GRID3

GEO-REFERENCED INFRASTRUCTURE AND DEMOGRAPHIC DATA FOR DEVELOPMENT

BILL & MELINDA GATES foundation

UKaid from the British people

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UNFPA

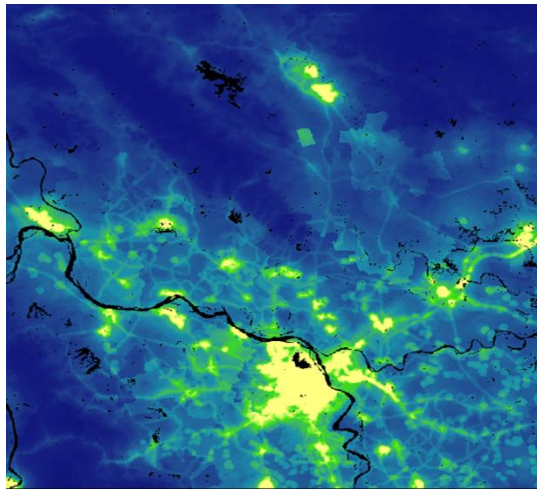
Center for International Earth Science Information Network
EARTH INSTITUTE | COLUMBIA UNIVERSITY

Our vision

> *We envision a world where data analytics puts everyone on the map, ensuring that especially the most vulnerable count.*

What we do

GRID³ provides support to low- and medium-income countries to produce, collect, analyse, integrate, disseminate, and utilise high-resolution geo-referenced data for development and humanitarian decision making.



Current Focus

GRID³ is underway within six African countries:

