



ReCAP
Research for Community Access Partnership



The First mile: connecting rural communities to regional and urban markets

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EST Forum 2018, Ulaanbaatar

What is the First Mile?

- The primary transport segment between rural farms and markets
- The most inaccessible segment of the small-holder agricultural value chain in low income countries due to poor infrastructure and transport service provision
- First stage of crop movement, from field to roadside, or to the local market is the most expensive per tonne/km





What is the Last Mile?

- Bringing essential services to the poorest people, whether in remote rural areas or in urban slums
- Lack of governmental capacity and resources prevents effective public provision of water, power, education, and health services
- The people and places that are under-served and excluded, where development needs are greatest and where resources are most scarce



UKAid Funded First Mile Project

- AfCAP commissioned TRL and IFRTD to undertake research into the:
Evaluation of the cost-beneficial improvement of first mile access on small-scale farming and agricultural marketing
- Aim - to investigate the total economic benefits of improving initial access from the farm gate to the market, including impacts on crop deterioration and transport costs



- Investigate the cost-beneficial improvement of 'First Mile' access and the transport services required to move produce from the farm to nearest road or collection point
- Focus on all-season access and the income earning potential of small-scale farmers
- It explores the effect of road condition on crop deterioration and post-harvest losses



Focus of the First Mile Research

- Focus: challenges in the primary transport segment (between the farm and an all-season access road)
- Initial stages of crop movement that are the most expensive (tonne/km)
- First mile has the biggest transport constraints in terms of post-harvest losses and agricultural marketing
- Initial movements on local paths and tracks involving NMTs and IMTs



- Small-holder agriculture provides one of the key pathways to poverty reduction through food security for people living in rural areas
- Agriculture in SSA employs 62% of the population and generates 27% of the GDP of these countries – it is not something we can ignore!

- Role of different forms of transport in the small scale agricultural environment
- Low transport costs and crop wastage for French beans in Kenya
- High first mile transport costs and crop losses in the pineapple sector of Tanzania
- Engineering assessment of the road condition along the primary transport segment



Potential Outcomes

- Identification of elements of the transport system that can be improved in order to unlock growth in the smallholder value chain sector
- Guidelines and advice for road planners and engineers on the best location for access improvements and type of interventions ‘beyond the road’
- Quantification of the economic benefits of better initial access
- A framework to provide advice to farmers and the authorities on the best pattern of transport
- Better understanding of the role of different forms of transport in the small scale agricultural environment



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The Rural Access Index: Consolidation, Revision and Uptake

