

49th Session of the UN Statistical Commission

Statistical-Geospatial Integration Forum:

Integrating statistical, geospatial, and other Big data to leave no one behind

Geography for the 2020 Round of Census

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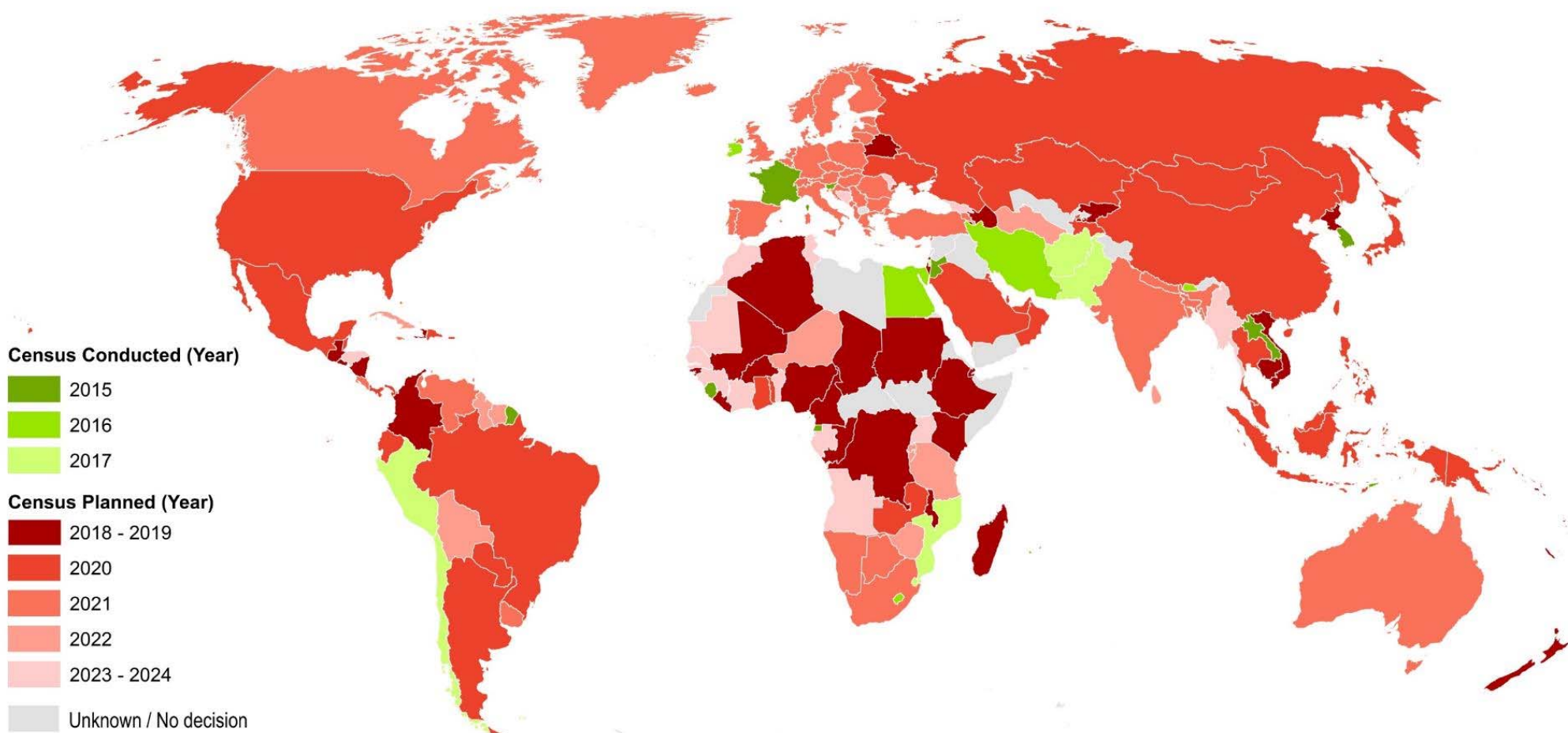
Population and Development Branch, Technical Division

