

Urban transport services in Sub-Saharan Africa: Recommendations for reforms in Uganda

L'organisation des transports urbains en Ouganda: Recommandations pour des reformes

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ABSTRACT: The paper identifies the major problems faced by transport operators in Uganda and analyses their impact on vehicle operating costs. It also examines transport regulations and the current organisation of transport services and their impact on vehicle utilisation. The key areas highlighted for concern include anti-competitive practices by the associations that control service provision and absence of transport planning and regulation. Finally, recommendations to improve vehicle operations are made. These range from long term policy, institutional reforms (including legislative changes, vehicle import regulation, and setting up of a transport regulator body and Private Public Partnership arrangements) to shorter term initiatives addressing issues such as vehicle financing, driver training and safety.

RESUME: Cet article présente les résultats de recherches menés sur les services de transport urbains en Ouganda. Pour bien comprendre leur fonctionnement, des enquêtes et des interviews ont été réalisées aussi bien dans la capitale Kampala que dans deux zones rurales. L'article a identifié les problèmes majeurs rencontrés par les exploitants, examiné la réglementation et l'organisation des services de transport et leur impact sur la productivité des véhicules. Finalement, l'auteur fait des recommandations portant d'une part sur des réformes institutionnelles à long terme (changement de la législation, création d'un organisme régulateur et projets de Partenariat Public-Privé) ainsi que sur des actions à courts termes traitant des modalités de financement des véhicules, de la formation des chauffeurs et des questions relatives à la sécurité routière.

1 INTRODUCTION

To understand the Ugandan transport market and its operations, interviews were carried out with the main stakeholders (Operators, drivers, regulators and users). A sample survey which covered 52 mini-buses was completed in Kampala City and in the rural towns of Fortportal and Buwenge in April 2001.

1.1 *Vehicle characteristics*

The survey's main results show that the average age of mini-buses is relatively high (13 years) and the current value is relatively low, 3,000 US\$ on average. For this reason, mini-buses are mainly the property of private individuals (90%).

Assuming a serviceability rate (availability) of 85%, the average vehicle utilisation per year for mini-buses is 35,000km but the coefficient of variation is relatively high, 65%. This could indicate that some operators may benefit from the current organisation of the market and perform relatively well partly because of relatively high fare level charged and partly because of running the most profitable routes. Many

operators, however, cannot sustain their business because of low mileage, which they attribute to "lots of competition" but mean an oversupply of vehicles.

Although the size of the survey sample is small, there is every reason to believe that the results are broadly representative of vehicle characteristics in Uganda. The survey's results converge with information given in the National Transport Data Base (1) which show that 9 out of 10 of new registrations are used vehicles and there is no age limit on vehicle imports.

2 HIGH UNIT PRICES OF VEHICLE OPERATION INPUTS

It is not surprising that the main problems mentioned during the bus survey were high operating costs. Most spare parts are imported and excise duties and petrol taxes are high. Additional costs such as association membership and loading fees for using bus parks are also mentioned to be a source of problems. Other problems identified were high accident risks

(safety), bad driver behaviour, government intervention (police), "excessive competition" and the bad condition of the roads.

2.1 High fuel taxes

The survey results show that the main problem faced by minibus operators was high vehicle operating costs. Petrol and diesel prices are respectively 1,470 Ugandan Shillings and 1,270 UgSh per litre, which is equivalent to 0.82 US\$ and 0.71 US\$ converted at the exchange rate of 1 US\$=1,800 UgSh (in 2001 prices). Although excise duty on petrol and diesel were recently reduced to respectively 47% and 39% of pump prices (1999), fuel prices in Uganda are still significantly higher than neighbouring countries. For instance, they are 30% higher than the prevailing prices in Kenya and Tanzania.

2.2 Vehicle financing

Survey results show that access to finance to purchase vehicles is only possible for established transport companies. The initial capital required for new conventional sized buses is high and is therefore more difficult to raise. Only the main bus companies, a few members of UBOA and a few truck operators turn to financial institutions (banks and a leasing company). Most operators finance their vehicles using traditional channels through down payment or the "work and pay" system, which predominates among mini-buses.

In Uganda, there is only one leasing company. Although the requirements on the collateral are less than the banks, the leasing company has financed only 500 commercial vehicles so far. The company deals mainly with properly established businesses (companies and professional partnerships), that can practically demonstrate the cash flow ability to make equipment rental payments on time. The payment terms depend on vehicle conditions (brand-new or second hand). A cash guarantee (security deposit) of 15% to 20% and equal monthly payments at 22% interest rate over a lease period of 5 years is required to purchase new vehicles. For used vehicles, the deposit is higher (30%) and the monthly payments are over shorter periods of 2 to 3 years. The company indirectly sets an age limit for vehicle imports since it verifies the condition of each vehicle and the reliability of its supplier before placing an order.

2.3 Safety issues

Traffic Safety has been identified in a recently concluded study as a major risk factor hampering efficient transport services in Uganda. Uganda has a high accident rate of 160 fatalities per 10,000 vehicles, one of the highest in Africa. Based on average cost per vehicle damaged of US\$ 2,290, average fatality cost of US\$ 8,600, and injury costs of US\$ 1,933, road accidents cost the Ugandan economy US\$ 101 million per year. This represents 2.3% of the country's GNP.