Dr Annabel Bradbury, ReCAP Deputy Team Leader



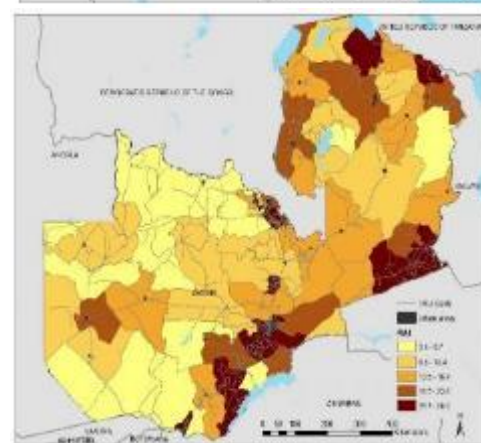
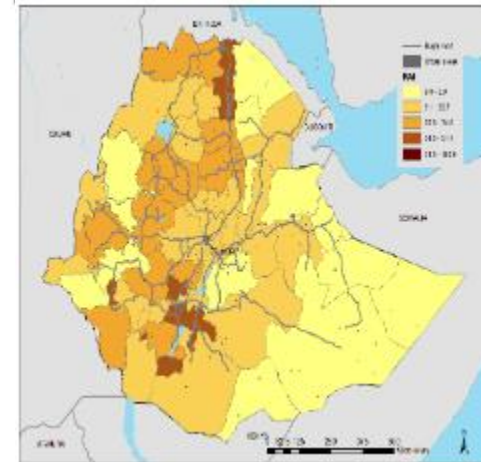
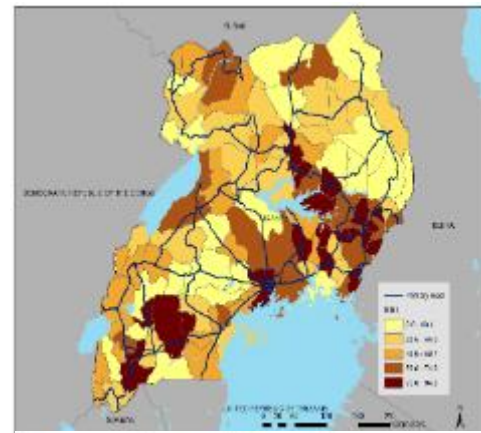
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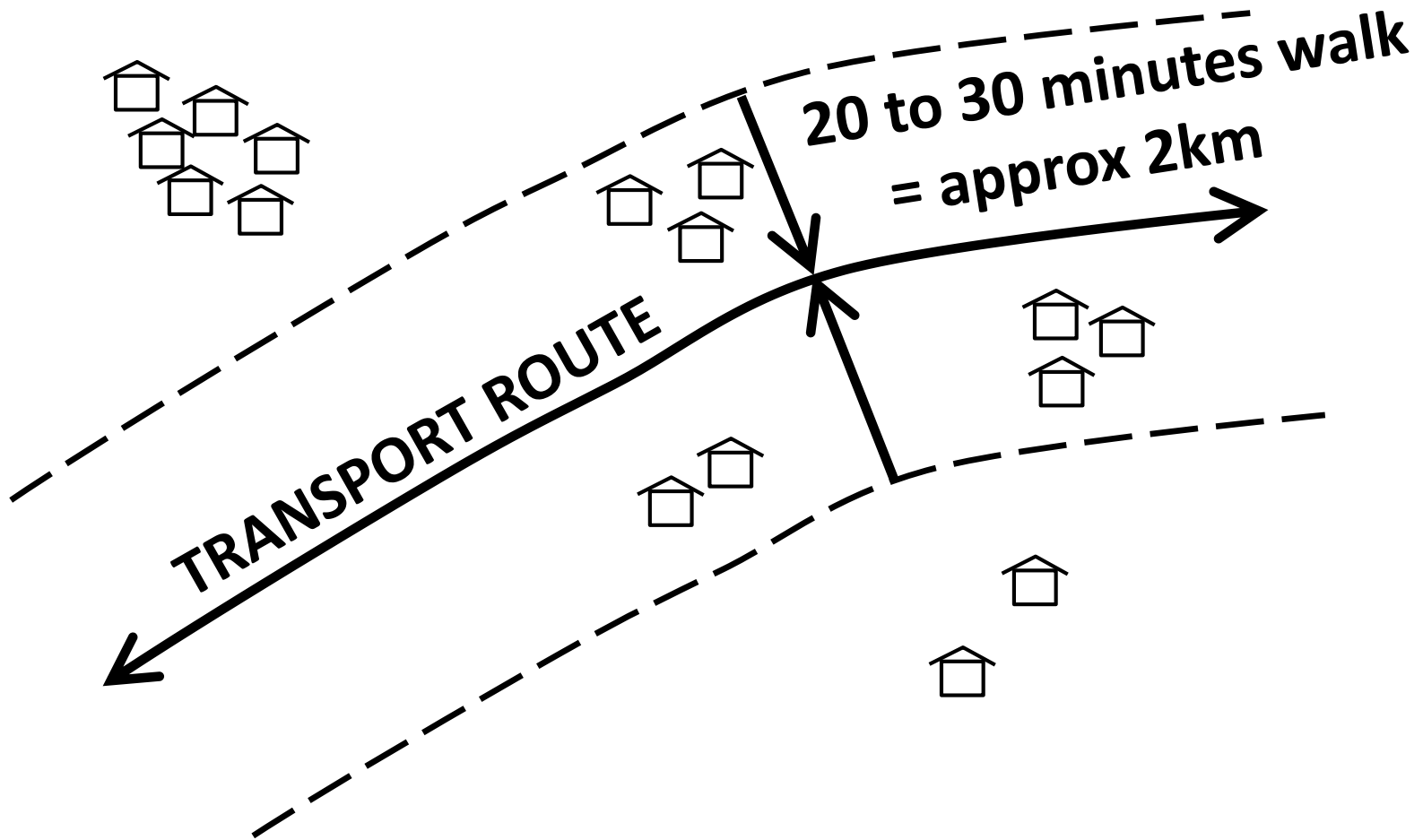
Rural Access Index (RAI) Task Group 1: Status Review