United Nations Population Fund

05 March 2018



Years for 2020 round of censuses



Role of geography in census



- Maps provide the cartographic base for enumeration and the platform for spatial census data products

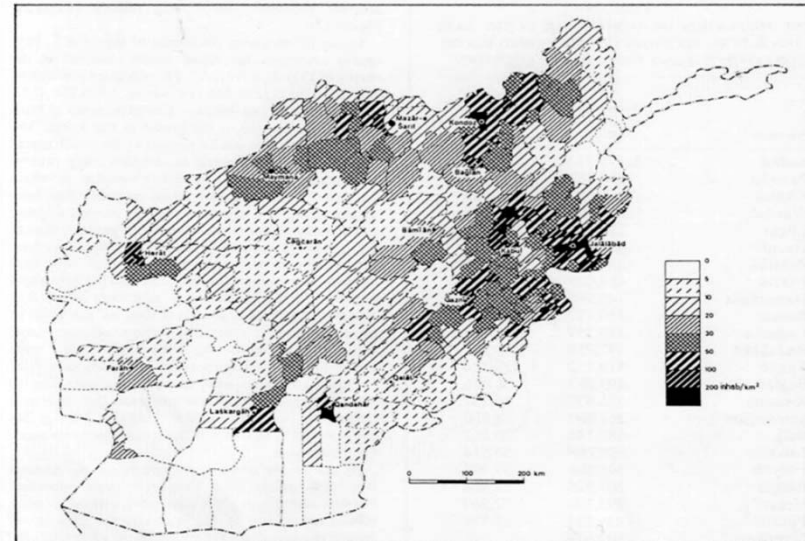
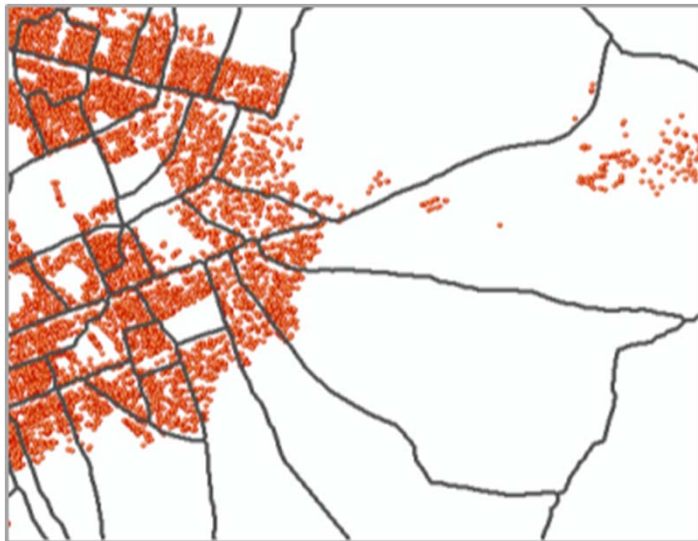
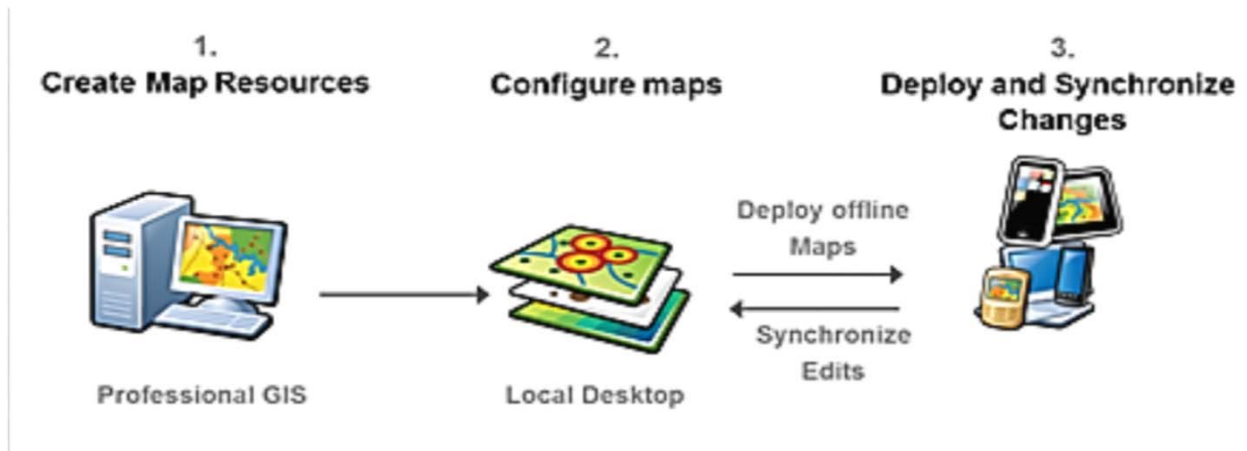


