
AFCAP

COMMUNITY ENGAGEMENT IN THE MANAGEMENT OF FIRST MILE INFRASTRUCTURE IN KENYA

**Presented by Grace Nyambura Wahome
ARRB Symposium, Cairns, Australia**

25-27 November 2013

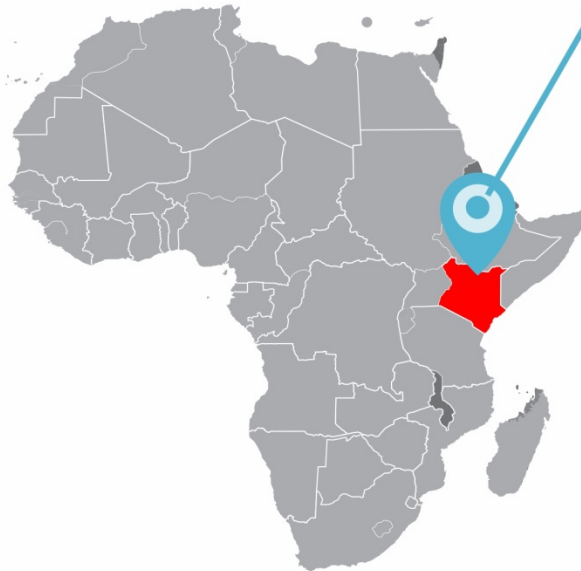


Kenya: Some Country Statistics

infographic by: G.N & AUR

KENYA

SOME COUNTRY STATISTICS



THE BULK OF THE ROAD NETWORK IN KENYA IS MADE OF RURAL ROADS MANY OF WHICH ARE UNCLASSIFIED AND ARE POORLY FUNDED



581,309 km²



44 million

Roads are Predominant mode of transport carrying about **93%** of all cargo and passenger traffic in the country.



16,544 km are Highways under the Kenya National Highways Authority
12,549 km under the Kenya Urban Roads Authority;
and an estimated **131,794 km** of rural roads under Kenya Rural Roads Authority.



- Based on an AFCAP funded research project: “Rural Logistics for Smallholder Farmers to Meet New Agricultural Market Demands”.
- Implemented in Kenya between 2012 and 2013 by KENDAT/IFRTD/TCP International

- To analyse existing transport services and logistics in selected agricultural value chains in Kenya.
- To draw key lessons on how transport services are organised in the sector, and how they can be improved with regard to costs, reliability and quality.
- To develop a planning framework for improving the efficiency of transport services in the high value agricultural sub-sector, which can be replicated in other values chains.

Agriculture and Transport/1



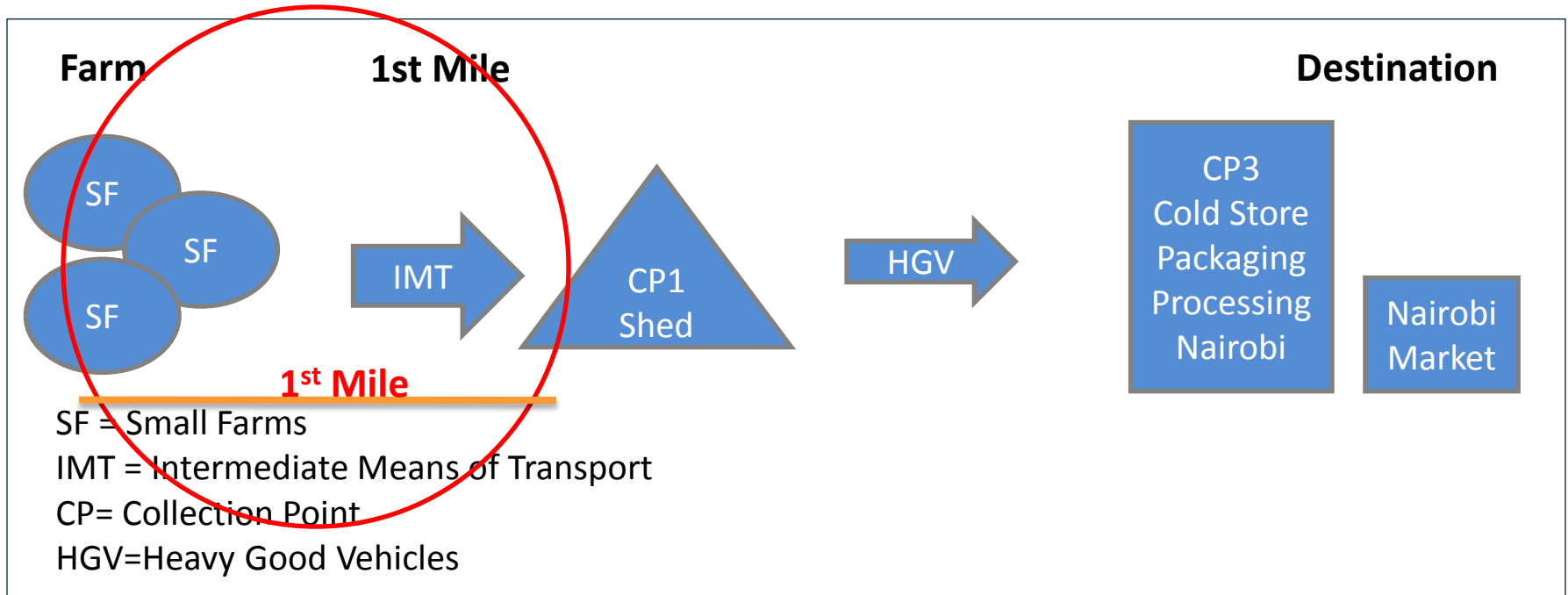
- Over 70% of Kenya's rural population is dependent on agriculture
- Small holder farmers contribute 95% of produce marketed in end outlets nationally and internationally
- Transport services are a key in ensuring timely delivery of high quality produce to national and international markets.



