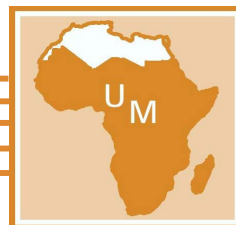




Urban Transport Services in Sub-Saharan Africa



Improving Vehicle Operations



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Prepared by Mustapha BENMAAMAR

The Sub-Saharan Africa Transport Policy Program (SSATP) is a joint initiative of the World Bank and the United Nations Economic for Africa (UNECA) to facilitate policy development and related capacity building in the transport sector of sub-Saharan Africa.

The findings, interpretations, and conclusions expressed here are those of the authors and do not necessarily reflect the views of the World Bank, UNECA or any of their affiliated organizations.

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ACKNOWLEDGEMENTS

The work described in this paper forms part of the Knowledge and Research project, funded by the UK Department for International Development (DfID) and carried out for the benefit of developing countries. The research was undertaken by Mustapha BENMAAMAR (TRL) with the collaboration of the Uganda Private Road Users Association (UPRUA) and COMPTRAN (Ghana). The views expressed are those of the authors and not necessarily those of DfID.

FOREWORD

This Working Paper presents the findings of research on “Vehicle Operations in Sub-Saharan Africa” carried out by the Transport Research Laboratory (TRL), author Mustapha Benmaamar. The research work was funded by the UK Department For International Development (DFID) and carried out in Uganda and Ghana over a period of two years.

Urban transport services in Kampala and Accra show many features similar to most Sub-Saharan African cities. These are an entirely deregulated market, a use of second hand vehicles by the informal sector, an oversupply of low capacity buses, a high number of fatal accidents and a high contribution to urban air pollution and traffic congestion. The finance of the fleet is provided through traditional channels, outside the formal banking system. The vehicle owners are not professionals and often have a second occupation, while drivers tend to lack the required expertise to operate in a cost-effective way.

In Accra and Kampala, the urban transport market is controlled by one association, which sets the fares, allocates the routes and carries-out self-enforcement on its operations. The market is not competitive but provides significant employment.

The TRL research demonstrates the significant potential for cost savings from an improvement in vehicle efficiency but this needs institutional reforms. Similar studies carried out in Bamako, Abidjan, Harare, Nairobi (see previous SSATP Working Papers on the subject) as well as information from Dakar, Lagos and Douala also confirm the need for reforms in urban transport sector in SSA.

The institutional and regulatory reforms include measures such as the introduction of progressive professionalism, the establishment of an independent regulatory body, a sustainable funding mechanism and the allocation of bus routes on the basis of transport demand. These are the first key measures to improve urban mobility in sub-Saharan African cities.

We hope this publication will contribute to strengthen our knowledge on the way forward.



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ACRONYMS

DVLA	Driver and Vehicle Licensing Authority
GTSC	Ghana Transport Steering Committee
KBS	Kenya Bus Services
PIU	Program Implementation Unit
PPP	Public-Private Partnership
PSV	Public Service Vehicle
TLB	Transport Licensing Board
UPRUA	Uganda Private Road Users Association

EXECUTIVE SUMMARY

1. The objective of this report is to present the findings and the way forward in respect of the Knowledge and Research (KAR) project on Vehicle Operations in Sub-Saharan Africa. The main objective of the project was to identify policy measures to improve the efficiency of vehicle operations in Sub-Saharan Africa. The research work was undertaken in two countries (Uganda and Ghana) over a period of two years.

2. To predict the effects of policy measures on transport services, it is necessary to gain a thorough understanding of the industry. The research reported in this document was designed to achieve this through a range of different surveys carried out in Uganda and Ghana. Along with interviews with the main stakeholders within the transport industry (associations, regulators, and operators), sample transport operators surveys were also carried out in both capital cities Kampala and Accra and in two rural towns in each country (Fortportal and Buwenge in Uganda and Takoradi and Asewewa in Ghana).

3. In the first phase of the project, the study identified the major problems faced by transport operators in both countries and analyzed their impact on vehicle operating costs. It also examined transport regulations and the current organization of transport services and their impact on vehicle utilization. Finally, recommendations to improve vehicle operations were made, which range from long-term policy reforms to short-term initiatives addressing issues such as vehicle financing, driver training and safety.

4. Road transport is the predominant mode for goods and passengers' movements in Uganda and Ghana. Following the liberalization of their economies and the deregulation of transport sectors in the 1990s, transport services are now largely in private sector hands. The number of new vehicle registrations increased by two-fold between 1993 and 1994 in Uganda and the growth in vehicle ownership (including motorcycles) was 22% per annum during the 1995-1998 period. There is no age limit for vehicle imports and 9 out of 10 imports are used vehicles.

5. Similarly, in Ghana total vehicle registration grew by 22% per year during the 1995-2000 period while the number of bus registrations increased by 36% per year during the same period. This is despite the introduction of a 10-year age limit for vehicle imports in 1997.

6. Freight transport services in Uganda and Ghana are provided by a large number of individual operators, operating mainly in the domestic market and by a few major private companies which run a fleet of 50 to 200 vehicles each. The large freight companies operate mostly on international corridors. The commercial trucking industry is organized around two main stakeholders, the freight associations/unions and the Government. Government regulations are weak and truck owners do not require a license to operate.

7. In spite of almost complete deregulation the trucking industry is inefficient. Vehicle utilization is significantly low and empty-running is high. There is a tendency to overload vehicles, which leads to a substantial waiting time between two loads (up to 3.5 days) and to pavement damage. A recent study (*BKS, 2000*) on road management policy in Uganda shows that 40% of trucks are overloaded, with an average overload amounting to 30% of the legal limit.

8. The bus transport market is entirely deregulated and the only intervention of public authorities (Ministry of Transport) is through the Transport Licensing Board (TLB) in Uganda and the Driver and Vehicle Licensing Authority (DVLA) in Ghana. The vehicle licensing organization's main mission is to regulate the use of public transport vehicles, private mini-buses and goods vehicles by issuing PSV (Public Service Vehicle) licenses after carrying out technical inspection of vehicles.

9. Ministries responsible for roads and transport have had historically insufficient financial and human resources to address their key activities. Resource allocation between the road/engineering and the planning department within the Ministry over the years has not only been inadequate but biased. Infrastructure (roads) development and maintenance have been allocated a disproportionate amount of both financial and human resources.

10. The required technical and legal conditions to enter the transport business are easily met by any potential candidate in Uganda and Ghana. Therefore, access to transport activity using mini-buses is relatively easy. All that is required to become a bus operator in Uganda for example is a vehicle irrespective of its conditions and age (US\$3,000 on average) and a PSV license, which is delivered after a basic visual inspection of the vehicle and without reference to any transport plan or strategy.

11. The current organization of urban bus services does not allow for the efficient use of the vehicle fleet. The transport market is not competitive. In general, it is controlled entirely by one association¹, which encourages admission of new members who operate used and non-roadworthy vehicles. Ministries of Transport are under-staffed and not equipped to carry out the planning, regulation and monitoring functions. Associations therefore not only set fares, but also allocate routes and carry out self-enforcement on their operations, regardless of transport needs and efficiency.

12. Transport associations are the main providers of passenger transport services. They have total control of bus parks and collect significant amount of revenues from drivers for the use of terminals. This has led to a monopolistic situation, preventing non-members from access to the transport market.

13. In the second phase, to disseminate research findings, raise awareness and develop action plans a national stakeholder workshop was organized in each country. Around 60 delegates,

¹ Uganda Taxis Owners and Drivers Association, UTODA and Ghana Private Road Transport Union.

representing both the private and the public sector attended each workshop. Delegates developed an agreed strategy (through action plans) to improve vehicle operations and stressed the need to introduce professionalism to the transport industry as well as the need to gradually replace used vehicles. To improve the standards of drivers and instructors training, a recommendation was made to develop capacity building. A set of actions was also identified to improve the regulatory environment through the encouragement of conditions that promote competition.

14. Overall, the findings from the workshops went a long way to achieving their objectives by formulating action plans aimed at increasing operation and organization efficiency of transport services. There was a general consensus to introduce competition through the promotion of Public-Private-Partnership (PPP) initiatives for the development and management of bus and lorry parks. Furthermore, it was agreed that the public and private sector have a role in promoting improved services. In Uganda, the main findings were:

- A general consensus to introduce competition through the promotion of PPP initiatives for the development and management of bus parks, drivers' training, the technical control of vehicle and route licensing. Furthermore, public and private sector each have a role in promoting improved services;
- Provision of technical knowledge to central and local government in transport management and tendering procedures;
- The need to develop a media and sensitization strategy to make the public aware of the benefits of the reforms through a program of sensitization;
- The stakeholders resolved that Uganda Private Road Users Association (UPRUA), which is the local project "Champion", should be the voice of the private sector on transport issues in the country.

15. In Ghana, the stakeholders resolved that a Steering Committee made up of the key actors representing the public and private sector will be the project "Champion" and, in addition to actions identified in Uganda, delegates developed a set of actions aimed at improving the freight industry. These included the following:

- Set up a professional body for freight agents and forwarders (land transport);
- Creation of more warehouses and terminals for consolidation of freight;
- Tendering out the management of lorry parks using PPP arrangements; and
- Revision of current legislation on axle load regulations (harmonization with sub-regional roads).

16. Some uncontroversial measures with obvious benefits and beneficiaries such as driver and operator training can be taken which will improve the situation. But actions aimed at introducing or enhancing competition (e.g. PPPs, route licensing, the enforcement of operator and driver licensing, etc.) will require institutional reforms. Most of these actions are controversial and will require a critical minimum effort to be effective. The design process will consist of developing proposals recommending the most cost-effective and sustainable options and setting out the key steps for their implementation.

17. To make substantial progress in improving efficiency a total package of the adopted measures will need to be implemented. It will not be possible to achieve the expected goal of reducing transport costs by implementing only one action. For example, a set of actions aimed at improving the condition of the vehicle fleet will not be enough without a reorganization of the transport market to improve vehicle operations (increase vehicle utilization). This will necessitate institutional reforms and the establishment of an independent regulatory body, which will act as a "Watch Dog" to maintain competitive market conditions.