- 2006 RAI definition:
'Percentage of rural people who live within 2 km of an all season road as a proportion of the total rural population'
- 2015-16: methodology using spatial data to measure the rural access index
 - High resolution population distribution data
 - Detailed road condition
 - Online open data platform





The Rural Access Index (RAI)



SDG 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.

SDG Indicator 9.1.1

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

World Bank is the “custodian” of SDG Indicator 9.1.1

Status of RAI and SDG 9.1.1

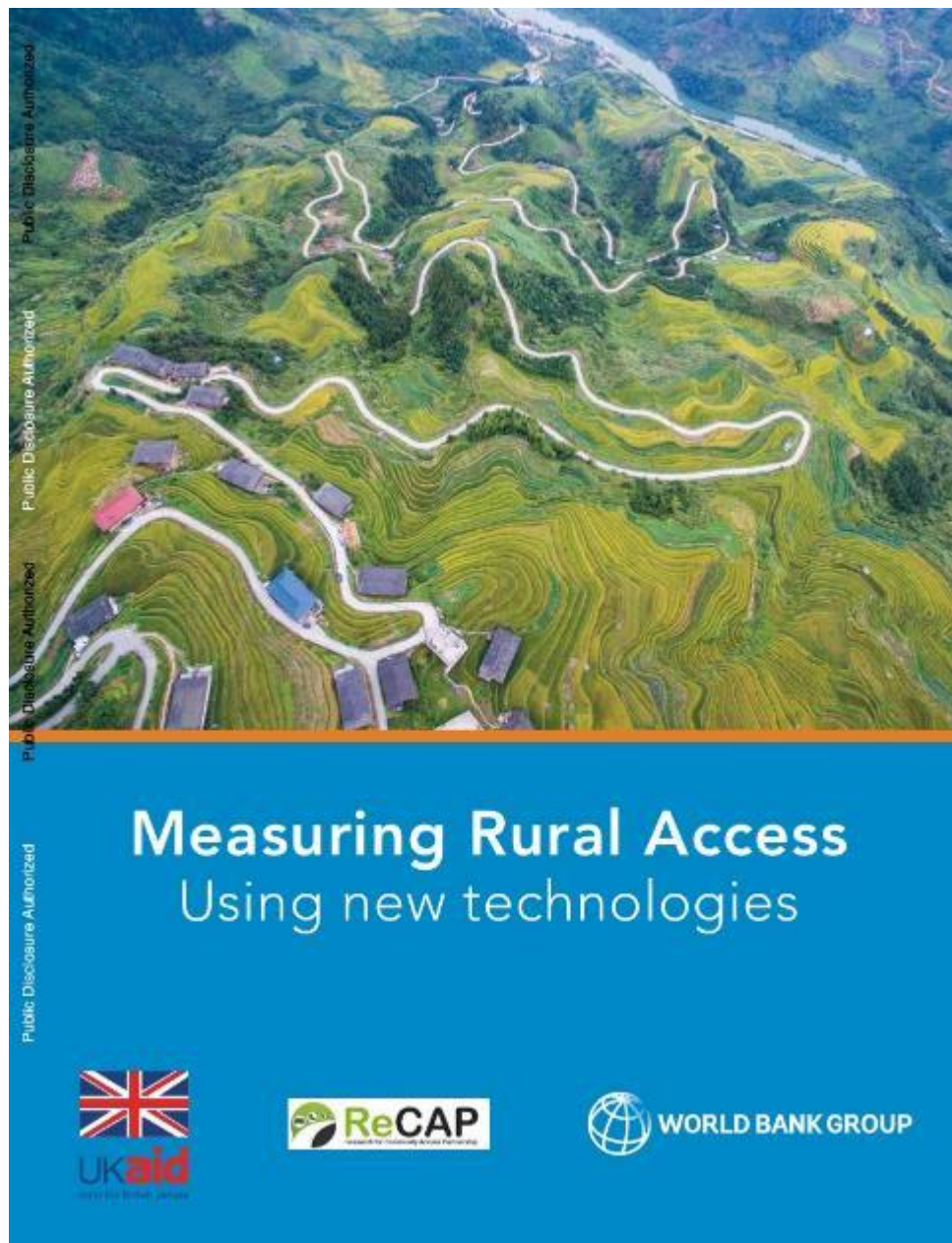
- SDG 9.1.1 is currently a Tier III indicator:
 - Tier III: No internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested.
- Aspiration to progress to Tier II, and ultimately Tier I:
 - Tier II: Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.
 - Tier I: Indicator is conceptually clear, has an internationally established methodology and standards are available, and data regularly produced by at least 50% of countries