Figure 12. Geographical distribution of the settled population in Afghanistan, according to the 1358 Š./1979 census. Source: CSO, *Natāyej*, pp. 148ff.

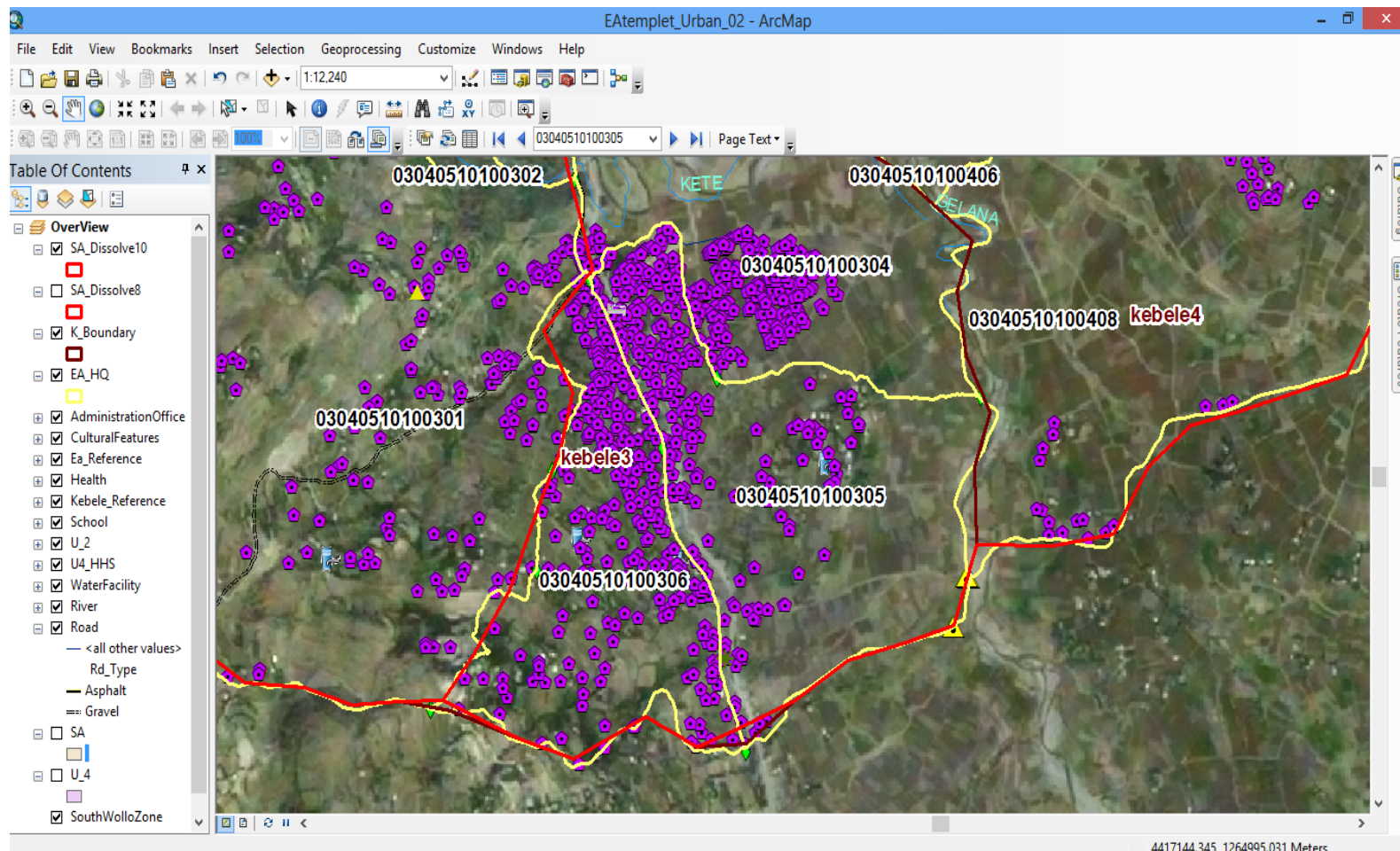
GIS mapping technology



- Timeliness of mapping as boundaries are constructed on the spot
- High quality enumeration area boundaries to avoid omission or duplication
- Accuracy & consistency in classification of features captured during mapping
- Mapping infrastructure, road systems