18. The workshops highlighted the need for the private and public sector to work together on initiatives to promote improved vehicle operations. To begin with, the activities being suggested above will support the private sector to respond. It is also important that the government is supported to understand its obligations and how it can both benefit and support improved vehicle operations.

19. Support is needed at both the national and local levels. The relevant ministries in Uganda and Ghana are currently tendering for work on a transport master plan that will provide much needed information about transport demand and supply in the country. Donors' support in this area to the Ministries of Local Government in both countries would be most beneficial. Workshops' participants articulated their requirements and responsibilities very well. The two main areas that they stressed were:

- Support on how the Ministries of Local Government can incorporate a transport operations strategy framework within their development plans and more specifically,
- Provide support for the Ministries of Local Government in the development and management of bus and truck parks.

20. The adopted action plans were broadly defined but did not identify neither the mechanisms for implementing the priority actions nor the resources and the "firming up" of solutions. There is a need to design implementation strategies for each priority action, resource mobilization and dissemination program together with a stakeholder review.

21. In addition, there is a need for a broader level (international) sensitization and information sharing process (Sub-Saharan African). This should include the production of videos, study tours, training courses, publications and pamphlets, etc. The model of the Road Maintenance

Initiative (RMI) experience should be used, learning from their mistakes, to move to a position where improved vehicle operations becomes an everyday issue just as maintenance is today. This initiative could be hosted by an international organization such as the SSATP.

22. The implementation of the action plans is the most critical stage of the project cycle and requires some innovative methods that should differ from conventional delivery methods used in Technical Assistance projects. The strategies could be implemented by a designated Program Implementation Unit (PIU). The PIU should be located at the Ministry of Local Government or at the Municipality. The main role of the PIU will be to oversee the implementation of the action plans. The PIU will include a program manager and professionals in transport planning and regulation. The PIU staff will be recruited by a donor organization (World Bank or other international institutions). Project management reports will be prepared and submitted on a quarterly basis to the donor organization.

23. In order to steer project implementation toward meeting its goals and to monitor the work done by the PIU, a Management and Monitoring Committee could be set up and headed by the Permanent Secretary of the Ministry of Local Government. It will include representatives of other ministries, members of parliament and of municipalities and rural town mayors. Within the scope of its mandate, the PIU will also interact with key stakeholders vested with transport responsibilities, namely: Vehicle owners and drivers associations, vehicle leasing companies, vehicle licensing and examination organizations, drivers training organizations and most importantly with transport users interest groups.

1. INTRODUCTION

Research has shown that there are very large differences in the availability and costs of transport between Africa and Asia. Africa (*Hine et al, 1997*) is at a considerable disadvantage in all respects. Development funds to date have been almost exclusively used for infrastructure, yet there is huge potential for cost savings from an improvement in vehicle efficiency. The provision of transport services has been left to the market but the market has not been working effectively. High transport costs and unreliable service provision have a significant impact on industry and on the mobility of people.

To predict the effects of policy measures on transport services it is necessary to gain a thorough understanding of the industry. The research reported in this report was designed to achieve this through a range of different surveys carried out in Uganda and Ghana. Along with interviews of the main stakeholders within the transport industry (associations, regulators, and operators), sample transport operators' surveys were also carried out in both capital cities Kampala and Accra and in two rural towns in each country (Fortportal and Buwenge in Uganda and Takoradi and Asesewa in Ghana). The transport surveys covered the operation of mini-buses, large buses, trucks and pick-ups.

The report provides a general description and presents data on a wide range of subjects relating to the transport industry. These include age and value of vehicles, vehicle utilization, ownership and finance and other related safety issues. It also describes the organization and management of transport services and their impact on the efficiency of vehicle operations.

To disseminate research findings and raise awareness national stakeholder' workshops were organized in Kampala (26-27th March 2002) and in Accra (16-17th July 2002). The workshops set out how to involve the transport industry in defining a new strategy for change and to work with the management in identifying areas where there is agreement that change is required. In this context, broad action plans were adopted which consisted of a set of measures to improve the efficiency of both road passenger and freight operations.

The overall study was carried out under the DFID Knowledge And Research (KAR) program by the Transport Research Laboratory (TRL) with the collaboration of the Uganda Private Road Users Association (UPRUA, Uganda) and COMPTRAN in Ghana. It is intended that the results of the research will assist decision-makers in formulating transport policy to improve vehicle operations in Sub-Saharan Africa.

2. BACKGROUND TO TRANSPORT SECTOR

Road transport is the predominant mode for the movement of goods and passengers in Uganda and Ghana.

Following the liberalization of their economies and the deregulation of their transport sectors in the 1990's, transport services are largely in the hands of the private sector. The number of new vehicle registration increased by two-fold between 1993 and 1994 in Uganda and the growth in vehicle ownership (including motorcycles) was 22% per annum during the 1995-1998 period. There is no age limit for vehicle imports and 9 out of 10 imports are used vehicles (*National Transport Data-Base, Uganda, 2000*). Similarly in Ghana, total vehicle registration grew by 22% per year during the 1995-2000 period while the number of bus registrations increased by 36% per annum during the same period. This is despite the introduction of a 10-year age limit for vehicle imports in 1997 (*Information on Importation of Vehicles, CEPS, 2000*).

The transport market is entirely deregulated and the only intervention of the public authority (Ministry of Transport) is through the Transport Licensing Board (TLB) in Uganda and the Driver and Vehicle Licensing Authority (DVLA) in Ghana. The vehicle licensing organization's main mission is to regulate the use of public transport vehicles, private minibuses and goods vehicles by issuing PSV (Public Service Vehicle) licenses after carrying out technical inspection of the vehicles.

In practice, vehicle-licensing organizations do not have the necessary resources (equipment and staff) to appropriately accomplish their missions. Technical control is limited to visual inspection of vehicles and furthermore the number of vehicles and their allocation to public transport routes is decided without reference to transport plan studies. There is no regular data collection on the size and characteristics of urban transport demand and there is a need for strategic studies on urban transport planning and organization of public transport services.

Transport associations — the main providers of passenger transport services — collect significant amounts of revenue from drivers for the use of terminals and have total control of bus parks. This process has led to monopolistic tendencies preventing non-members from access to the transport market.

3. MAIN VEHICLE OPERATIONS SURVEY RESULTS

To understand the transport market and its operations, interviews were carried out with the main stakeholders (vehicle owners and drivers' associations, ministry, local authorities). A sample survey of drivers was also carried out which covered mini-buses, large buses, trucks and pick-ups. Surveys were completed in both capital cities Kampala and Accra and in two rural

towns in each country. Fortportal and Buwenge in Uganda and, Takoradi and Asewewa in Ghana.

In general, the results obtained in Uganda and Ghana present many similarities in terms of vehicle characteristics, ownership and performance. The average results for both countries are as follow:

- Used vehicles form 90% of imports (average age 15 years);
- Average cost of a 14-seat minibus is US\$3,000 and US\$3,500 for a 19-seat minibus;
- Average cost of a 2 and 3 axle truck is US\$7,000;
- High queuing-time at terminals (1 hour for minibuses and up 3.5 days for large trucks) and low utilization of vehicles (35,000 km/year for minibus and 45,000 km for trucks);
- 9 out of 10 drivers do not own the vehicle;
- Vehicle owners are not professionals and often have a second occupation;
- Associations charge various fees for the usage of bus terminals (Monthly, daily and park loading fees);
- Bus fares increased by 50% (in real terms) over the last three years in Uganda;
- Minibuses are involved in a high number of fatal accidents;
- There is an oversupply of low capacity buses (minibuses).

It is not surprising that the main problems mentioned during the surveys were high operating costs, "excessive competition" and the bad condition of the roads. Additional costs such as membership association 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 behavior, and "government intervention" (police).

4. CURRENT ORGANIZATION OF THE FREIGHT TRANSPORT

Freight transport services in Uganda and Ghana are provided by a large number of individual operators, operating mainly on the domestic market and by a few major private companies which run a fleet of 50 to 200 vehicles each. The large freight companies operate mostly on international corridors.

The commercial trucking industry is organized around two main stakeholders, the freight associations/unions and the Government. But Government regulations are weak. The market is open to any truck owner and no license is required to operate.

In Ghana, there are 5 unions that represent both drivers and truck owners. The unions, and in particular the Ghana Private Road Transport Union (GPRTU), play an important role in the management of the lorry parks. However, GPRTU has less influence on freight operations and a much greater role in passenger transport services. This is probably because the union does not control the operations of the majority of the freight vehicles.

In Uganda, truck drivers and owners are organized by two separate associations but both are relatively new organizations (established in 1998). The Uganda Commercial Truckers Association (UCTA) which represents truck owners' interests has only 60 members. However, members show little commitment and most truck operators are not affiliated to any association.

In spite of almost complete deregulation, the trucking industry is inefficient. Vehicle utilization is low and empty shipment is high. There is a tendency to overload vehicles, which leads not only to pavement damage but also to a substantial waiting time between two loads (up to 3.5 days). A recent study² on road management policy in Uganda shows that 40% of trucks are overloaded, with an average overload amounting to 30% of the legal limit (*Road management and financing study, BKS, 2000*).



Overloaded Truck, Buwenge (Uganda)

Unlike in Bangladesh where truck drivers' unions play an important role in finding return-loads for their members (Box 1). The truck drivers and owners' associations in Sub-Saharan Africa do not provide such services. The return load is found either through regular customers for the transport of cash crops such as cocoa or coffee or through brokers who operate in lorry parks where most trucks remain parked and move out only when they have been assigned goods to haul.

² Road management and financing study, August 2000, BKS

5. CURRENT ORGANIZATION OF PUBLIC TRANSPORT SERVICES

The current organization of transport services as described in Figure 1 does not allow efficient use of the vehicle fleet. The transport market is not competitive. In general, it is controlled entirely by one association³, which encourages admission of new members who operate used and non-roadworthy vehicles. Ministries of Transport are under-staffed and not equipped to carry out the planning, regulation and monitoring functions. Associations therefore not only set fares, but also allocate routes and carry out self-enforcement on their operations, regardless of transport needs and efficiency.

The required technical and legal conditions to enter the transport business are easily met by any potential candidate in Uganda and Ghana. Therefore, access to transport activity using mini-buses is relatively easy. All that is required to become a bus operator in Uganda for example, is a vehicle irrespective of its condition and age (at US\$3,000) and a PSV license, which is delivered following a basic visual inspection of the vehicle and without reference to any transport plan or strategy.