2015/2016

UKAid funding,
through ReCAP, to
update method of
measuring the RAI

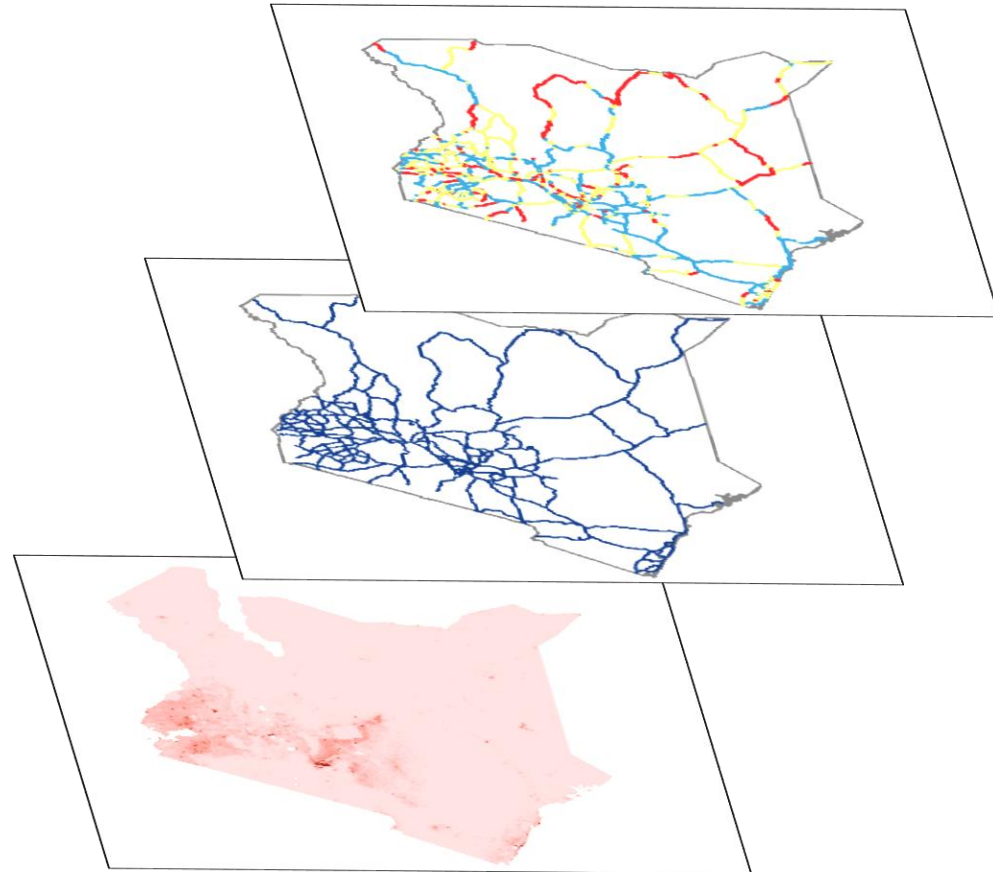
Pilot measurements
in 8 ReCAP countries

Support moving