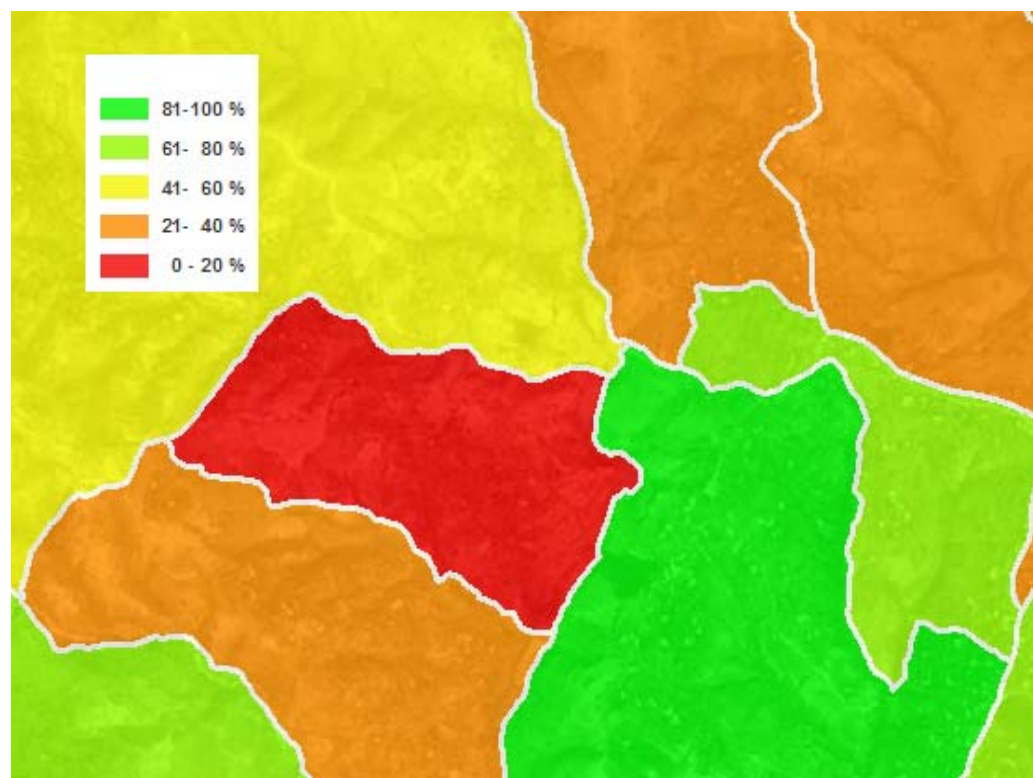
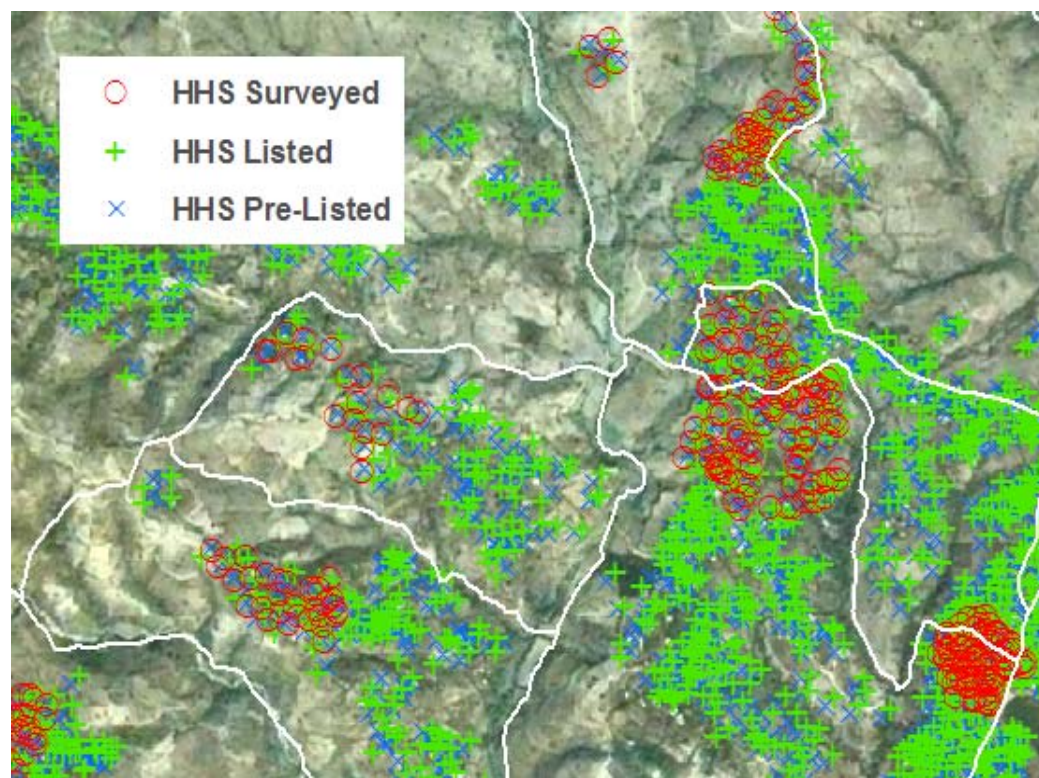
GPS locations of households improve spatial resolution of census data



Combining household GPS locations
with high resolution satellite imagery to
ensure household coverage



