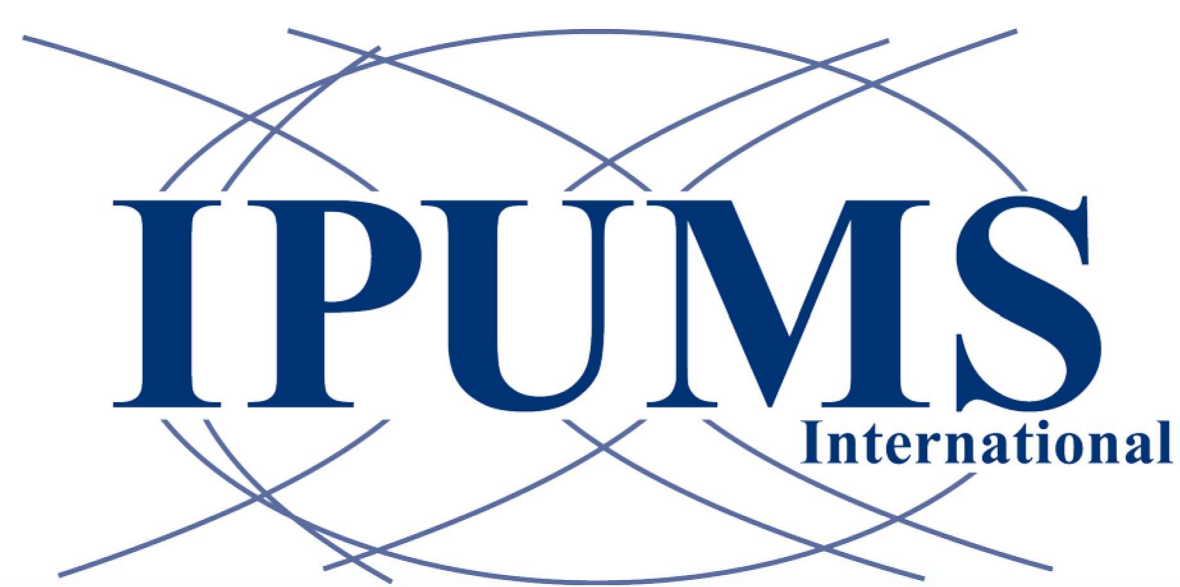


Monitoring Sustainable Development Goals

with census microdata from IPUMS-International

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Introduction & Objectives

Objective: In this study, we use IPUMS International data to measure indicators from four SDG goals as operationalized by the United Nations, demonstrating their utility for the establishment of baseline measures and ongoing monitoring.

High-density census microdata samples:

- Highly representative of national populations
- Collected at regular intervals
- Include characteristics required for SDG indicator disaggregation
- Part of the existing statistical infrastructure of developing countries

IPUMS value added:

- Harmonized variable coding
- Spatially consistent units in the microdata
- Corresponding GIS boundary files



SDG indicators should measure progress among different demographic and social groups at various levels of sub-national geography.