SDG Indicator 9.1.1
to Tier II/Tier I



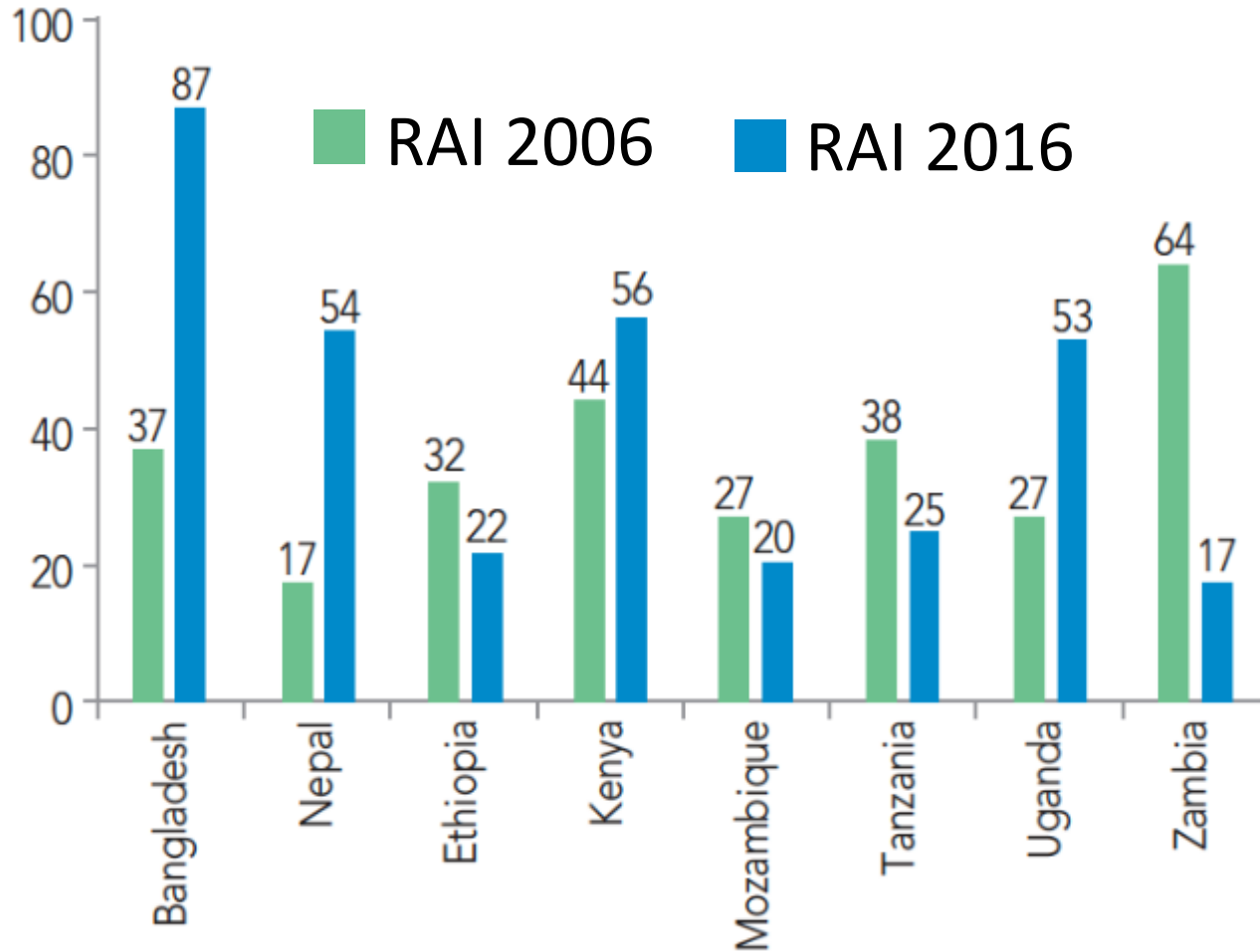
Taking advantage of available (and sustainable) spatial data, RAI is calculated by spatial software