Nigeria

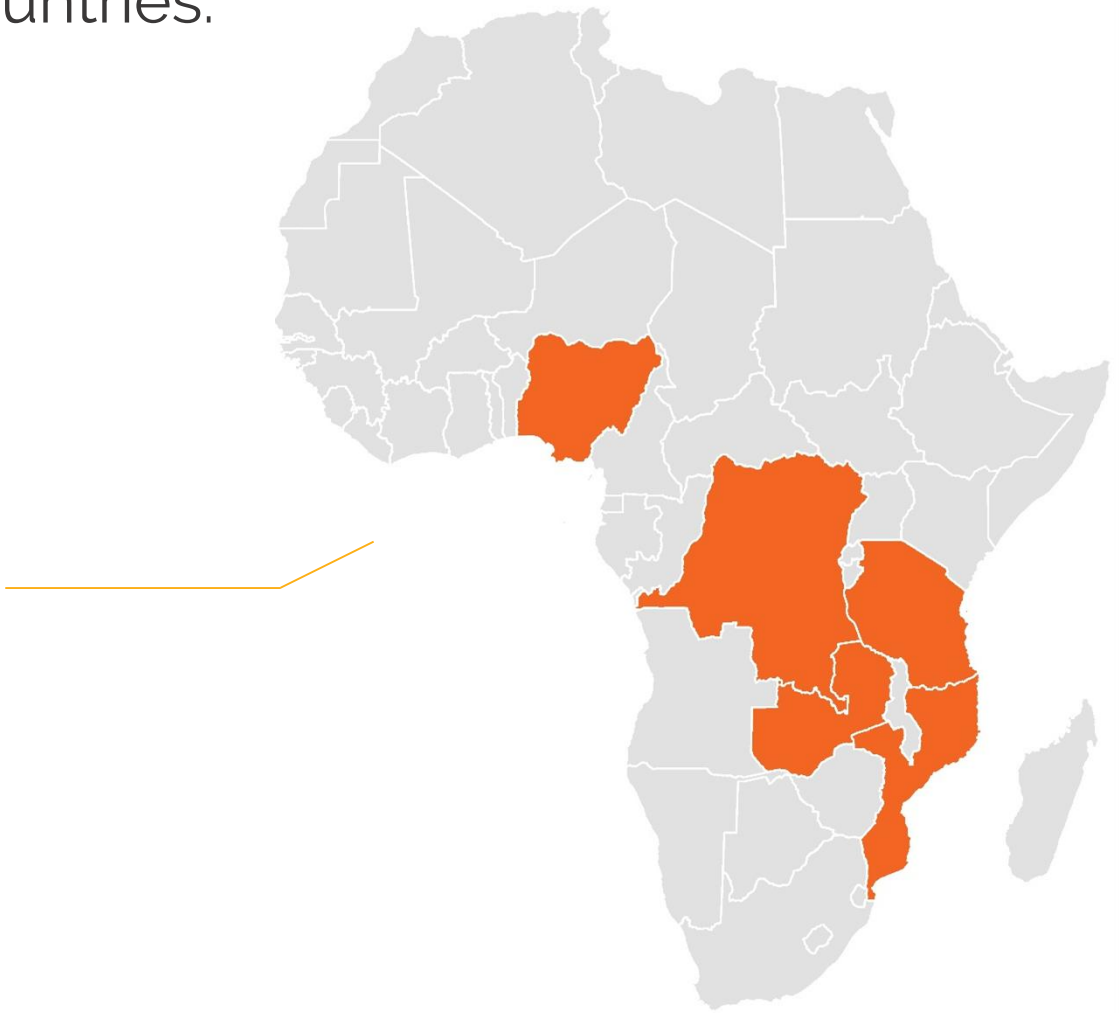
Mozambique

Zambia

Tanzania

Democratic Republic of the Congo

South Sudan



A Global Partnership

GRID3

Funding Partners

Bill & Melinda Gates foundation

UKaid from the British people

Oversight and Decision Making

Implementing Partners

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Technical Expertise and Capacity Strengthening

Coordinating/Managing Partner

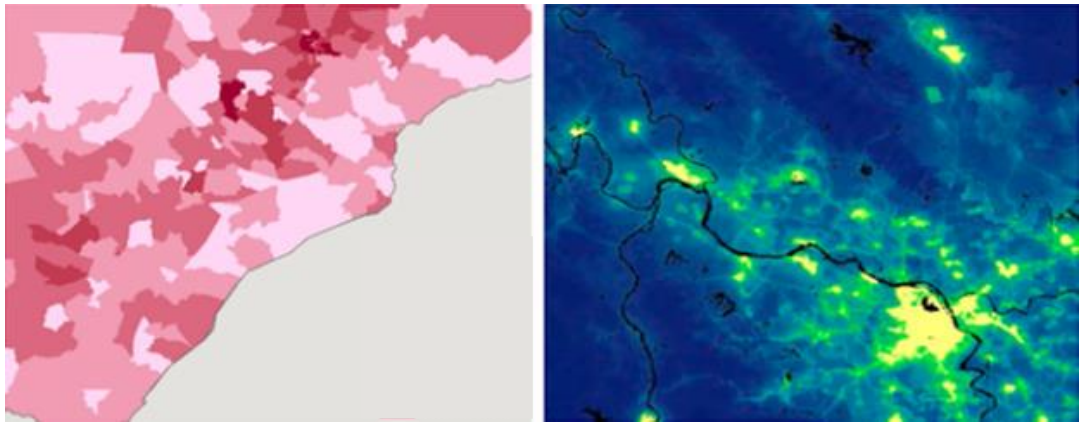
Center for International Earth Science Information Network
Earth Institute | Columbia University

Technical Support and Advocacy

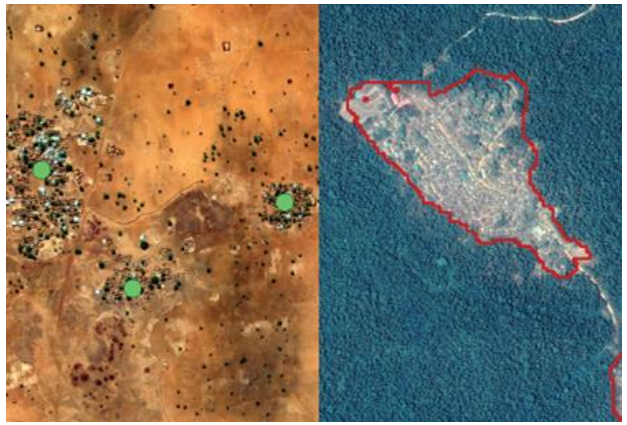
Spatial Data Production

GRID³ helps produce three spatial data layers to meet critical development needs:

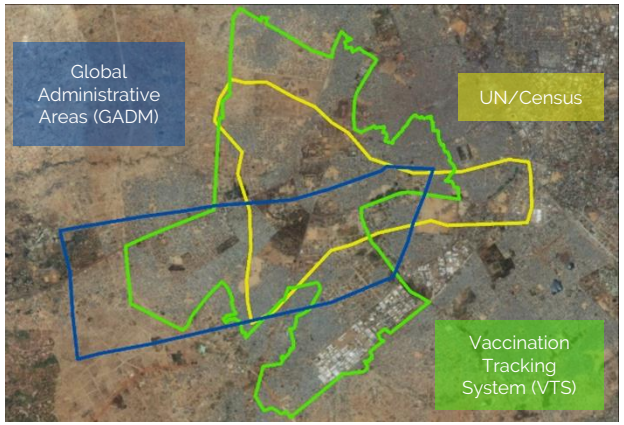
High-Resolution Population Maps



Settlement Locations

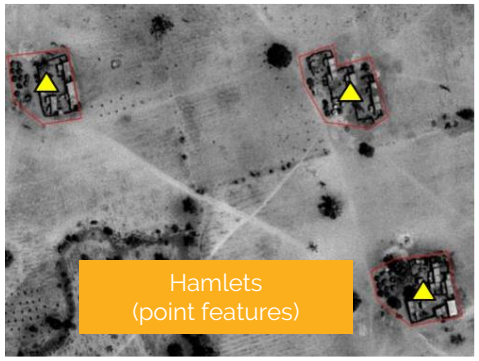


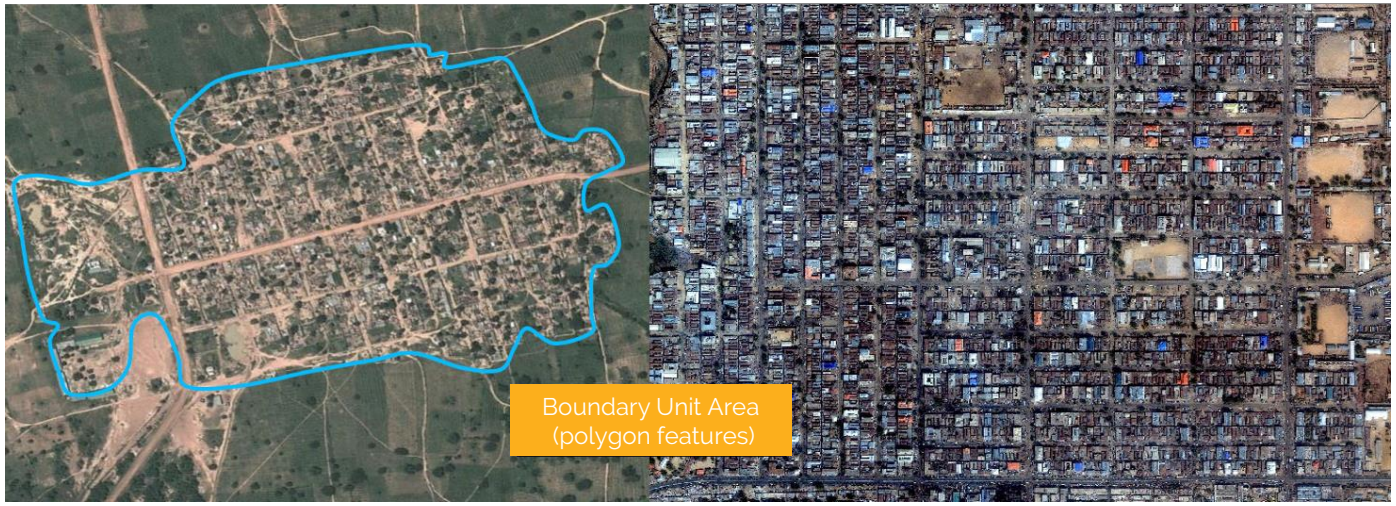
Subnational Boundaries



Settlement Locations

Comprehensive settlement locations provide a real world picture of where people live to target service delivery and development investments.





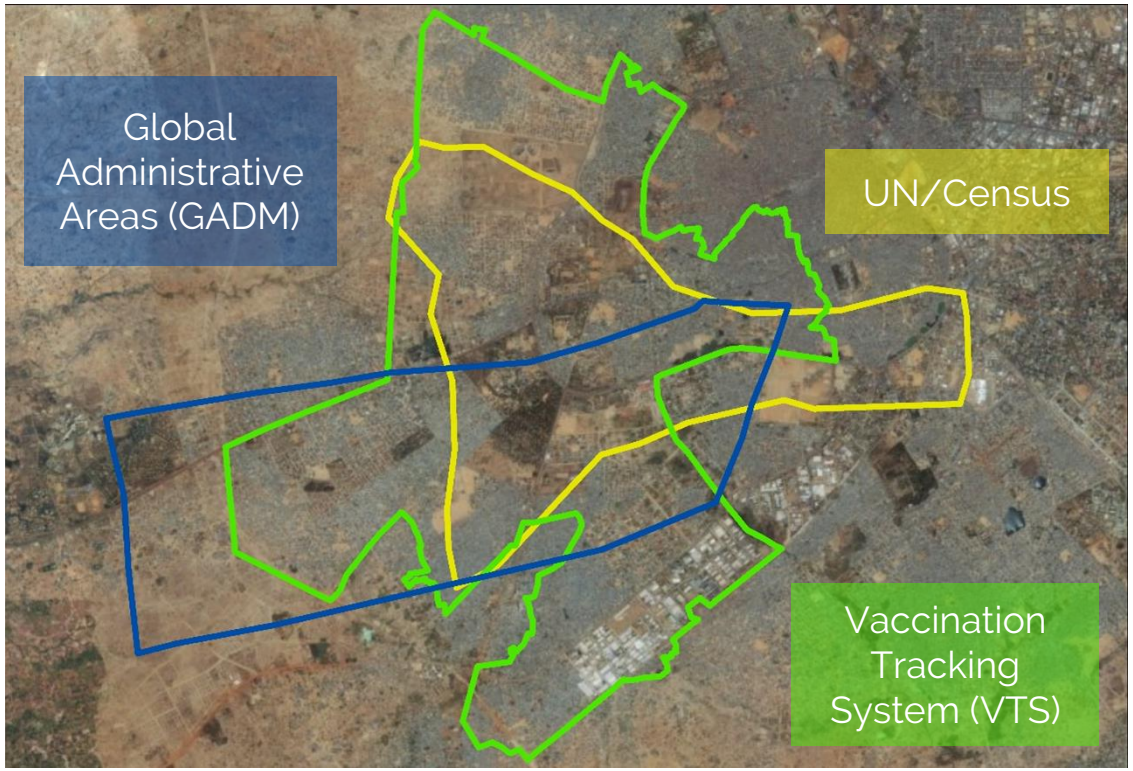
GRID³ identifies settlements and classifies urban neighborhood types using high resolution satellite imagery.