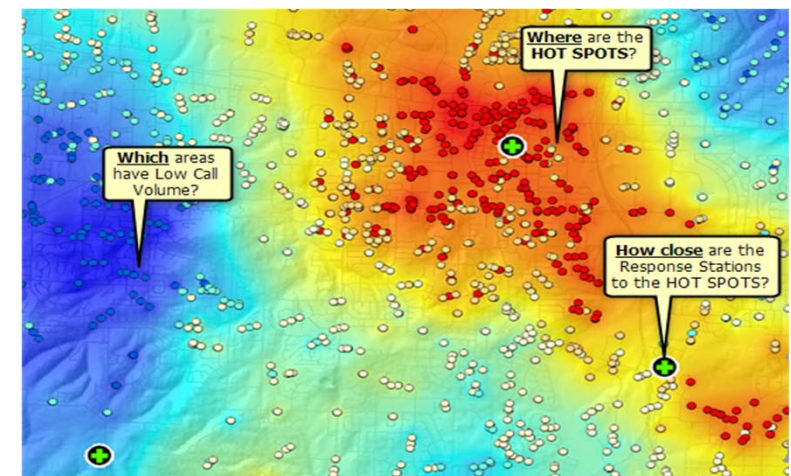
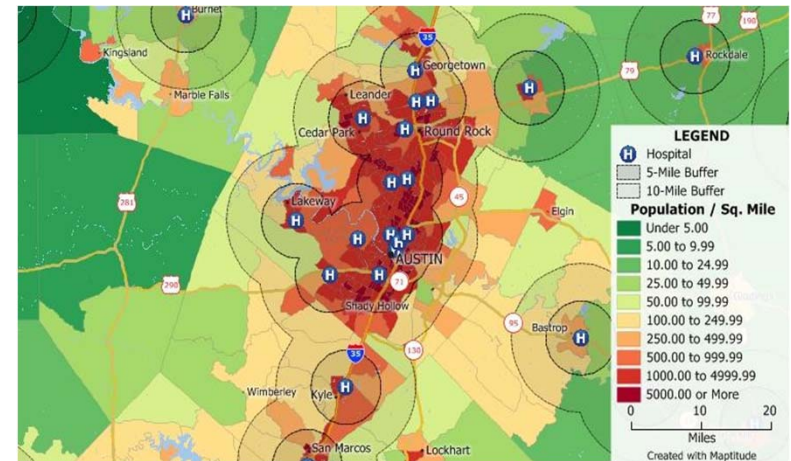
GPS listing of households facilitates enumeration monitoring/ tracking



Value of GIS mapping for data analysis, presentation & dissemination



- Digital statistical products for data dissemination
- Accessible dashboards, portals, and GIS-based platforms for