- Where do people live?
 - Global population data are available
- Where does the road network exist?
 - Georeferenced road network (government-owned, open data)
- In what condition?
 - Data exist, though often fragmented
 - Relevant issues: How to maintain road asset management system?
- Overlapping the above, the RAI is estimated by spatial software



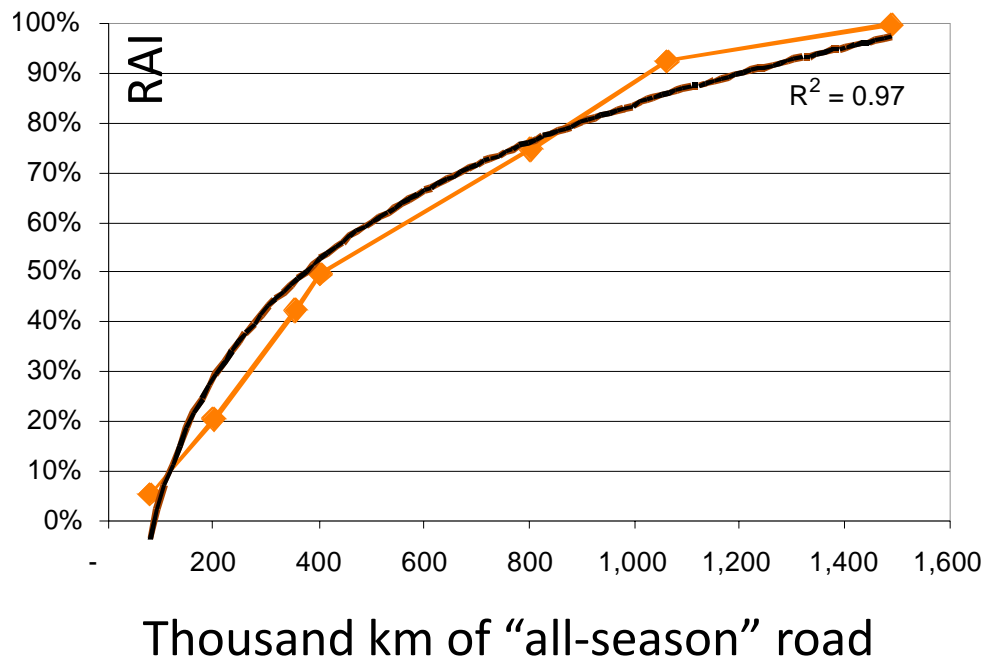


Comparison of 2006 and 2016 results



Financing of infrastructure & maintenance

- What level of RAI can be achieved within realistic infrastructure spending?
- What level of RAI can be sustained by future road maintenance finance?
- Maximum achievable RAI is country specific