Electricity Access in Rural Areas: Cambodia 2008

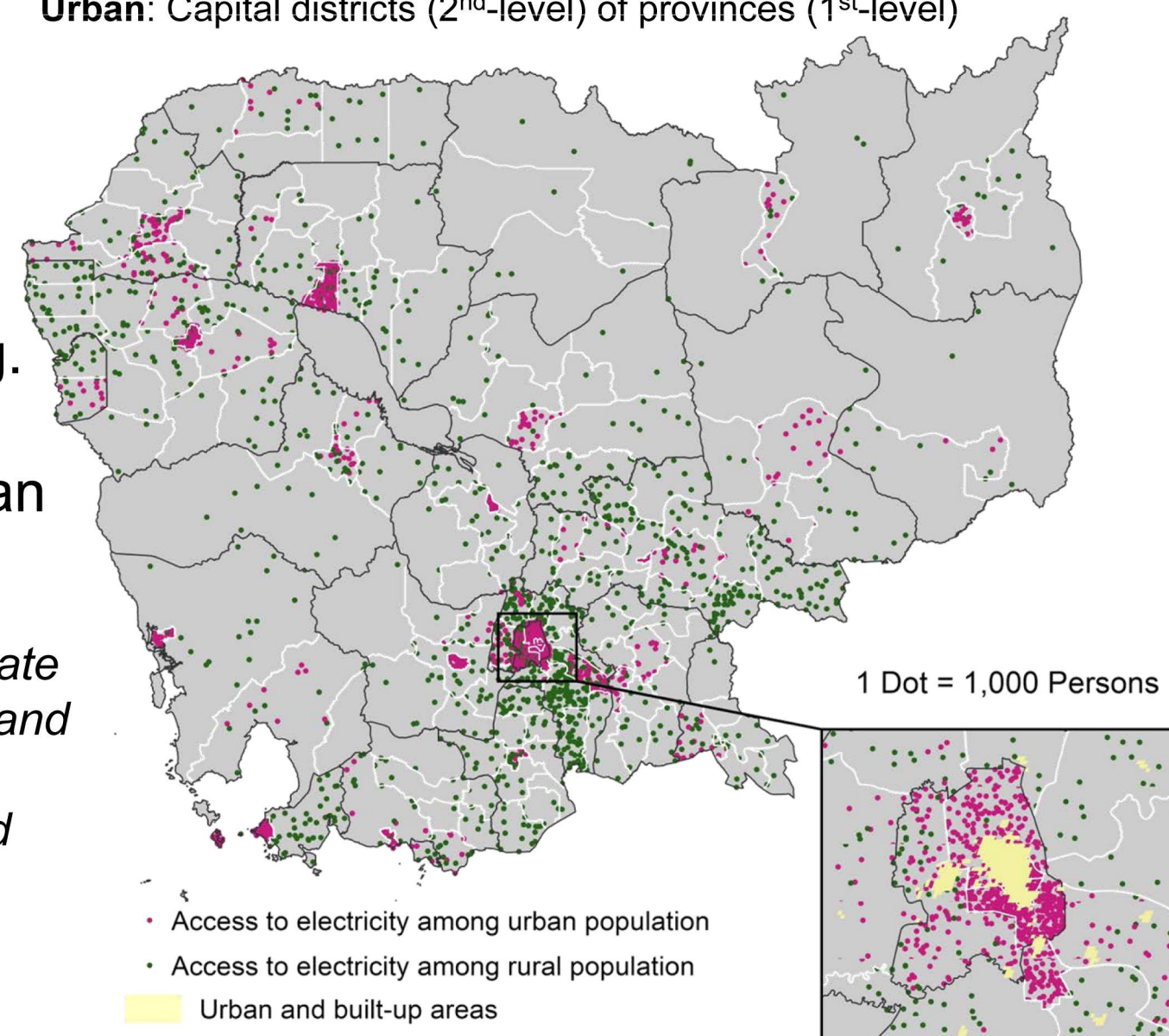
Percentage of population with access to electricity in urban and rural areas of Cambodia (Goal 7.1):

Variables	IPUMS variable
Electricity	ELECTRIC
Urban or rural	URBAN

Population with electricity access, Cambodia 2008

Area	Percent	Obs.
Urban	87.7	2,497,610
Rural	13.8	10,694,430

Urban: Capital districts (2nd-level) of provinces (1st-level)



- High % of urban population with access to electricity
- Surrounding rural areas of major cities (e.g. Phnom Penh, Siem Reap, Battambang, Poipet) have better access to electricity than northeast and southwest parts of country