- Small scale farms are dispersed in areas with poor transport infrastructure
- Transport is needed to consolidate produce from dispersed farms
- Transport problems are compounded by heavy rainfall in highland areas where small scale farmers are found.
- Perishability of produce is a major concern

- Primary transport segment
 - From the farm to a collection/consolidation point typically found at the key junctions of a motorable LVR. Key actors here are the farmers.
- Intermediate segment
 - From the collection points to a local cooling point (eg French Beans) or an intermediate traders' market (eg potatoes and bananas) on motorable LVRs. Key actors are traders, wholesaling companies or transporters.
- Terminal delivery
 - Transport on main arterial road networks to national and international markets

Small-holder Transport Segments



- Analysis of the transport costs for each transport segment.
- Particular attention paid to the transport segment between the small holder farm and the first collection point.
- This is referred to as the First Mile
- First segment of a journey consisting of individual fragmented volumes transported from the farm to a collection point or a primary market.
- First mile is conducted on local paths and tracks that are typically in very poor condition and are particularly treacherous in the rainy season.
- This segment can contribute up-to a fifth of the total transport costs in logistics chain



- The length of the First Mile transport segment ranged between 1.5 to 13 km.
- First mile transport costs (in tonne/km) range between 20%-37% of the total transport costs of the chain
- Transport conditions improve and economies of scale increase progressively up the transport scale



- The transport costs on the first mile closely linked to the mode of transport and the condition of the infrastructure.
- Human carriage is the most expensive means with variable cost of US\$11 - 29/ton/km
- Donkey/oxcarts are used for bulky products, such as onions and potatoes . They had lower costs of US\$4 - 6/ton/km

Farmer's Initiative to improve their infrastructure



- In one of the case studies a farmer Rosemary and a group of farmers use farm equipment to keep their farm access road open.
- A key need expressed by the farmers is on need for training on basic methods of maintaining the road especially in rainy conditions

- Based on the current study, first mile transport can contribute upto 30% of the cost of produce in the market.
- Human portering is the most expensive form of transport, its tedious and inefficient. Improved access infrastructure would allow mechanised transport to be used instead of human portering.
- Though the study was not a cost/benefit analysis on how first mile infrastructure improvements would impact farmer's income, indications are that farmers would benefit from higher farm gate prices while consumers would have produce at lower costs,



- Maintaining the first mile infrastructure to ensure all weather access should be part of rural roads strategy.
- There is more scope for promoting community participation on this road segment because the community derive direct benefits from it

- The first mile is not a well researched area of transport planning. It would be important to carry out further detailed research on transport costs and their impacts on farmers and consumers. Such research should cover issues of community capacity building and possible management models for the first mile infrastructure
- Finally, the author notes that despite this being a very exciting area of work, there is a dearth of young researchers who are familiar with this subject. There is need to support young researchers through mentoring, engaging them in capacity building programmes and strengthening their capacities to communicate on issues of community access.

Thank you