Subnational Boundaries

Validated administrative boundaries allow for efficient development processes to be planned and implemented in an evidence-based, place-based manner:

GRID³ provides the methodology to empirically access, edit, and validate sub-national administrative boundaries.

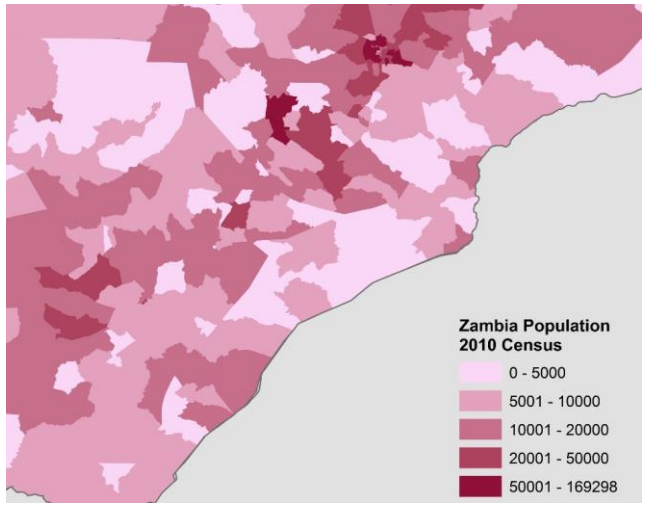
Various Boundary Sources for Gwale, Nigeria



High-Resolution Population Maps

High-resolution population estimates and demographic characteristics are fundamental to understanding and managing development processes:

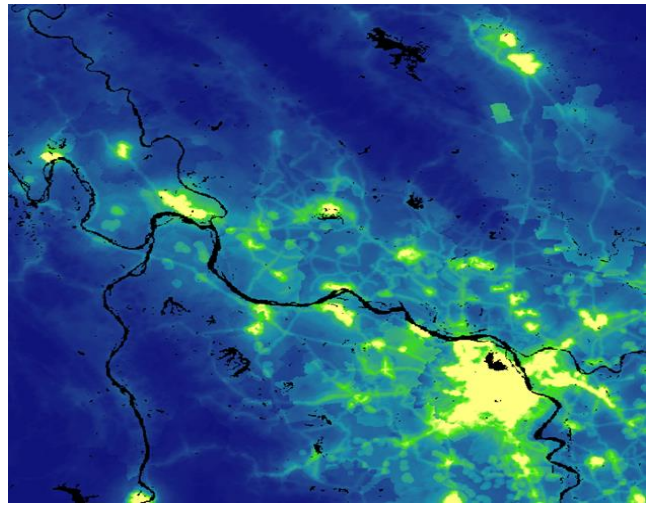
Census-Based Population Mapping



Southern Zambia, Ward level
UNFPA

Depending on needs and feasibility, we update current population maps using either census or model-based mapping.