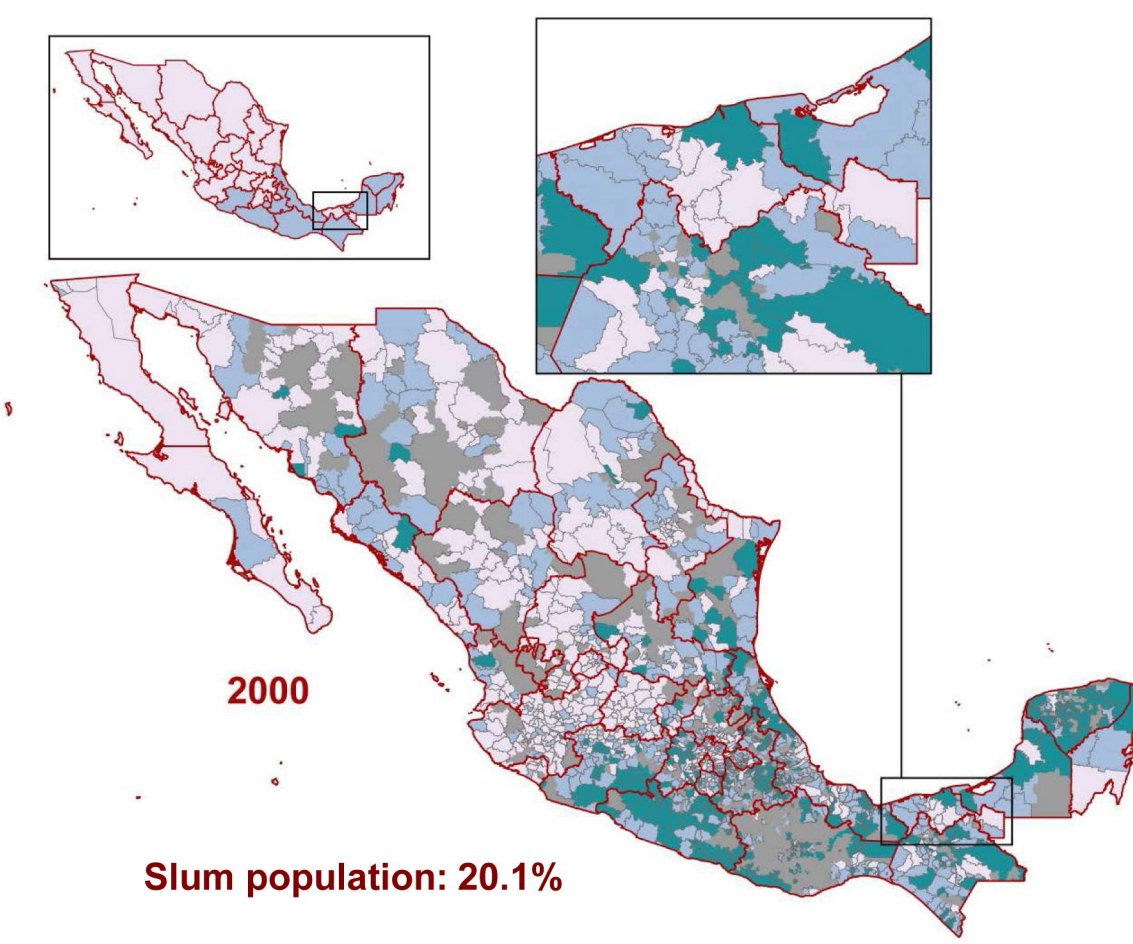
Ancillary data sources: Urban built-up areas from Moderate Resolution Imaging Spectroradiometer (MODIS) global land cover dataset. Urban and built-up areas are defined as places dominated by non-vegetative, human-constructed infrastructure.

