SDG INDICATOR 9.1.1

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

WORLD BANK GROUP

9.1.1 Rural Access Index

Goal 9
- Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
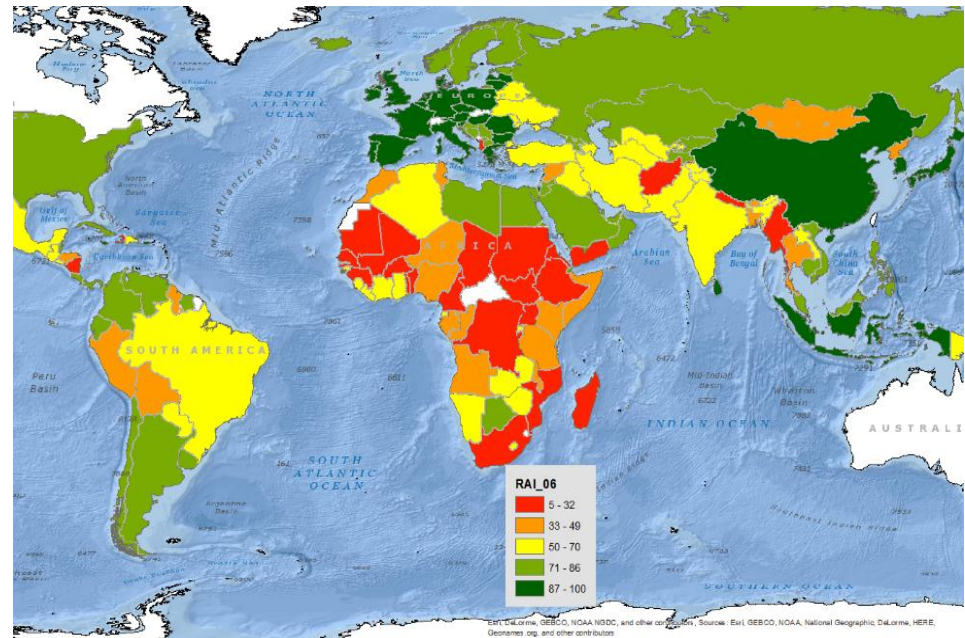
Target 9.1
- Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

Indicator 9.1.1
- Proportion of the rural population who live within 2 km of an all-season road
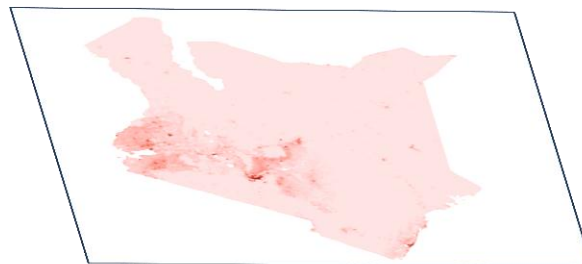
Initial work based on surveys

- First developed in 2006 by Roberts et al

- Global estimated of 68%: 1 billion people unconnected

- Based on household surveys and models

- But sample surveys are inconsistent, and concept of "all season road" tricky to implement

- Can produce national/global estimates, but samples not useful to guide national roads investment planning

RAI_06
- 5 - 32
- 33 - 49
- 50 - 70
- 71 - 86
- 87 - 100

Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors, Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, HERE, Geonames.org, and other contributors

WORLD BANK GROUP

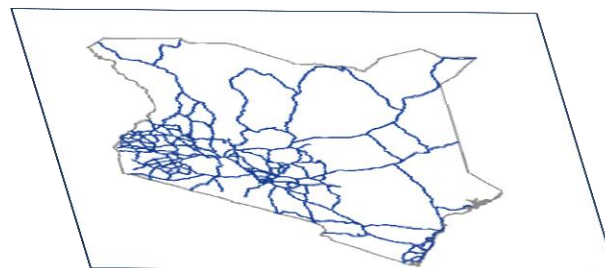# New methodology using spatial datasets

Where do rural people live?

Censuses, but new global population datasets available e.g. WorldPop, Landscan of OakRidge, GRUMP (rural population, by CEISN)
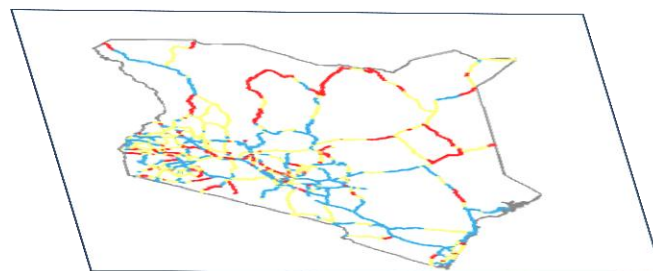
Where are roads?

