BASELINE STUDY ON RURAL TRANSPORT SERVICE INDICATORS KIDABAGA-BOMA LA NG’OMBE ROAD, KILOLO DISTRICT, TANZANIA

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PRESENTATION OUTLINE

- Background
- Objective
- Methodology
- Main RTS Issues
- Key Findings
The Rural Transport Service indicators (RTSi) survey aims at contributing to the development of appropriate rural transport services indicators to enable better understanding of how rural transport services are performing.

To be able to gain from investments in roads, people need to be within a reasonable distance of a motorable road. This is the basis upon which the Rural Access Index (RAI) was formulated as an access measurement tool on the basis of the population living within 2 km of an all-season road. The population beyond a 2 km catchment of an all weather road is considered to have poor access.

However, looking at rural access purely from a road proximity point of view may hide the fact that apart from the road, there needs to be reliable, affordable and safe transport services.
BACKGROUND TO RTSi/2

- The short survey in Kidabagala-Boma la Ng’ombe road Kilolo District aims at expanding on previous RTSi pilot work that was supported by AFCAP (phase 1).

- Previous work was carried out in Tanzania, Kenya and Cameroon and focussed on understanding Rural Transport Services from four perspectives, namely
  - Rural transport users perspective;
  - Rural transport operators perspective;
  - Transport services regulators’ perspective;
  - Perspective from people responsible for key development sectors

- The Kidabagala-Boma la Ng’ombe Road survey was carried out in the month of March 2015 with a view of narrowing the scope of data collection to a few attributes that can help quickly describe rural transport services.
OBJECTIVES OF THE RTSi STUDY OF KIDABAGA-BOMA LA NG’OMBE ROAD

The study had two main objectives:

1. To **collect primary data** on rural transport services along the Kidabaga-Boma la Ng’ombe road.

2. To **initiate engagement process** with the relevant government agencies in Tanzania to agree on the key baseline data that would be useful to collect, and especially data that can be embedded with the **Rural Access Index** which the Government of Tanzania has been trying to use with modifications.

*At this stage, we will not attempt to derive an indicator, but illustrative data that can be debated by stakeholders*
MAP SHOWING KIDABAGA-BOMA NGOMBE ROAD
The methodology used was built around a key question: what baseline data is the most important in describing and assigning key performance characteristics of the transport services operating along a road?

To determine the answer to this question, the rural transport services characteristics developed in RTSi phase 1 were circulated to contact persons in relevant agencies in Tanzania. They were asked to select the key ones that should be the focus of the Kidabaga-Boma la Ngombe survey. The following were selected
METHODOLOGY/2

1. **Passenger fares** (Cost/Passenger Km) for each mode. Different modes have different fares (passenger km).

   - **Small freight tariffs** (20-50Kg) for each mode: Rural traders and farmers rely heavily on rural transport services. A typical consignment would normally be in the range of 20-50kgs

   - **Gender and age preferences:** Gender and age can be determinants of mode selection.

2. **Modal composition of traffic along a road:** Rural roads have varied transport modes in use, conventional and non-conventional, motorised and non motorised.
3. **Frequency of services:** per mode and trip distances for one way trip. Number of trips are available per day per mode together with typical trip distances.

4. **Number of competing services:** Competitive environment has a bearing on fares and quality of services.

5. **Affordability:** A qualitative measure from the users perspective. Can also be related to income levels.

6. **Reliability:** Consistency and predictability of services.

7. **Accessibility:** Distance, terrain and connectivity considerations for people to access a service on the road under consideration.

8. **Assessment of catchment population** along the road and the hinterland (area of service).
Three types of interviews were conducted as below. For each interview type, 4 locations were selected along the road.

1. Transport service users focusing (Total 45; 15F, 30M)
   - To establish passenger and freight fares for various modes for a particular distance.
   - Frequency of service/mode both in normal and days of difficulties (rainy)
   - Perceived changes in modes available along the road in the last 2-3 years
   - Perceived changes in number of journeys made in the last 2-3 years
   - A ranking of the most important concerns in regard to rural transport services
INTERVIEWS/2

2. Operators of various transport services (Total 42 all male, 19 owners, 23 owner/operators); The focus was on:
   – Road condition.
   – Market demand.
   – Back-up financial and technical services for RTS.
   – Competition and cooperation in service provision;
   – Safety and security.
INTERVIEWS/2

- Key informant interviews (4 VL & 1 dist. Eng) focusing on:
  - Insights into catchment area of the road;
  - Population of villages along the road;
  - Social and economic activities that are serviced by various modes.
  - Key transport services challenges and ways of solving them
• Kidabanga-Boma la Ng’ombe road passes through a hilly hinterland whose main economic activities are agriculture and livestock keeping. Crops grown include maize, sunflowers, beans, peas, vegetables and tomatoes.

• The road is a 20km district road branching off from the Kilolo-Idete Regional road (54km from Iringa Town).

• Traffic composition consists of pedestrians, bicycles, motorcycles, small cars, one daily bus, pickups and trucks.

• There is one daily Bus service
ONE DAY TRAFFIC COUNT

Traffic Volume Based on One Day Count (Kidabaga)

- Pedestrians: 164
- Handcrafts: 0
- Animal Drawn Cart: 0
- Bicycles: 3
- Motorcycles: 7
- Small Cars: 2
- Mini-Bus: 3
- Pick-ups & Van Z: 10

Traffic Volume Based on One Day Count (Boma la Ngombe)

- Pedestrians: 72
- Handcrafts: 0
- Animal Drawn Cart: 12
- Bicycles: 58
- Motorcycles: 3
- Small Cars: 0
- Mini-Bus: 1
- Pick-ups & Van Z: 0
Passenger fare varies between modes per passenger km

- Motorcycle are the most expensive
- Bus and trucks charge more or less similar price

<table>
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<tr>
<th>RTS Mode</th>
<th>Origin/Destination</th>
<th>Bomalang'ombe</th>
<th>Kidabaga</th>
<th>Kilolo</th>
<th>Iringa</th>
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</table>
Freight Cost/kg - Unaccompanied

- Freight cost per kg varies by mode
- Motorcycle are the most expensive followed by trucks and buses
- Trucks come for dedicated freight. Bus core business is passengers. Freight supplements income
Freight Cost – Cont...

- Most of the produce are available during rainy season i.e. green maize, pears, timber

- During rainy season a truck could be stuck for a week or so

- Uncertainty of the journey could be a reason to higher costs over bus
Service Frequency & Roadside Waiting Time

Service frequency for RTS varies on day types (normal, busy & disrupted)

- On Kidabaga – Bomalang’ombe
  Bus and Trucks are completely cut off during rainy days

- The frequency of service is relatively higher for motorcycles than other modes

<table>
<thead>
<tr>
<th>RTS Mode</th>
<th>Av. No. of Service frequency of travel per day</th>
<th>Average roadside waiting time (Fig. in Minutes)</th>
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<tbody>
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<td>Normal days</td>
<td>Special /Busy days</td>
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<td>Overall Average</td>
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SUMMARY OF KEY RTSi issues

- Key RTS issues from point view of users
  - Reliability of service
  - Frequency of service
  - Passenger fare
  - Journey Time
  - Freight Cost for Accompanied Freight
  - Safety
- Key issues for operators are:
  - Infrastructure
    - Unpredictability of business volumes
Summary of key issues

- From key informants
  - Poor transport during rainy period when there are many products to be transported
  - Safety in motorcycles operations
  - Poor access to areas with poor terrain
THANK YOU VERY MUCH FOR YOUR ATTENTION