Urban Population Living in Slums: Mexico 2000-10

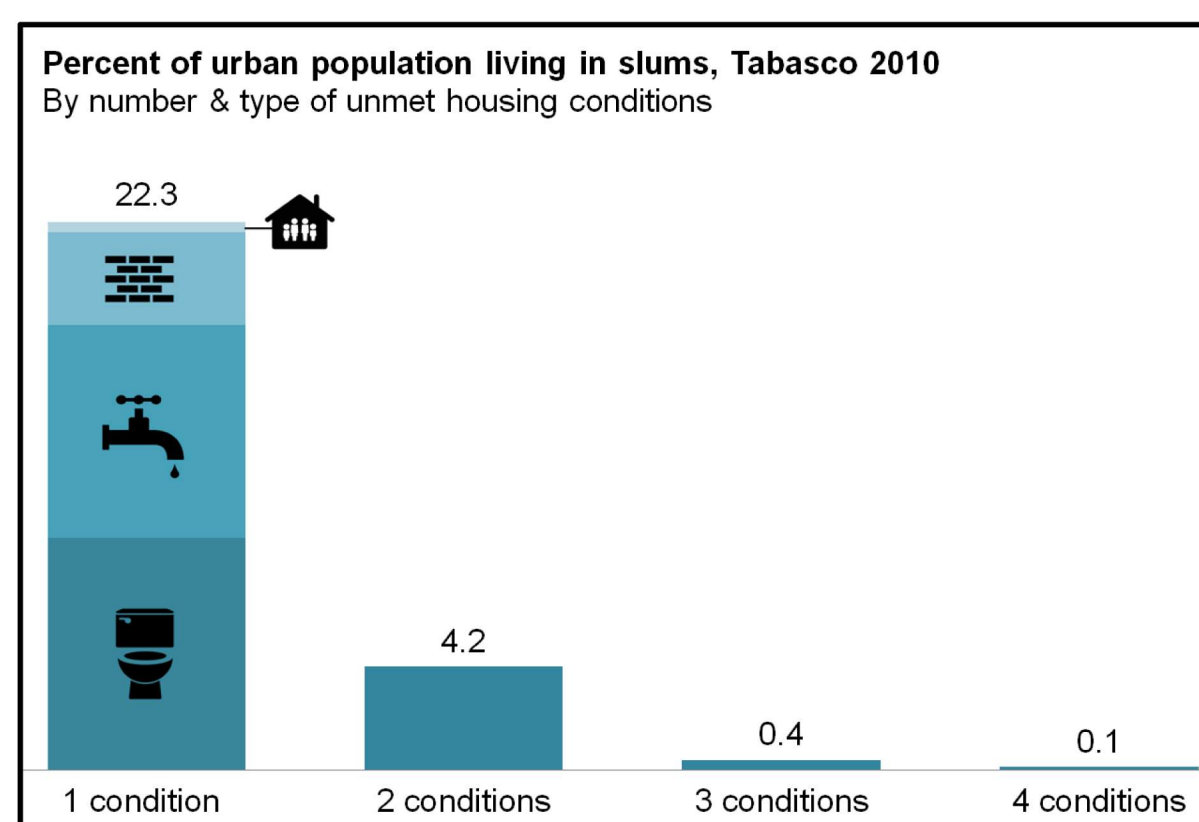
Urban slum population in Mexico through time (Goal 11.1):

Slum household: group of individuals living under the same roof lacking one or more of the following housing conditions:

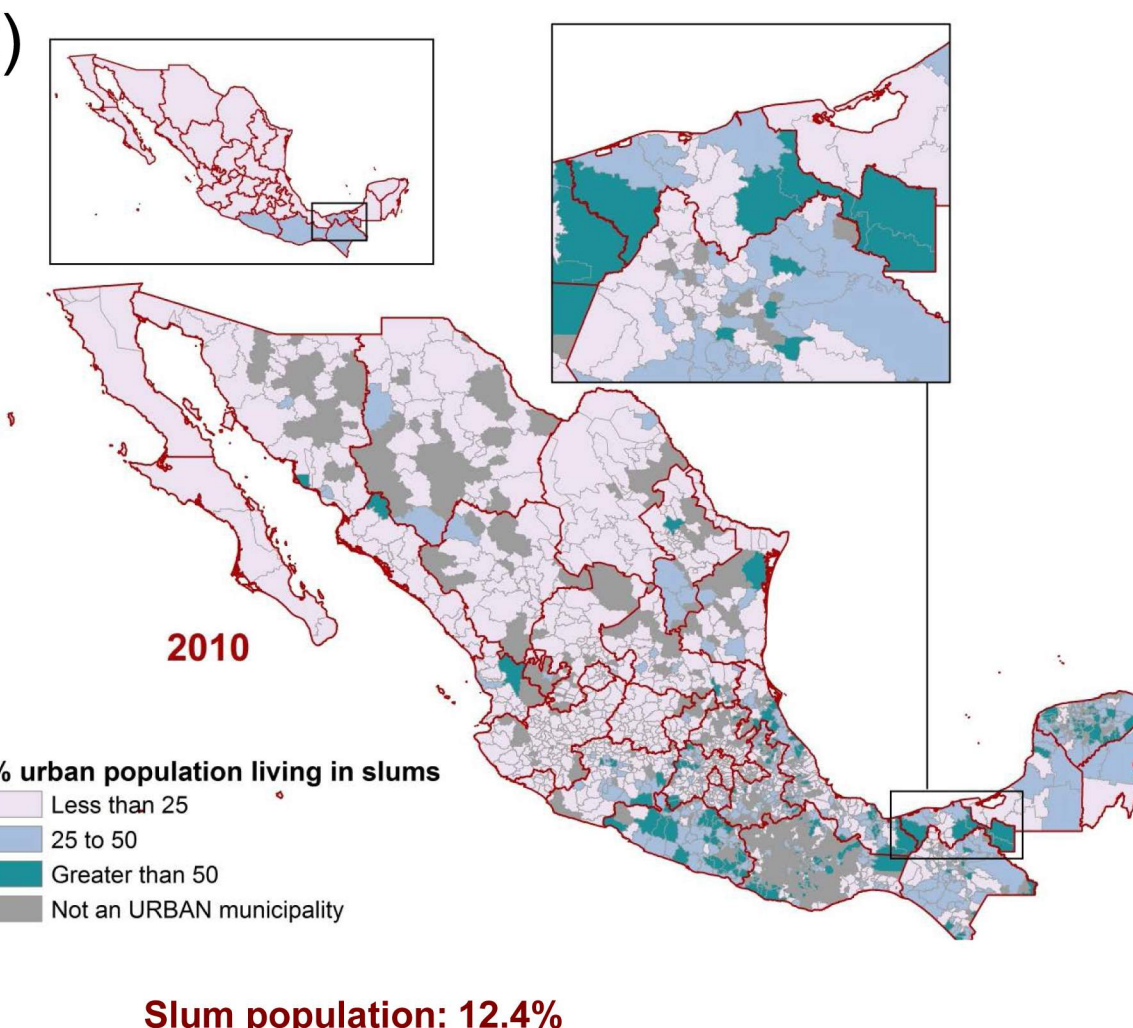
Housing conditions	IPUMS variable
Access to improved water	WATSUP
Access to improved sanitation	SEWAGE
Durable dwelling	WALL FLOOR ROOF
Sufficient living area	ROOMS PERSONS



- Population in slums stagnated or increased from 2000 to 2010 in 133 municipalities (10%)
- Slum-dwelling remained high/increased in southeastern Mexico, particularly in the state of Tabasco (inset)