Model-based Population Mapping



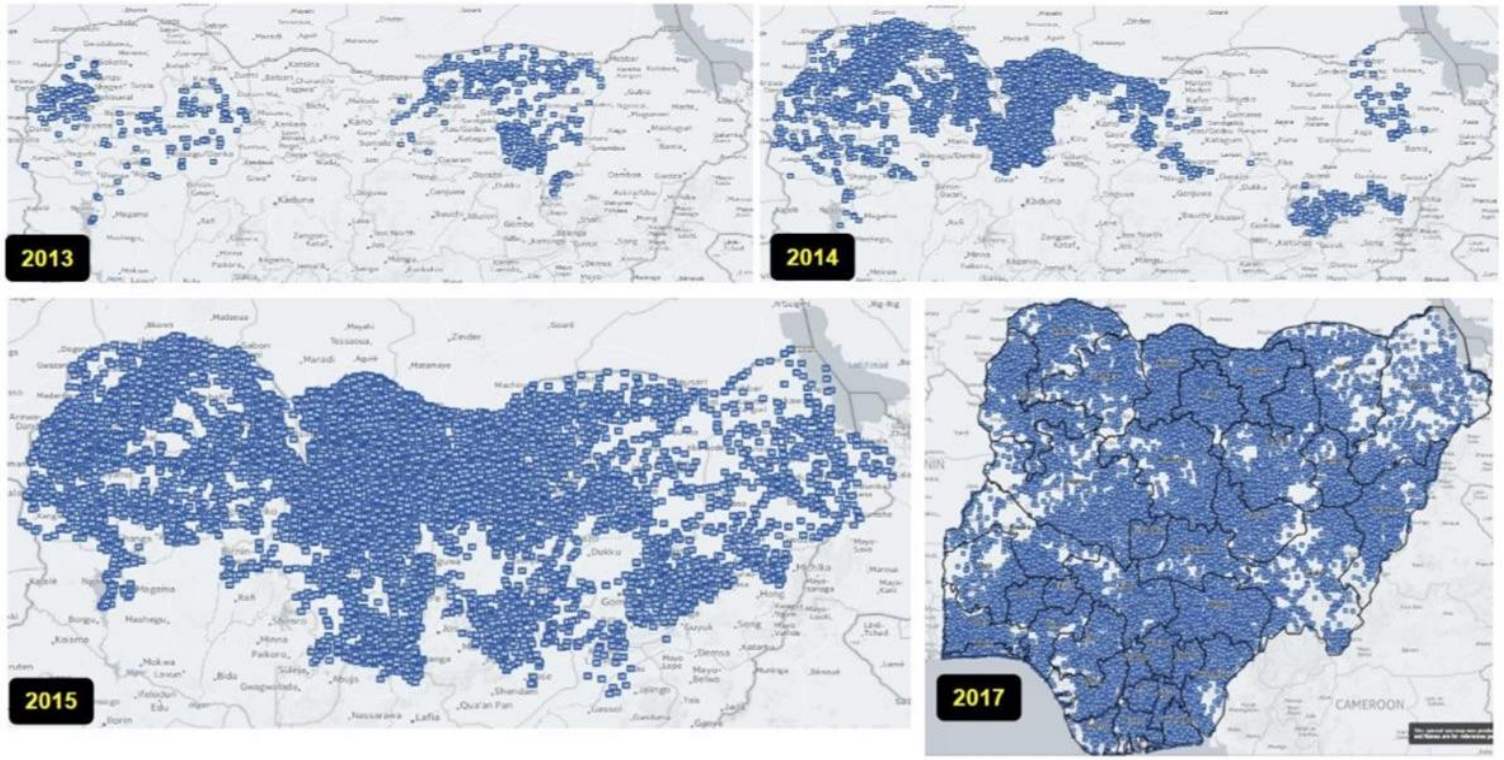
Northern Vietnam, 100-meter pixels
WorldPop/Flowminder

Other Spatial Data Improvements

GRID³ can also target and produce other spatial data layers depending on a country's current needs or desires:

Mapping infrastructure locates development investments in space. It makes possible full integration of development planning and monitoring with other spatial reference data.

Nigeria: Update of health facility locations (2013 to 2017)



GRID³ Zambia
Implementation

2010 Census of Population and Housing

- The fifth national population census that Zambia
- Completed by 30th November 2010
- Paper based

Next Census - 2020:

- Preparations under way
- Geo-referenced to household level

GRID³ Zambia: Overarching Goal

To strengthen national geospatial capacity, and promote effective coordination across government actors, donors, the private sector, academia, and NGOs for collection, processing and utilisation of such data in support of national development efforts.