Transport associations encourage the enrolment of new members as long as they are able to pay membership fees. Therefore, the association increases the amount of revenue collected through admission fees and other recurrent park fees. The association allocates routes to new members only at a later stage after their admission, regardless of the efficiency of transport services.

Since collecting revenues 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 revenues from tax levies on transport services are relatively 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 the reasons explained above has led to an oversupply of vehicles of high average age and to high queuing time at bus stations,



UTODA Taxi Park, Kampala

³ Uganda Taxis Owners and Drivers Association, UTODA and Ghana Private Road Transport Union, GPRTU.

which in turn leads to low vehicle availability and utilization, and hence to high vehicle operating costs.

5.1. Resources allocation imbalance between infrastructure and transport planning

Ministries of Transport have historically had insufficient financial and human resources to address their key activities. Resource allocation between the road/engineering and the planning department within the Ministry over the years has not only been inadequate but biased. Infrastructure (roads) development and maintenance 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 for planning, regulating and monitoring of transport services compared to road infrastructure organization. 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 marginalized and yet they are responsible for developing strategies for better use of transport infrastructure and services.

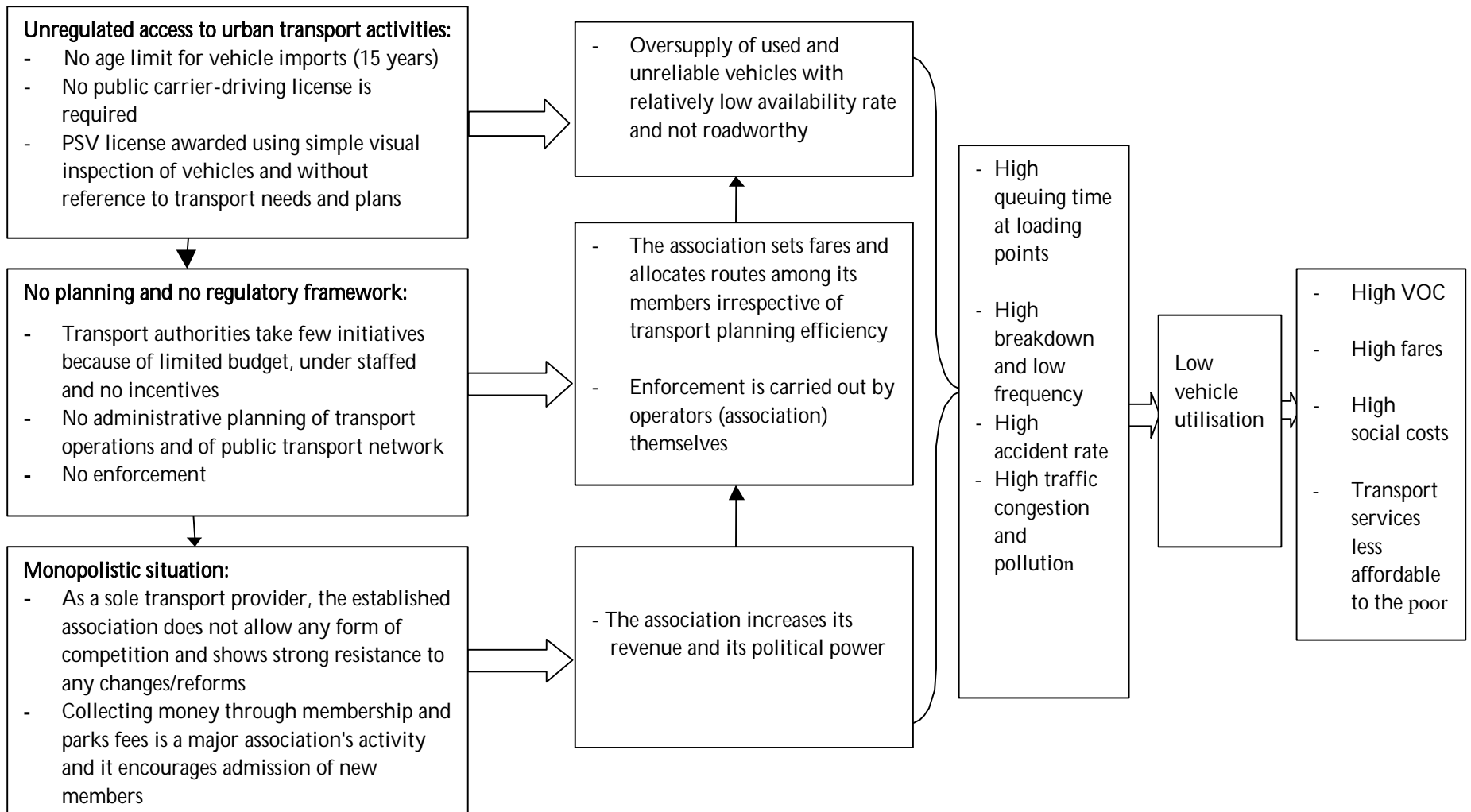


FIGURE 1: Current organization of transport services and their impact on vehicle utilization

6. OPTIONS FOR IMPROVING VEHICLE OPERATIONS

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

6.1. 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 costs required for the purchase of used and new vehicles, and underestimate therefore 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, hence on total vehicle operating costs. Research work undertaken in Pakistan (*Hine et al, 1994*) where vehicles are relatively better maintained than in Sub-Saharan African countries, shows that the overall availability of used vehicles decreases on average by 10% per year while labor and spare part maintenance costs increase respectively by 15% and 20% per year. Using these conservative assumptions, a comparison of vehicle operating costs of a used minibus, with a relatively new minibus, over a 5 year period shows an increased saving of 30% (Figure 2).

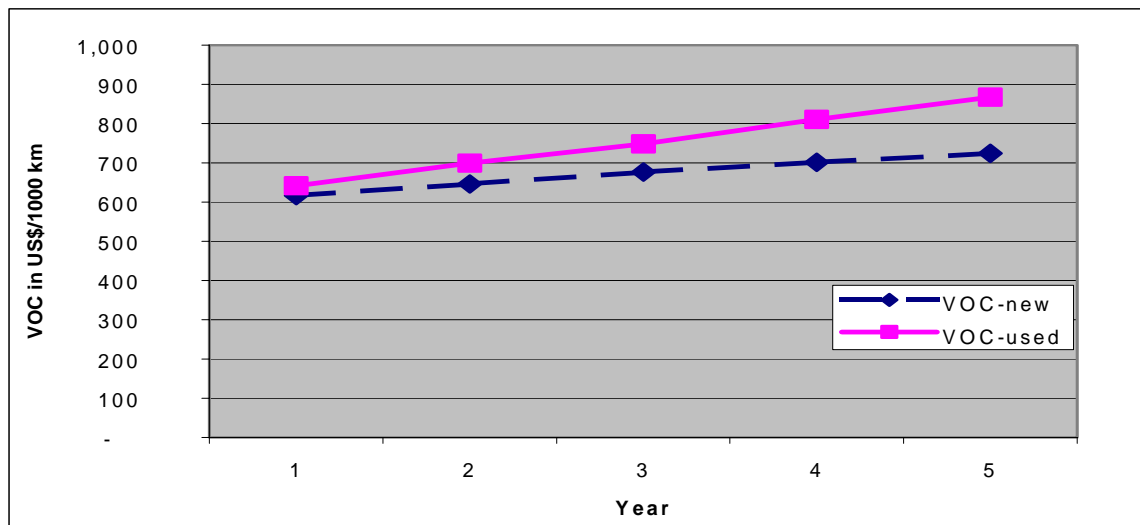


FIGURE 2. Comparison of the whole-life cost of operating new and used mini-buses

Based on the above results, each dollar invested in replacing a used minibus with a new one will produce around US\$2.0 in VOC savings to transport operators. These savings do not include gains associated with the reduction in external costs (accidents, congestion and pollution costs) and savings related to the increase in level of service and reliability.

6.2. Support framework for vehicle financing

Surveys' results show that the access to finance for the purchase of vehicles is only possible for established transport companies. The initial capital required for new large buses is high and therefore more difficult to raise. Members of the main inter-city bus companies in Uganda and Ghana and a few truck operators use financial institutions (Banks and a leasing company). But, 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 guarantee risks are less than the banks, the leasing company has financed only 500 commercial vehicles so far. The company deals mainly with properly established business (companies and professional partnerships), which 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 conditions of each vehicle and reliability of its supplier before placing an order.

The financing of vehicles through leasing schemes could improve vehicle performance and reduce the whole-life of vehicle operating costs. However, this objective can only be reached by achieving an adequate level of vehicle utilization necessary to produce sufficient discretionary cash flow. Considering current vehicle utilization 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 risk guarantee (collateral). A similar financing scheme has been used by transport authorities in Senegal for the acquisition of new vehicles through a World Bank credit line (Box 2).

Box 2 : A financing support framework for new vehicle purchase in Dakar

A financing mechanism for bus purchase similar to the one used by the equipment leasing companies has been set recently in Senegal using a credit line from the International Development Association, IDA-World Bank.

Brand new buses are purchased by the financing agency and sold to operators through a credit facility. A deposit of 25% is required and the rest is contracted as a loan at 8% interest rate over a lease period of 5 years. The financing agency also requires 3 month advance payments to cover any delay of monthly installments. The buses remain the property of the financing agency till the loan is totally reimbursed.

About 500 operators were regrouped to form 12 registered companies. They benefited from the new financing arrangement and purchased around 1,350 buses. The financing of vehicles through leasing schemes is one of a set of measures aiming at introducing professionalism into the informal sector and to improve the efficiency of vehicle operations.

Source: l'exemple du renouvellement du parc de cars rapides dans le cadre de la réforme du secteur des transports publics urbains de Dakar, Ibou Diouf, SITRASS-6, 2001.

6.3. Reducing the average age of vehicle fleet

PPP schemes

As described in section 6.1, the average age of vehicle fleets in Uganda and Ghana is relatively high and has direct impacts on vehicle availability rates, utilization and hence on vehicle operating costs. Once an adequate financial support framework for vehicle acquisition (Section 6.2) is provided it will then be appropriate to impose an age limit on vehicle imports (for example less than 5 years). This will reduce gradually the average age of vehicle fleets and substantially reduce total vehicle operating costs (including social costs of congestion, pollution and accidents).