storage, analysis, and presentation of spatial and non-spatial information
- Dynamic Online Interactive Live Mapping & Spatial-Analysis
- Facilitating public access to the integrated geospatial data



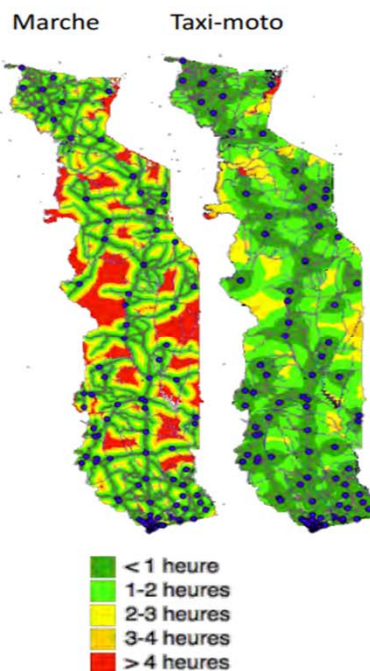
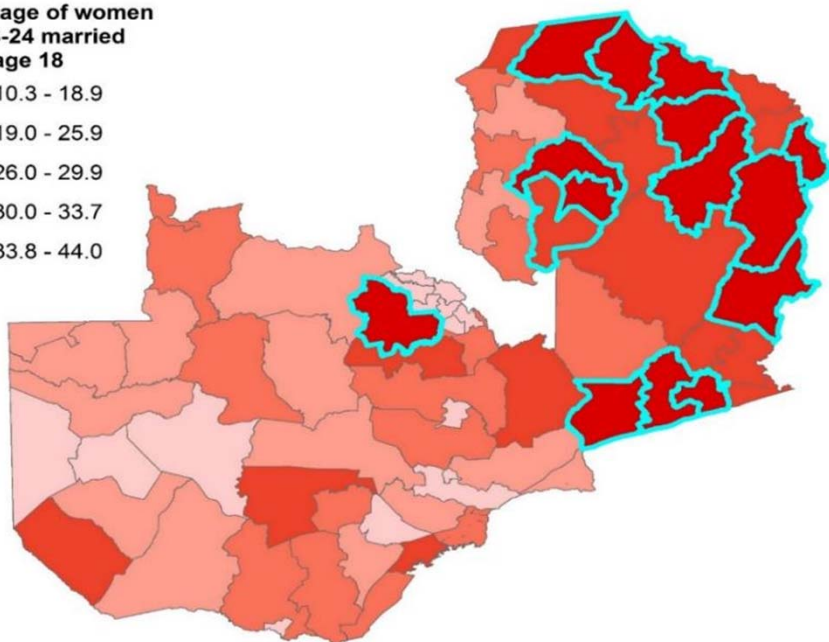
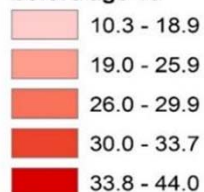
Mapping key development indicators