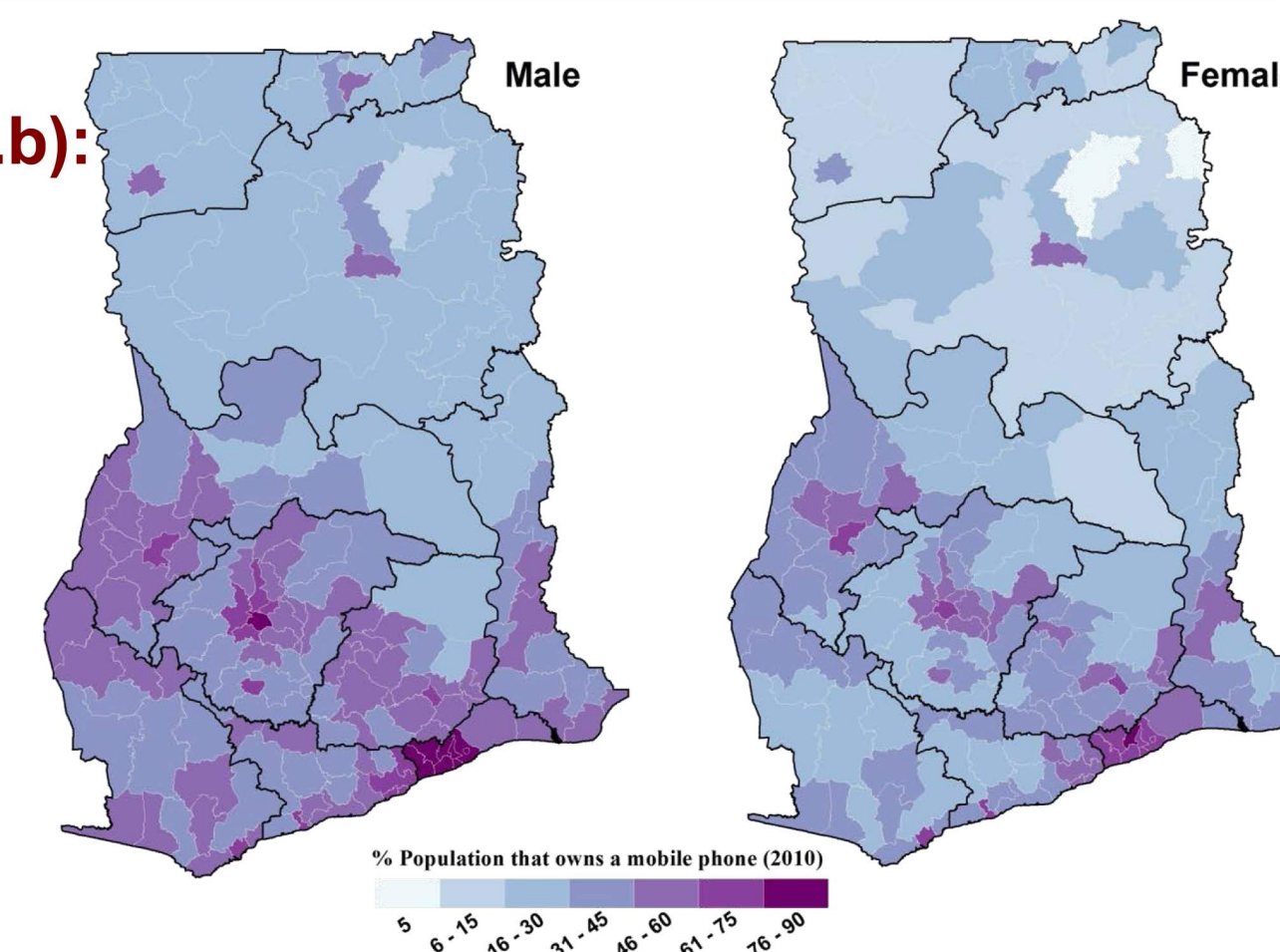
Urban: Localities with population >=2500



Women's Empowerment & Technology: Ghana 2010

Gender disparities in cell phone ownership in Ghana (age 12+) (Goal 5.b):

Variables	IPUMS variable
Mobile phone	GH2010A_CELLPHON
Age of respondent	AGE
Sex	SEX



- Cell phone ownership is more common in urbanized south among both sexes
- Gender disparities exist and gaps are less pronounced in urban centers

NEET by Age & Gender: Argentina 2010

Percentage of youth (15-24) not in education, employment, or training (NEET) (Goal 8.6):