GRID³ Zambia National Engagement

Key stakeholders

- Central Statistical Office Zambia (CSO)
- Ministry of National Development Planning
- Ministry of Lands
  - Surveyor General's Office
  - National Spatial Data Infrastructure(NSDI)- Committee comprises 15 Governments Departments
- University of Zambia
- UN Country team
- Development partners

Priorities for GRID³ support to Zambia

1. Support the National Spatial Data Infrastructure

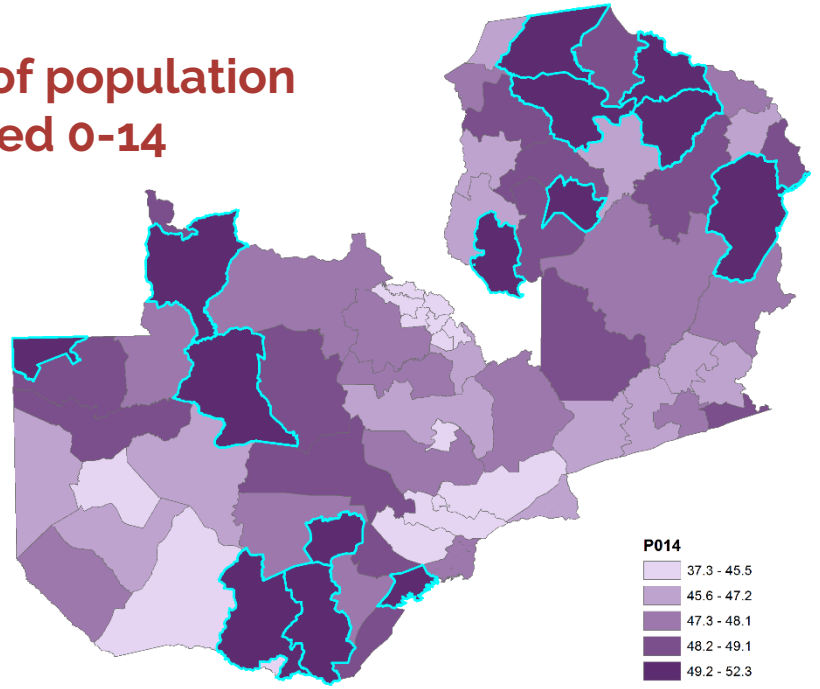
2. Population estimation in pre-enumeration phase of the 2020 census

3. Strengthening capacity to collect, manage and utilise georeferenced & geospatial census data

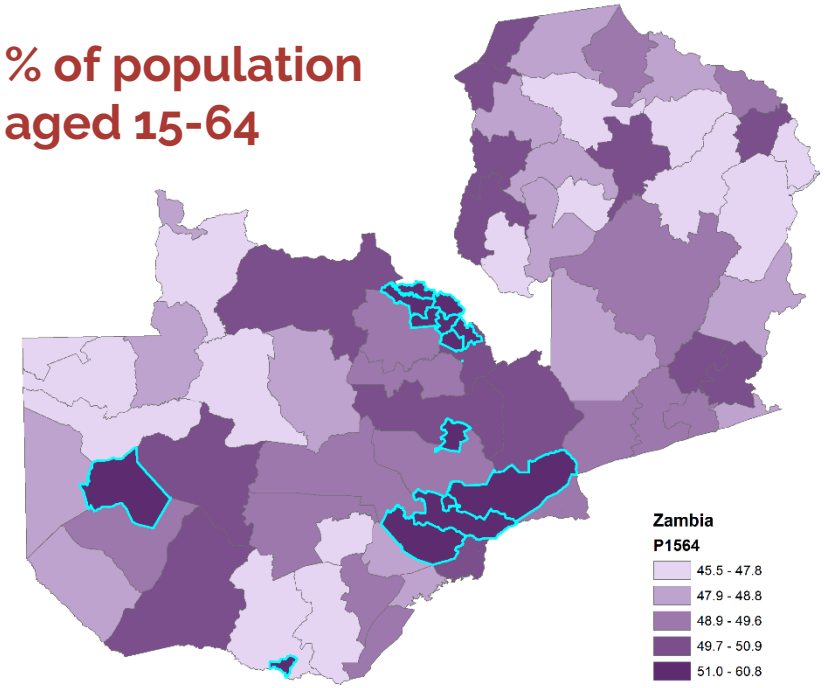
GRID³ Zambia
Expected outputs - Examples