● Child Marriage in Zambia

● Mapping Access to Basic EmONC in Togo

Percentage of women aged 18-24 married before age 18



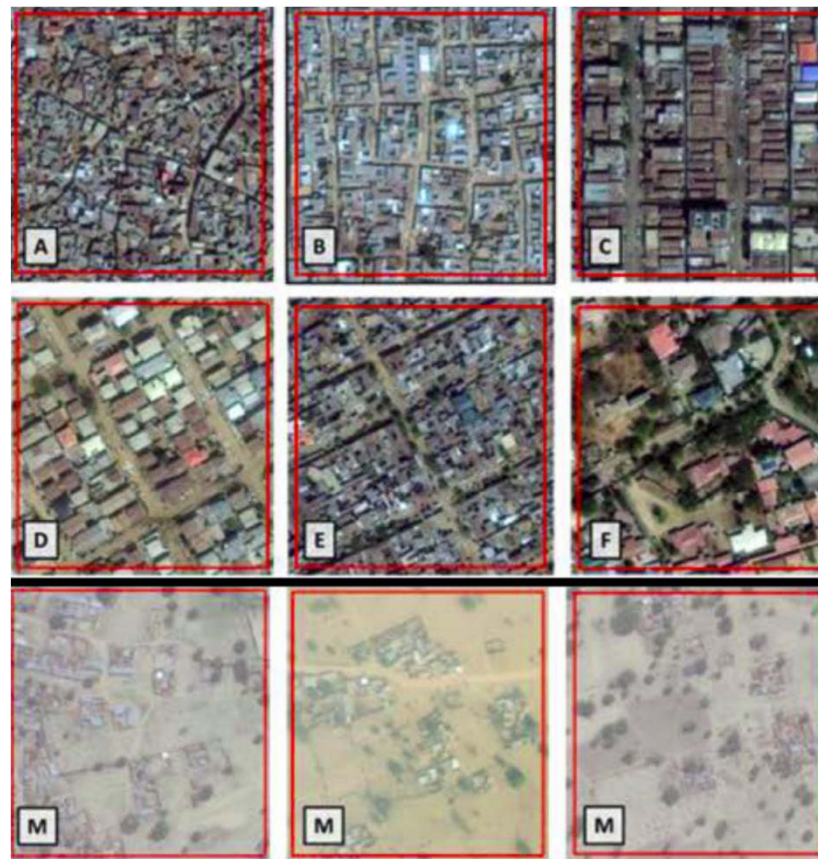
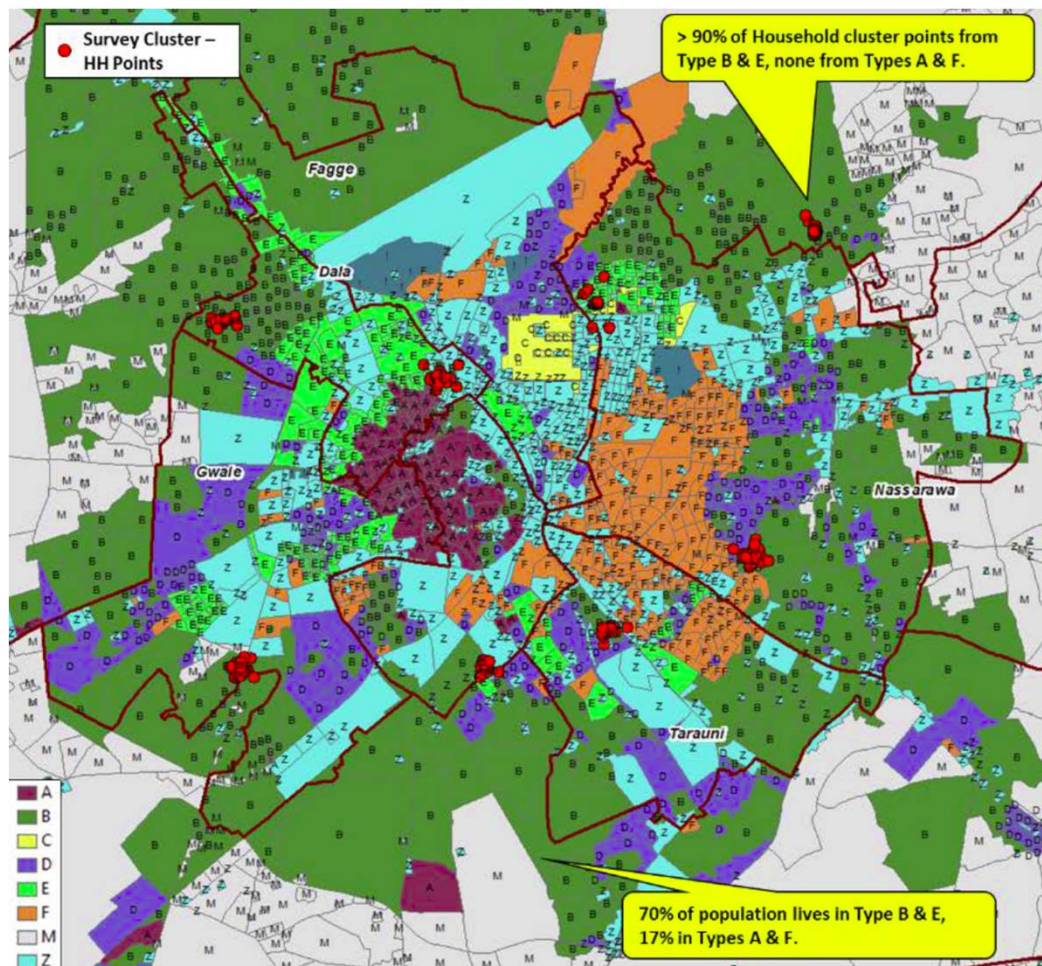
Results of accessibility cover at national scale, at 120min Comparison between scenarios

National cover of number of deliveries where pregnant women live at maximum 120min from a BEMOC :
Walk + moto vehicle: **83%**
Taxi-moto: **95%**

Percentage of cover per region:

Region	Perc. of cover Walk + motor	Perc. of cover Taxi-moto
PLATEAUX	70	94
KARA	75	91
MARITIME	92	98
CENTRALE	73	94
SAVANES	87	94
LOME_COM	99	99

Using GIS settlement layers to update census-based survey sampling frames



Source: Nigeria GIS population estimates – A joint project by ORNL, Flowminder and the Bill & Melinda Gates Foundation

UNFPA priorities for the 2020 census round



- High resolution geo-referenced census data
- Technical assistance for census cartography & GIS
- Support hybrid census, where full enumeration is not possible
- Capacity development for greater use and dissemination of georeferenced census data, including integration of census data with other geospatial datasets



Thank You