Georeferenced road network: government datasets, supplemented with other mapping sources e.g. Openstreetmap.
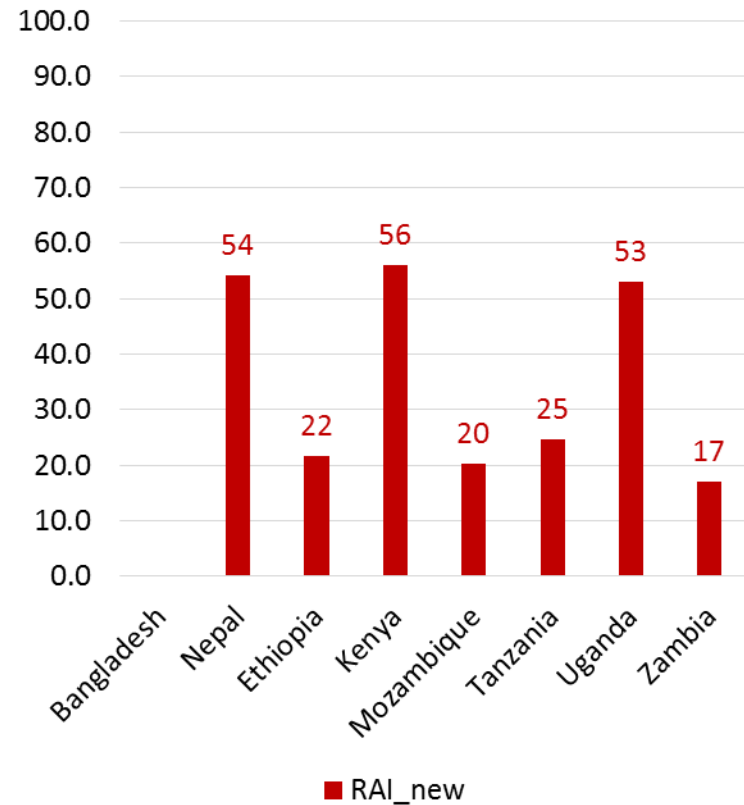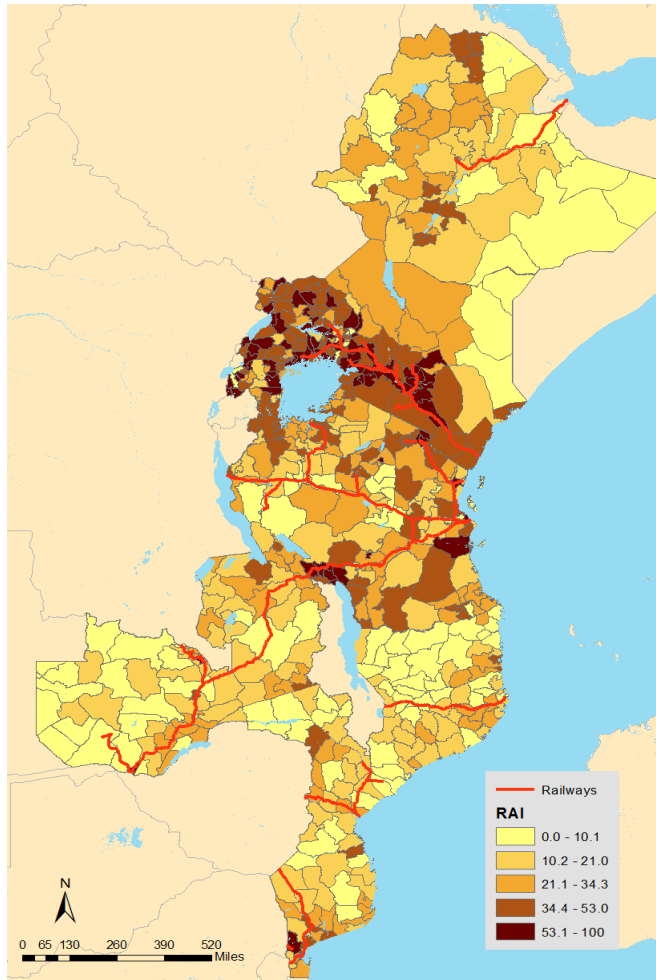
Are they in good condition?

Data available, but fragmented: road asset management systems, road inventory surveys. Weakest area, possible to supplement with satellite data, other tools e.g. RoadLab app.

Combine these datasets with GIS

WORLD BANK GROUP

Results from 8 pilot countries

Provides national and sub-national estimates: very important for planning road investments

Next Steps

- Publish detailed report assessing data sources, methodology, robustness, correlation with poverty, etc.

- Invite NSOs, other country partners, and international community to scrutinize the approach

- Apply the method to more countries (target is 30)

Africa	LAC	ECA	South Asia	East Asia	MENA
Burundi	Peru	Azerbaijan	Afghanistan	Vietnam	Morocco
Cameroon	Argentina	Moldova	Sri Lanka	Lao PDR	
Chad	Colombia	Armenia	Bhutan		
Ghana	Bolivia	Georgia			
Liberia	Paraguay	Macedonia, FYR			
Madagascar	Haiti	Kyrgyz Republic			
Malawi	Ecuador	Tajikistan			
Nigeria	Honduras				
Rwanda	Nicaragua				
Sierra Leone	Mexico				
Cote d'Ivoire					