Data Innovation in Africa

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Who we are

Flowminder Foundation
Improving national data systems to meet the needs of decision makers, providing insights, data, tools and capacity to improve the lives of vulnerable people

Pioneered the use of mobile phone data for humanitarian and development applications (2008 and onwards).

Our Vision: A world in which decision makers have the data they need to transform the lives of poor and vulnerable people everywhere.

Our Mission: Improving national data systems to meet the needs of decision makers, providing insights, data, tools and capacity to improve the lives of vulnerable people.
Project Overview
Mapping a path to sustainable development for everyone
What we do

- High-resolution population estimates
- High-quality geo-referenced census
- Comprehensive settlement locations
- National engagement
- Mapping infrastructure
- Capacity strengthening
- Harmonised subnational boundaries
- Open access, high-quality data
GRID3 is currently operating in five African countries:

- South Sudan
- Nigeria
- Zambia
- Mozambique
- Democratic Republic of the Congo
Approach

GRID3 works with national level partners to develop tailor-made strategies.
Innovation in GRID3

- Focus on **needs** and overcoming challenges. Do not start with the data.
- Working in **partnership with NSOs** and government stakeholders.
- **Research & Development** to support implementation.
- **Open** sharing and use of data and tools.
Innovation in GRID3

- **Supporting the census process and the existing statistical system:**
  - Develop tools to support existing processes
  - Find modeling solutions when necessary
  - Use data from the statistical system and improve resolution with new methods and data sources
Capacity strengthening

- Generate/collect high resolution GRID3 data
- Manage, analyse and utilise GRID3 data to meet development and humanitarian needs
- Disseminate & share GRID3 data
Outputs and work processes
High-resolution census-based population maps

Country’s Enumeration Areas

High-quality geo-referenced census

Zambia Population 2010 Census
- 0 - 5000
- 5001 - 10000
- 10001 - 20000
- 20001 - 50000
- 50001 - 169298
Paths to high-resolution demographic data
High-resolution mapping of population health and welfare indicators

Integration of mobile network data

Other Spatial Data Improvements
Applications
Population at Risk

- How many pregnant women were at risk from the 2015 Nepal earthquake?
Assess needs and optimise coverage

Access to Schools

Combining geo-referenced school data with high-resolution population data permits identification of unmet needs by local administrative unit.

Legend
- Schools
Number of schools needed in 3km
- Areas meeting the targets
- 0 Areas where new schools or larger schools are needed
- 1
- 5
- 20

Number of schools needed to meet targets

(Number of people in 3km / 5000) – number of schools in 3km
Enhancing Statistical Power

Sampling Frames

More accurate sampling frames that better capture differences in household characteristics across space