However, imposing an age limit on vehicle imports can only be implemented effectively by setting up supplementary measures for the provision of appropriate vehicle inspection equipment and training. The Transport Licensing Board (TLB) in Uganda is ill-equipped and under staffed. It requires a fundamental reorganization before providing any capacity building. The DVLA in Ghana is relatively better resourced but requires further strengthening of its management structure.

7. INSTITUTIONAL REFORMS

There are also opportunities for introducing institutional reforms and new legislation to enhance efficiency and improve competition levels. These could include a new legislation to prescribe the size of associations and a review of the present organization structure of the Ministries of Transport by setting up an Independent Transport Regulatory Body. There is also scope for the development of Private-Public Partnership (PPP) projects at different levels of transport activities.

Experience from studies conducted in few countries show that urban transport is a complex activity that involves various stakeholders. It will only be possible to achieve the expected goal of improving transport services through a package of measures. For example, setting an age limit for vehicle imports will be a part of the solution but not THE solution if upstream measures are not put into place to provide a support framework for access to vehicle financing, and downstream measures for effective technical control of vehicles. Moreover, a set of actions aimed at improving fleet management to increase vehicle utilization will not be effective without reorganization of the transport market to enhance competition.

A holistic approach should therefore be used to design an implementation strategy by pulling together different achievable actions into a coherent program that will form a basis for a transport policy guide for decision makers. Table1 presents a set of recommendations with their respective complementary measures.

7.1. Enforce transport regulations effectively

Evidence shows that in order to derive significant improvements in the performance of transport services is to reorganize the way in which urban transport is planned and developed. Once this has been achieved, technical interventions have a greater chance of achieving a positive impact on the urban transport sector.

Table 1: Recommendations and complementary measures

Recommendations	Complementary measures
Enforce transport regulations effectively.	Set up an independent regulatory body.
Enhance competition and introduce more transparency.	Provision and management of bus and truck parks using PPP arrangement schemes and bus route licensing.
Develop adequate funding for public transportation.	Set a funding mechanism for transport services.
Introduce more professionalism and impose compulsory bus driving license.	Provide support framework for vehicle financing, training schools for managers, drivers and instructors and an effective technical control of vehicles.

To give the transport sector a higher profile, more focus, and a dedicated and professional cadre requires the development of an autonomous city transport agency, either within the city or central government structure. This requires the consolidation of the functions of a number of parallel bodies into one autonomous body with responsibility for area-wide regulation, planning and management of the transport network. This body will provide the focus for the private sector operators to address their concerns and, in turn, for the public sector to ensure effective regulation and management of a quality infrastructure, appropriate to the needs of the city.

Enforcement of transport regulations is paramount and could be done by setting up an independent transport regulatory body. The objectives of the regulatory body will be to improve the benefits to transport users by providing 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).

This could include new legislation to prescribe the size of associations and reviews of the present organization structures of Ministries of Transport. 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 and Local Government will require technical assistance for capacity building and strengthening their planning and regulatory functions.

Local government can also play a vital role in enhancing competition. Evidence from Cameroon (Box.3) show how the implementation of two different systems of rural transport service provision within one country (between the South and the North) under different competing environment could lead to totally different results.

**Box 3: Impact of a competitive environment on the provision of rural transport services
The Cameroon case study**

Surveys were undertaken in Southern and Northern Cameroon looking at all aspects of rural transport. An interesting finding emerged that the cost of transport services, both for inter-urban and rural trips, were considerably cheaper in the North. For example in Muyuka district in the South, passenger fares were between 53% (10 km) to 370% (200 km) higher than in Ngoundere district in the North.

Characteristics of rural transport services in the North – Most operators form themselves into transport agencies. The transport agency operates from its own bus park and has strict rules on the quality of vehicles. A technical committee will inspect new vehicles before allowing them to operate. Customer service is also good and drivers with complaints made against them are fired. Competition is stiff because the local mayor also gives other agencies permission to operate from the towns. Transport charges in Ngoundere have reduced by 40% in the last two years as new agencies have entered the market. The agencies use rugged Renault buses (32-seats capacity). These agencies serve the rural areas on sometimes very poor quality roads.

Characteristics of rural transport services in the South – Operators form themselves into transport syndicates (Unions) which operate in a similar way to the transport agencies. The difference being that there is no competition, the vehicles are not in such good condition and they all operate from the same bus park. The vehicles tend to be cars, some of which are modified to cope with rough rural roads, which tend to be overloaded because of their low capacity. Some transport agencies do operate in the South but they tend to be restricted to the longer routes.

Policy implications – The key to the difference between the North and South is the actions of the local mayors. In the North the mayor allows different agencies to operate from the town and hence has brought competition into the market. The policy of local mayors allowing competition between operators in the same town has clearly led to a better, safer and lower cost rural transport services in the North.

Source: Rural Transport Policy Toolkit, TRL

7.2. Enhance competition and introduce more transparency

Planning and regulatory arrangements for private participation in the provision and management of bus terminals is essential. The evidence shows that a key impediment to increasing levels of competition is the vested interest around the monopolistic control of bus parks by an association⁴ (*Benmaamar et al, 2002*). Appropriate Private-Public-Partnerships (PPP) in the provision and management of bus parks can have a significant impact on public transport efficiency. In this context, projects for the rehabilitation and management of bus terminals by third parties (concessionaires) using PPP arrangements in Togo, Benin and Senegal (Box 4) are good examples. The projects introduce financial discipline and transparency and identify clearly defined roles and responsibilities for each stakeholder: the City Council, the Associations and the Contractor.

Box 4: Management of bus terminals using PPP arrangement in Dakar

As part of the urban transport reforms program in Senegal, the Urban Transport Council (CETUD) have invested around 3 million pounds equivalent for the development of two bus terminals in Dakar. The improvements included office facilities for bus operators, bus stands, toilets, shops, advertising space, passengers waiting rooms and, roads and terminal lighting.

The management of the terminal was contracted out through a competitive tendering process open freely to private companies. The company will be responsible for the daily management of the internal activities and maintenance of the terminals. In return, the management company is entitled to collect revenues from the terminal users-operators. An annual rental fee, equivalent to 60% of the net benefits will be allocated to the Urban Transport Development Fund and used for the promotion of public transport in Dakar. The contract was awarded to a management company (SAGES), which is independent from other terminal users (operators and commercials).

The implementation of this new PPP arrangement encountered some resistance, particularly from transport operators who had total control of bus terminals. Transition measures were put in place to avoid radical conflicts by setting a steering committee that included representatives of transport association to oversee the activity of the management company.

Overall, the initiative has been well received and the authorities are planning to extend this experience to other bus terminals in Dakar and to other towns in Senegal.

Source: Financement public et exploitation privée: Les gares routières de Petersen et de Lat Dior, CETUD.

⁴ In Uganda and in Ghana, the municipalities receive only a fraction of the total monthly revenue collected by the transport association/union, on their behalf.

7.3. Allocate bus routes on the basis of transport needs

The urban transport development in both countries continues to be 'ad hoc' and there is a lack of data on the size and characteristic of urban transport demand. As a result, the provision of public transport services is controlled entirely by transport associations. Distribution of routes among operators remains a major issue and is a subject of frequent disputes among association members and is often decided without reference to transport needs.

There is a need for strategic studies on urban transport planning and organization of public transport services. This will require technical advice to the Ministry of Transport and local transport authorities (Local Government and City Council) for the provision of the regulatory framework, bidding assessment procedures for the selection of service providers and managers of public services.

Introduction of competitive tendering of franchises in major cities in Western Europe reduced costs per vehicle kilometer by up to 40% in real terms, and allowed higher service frequencies to be maintained within constrained budgets than under traditional monopoly supply mechanisms. Those experiences which were first implemented in developed countries are now being seen to be effective in developing economies (*A World Bank Urban Transport Strategy Review, 2002*). In this context, a two-year reform program has been completed in Uzbekistan, which has focused on setting up a regulatory framework for tendering bus routes (Box 5)

Box 5: Introducing competitively tendered franchises in Uzbekistan

Urban public transport services were traditionally supplied in Uzbekistan by State-owned enterprises that enjoyed area wide, sometimes city wide, monopolies. Beginning in late 1997, however, as part of the transformation of this former socialist economy into one that functions on market principles, the Uzbek Government has implemented radical changes in the organization and regulation of urban bus transport services. Through a gradual and carefully planned process, which included experiments in a few cities, a study tour to London, and progressive scaling up to all secondary cities, responsibility has been given to the city administrations to organize all bus services on the basis of exclusive route franchises. These franchises are allocated through a competitive tendering process open freely to private companies and associations of small owner-operators as well as the State owned enterprises. Tendering is under the responsibility of a special commission in each city, chaired by a deputy Mayor, operating under precise rules set by a transport regulatory agency in the Central Government. Bidder's discount, if any, from the passenger fare ceiling, proposed service frequency, and bus fleet characteristics are the main selection criteria. Franchise duration, initially set at six months, renewable once for another six months, is progressively being extended (now to one year).

These reforms, completed in two years, have resulted in impressive changes. Numerous private operators have entered the public transport market, many new jobs have been created in the emerging bus service sector, and a healthy competition has developed (particularly for rapidly growing minibus services). Private operators now supply more than 50% of all urban transport services. A bus route franchising system is also now being implemented in Tashkent.

Source: J-C Crochet from World Bank project files

7.4. Develop sustainable funding mechanisms for a transport authority

In order to function in an autonomous and effective way, such a transport authority needs an independent and secure source of funding, over which it has control (subject to any guiding principles and auditing requirements laid down in its legal underpinnings). The organization needs to be sufficiently independent so that it can develop its own professional cadres based on attractive salary scales sufficient to attract the best.