Using 2010 census for the 7th National Development Plans

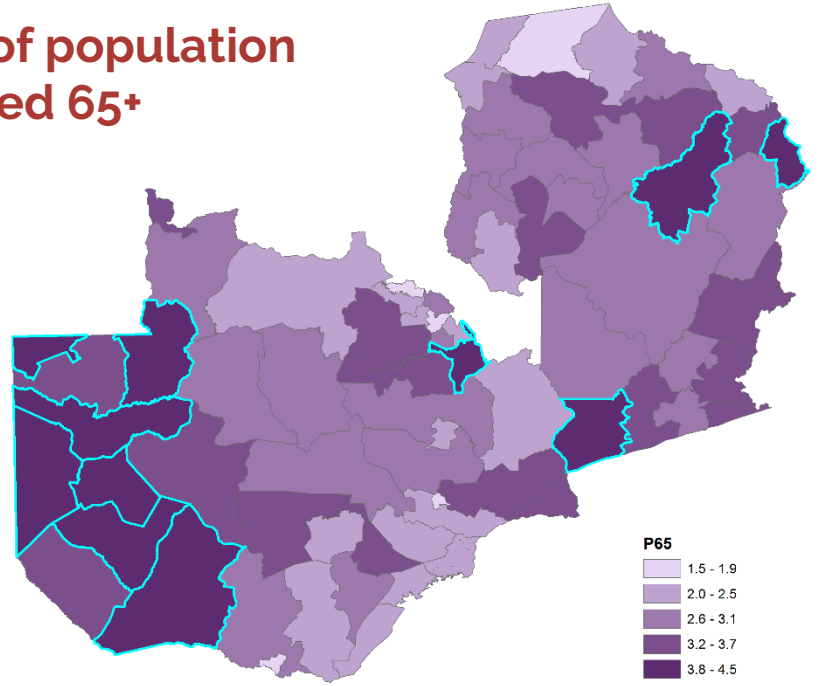
% of population aged 0-14



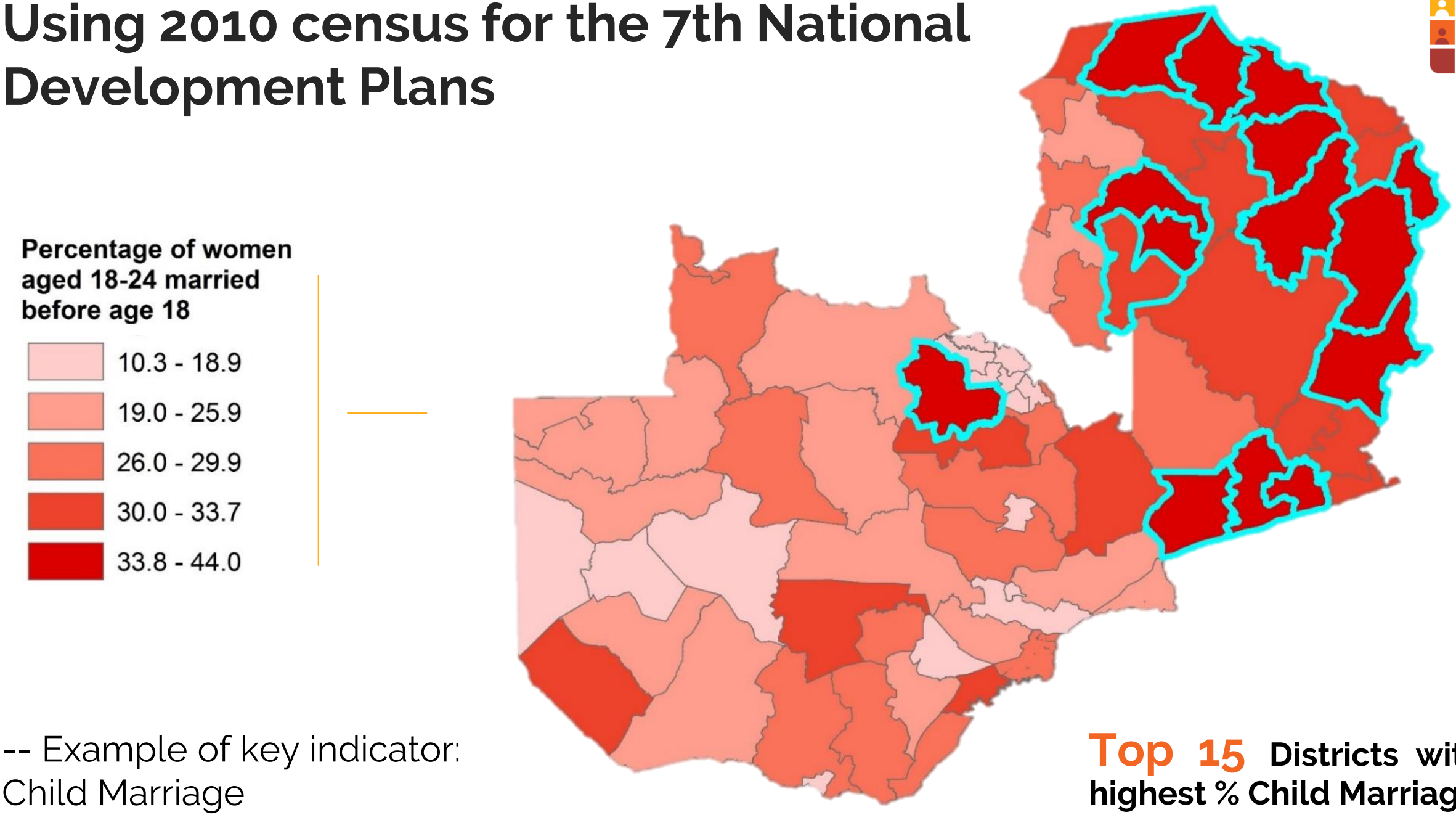
% of population aged 15-64



% of population aged 65+



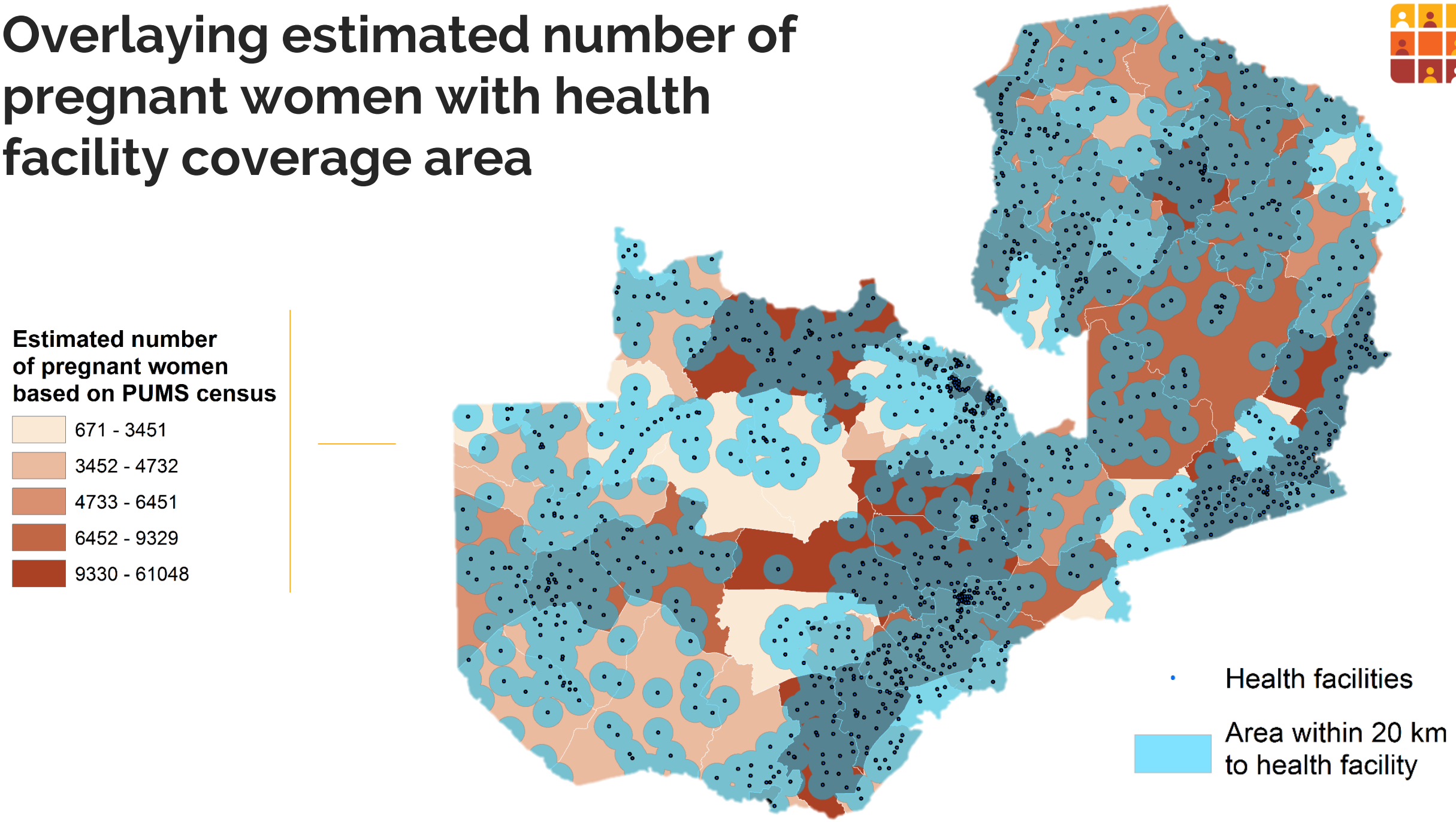
Using 2010 census for the 7th National Development Plans



-- Example of key indicator: Child Marriage

Top 15 Districts with highest % Child Marriage

Overlaying estimated number of pregnant women with health facility coverage area



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For more information, contact us: **info@grid3.org**
Or visit: **grid3.org**

For project updates and announcements, follow the partners on Twitter or #GRID3

@Flowminder, @WorldPopProject, @PopDevUNFPA, and @CIESIN