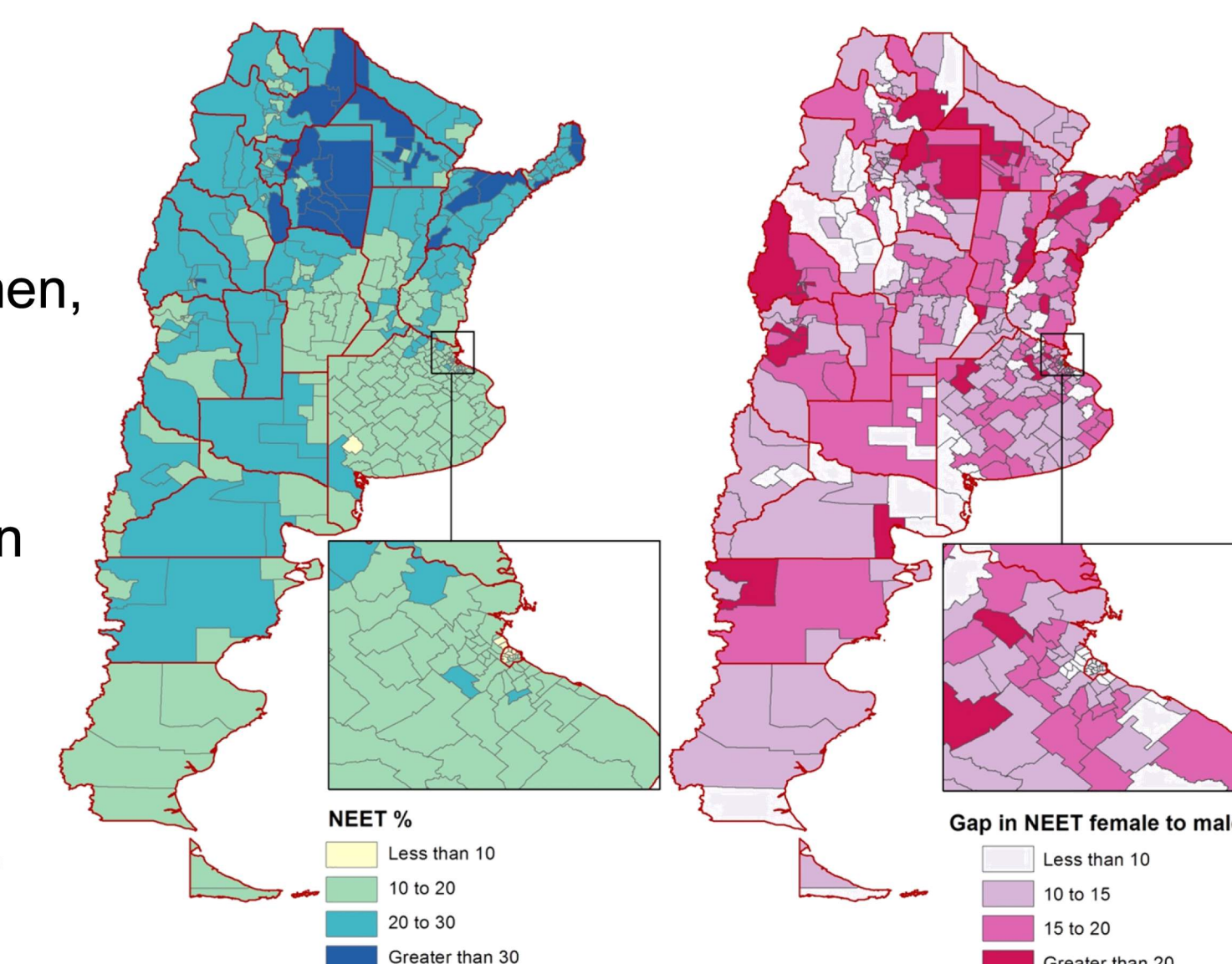
NEET: proportion of youth not in employment or education

Variables	IPUMS variable
Employment status	EMPSTAT
School attendance	SCHOOL
Sex	SEX

NEET population (%), Argentina 2010

	Total	Male	Female
NEET (no school or work)	17.6	11.7	23.5
Not in school	48.9	52.2	45.6
Not working	52.3	42.7	62.0
Obs.	677,182	338,435	338,747

- Higher proportion for women than men, associated with differences in labor force participation
- Smallest in capital city and smaller in densely populated units
- Gender gaps do not follow similar geographical pattern; some areas have small incidence but large gaps



Summary & Conclusion

- IPUMS International data are suitable for monitoring several SDG indicators, disaggregated by geography, gender, age, and urbanization
- Harmonized variables and spatially consistent geographic units provide monitoring agencies and national governments with reliable data for the establishment of disaggregated baseline-measures for several SDGs
- As new census data are collected and integrated in IPUMS, SDG progress can be measured against these baselines according to methods presented in this study

References and Acknowledgements:

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The authors wish to acknowledge the National Statistical Offices that provided the underlying data making this research possible