At present finance from their respective national road funds support road maintenance in many cities in Sub Saharan Africa. However, to fully fund a transport authority to finance its regulatory, planning and development roles, and to raise the level of road maintenance expenditure, it may be necessary to seek other funding sources. Other potential revenue sources that could be explored include:

- Additional urban road user charges (in the form of tolls, parking charges, city road tax or area licensing fee, road pricing etc.)
- A levy on driver insurance premiums (possibly to specifically finance safety work)
- An employment tax dedicated to transport
- Betterment charges
- Net income from vehicle inspections and licensing, and driver licensing and testing
- Charges for use of public transport terminals

Some of these are unlikely to be feasible in the context of poor administration, and inability to efficiently collect existing local taxes.

Box 6 presents an outline of a funding mechanism that is adopted by the Lagos Area Transport Authority, LAMATA.

Box 6: Funding mechanism for Lagos Metropolitan Area Transport Authority, LAMATA

For at least the past decade, Lagos State Government (LASG), in common with the other states of the Federation, has not generated sufficient revenue to cover its expenditure on transport infrastructure. As a consequence, much of the required maintenance of the existing infrastructure has been delayed or remains undone. The deterioration in the transport system infrastructure that has resulted from these years of neglect is clear to all and is a source of much unnecessary inconvenience and cost to all system users. It is obvious, therefore, that if the State Government is to be able to maintain the transport system in the future, it must seek to increase its revenue base. It is equally clear, however, that present users of the transport system infrastructure contribute very little by way of existing direct user charges to the maintenance and upkeep of the infrastructure. The LASG have, therefore, adopted a policy on financing of the transport sector as follows:

- User charges will be introduced or increased where they already exist to generate the levels of revenue necessary to meet the maintenance needs of the system;
- To ensure the additional funds collected are utilized for the purpose intended the LASG will set up a dedicated Transport Fund into which all revenues from designated user charges will be paid. All revenue accruing to this fund shall be used by LAMATA in the performance of its duties;
- During the period prior to the Vesting Date for LAMATA, the funds identified and collected by the Preparatory Office (PO) will be placed in an escrow account for the use of LAMATA when it is fully constituted. A portion of these funds may be used by the PO, at the discretion of the Governor of Lagos, for maintenance or such other purposes for which they would normally be used under LAMATA's responsibilities.

The level of user charges to be set and the actual mechanism by which they may be recovered have not as yet been detailed. LASG and the PO are investigating the means of raising the funds from diverse sources to ensure that LAMATA is not wholly dependent on any one source.

Among the sources of revenue being investigated, the Review Team has identified the following:

- An increase in the level of vehicle licensing fees and a more efficient collection of same;
- Road pricing to reflect vehicle usage, which could include a toll charge on all bridge crossings;
- Congestion charging in vulnerable areas, which might include parking areas;
- Area licensing fees for such areas as Lagos and Victoria Island.

It is the intention of the State Government that regular periodic reviews are conducted of the revenue and expenditure pattern of the sector to ensure that revenue and expenditure projections are balanced and sufficient to meet the obligations of LAMATA in maintaining the system network.

Source: Lagos Urban Transport Project, Draft Transport Sector Statement, amended November 2001.

7.5. Introduce professionalism

In both countries, minibus owners are mostly engaged in non-transport activities; they look to the transport sector as a way of investing small capital sums amassed in other enterprises. In this sense they are not transport professionals who have a committed interest in the development of the sector. Neither do they employ professional drivers.

There is therefore a need for support from the authorities to improve the standard of public transport provision emanating from the informal sector. For this purpose, a set of measures aimed at introducing professionalism need to be implemented in parallel. This could include formalization of contractual relations between drivers and bus owners according to the labor legislation, preventing public servants from owning public transport vehicles, and the provision of training for drivers, instructors and managers to improve bus operations and management standards.

Such an initiative is being taken by Transport Authorities in Dakar (CETUD). They have developed an action plan to introduce professionalism into the informal sector using a credit line from the World Bank (Box 7).

Other experiences of bus management companies in developing countries show that the activity could become financially viable when using appropriate management strategies.

Box 7 : Transport services in Dakar: The way towards professionalism

The "*Conseil Exécutive des Transports Urbains de Dakar*", CETUD, is a newly established body in charge of organizing and regulating the provision of urban transport services in Dakar. Under the World Bank-IDA program, the CETUD developed an agenda for reforms to gradually introduce professionalism into the city bus transport services. The main objective is to formalize and modernize the informal sector and improve the level of service. Three main measures are being introduced:

- 1- Reorganization of bus routes and building of bus stations
- 2- Formalization of contractual relations between drivers and bus owners according to the work legislation
- 3- Determination of viable bus fares

Along with the provision of institutional assistance to establish legal transport entities (registered bus companies), sensitization and training programs were provided for drivers and operators on operation management. Twelve (12) bus companies were created, they regroup 446 operators with a vehicle fleet of 1,357 buses. The training program covered 6,000 drivers who have been trained on road safety, vehicle maintenance and on passengers' relations.

Other actions are being pursued and include the followings:

- 1 - Reorganization of the public transport network
- 2 - Revision of the pricing system or formula of bus fares
- 3 - Bus routes franchising

The implementation of these actions along with the setting up of a regulatory framework to promote private sector participation in the provision and management of bus services will lead progressively towards professionalism.

Source: Les Cars Rapides à Dakar: Vers la voie du professionnalisme. Ibou Diouf, CETUD

Developments in the operation of Kenya Bus Services (KBS) in Nairobi, since the recent take-over (by Kenyan businessmen), are particularly interesting and could well serve as a model for the development of organized bus services elsewhere. Box 8 presents the example of a proactive management approach taken by the KBS. The business approach is addressing the problem of financing urban bus operations in two ways:

- (a) market differentiation (targeting different markets with tailored services in order to maximize revenue yields) and
- (b) streamlining the cost base of the Bus Track service by contracting-out most of the operations, and reducing the administrative costs to an absolute minimum.

Box 8 : Kenya Bus Services Limited (KBS): A proactive management approach

KBS operates as three separate units, only two of which (Metro Shuttle and Bus Track) are in the city. The two main innovations which KBS has adopted are:

- Market segmentation, targeting the Metro Shuttle buses at high and middle income commuters who will pay more for a high quality service. There is a fleet of 30 Metro Shuttle minibuses, each with the capacity of carrying 33 seated passengers. They were bought new, are well maintained, clean, do not carry standing passengers, and operate on timetables. However, they are about 50% more expensive than the *Matatus*. Their market niche is the middle and high-income urban residents who value their comfort, safety, and time, and ready to pay the high fares (approximately 1.5 to 2 times higher than *Matatus* fares). The Metro Shuttle service has been successful. The services grew from 4 minibuses on one route in 2000 to about 30 minibuses on 3 routes in May 2002. KBS hopes to increase the fleet, as initial indications are that they can make better profits in this service than in the Bus Track service.
- Contracting-out the operations of the big buses owned by Bus Track (a subsidiary of KBS). In effect Bus Track is a management company which owns a fleet of big buses which it 'leases' to so-called 'route-owners'. The latter are ex-employees of KBS who manage the routes operated by Bus Track. All operational staff are self-employed, and work for the route owner. Bus Track provides control and maintenance staff, and a cashier for each route. They also provide access to fuel and tyres (the supply being organized by KBS on a bulk-purchasing arrangement) and central workshop support.

Source: The Metamorphosis of Kenya Bus Services Limited in the Provision of Urban Transport in Nairobi. Tom Opiyo, Department of Civil Engineering.

7.6. Introduce a compulsory bus driving license

The leading cause of fatal accidents in both countries is poor driver behavior. Drivers of public transport vehicles do not hold a carrier's driving permits and most of them train on the job. Moreover, drivers' daily wages often represent the differential between vehicle owner's expected daily revenues and any additional amount generated after deducting fuel costs, police fines and broker's and parking fees. Therefore, to maximize their daily wages, drivers tend to speed and overload their vehicles in order to make additional trips regardless of passenger safety and traffic regulations. For public safety reasons, driving of a public transport vehicle needs to be regulated and monitored.

Driver training schools for bus and heavy goods vehicles should be provided prior to changing the legislation to make bus and HGV driving licenses compulsory. This could discourage non-professionals to enter the transport market and leave the activity to committed operators.

One of the actions identified by the stakeholders national workshop in Uganda in March 2002 (Appendix 2) is to establish national standards for training and testing drivers and instructors. Since then, Transaid and Bibbys Distribution UK Ltd have carried out a needs-assessment study in October 2002. The aim of the study was to assess the potential for developing a standard Driver Training program to improve safety and efficiency of transport services (Box 9).

Box 9: Train the trainee course for drivers' instructors in Uganda

During the planning stage of the project review, it was decided that the initial focus should be on freight transport operators and their drivers. Attention was then given to the need to establish a benchmark for driving standards including the basic training for learner drivers, driver testing and institutional support for training providers. Following the needs assessment study, it is anticipated that a 10 day course will be delivered to 45 candidates in February 2003. Successful candidates will be issued with a certificate stating their competence, which, will be endorsed by Transaid, Bibby Distribution Ltd and the Logistics College of the North-West. Training will consist of classroom and in-vehicle instructional techniques.

OBJECTIVES

- Trained instructors to instruct trainees' (drivers) regarding the safety of people on Uganda roads.
- Sensitization of learners that they may meet so many kinds of "misconduct" needs like helping the needy.
- Drivers should know road regulations.
- To establish and manage driving schools in an effort to bring services nearer to the people and to work in close co-operation with the other associations or another company, municipal or local authority, person or persons.
- To establish and manage schools at all levels of driving and to absorb the growing number of people.
- To establish and manage driving schools for the public to acquire skills to reduce the high levels of accidents in Uganda.
- To embark on adult education of driving cars, lorries, motor cycles etc.
- To invest in or purchase of otherwise acquire leasehold and freehold lands, houses, building and here determent business and acquire by purchase, exchange or otherwise any other land, tenant, and here determent on any tenure and to hold.
- To carry on the safe keeping, cleaning, repairing, refueling and the general care of motor vehicles of all kinds. To buy and sell petrol, gasoline oil and petroleum products, new and used motor vehicles, parts of such vehicles and accessories.

OUT PUTS

- Less accidents
- Trainers sensitized on training
- Develop course of curriculum of the trainers
- Low charges on insurance
- Low cost of maintenance

Source: Review of Driver Training Facilities in Uganda to Enhance Safety Standards and Promote Improved Vehicle Operations, Transaid, 2002.