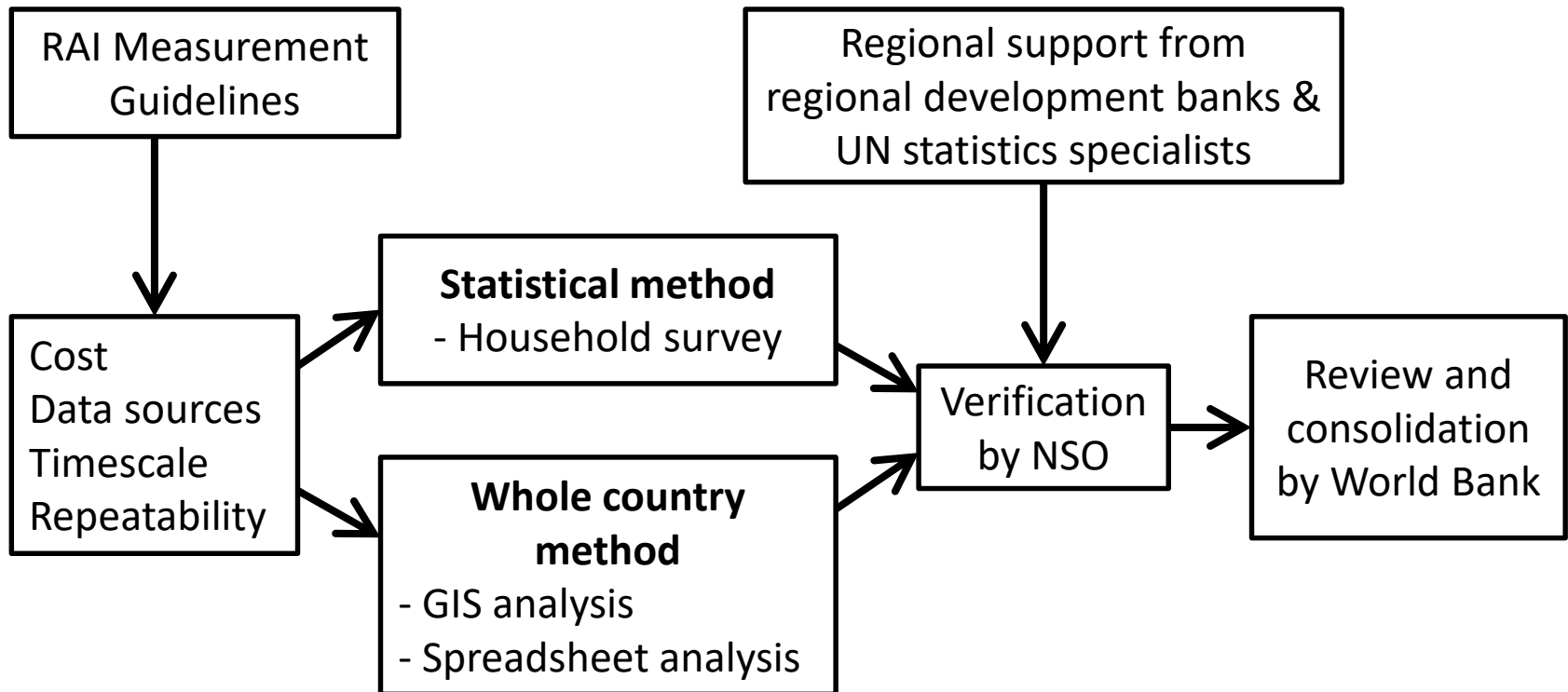
Rural Access Index – Task Group 2

- Objective: Scale-up implementation of the RAI across UN member countries and advance SDG 9.1.1 from Tier III to Tier II
- Aim: Develop, propose, and agree on harmonised approach to data collection and measurement of RAI
- Approach: Revise the measurement framework to:
 - Meet international standards
 - Provide a clear framework for data validation
 - Ensure consistent and rigorous data collection
- Task Group 2: Trial proposed measurement framework in ~4 ReCAP countries

Rural Access Index – Task Group 3

- Application of RAI and scale up to all ReCAP countries
- Process for implementing the measurement framework by at least 30 ReCAP and non-ReCAP countries
- Contingent on firm commitment of funding and commitment to enable implementation
- Foundations for delivering a longer term programme in 50% of UN countries by 2025

Overview of RAI Measurement Methodology





Summary of Intended Outcomes

- RAI database of all UN countries
- RAI measurement methodology guidelines
- RAI web page with access to database and guidelines
- Achieve Tier II and ultimately Tier I target for SDG indicator 9.1.1
- Knowledge exchange on RAI data among MDBs, United Nations and National Statistics Offices



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Thank you for your attention

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