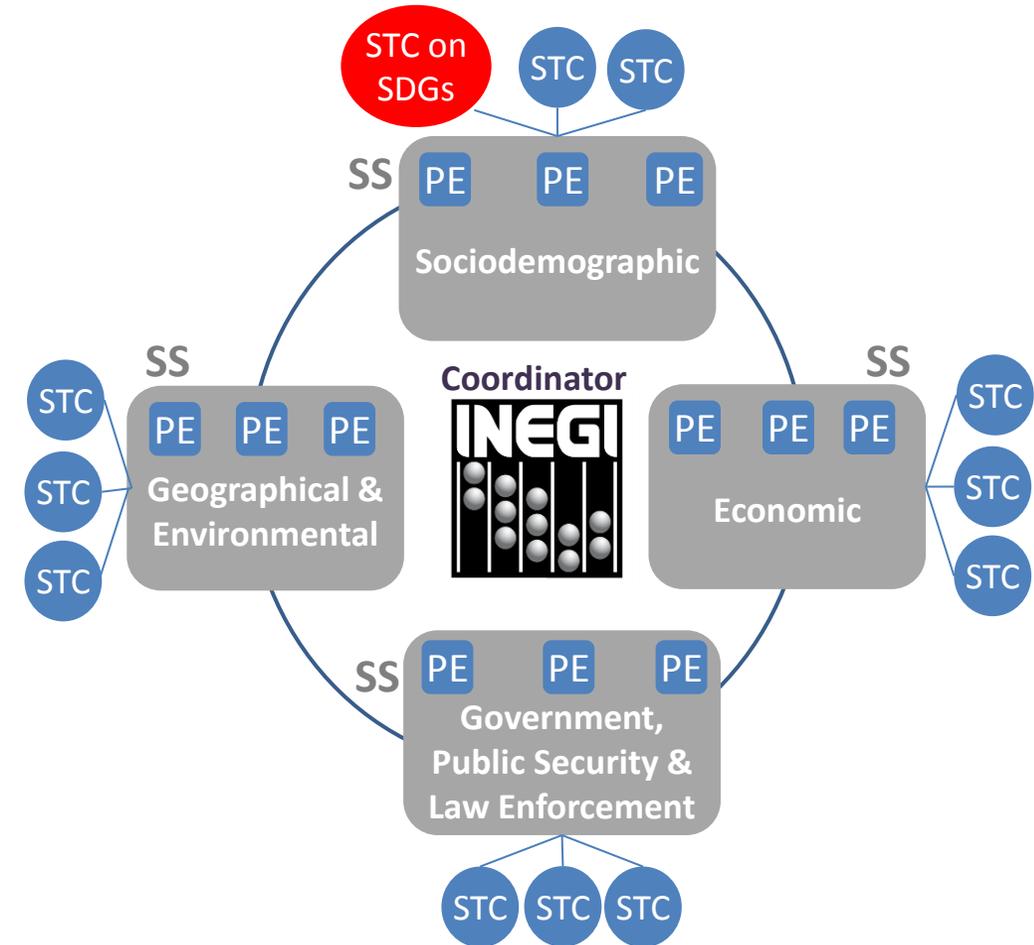
Indicator 9.1.1: Proportion of the rural population who live within 2 km of an all-season road

- **Results:** In Mexico, **93.1% (24,259,295)** of the rural population live within 2 km of an all-season road
- **By State:**



SNIEG: MEXICO'S COORDINATION FRAMEWORK TO PRODUCE STATISTICAL & GEOGRAPHICAL INFORMATION

- Public Entities (PE), as members of the SNIEG (NSS), are organized in **4 Subsystems of Information (SS)**
- Each SS produce, integrate and disseminate **information** in matters within their competence
- Each Subsystem has Specialized Technical Committees (STCs) that **set technical standards, guidelines, methodologies and processes**
- The **STC on SDGs**, headed by the office of the Presidency, **coordinates the efforts to measure the fulfillment of the 2030 Agenda SDGs**



IMPLEMENTING THE 2030 AGENDA AND SDGs

Mexico's challenges measuring & monitoring SDGs

LEVEL 1: SDGs	17 SDGs	232 Indicators
LEVEL 2: Region	2,446 Municipalities	567,472 Measurements
LEVEL 3: Gender	2 Genders	1,134,944 Measurements
LEVEL 4: Age	3 Age Groups	3,404,832 Measurements
LEVEL 5: Ethnicity	4 Ethnic groups	13,619,328 Measurements

The challenge of implementing the 2030 Agenda and measuring its 232 indicators is too great for an institution alone

IMPLEMENTING THE 2030 AGENDA AND SDGs

2030 Agenda: a State undertaking

- The implementation of the 2030 Agenda requires a State –wide **commitment**
- Mexico´s **National Council for Sustainable Development and 2030 Agenda** was installed on April 26, 2017
- The National Council is conceived as a **long-term commitment**





OBJETIVOS DE DESARROLLO SOSTENIBLE

- The Office of the Presidency of the Republic along with INEGI launched an online platform to monitor the progress of SGDs
- It currently has 25 indicators
- A continuous and long term process is under way to keep the platform updated
- This platform is available for sharing and implementation in other countries



CHALLENGES AND OPPORTUNITIES

CHALLENGES

The 2030 Agenda brought us new challenges that we need to face

- Measuring and monitoring the 17 SDGs and their 232 indicators will **take our capabilities to the limit**
- All the actors involved **must join efforts and work together**
- We must become **talent-hubs**
- As data demand grows exponentially, **the quality of the information must be assured**
- **Foster capacity building in all regions:**
 - The Mexican Government, through INEGI, coordinates the Capacity Building Phase of UN-GGIM: America´s Caribbean Project*

*Project for Strengthening Spatial Data Infrastructures in Member States and Territories of the Association of Caribbean States



OPPORTUNITIES

The challenges open up a variety of opportunities

- Advance towards **the integration of geospatial information with statistics**
- **Be creative and move beyond** the traditional boundaries
- **Establishing partnerships** to harness the power of data
- **Use more efficiently** the data we are already collecting
- **Strengthen the trust of society** in official information



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