8. IMPACT ON POVERTY

The poverty aspects of the action program for urban transport development can be appraised in terms of the project expected impact on creation of opportunities, empowerment and security for the poor. The exact nature of how transport benefits are distributed cannot be certain (without detailed analysis), but any project design is clearly pro-poor if it focuses attention on the main means of transportation used by the poor, i.e. public transport and non-motorized transport (including walk). Table 2 indicates the probable links between the main components of an urban transport project and the potential to reduce poverty.

As part of the process of establishing a transport Authority, procedures need to be put in place whereby it can continually monitor the impacts of transport on poverty, and can also incorporate the perceptions and needs of the poor in its forward planning. Poverty assessment must be built into the project cycle, and should be applied at all stages, but particularly when projects are conceived and prioritized.

A series of indicators to support the process of poverty impact analysis can be devised as follows:

- **Opportunity.** Indicators that point to the availability and accessibility of the public transport service. Improvements are reflected in more capacity, better travel conditions, faster journeys, stable transport costs and/or outlays as a proportion of household expenditure;
- **Security.** Indicators that point to the safety of using urban transport. Improvements will be reflected in reduced accident rates, and reductions in criminal activities;
- **Empowerment.** In this connection, an indicator is needed to demonstrate the involvement of the poor in the design and planning process. In the longer term, this indicator needs modifying to demonstrate whether that involvement is effective.

Over time, all the indicators and associated targets will need monitoring and modification to reflect experiences gained in their use. Particular changes to reflect gender nuances may, for example, be appropriate.

Table 2: Poverty impact of urban transport developments

Project component	Key poverty dimensions			
	Economic opportunity		Empowerment	Security
	Growth	Redistribution		
Policy and institutional reform:	<p>A mechanism for creating a more effective and efficient operating environment, within which transport operators can be more productive, and hence cost-efficient and thus contribute to urban growth.</p> <p>Open up opportunities for new investment in the transport sector, and hence increased employment.</p> <p>Improve competitiveness of firms, and efficiency of labor markets.</p>	<p>Priority interventions directed at enhancement of public transport performance and promotion of NMT are likely to be highly pro-poor.</p>	<p>Opportunities for significant involvement of stakeholders and local communities at many levels in the project cycle.</p>	<p>Improved transport will contribute to lowering vulnerability through greater ease of movement and access to opportunities, less exposure to accidents, and better quality of life.</p> <p>Enhanced conditions of travel support improved social networking.</p> <p>Improved quality may also reduce security (crime, sexual harassment, etc) concerns (which may currently engender fear of travel and hence social isolation).</p>
Bus service enhancement:	<p>Measures which can enhance the productivity of the bus service should be easily justified in economic and financial terms.</p>	<p>Buses are a main mode of transport for those urban poor who can afford to pay for travel. Productivity enhancements which make travel cheaper will extend the catchment of the poor (though it may be difficult to transfer such productivity improvements through to lower tariffs).</p> <p>Travel times for the poor should be reduced.</p>	<p>Increased accessibility within the city for the poor and hence strengthening of social and political connectivity.</p>	<p>Bus travel is a major source of insecurity (theft, sexual harassment, etc.). Enhanced quality of travel may contribute to reduced concerns.</p>
Road network efficiency improvements	<p>It should be possible to economically justify improvements to the road network on the basis of time savings to road users.</p>	<p>If the focus of improvements is on the bus network routes, the urban poor (who are highly reliant on public transport) will be major beneficiaries from improved journey times.</p>		<p>The poor are likely to be most exposed to the externalities of road development – increased pollution, increased accident risks due to greater exposure to traffic, severance, re-settlement.</p>
Non-motorized transport promotion	<p>The economic justification of improvements to these modes may be difficult.</p>	<p>These are modes that are largely used by the urban poor. Any measures to encourage better performance or greater up-take are pro-poor in respect of users.</p>	<p>A direct response to the voice of the poor, which may have had little political influence in the past – giving attention to the modes used by the very poor.</p>	

9. CONCLUSION

The recommendations and measures described in chapters 6 and 7 above and illustrated in Figure 3 below are innovative considering the current operating environment in Uganda and Ghana. The likelihood of their implementation rests upon the level of awareness of decision makers and that the suggested reforms will gradually improve transport efficiency and lead to a "win-win situation". 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. It was therefore proposed that, in addition to individual dialogue, there is also a need for workshops to present the findings and agree on an action plan for the future.

A summary of the outcome of workshops organized in Uganda and in Ghana during the second phase of the project and the subsequent action plans are presented and discussed in Appendix 1, 2 and 3. The adopted action plans were broadly defined but they did not identify the mechanisms for implementing the priority actions and nor the resources and the "firming up" of solutions. For each priority action, there is a need to design implementation strategies, determine resource mobilization and dissemination program together with a stakeholder review.

Some uncontroversial measures such as drivers and operators' training, with obvious benefits and beneficiaries, can be taken which will improve the situation. But, actions aiming at introducing or enhancing competition (e.g. PPP's route licensing, the enforcement of operator and driver licensing, etc) will require institutional reforms. Most of these actions are controversial and will require a critical minimum effort to be effective. The design process will consist of development proposals recommending the most cost-effective and sustainable options and setting out the key steps for their implementation.

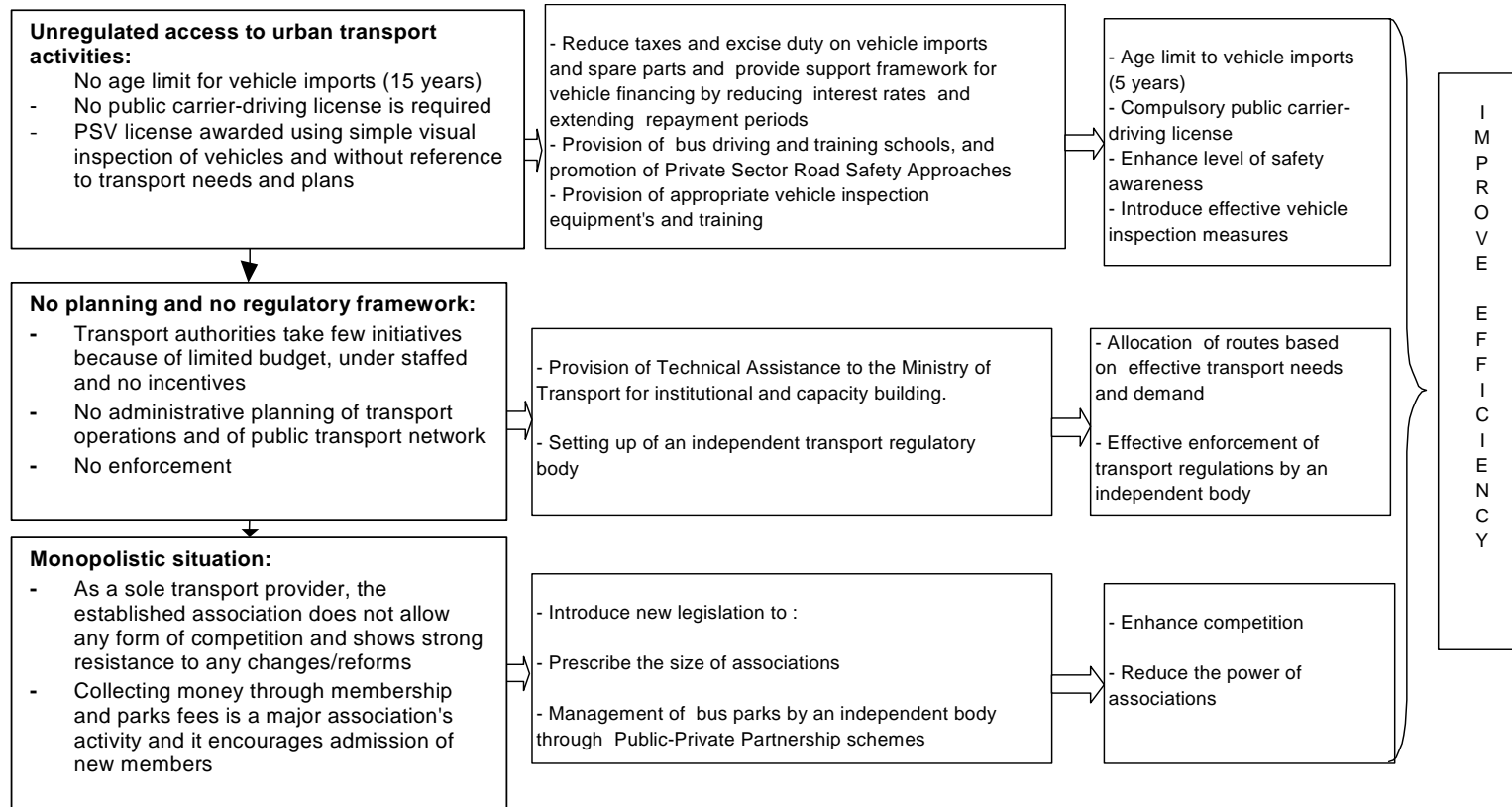
To make substantial progress to improve efficiency a total package of the adopted measures will need to be implemented. It will not be possible to achieve the expected goal of reducing transport costs by implementing only one action. For example, a set of actions aiming at improving the condition of the vehicle fleet will not be enough without a reorganization of the transport market to improve vehicle operations (increase vehicle utilization). This will necessitate institutional reforms and the establishment of institutional organizations, which will act as "Watch Dogs" to maintain competitive market conditions.

The implementation of the action plans is the most critical stage of the project cycle and requires some innovative methods that should differ from conventional delivery methods used in Technical Assistance projects. The action plans should be implemented by a designated Program Implementation Unit (PIU), which could be located at the Ministry of Local Government or at the Municipality. The main role of the PIU will be to oversee the implementation of the action plans aiming at reducing cost of vehicle operations. The PIU will include a manager and professionals in transport planning and regulation. The PIU staff will be recruited by a donor

organization (World Bank or other international institutions). Project management reports will be prepared and submitted on a quarterly basis to the donor organization.