The leading cause of accidents in the country is poor driver behaviour. Drivers do not hold carriers' driving permits and most of them train on the job. Moreover, drivers daily wages often represent the differential between the vehicle owners' expected daily revenues and any additional amount generated after deducting fuel costs, police fines and brokers and parking fees. Therefore, to maximise their daily wages, drivers tend to speed and overload their vehicles in order to make additional trips regardless of passenger safety and traffic regulations.

Other causes of accidents are the low level of safety awareness, poorly equipped elementary driving schools, absence of a driving syllabus and lack of road safety awareness campaigns. The Government has attempted to address the traffic safety problem and has addressed the legal framework gap. It has enacted a new Traffic and Road Safety Act in 1998. However, the recent withdrawal of traffic police from roads has created concerns about the effective implementation of the law. Following the liberalisation of the economy and the deregulation of transport sectors in 1990s, transport services are largely in private sector hands.

The transport market is entirely deregulated and usually the only intervention of the Ministry of Transport is through a Transport Licensing Board (TLB). The TLB main mission is to regulate the use of public transport vehicles, the private omnibuses and goods vehicles by issuing PSV (Public Service Vehicle) licenses after carrying out technical inspection of vehicles. TLB is also responsible for the effective distribution of public transport.

In practice, TLB does not have the necessary resources (equipment and staff) to appropriately accomplish its mission. Technical control is limited to visual inspection of vehicles and the number of vehicles and their allocation to public transport routes is decided without reference to transport planning

studies. There are no data on the scale and characteristics of urban transport demand and there is a need for strategic studies on urban transport planning and the organisation of public transport services.

The transport association is the main provider of passenger transport services and collects taxes from drivers for the use of bus parks. The association has total control of the bus parks. Although city council revenues have risen over the years, this process led to monopolistic tendencies preventing non-members from operating in the business.

3 -RESOURCES ALLOCATION IMBALANCE BETWEEN INFRASTRUCTURE AND TRANSPORT PLANNING AND REGULATION PROJECTS

The Directorate of Transport of the Ministry of Works, Housing and Communications, MWHC has historically had insufficient financial and human resources to address key activities. Resource allocation over the years has not only been inadequate but also biased. Infrastructure maintenance and development have been allocated a disproportionate amount of both financial and human resources.

This imbalance in resource allocation has led to a relative backlog of institutional capacity building for planning, regulating and monitoring of transport services compared to road infrastructure organisation. The institutional capacities have not expanded as fast as the change of ownership experienced in the transport market (from public to private suppliers). Thus, the policy, planning and regulatory functions of Ministries have been marginalised and yet they are responsible for the safe and proper use of transport infrastructure and services.

3.1 Anti-competitive practices and their impact on vehicle utilisation

The technical and legal conditions that are required to enter the transport business are easily met by any potential candidate. Therefore, access to transport activity using mini-buses is relatively easy. To become a bus operator in Uganda for example, all that is required is a vehicle irrespective of its conditions and age. This will cost on average US\$3,000 and a PSV licence, which is delivered after a basic visual inspection of the vehicle and without reference to any transport plan or strategy. The current organisation of transport services does not allow efficient use of the vehicle fleet.

The transport market is not competitive. In general, it is controlled entirely by one Association, which encourages admission of new members who operate used and non-roadworthy vehicles. The Directorate of Transport is under-staffed and not equipped to carry out the planning, regulation and monitoring functions. The Association therefore not only sets fares, but also allocates routes and carries out self-enforcement on their operations, regardless of transport needs and efficiency.

The Association encourages the enrolment of new members since payment of membership fees is the sole condition for their admission. Therefore, the Association increases the amount of revenue collected through admission fees and other recurrent park fees.

Since collecting revenue for local authorities has become its main activity, the Association diverts from its initial objectives and neglects its members' interests. This shift in responsibilities has implications for the operation of services. It has led to political patronage and fighting to prevent the emergence of rival associations.

Although revenue from tax levies on transport services are substantial compared to other sources for local authorities, very little is re-invested to improve services. In addition, high unemployment levels, together with an activity that offers obvious prospects for profitability, attract many unskilled operators/drivers to enter the transport business. This situation combined with reasons explained above has led to an oversupply of vehicles of high average age (15 years) and to high queuing time at bus stations (1 hour), which in turn leads to low vehicle availability and utilisation and to high vehicle operating costs.

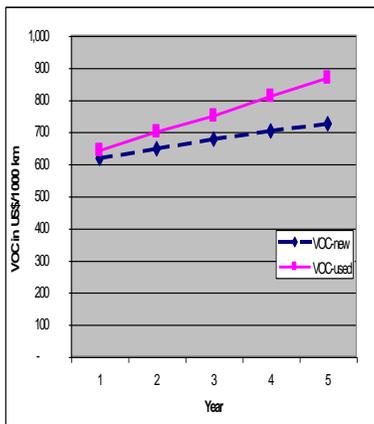
4 OPTIONS FOR IMPROVING VEHICLE OPERATIONS

There are options for improving vehicle operations addressing issues such as replacement of used vehicles, promotion of private sector road safety approaches and financing support framework for vehicle ownership. There is also scope for longer-term policy and institutional reforms including legislative changes, vehicle imports regulation, and setting up of a transport regulator body and Private/Public Partnership arrangements.

