

## Financing and Management of Roads in Sub-Saharan Africa – A Hopeless Case?

*Prepared by Dr. Gunter Zietlow - Transportation Engineer and Economist*

Road transport is the dominant mode in Sub-Saharan Africa (SSA) and typically carries over 75% of passengers and freight. It is essential for economic growth and poverty reduction. By the end of the 1980s SSA had over 2 million kilometres of roads with an estimated replacement value of US\$ 150 billion. Unfortunately more of 50% of these roads were in poor condition, mainly due to underfinanced and poor management of road maintenance. The extra cost resulting from insufficient maintenance was approximately US\$ 1.2 billion per year, mainly born by road users.

In the early 90s, after extensive consultations between development partners and SSA governments, a general agreement was reached, that substantial reforms would be required to address the problem. The Road Maintenance Initiative (RMI) for SSA countries was born. All major international and bilateral donors supported it. The main objectives were to increase effectiveness and efficiency in the road sector by creating:

- Autonomous road agencies with an effective structure and clearly defined responsibilities and
- Road Maintenance Funds financed by road user charges and managed by a Roads Board with members from the private and public sector.



*The conditions of its roads are a country's "calling card." – National road in Lesotho*

Initial progress was slow but is improving. By now 16 Road Agencies have been established, most of them after the year 2000. The required autonomy is gradually developing. For the moment being, only 8 of them have management boards out of which 3 have a private sector majority. As for the Road Maintenance Funds, 27 have been set up with 9 of them after the year 2000. Here the degree of autonomy is higher, as 26 road maintenance funds have management boards out of which 12 with private sector majority. The source of financing is mainly a fuel levy of between 3 and 15 cents US per litre. Approximately

12 cents US per litre are considered to be adequate in countries of SSA, assuming that roads are in a maintainable condition and funds are being used efficiently. Since a lot of these funds are still used for rehabilitation work and inefficient maintenance practices prevail, road maintenance is still substantially underfinanced. Because of implementation constraints, few countries face the problem of not being able to spend all road maintenance funds effectively such as Ethiopia. But most of the countries in SSA do have sufficient implementation capacity and need to close the financing gap.

One way of closing this gap is to mobilise additional funds and the other way to use funds more efficiently. The biggest gain is being realised by changing from force account or own labour force to

contracting out road maintenance. Most of the countries in SSA have made this change already or are in the process of doing so. Countries that have made this change have realised savings of between 30% and 50% of the cost of their unit rates of road maintenance. In other words, the road maintenance budget can now maintain 30% to 50% more roads than previously. Adopting long-term performance-based road management and maintenance contracts can produce additional savings. Such saving can be in the range of 10% to 30%. The main feature of these contracts is that the contractor is being paid a fixed fee for keeping the road at a predefined service level and is being penalized if he does not do so. These innovative contracts will gradually replace traditional road maintenance contracts world-wide. Five countries in SSA, South Africa, Zambia, Chad, Cape Verde, and Cameroon have contracted out road maintenance under performance-based road maintenance contracts and ten countries are preparing follow suit. These are Tanzania, Mozambique, Madagascar, Nigeria, DR Congo, Kenya, Uganda, Gabon, Senegal, and Rwanda. Besides improving efficiency, the benefit of these contracts is that they guarantee roads in permanent good conditions. Since these are long-term contracts they put pressure on governments to supply sufficient funding for road maintenance as long as there is still a funding gap.

At present, mainly the World Bank is assisting these countries in implementing this new contracting scheme. Other donors such as the EU and the Kreditanstalt für Wiederaufbau (KfW) are planning to do so. Since this is a new contracting scheme, it requires road agencies, consultants and contractors to become familiar with it and to acquire new skills. Technical Assistance can play a major role in providing high-level seminars for decision makers and training courses for road agencies, consultants, and contractors regarding the different aspects performance-based road maintenance and management contracts.

Certainly, initial progress in implementing the road sector reform was rather slow but has gained momentum during the last few years. But not everything has been developing as planned and some countries are hampered by political interferences that can put reform efforts in jeopardy. There is always the danger that the reform process might be stalled or even rolled back. One has to consider that these new autonomous or semi-autonomous organisations with private sector participation are fairly new in SSA. To a certain extent, they are felt as a “threat” to the traditional public administration and face opposition. In addition, funds that are readily available, such as the funds, which are earmarked for road maintenance, are always under threat of being diverted or raided by politicians for other purposes. Such diversions have taken place in the past and most likely will happen in the future as well. Therefore, one of the most important immediate challenges is to keep up the momentum of the reform and create a positive image towards the road user and the public in general.

Some people, especially in the donor community, seem to be frustrated by the “slow” progress of the reform of the financing and management of roads in Sub-Saharan countries. But to be fair, if we compare the pace of such difficult reforms in other countries of the developed world such as New Zealand or the Nordic countries, SSA countries are still on track. And looking at some of the established developed countries such as Germany one can get the impression that reforms in SSA are easy and quick. Therefore, we definitely should not lose hope for the financing and management of roads in Sub-Saharan Africa to improve to a satisfactory level in the near future. The donor community still can and should play a vital role in providing assistance to further support the reform efforts, even up to the point to intervene if politicians want to roll back parts of the reform for their own benefit.

## Further references:

**Financing of road maintenance in Sub-Saharan Africa** - Reforms and progress towards second generation road funds, Mustapha Benmaamar; Sub-Saharan Africa Transport Policy Programme, September 2006  
<http://www4.worldbank.org/afr/ssatp/Open.aspx?id=701>

### **International Fuel Prices 2007**

Fully updated publication "International Fuel Prices 2007" with information on diesel and gasoline prices in more than 170 countries. In the context of continuously high fuel prices and growing concerns over energy security, this edition focuses on aspects of enhancing energy efficiency in the transport sector (authors: Dr Axel Friedrich and Falk Heinen (German Federal Environmental Agency)) and the cost of promoting biofuels (authors: Joerg Peters (RWI) and Dr. Sascha Thielmann (GTZ)): [www.gtz.de/fuelprices](http://www.gtz.de/fuelprices)

### **Webpage Performance-based Management and Maintenance of Roads**

This website is designed to provide an overview of the development of PMMR worldwide, to put PMMR into the context of the Road Sector Reform that is taking place in several countries around the world, and to make available the latest documents and presentations on PMMR in order to assist practitioners to develop and implement PMMR in their respective countries: <http://www.performance-based-road-contracts.com/>

### **Webpage GTZ-Roads**

Overview of the reform of financing and management of roads in developing countries, with special emphasis on the contributions of the German Development Corporation (GTZ): [www.gtz.de/roads](http://www.gtz.de/roads)

## Further information / Contact:

Armin Wagner  
Transport Policy Advisor  
Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH  
(German Technical Cooperation)  
Division 44 - Environment and Infrastructure  
Transport and Mobility  
[Armin.Wagner@gtz.de](mailto:Armin.Wagner@gtz.de)