Adding value to the whole economy: Maintaining Uganda's roads

Uganda's roads are one of the country's main assets, generating hundreds of millions of dollars in revenue every year through the commercial activities that they make possible. However, some of the country's road network is in a serious state of disrepair due to poor maintenance – a fact that is devaluing this important resource and limiting revenue-generating commerce.

To address these issues, Uganda needs to invest a significant sum over the next 10 years and use those funds to (i) increase road maintenance work and (ii) rehabilitate the backlog of roads that have been allowed to degrade. This could be achieved through an increase in the overall budget for roads, or by some careful adjustment to the balance between maintenance and construction.

The cost of poor maintenance

Reduction in asset value
It is generally agreed that Uganda is not allocating sufficient funds to road maintenance – which means that the country's roads are slowly but surely degrading.

In fact, insufficient maintenance has already reduced the value of the national road network from US$ 6.6 billion (UGX 17 trillion) to US$ 5.5 billion (UGX 14 trillion). Or, to put it another way, around US$ 1.1 billion (UGX 2.8 trillion) has been wiped off the value of Uganda's road network simply because it has not been maintained. If the current inadequate levels of maintenance continue for the next 10 years, then the value of this major asset will fall by a further US$ 2.1 billion (UGX 5.4 trillion).

Commercial losses
What is more, these figures do not take into account the commercial losses that result from a poorly maintained road network – if poor maintenance continues, the country's gross domestic product (GDP) will fall by 1% per year over the next 10 years. Basically, Uganda's failure to maintain its revenue-generating national road network is similar to a company allowing the factories and machinery that create its products to fall into disrepair.

"In 2012 alone Uganda's roads generated around US$ 546 million (UGX 1.4 trillion) of revenue"

Calculating the value of Uganda's road network

Replacement cost
One way to work out the value of a country's road network is to calculate how much it would cost to rebuild from nothing the infrastructure that currently exists. Based on this approach, Uganda's road network has been valued at around US$ 7.56 billion (UGX 19.5 trillion) – a figure that includes both national, district and urban roads.

Revenue generation
However, calculating replacement costs in this way does not take account of all the revenue generated by people using Uganda's roads to, for example, move goods and provide services. In Uganda such economic activity accounts for about 2.6% of the country's GDP – which means that in 2012 alone Uganda's roads generated around US$ 546 million (UGX 1.4 trillion) of revenue.[1]

[1] Uganda's GDP was US$ 21.002 billion (UGX 54 trillion) in 2012 according to the International Monetary Fund (see http://snipurl.com/imf_uganda_gdp).

Future implications
All of this has major financial implications for the country (i) because poor roads affect trade and commerce and (ii) because rehabilitating badly degraded roads in the future is a more expensive option than a continuous programme of maintenance.

How much should Uganda be investing?

The Economic Commission for Latin America recommends that a country should spend between 2.5% and 3.5% of its road network's replacement value each year, while the University of Birmingham (UK) has suggested that 3% is an appropriate figure for a country like Uganda.[2] Economically this makes good sense, as studies have demonstrated that spending on road maintenance provides an economic return almost three times greater than spending on the development of new roads.

Currently, however, Uganda is only allocating around 1.2% of the value of its road network to maintenance each year, which is only enough to properly maintain 41% of the national paved network, and none of Uganda's unpaved network.

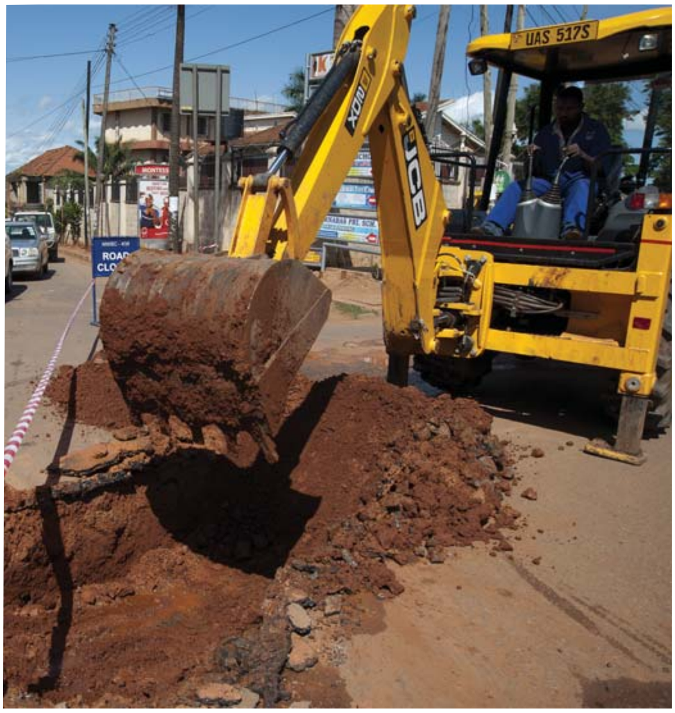
Facing the 'backlog'

Of course Uganda's road-related issues are not simply a matter of maintenance. Inadequate spending over many years has now resulted in a backlog of roads requiring large-scale rehabilitation rather than maintenance. Dealing with this will add further to the cost of maintaining the network over the next decade.

The capacity gap
The problem is not only one of funds, however. Currently, if the funds needed to deal with the backlog of roads needing rehabilitation were to be released over the next three or four years there would simply not be enough skilled manpower or machinery to do the work. Funds for maintenance therefore need to be increased steadily over a longer period to allow the country's contractors to keep up with demand.

How much is needed?

In total, over the next 10 years US$ 2,290 million (UGX 5.9 trillion) is required to address both the backlog and maintenance needs of Uganda's roads. Spreading the work over this period and increasing the funding provided year by year (from US$ 135.3 million [UGX 350 billion] in 2014–15, to US$ 174 million [UGX 450 billion] in 2015–16, and US$ 232 million [UGX 600 billion] in 2016–17) will allow road maintenance suppliers to increase their capacity and keep up with the amount of



work needed. The increase in funding coupled with other capacity building initiatives will support this process of change.

Once the backlog of work has been fully addressed, the amount of funding required will fall to around US$ 154.7 million (UGX 400 billion) per year (at present-day prices) as it will only have to cover ongoing maintenance.

Finding the funds

Given the differing demands that the Government faces, it may be unable to increase the level of funding for roads. If this is the case, then a careful balance should be considered between the funding of maintenance and construction within the existing budget.

Sources:
This paper is based on the following: 'Assessment of the 10 Year Road Programme based on the Road Sector Development Programme (RSDP) 3' (Report: MoWT) March 2013. 10 pp.
Howarth, S. and Sanchez, J. 'Road Maintenance and Asset Protection: Presentation by the RIC' (PowerPoint presentation, May 2013).

[2] Andreski, Adam. *Road Asset Valuations* (2005). http://snipurl.com/andreski_roads

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