4.1 Benefits of replacing used vehicles

Most operators interviewed have a misconception of the vehicle life costs when operating used vehicles compared to relatively new vehicles. Their appreciation of costs is strongly influenced by the substantial difference between initial capital costs required for the purchase of used and new vehicles, and underestimates the whole life cost differential in operating the two vehicles.

The evidence suggests that the age of a vehicle has a direct impact on its productivity and on its maintenance costs, and therefore on total vehicle operating costs. Research work undertaken in Pakistan (3), where vehicles are relatively better maintained than in Sub-Saharan African countries, shows that the overall serviceability of used trucks decreases on average by 10% per year while labour and spare parts maintenance costs increase respectively by 15% and 20% per year. Using these conservative as-



sumptions, a comparison of vehicle operating costs
Figure 1: Comparison of the life cost of operating new and used mini-buses.

of a used minibuss, with a relatively new minibuss, over a 5 year period shows increased savings of 30% (Figure 1). Based on the above results, each dollar invested in replacing a used minibuss with a new one in Uganda will produce around US\$2.0 in VOC savings to transport operators. These savings do not include gains associated with reduction in external costs (accidents, congestion and pollution costs) and savings related to the increase in level of service and reliability.

4.2 Support framework for vehicle financing

The financing of vehicles through leasing schemes could improve vehicle operations and reduce the whole-life cost of vehicles operations. However, this objective can only be reached by achieving an ade-

quate level of vehicle utilisation necessary to produce sufficient discretionary cash flow. Considering current vehicle utilisation levels, financing schemes need to be adapted to the operators' capacity to meet the monthly payment objective. This could be done by reducing the interest rate and or by extending the payment period, or by simply providing assistance to raise the required collateral.

4.3 Institutional reforms

The average age of the vehicle fleets are relatively high and have direct impacts on vehicle serviceability rates, utilisation and hence on vehicle operating costs. To encourage operators to purchase newer vehicles, the financial support framework for vehicle ownership could include a reduction of vehicle import duties and fuel taxes and better access to vehicle financing. However, these measures can only be successfully implemented in competitive contexts to allow part of gains in productivity to be transferred to transport users.

Other measures that could be considered in order to gradually reduce the average age of the vehicle fleet include introducing new legislation that will not only impose an age limit on vehicle imports (for example less than 5 years old) but also an effective technical inspection of vehicles. This can only be implemented effectively by setting up complementary measures for the provision of appropriate vehicle inspection equipment and training.

There are also opportunities for introducing institutional reforms and new legislation to enhance efficiency and improve competition levels. These could include new legislation to prescribe the size of Associations (4) and review of the present organisational structure of the MWHC by setting up an Independent Transport Regulatory Body.

The objectives of such a body would be to improve the benefits to transport users through the encouragement of conditions, which promote competition in a sector where there is a tendency for a natural monopoly. The regulator should be independent from political interference and thus be answerable to parliament rather than to a Ministry. The regulator will agree performance criteria relating to associations with the Ministry and other authorities and set up the necessary mechanisms of monitoring and carrying out technical and financial audits (by employing independent private financial auditors).

The role of the Ministry of Transport will therefore consist of policy making for the development and maintenance of an adequate transport infrastructure to facilitate the provision of safe and efficient transport services. The Ministry of Transport should also set the objectives and performance targets not only for the Road Agency (infrastructure) but also for Associations (transport services) too. However, in order to carry out these missions successfully, Ministries of Transport will require technical assistance for capacity building and strengthening its planning and regulatory functions.

There is also scope for the development of Private - Public Partnership (PPP) projects at different levels of the transport activity. The evidence shows that a key impediment to increase level of competition is the monopolistic control of bus parks by an association. Appropriate PPP in the provision and management of bus parks can have a significant impact on public transport efficiency (5). PPP projects introduce financial discipline and transparency and identify clearly defined roles and responsibilities for each stakeholder: the City council, the Associations and the Contractor.

The recommendations and measures described above are innovative considering the current operating environment. The likelihood of their implementation rests upon the level of awareness of decision makers that the suggested reforms will gradually improve transport efficiency and lead to a "win-win situation".

The Department for International Development (DFID) funded project, from which these recommendations emerge, will attempt to begin the process of raising awareness of the various stakeholders to the issues raised in this paper. It is proposed that, in addition to individual dialogue, there will also be a series of workshops to present the findings and agree on an action plan for the future. This will be facilitated through the production of various sensitisation [information] material targeted at regulators, operators, users and the donors. This sensitisation material will set out the impact on transport efficiency of the current situation, together with options for long-term reform. This is inevitably a long term process but one where all the key stakeholders can potentially gain. Convincing them of this is the key to successful implementation.

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