In order to steer project implementation toward meeting its goals and to monitor the work done by the PIU, a Management and Monitoring Committee could be set up and headed by the Permanent Secretary of the Ministry of Local Government. It will include representatives of other ministries, members of parliament and of municipalities and rural town mayors. Within the scope of its mandate, the PIU will also interact with key stakeholders vested with transport responsibilities, namely: Vehicle owners and drivers associations, vehicle leasing companies, vehicle licensing and examination organization, drivers training organizations and most importantly with transport users interest groups.

FIGURE 3: Recommendations to improve vehicle operations



10. A WAY FORWARD

Participants at the stakeholders' workshops have received the initiative very enthusiastically. There is clearly a demand and a willingness to move towards a more professional industry that is well regulated and resourced.

The workshops generated a wide range of problems and potential solutions. These ranged from short term and detailed operational issues to longer term and more wide-ranging institutional reform. Many of the issues can be dealt with in-country with little or no support from outside agencies, some are already the subject of on-going technical assistance but others represent real gaps to the implementation of improved vehicle operations that could be addressed with a follow-up project.

The workshops' reports provide a detailed account of the proceedings and the main points and recommendations for future steps are summarized below.

There were four broad areas that emerged as priorities for future action:

- The delegates at the workshops resolved that UPRUA in Uganda and the Transport Steering Committee (GTSC) in Ghana should act as their champion and co-ordinate activities in their interests;
- All the working groups discussed the need for sensitization of stakeholders on the issues that affect them. This ranged from media campaigns for the general public to specific issues for government departments;
- There was a general call for increased professionalism in all aspects of the industry including driver training, operations management and customer care;
- A move towards increased public and private partnership in the delivery of service and from both perspectives to encourage a good operating environment in which to deliver improved vehicle operations.

10.1. Next steps

The sections that follow provide more detail on the main broad points raised above and suggest ways in which they may be taken forward. Appendix 5 and 6 contain this information within a logical framework.

There are a large number of activities that could potentially be undertaken but our approach here has been to identify the priority activities based on the following:

- Clear demand as stated through the workshops;

- Logical next steps in what is anticipated to be a long term process;
- Activities that will pave the way for potentially more contentious issues at a later date i.e. activities that in the longer term will facilitate the introduction of a more competitive operating environment;
- Activities that will produce tangible results; and
- Activities that complement initiatives that are already underway or being planned in Uganda and Ghana.

10.2. A representative "Champion"

The stakeholders at the workshops resolved that UPRUA in Uganda and GTSC in Ghana should be their "Champion". While the GTSC was elected at the workshop plenary session, UPRUA was set up two years ago to represent the interests of all road users. Many of the Government departments are also represented on the Association's membership list. In the longer term there maybe conflicts of interest between the associations and service users. However, in the short term, and when there is no alternative, it makes sense for all the organizations to remain under the same umbrella group.

Both organizations will need to be resourced in the short term if the initiative is to be sustainable. The participants at the workshop also made it clear that their resolution that the Champion should represent them only lasted as long as they were seen to be delivering. Performance can be measured by their ability to raise revenue from membership fees. The intention would be that over time the Champion's running costs should be entirely funded from membership fees.

10.3. Sensitization of stakeholders

This was an issue that was raised within the workshops by all the working groups. There was a general feeling that before progress can be made the main stakeholders need to understand the extent of the impact of an inefficient transport industry on their activities.

In addition, there is a need for a higher level international (Sub-Saharan African) sensitization and information sharing process. This should include the production of videos, study tours, training courses, publications and pamphlets etc. The Road Maintenance Initiative (RMI) experience can be used as a model, learning from their mistakes, to move to a position where improved vehicle operations becomes an everyday issue just as maintenance is today. This initiative could be hosted by an international organization such as the SSATP or SITRASS but could be managed and championed by a transport consultant.

10.4. Increasing the professionalism of the transport industry

All the representatives from the different organizations recognized the need for greater professionalism from their members in terms of providing a value for money and safe service. There is a whole range of stakeholders who would benefit from training in this regard and an initial step in any next stage would be to identify priority-training areas and determine the equipment and materials needed to do the job. In this regard TRANSAID are well placed to undertake needs assessments and initial training activities (Box 9).

The stakeholders at the workshops were eager for support in this area and clearly wanted to take pride in developing a more professional industry. The key to the long-term success of this activity will be to find appropriate homes for the long-term sustainability of this training. There were a number of private sector training organizations such as the Uganda Driving School Operators Association (UDSOA) represented at the workshops which would be the obvious place. They would need initial support with training and equipment, an industry that understands the commercial value of well-trained staff and support from government in providing national standards and enforcement.

10.5. Improving the operating environment for transport service provision

The workshops highlighted the need for the private and public sector to work together on initiatives to promote improved vehicle operations. To begin with the activities being suggested above will support the private sector to respond. It is also important that government is supported to understand its obligations and how it can both benefit and support improved vehicle operations.

Support is needed at both the national and local levels. The relevant Ministries in Uganda and Ghana are currently tendering for work on a transport master plan that will provide much needed information about transport demand and supply in the country. The Ministry of Roads and Transport in Ghana is in the process of developing its urban transport policy. Donors support to the Ministries of Local Government would be most beneficial. They were a vocal participant in the workshop and articulated their requirements and responsibilities very well. The two main areas that they stressed were:

- Support on how the Ministries of Local Government can incorporate a transport operations strategy framework within their development plans;
- Support Ministries of Local Government in the development and management of bus and truck parks.

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12. APPENDICES

Appendix 1 – National Stakeholders Workshops (Uganda and Ghana)

In the second phase, as part of the research project two Stakeholders National Workshops were held in Kampala (26-27th March 2002) and in Accra (16-17th July 2002).

Two main objectives were pursued through the organization of the workshops:

(i) to raise awareness of the main key stakeholders on options for improving the current organization of transport services. This was facilitated through the presentation of sensitization materials that set out the impact of the current situation on vehicle operations together with options for long-term reforms.



Participants (Uganda)

(ii) to develop an agreed strategy (action plan) to improve the efficiency of both road passenger and freight operations.

Around 60 delegates, representing organizations in the private and public sector attended each workshop. The workshops set out how to involve the transport industry in defining a new strategy for change and to work with the management in identifying areas where there is agreement that change is required.



Participants (Ghana)

Following the presentations of the sensitization material (chapters 1 to 8) which consisted of technical papers on the project background and research findings on the organization of transport services in Uganda and Ghana, a methodology based on a participatory approach was used to develop action plans by each discussion group. The suggested actions were presented and discussed at the plenary session and all delegates agreed on a strategy.

The two day National Stakeholders Workshops in Uganda and Ghana were well attended by delegates from the transport industry with a strong involvement from the private sector, the Ministry of Works, Housing and Communications, and Local Government.

Delegates stressed the need to introduce professionalism to the transport activity by providing access to business start up loans for suitably qualified individuals as well as a need to gradually replace used vehicles.

A set of actions was also identified to improve the regulatory environment through the encouragement of conditions that promote competition in a sector where there is a tendency for a natural monopoly. These recommendations are based on a range of long term policy and institutional reforms.

To overcome the lack of standards for drivers and instructors training, recommendation was made to develop a capacity building program for the next two years by setting up a national driving institute. There was also a large endorsement of the suggestion that the driver training should be linked to the cost of insurance to provide incentive for encouraging operators and drivers to invest in training. Delegates stressed the need to effectively enforce law for traffic offenders. It was also suggested that a drivers' union be created and that law regarding work contracts for drivers be enforced effectively.



Discussion Groups (Uganda)

Overall, the findings from the workshops went a long way to achieving the project outputs by formulating action plans aimed at increasing operation and organization efficiency of transport services. The main findings are:

- A general consensus to introduce competition through the promotion of Public- Private-Partnership initiatives for the development and management of bus parks, drivers training, the technical control of vehicle and route licensing. Furthermore, public and private sector each have a role in promoting improved services;
- Provision of technical knowledge to central and local government in transport management and tendering procedures;
- The need to develop a media and sensitization strategy to make public aware of the benefits of the reforms through a program of sensitization;
- The stakeholders resolved that the Uganda Private Road Users Association (UPRUA), who is the local project "Champion", to be the voice of the Private Sector on Transport issues in the country.



Discussion in Plenary (Ghana)

A set of actions was also identified to develop the freight industry and to improve the regulatory environment through the encouragement of conditions that promote competition. This included the following:

- Set up a professional body for freight agents and forwarders (land transport);
- Creation of more warehouses and terminals for consolidation of freight;
- Tendering out the management of lorry parks using PPP arrangements;
- Revision of current legislation on axle loads regulations (harmonization with sub-regional roads).

Overall, the findings from the workshops went a long way to achieving its objective by formulating action plans aimed at increasing operation and organization efficiency of transport services. There was a general consensus to introduce competition through the promotion of Public-Private-Partnership initiatives for the development and management of bus and lorry parks. Furthermore, it was agreed that the public and private sector each have a role in promoting improved services.

The likelihood of implementing the adopted action plans in Uganda and Ghana, summarized respectively in Appendix 2 and 3 below, rests upon a strong political will for change and on the level of awareness of decision makers that the suggested reforms will gradually improve transport efficiency. Therefore, the awareness raising exercise should be maintained and extended beyond the organization of workshops.

Additional capacity should be provided to the local champion in Uganda (UPRUA), who is an appropriate candidate, to undertake further sensitization programs through lobbying government and development partners, and the production of newsletter and media campaigns.

In Ghana, the stakeholders resolved that a Steering Committee made up of the key actors representing the public and private sector will be the project Champion. The composition of the steering committee is presented in the Appendix 4.

