



BMAU BRIEFING PAPER (7/14)

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National Roads Maintenance Programme: What are the challenges in maintaining unpaved roads?

Overview

Over the past three years, Government of Uganda (GoU) through the Uganda National Roads Authority (UNRA) has been allocating over Ug Shs 180 billion for the National Road Maintenance Programme. Unpaved roads form 71.1% of national road network in Uganda.

Despite the continued maintenance intervention of unpaved national roads, they are still rated from bad to fair. To improve performance of these roads, the maintenance bottle necks have to be addressed in the short and long term.

The policy brief highlights the challenges in maintaining unpaved roads and provides policy recommendations for improvement.

Key Issues

Inadequate funding: Budget allocations for FYs 2011/12-2012/13 suffered cuts. For FY 2014/15 the National Maintenance programme has been allocated 75% of its required funding.

Rapid growth of motorized traffic: The growth in vehicle population (8% according to NDP of 2010/11-2014/15) is not adequately matched by improvement and maintenance works on the road.

Unengineered roads: Most unpaved roads lack proper drainage, are narrow and made of substandard material.

Inadequate UNRA staffing: The road network has doubled since its inception yet the number of staff has not increased. Therefore, the current staff is overworked.

Introduction

The National Roads Maintenance Programme was started in 2008 with the formulation of Uganda National Roads Authority (UNRA). It currently involves several activities of maintenance of 21,000 Kms on the national roads network (paved/tarmacked and unpaved/gravel), ferry services or inland water transport services and axle load control.

It aims at improving and maintaining interconnectivity of the national road network across the country by reducing

the rate of deterioration, lowering vehicle operating costs and travel time as well as ensuring safety of road users and ferry services.

The maintenance is carried out either by force account or contract intervention. 'Force account' is the use by UNRA of its own labour force and equipment to perform road construction or road maintenance works while for contracts, the responsibility of implementation is given to private contractors under the supervision of UNRA officials.

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The various maintenance techniques used on roads include: Routine (manual and mechanized) – carried out yearly; Periodic after a specific period of time; and Emergency Interventions (on call).

Unpaved roads deteriorate more quickly than paved roads and their value can often be assumed to be worthless after five years without maintenance, a reason they need to be given keen attention.

Some UNRA initiatives to improve performance of unpaved roads include:

❖ Piloting different technologies to address the problem of scarcity of material and dustiness on unpaved roads. For example; it has done land rock fill in Lira, carrying out consultancy services for use of probase on Bukwiri-Kyankwanzi road (30kms).

Probase works as a stabilising and sealing surface material.

❖ UNRA is planning to use part of the development budget to procure new equipment. It is using Plant hire schemes to solve the problem of aging equipment.

Implementation challenges

- Centralized procurement process: All procurements are handled at UNRA head office which causes delays.
- Limited capacity of UNRA staff and contractors: There is inadequate training as regards unpaved roads for UNRA

staff. Furthermore, contractors have limited staff and equipment; and most cannot access bank credit. This leads to poor quality works thus, increasing future maintenance requirements.

- Delayed release of funds: This leads to delays in maintenance works. For instance under Mubende UNRA station, Quarter One (Q1) FY 2013/14 funds were released at the end of the quarter. Therefore, Q1 maintenance works were postponed to (Q2).

- Scarcity of materials: Areas like Kasese, Kisoro, Kapchorwa, Tororo and many others lack the basic materials required like gravel which increases the costs of haulage as these are transported from far sources.

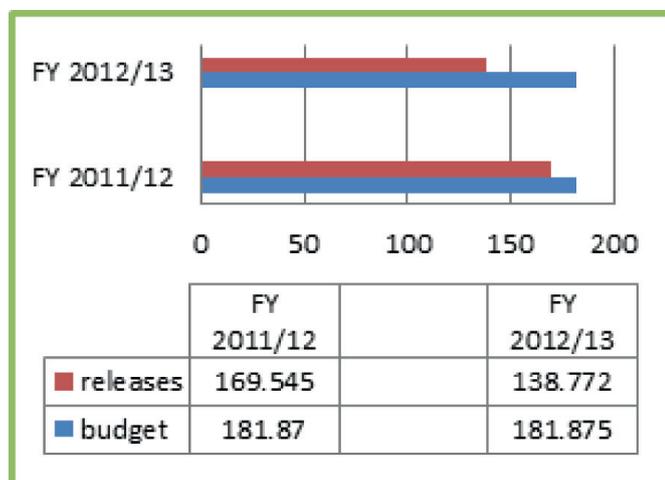
The available sources of gravel are depleting yet the Ministry of Works and Transport (MoWT) specifications emphasize its use.

- Old and inappropriate equipment: The equipment inherited by UNRA from MoWT is old and often breaks down. The inappropriate equipment yields substandard work and slows down the progress of works.

- Budget cuts: In FY 2011/12: The programme received 93% of the budget allocation while in FY 2012/13, 76% was released for a network of 21,000 Kms (See table I)

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Table I: Budget Performance of the National Road Maintenance Programme in FYs, 2011/12 and 2012/13



Source: BMAU Annual Monitoring Reports for FYs, 2011/12 and 2012/13.

The budget cuts affect the achievement of the programmed maintenance activities.

- **Unengineered roads:**

Unpaved roads under the programme are not up to the standards; they lack proper drainage which causes flooding, are narrow (overall width of less than 8m); and have loose material that is eroded during wet (roads become muddy) or dry seasons (dusty).

- **Understaffing in UNRA:**

The structure of UNRA staff has remained constant yet the network under the programme has doubled since its inception (from about 10,000 km to 21,000 Kms). For instance Mbarara station has roads of length 1860 Kms but only managed by one engineer and two assistants.

- **Rapid growth of motorized traffic:**

There is an ever increasing demand and use of vehicles in Uganda. Therefore, it becomes hard to forecast the volume of traffic on a particular road hence, making it difficult to establish the appropriate maintenance techniques to be applied.

CONCLUSION:

The National Roads Maintenance Programme is necessary for improving the performance of unpaved roads. However, a number of challenges like delayed release of funds, understaffing, rapid growth of traffic, aging equipment, scarcity and depletion of material and budget cuts have hampered effective project implementation. Failure to overcome the above challenges will continue to render the unpaved road network susceptible to early deterioration

Recommendations

- UNRA should encourage the use of decentralised (regional) procurements of contractors and material to increase efficiency.
- UNRA should increase training of both its staff and contractors to improve quality of maintenance and supervision for unpaved roads.
- The Ministry of Finance, Planning and Economic Development (MFPED) and Ministry of Public Service should raise the wage bill to attract more professional engineers to ensure good quality maintenance works.
- MFPED and Uganda Road Fund should ensure adequate and timely release of funds to the designated bodies to prevent increased future maintenance costs.
- The Government should increase funding to the maintenance programme as this will save the country future costs.
- UNRA should invest in more research in the various ways of maintaining unpaved roads and choose a more economical yet efficient method.

References:

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