Appendix 2: Action Plans for Improving Transport Services in Uganda

Solution	Actions
1 - Promotion of Private Public Partnership initiatives to introduce and enhance competition	<ul style="list-style-type: none"> • 1.1 - Competitive tendering for the management and the development of parks • 1.2 - Competitive tendering for route licenses • 1.3 - Privatization of vehicle examination
2 - Introduce more professionalism into the transport sector and improve standards	<ul style="list-style-type: none"> • 2.1 - Introduce appropriate regulations to introduce standards governing associations • 2.2 - Provide technical and financial assistance to new associations • 2.3 - Establish national standards for training and testing drivers and instructors • 2.4 - Setting up of revolving fund to be used as a support framework to access finance for genuine professionals • 2.5 - Provision of vocational training for mechanics and fleet managers • 2.6 - Revision of traffic and safety act 1998 to include tendering for Route Licensing
3 - Provision of Technical Knowledge to central and local government in transport management and tendering procedures	<ul style="list-style-type: none"> • 3.1 - Training of Local government technical staff • 3.2 - Lobby government for more resources and recruit qualified staff • 3.3 - Set up steering committee to ensure participation of relevant stakeholders for the formulation of local transport plans
4 - Formulation of sensitization strategy to make the public aware of the benefits of the reforms	<ul style="list-style-type: none"> • 4.1 - Develop a media and sensitization strategy to include: <ul style="list-style-type: none"> • 4.1.1.- Develop sensitization materials • 4.1.2 - Workshops/seminars/media programs (TV/Radio etc.) • 4.1.3 - Introduce a school curriculum (road safety etc.) • 4.1.4 - Develop materials in local languages • 4.2 - Identify key stakeholders • 4.3 - Ensure local government have a transport operations strategy framework in their development plans

Appendix 3: Action plan summary for improving transport services in Ghana

Solution	Actions
1 - Provision of financial and fiscal support for the acquisition of better vehicles	<ul style="list-style-type: none"> • Encourage operators to make a group order for vehicle purchase • Lobby government to provide financial support to raise collateral for genuine professionals (Use Unions or Groups approach to access to finance) • Lobby government to reduce import duties and taxes • Encourage local investment for the production of spare parts • Waive tax on new vehicle imports • Discourage the importation of over aged vehicles • Provision of production plants for vehicles and spare parts • Government policy to guarantee loans • Formation of leasing companies • Route Licensing • Definition of what is over-aged – 12 years currently
2 - Provision of appropriate training and setting up of a legal working regulatory framework for drivers	<ul style="list-style-type: none"> • Set up specific driving schools for freight drivers • Regular refresher courses for drivers • Set up Drivers Union • Enforcement of law regarding work contracts • Laws should be enacted to address the issues described in the problem statement • Dissemination of information on laws enacted (some kind of education) <p>Adequate funding should be provided</p>
3 - Introduction of more professionalism and Improve standards and practices	<ul style="list-style-type: none"> • Set up a code of ethics for freight operators • Running of Workshops, seminars, courses to educate and train operators • Develop a sensitization strategy to promote preventive maintenance

Solution	Actions
4 - Revision and improvement of the regulatory framework	<ul style="list-style-type: none"> • Set up a professional body for freight agent and forwarders (land transport) • Creation of more warehouses and terminals for consolidation of freight • Tendering out the management of lorry parks using PPP arrangements • Revision of current legislation on axle loads (harmonization with sub-regional road) regulations
Solution	Actions
5- Provision of safety amenities and effective enforcement of regulations	<ul style="list-style-type: none"> • Lobby Government to provide highway safety amenities and timely road maintenance • Establish and better equip highway patrol division (effective monitoring of the h.p.) • Develop material in local languages to sensitize the road users on road safety • Set up incentive schemes for good drivers

Appendix 4: List of members of the Ghana transport steering committee

Name	Representation	Organization
Mr. E.A. Kwakye, Chairman	Regulator	Min. of Roads and Transport
Mr. Issahaku Sayibu	Passenger transport industry	Vanef- STC
Mr. G. Boateng	Freight transport industry	Global Haulage Ltd
Mr. E. Kwakuvie	Passenger transport drivers	GPRTU
Mr. Salifu Adamu	Freight transport drivers	GHTD
Mr. K.F. McAshley	Driving Schools Association	Ghana Drive
Mr. J. Osei-Owusu	Licensing/enforcement	DVLA
Nana Anokye Kwaa-Tutu	Passenger Transport Drivers	PROTOA
Mr. J.N. Okyere	Engineering	COMPTRAN

Appendix 5: Logical Framework
Improving vehicle operation in Uganda: A way forward

Narrative Summary	Verifiable Indicators (OVI)	Means of Verification (MOV)	Important Assumptions
Goal : To increase the mobility of poor rural and urban people in Uganda	Sustainable reduction in fares and tariffs and an increase of an increase in the availability of all modes of transport	Published statistics and records from Donors, National Governments, and other agencies	
Purpose: Orderly and sustained development of affordable, safe and efficient transport services in Uganda and Ghana	A change in operator practice with a reduction of 20% in costs, fares and tariffs, accidents and an increase in vehicle utilisation by 2010.	Government, donors and consultant reports	Sufficient improvements can be made to affect the lives of poor people.
Outputs: A strong umbrella organization to promote the interests of the transport industry and its users (UPRUA) An implemented sensitisation campaign targetted at the main stakeholders Increased levels of professionalism in the transport industry Increased cooperation between the public and private sectors with particular focus on the role of local government	Membership of UPRUA to increase by 20% per year over the next 5 years Messages given to different stakeholders via all forms of media by 2005 20% lower levels of customer complaint, lower VOCs and lower accident rates by 2010 Local government has a defined policy and operational framework for its relationship with the transport industry by 2005	Accounts and membership details TV clips, newspaper articles, brochures and newsletters etc. Consultants reports and national news media Transport operations strategy appears in local government development plans	The activities identified in the package of interventions is practical to implement. There is wider agreement by Government and other stakeholders There is political and economic stability.
Activities: Establish UPRUA Secretariat Lobby UPRUA's nomination to Government standing advisory committees/agency boards in the Road Industry	A fully operational UPRUA Secretariat by 31 st December 2003 UPRUA recognized as the umbrella association for the Transport Industry in Uganda by 31 st December 2003	Government reports Government reports	Stakeholders are willing to participate in the process and can come to an agreement.

Initial sensitization to start with a Road user quarterly newsletter; b) media campaign, c) Setting up a website	Road user in circulation by 31 st December 2003 - A website operational by 31 st December 2003	Newsletter and website available	
Develop knowledge sharing and sensitization materials at an international level to be promoted through SSATP or similar organization	Record on SSATP and on other organization website of relevant material to sensitize and promote research findings (2003)	Relevant organization website	
Carry out training needs assessment (TNA) for various stakeholders in the transport industry	Training Programs for member associations in place by 2003	Government, donor and consultant reports	
Establish national standards for training and testing drivers, instructors, operators, managers and mechanics.	Revision of Road and Traffic Act (2004)	New Road and Traffic Act	
Identify and make available necessary equipment and materials for training	A materials & a program for awareness campaigns in place by 2003	Government reports	
Identify and implement the appropriate institutional structure for continuing a sustainable program of training	New program and appropriate institutional structure for its implementation identified by 2003	Government, donor and consultant reports	
Support local government in developing a transport operations strategy framework in their development plans	Increase of the number of local representatives in transport steering committees (2003)	Government reports	
Technical assistance to MoLG and municipal authorities in the management and development of bus and truck parks	More transparency in revenue collection from bus and lorry parks and reduction of queuing time by 90% (2004)	Government, donor and consultant reports	

Appendix 6: Logical Framework
Improving vehicle operation in Ghana, a way forward

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p>Goal : To increase the mobility of poor rural and urban people in Ghana</p>	<p>Sustainable reduction in fares and tariffs and an increase in the availability of all modes of transport</p>	<p>Published statistics and records from donors, national Governments, and other agencies</p>	
<p>Purpose: Orderly and sustained development of affordable, safe and efficient transport services in Ghana</p>	<p>A change in operator practice with a reduction of 20% in costs, fares and accidents as well as an increase in vehicle utilisation by 2010</p>	<p>Government, donors and consultant reports</p>	<p>Sufficient improvements can be made to affect the lives of poor people</p>
<p>Outputs: A strong umbrella organization to promote the interests of the transport industry and its users: emanating from the Ghana Transport Steering Committee (GTSC)</p> <p>An implemented sensitisation campaign targetted at the main stakeholders</p> <p>Increased levels of professionalism in the transport industry</p> <p>Increased cooperation between the public and private sectors with particular focus on the role of local government</p>	<p>GTSC officially recognized as the champion by the Government, the public and private sector. Membership to increase by 20% per year over the next 5 years</p> <p>Messages given to different stakeholders via all forms of media by 2005</p> <p>20% lower levels of customer complaint, lower VOCs and lower accident rates by 2010</p> <p>Local government has a defined policy and operational framework for its relationship with the transport industry by 2005</p>	<p>Accounts and membership details</p> <p>TV clips, newspaper articles, brochures and newsletters etc.</p> <p>Consultants reports and national news media</p> <p>Transport operations strategy appears in local government development plans</p>	<p>The activities identified in the package of interventions is practical to implement.</p> <p>There is wider agreement by Government and other stakeholders</p> <p>There is political and economic stability.</p>
<p>Activities: Establish GTSC Secretariat</p>	<p>A fully operational GTSC Secretariat by 31st December 2003</p>	<p>Government reports</p>	<p>Stakeholders are willing to participate in the process and can come to an agreement.</p>
<p>Lobby GTSC nomination to Government standing advisory committees/agency Boards in the Road Industry</p>	<p>GTSC recognized as the umbrella association for the Transport Industry in Ghana by 31st December 2003</p>	<p>Government reports</p>	

Initial sensitization to start with a road user quarterly newsletter; b) Media campaign; and c) Setting up a website	Road user in circulation by 31 st December 2003 A website operational by 31 st December 2003	Newsletter and website available	
Develop knowledge sharing and sensitization materials at an international level to be promoted through SSATP or similar organization	Record on SSATP and on other organization website of relevant material to sensitize and promote research findings (2003)	Relevant organization website	
Carry out training needs assessment (TNA) for various stakeholders in the transport industry	Training Programs for member associations in place by 2003	Government, donor and consultant reports	
Establish national standards for training and testing drivers, instructors, operators, managers and mechanics.	Revision of Road and Traffic Act (2004)	New Road and Traffic Act	
Identify and make available necessary equipment and materials for training	A materials & a program for awareness campaigns in place by 2003	Government reports	
Identify and implement the appropriate institutional structure for continuing a sustainable program of training	New program and appropriate institutional structure for its implementation identified by 2003	Government, donor and consultant reports	
Support local government in developing a transport operations strategy framework in their development plans	Increase of the number of local representatives in transport steering committees (2003)	Government reports	
Technical assistance to MoLG and municipal authorities in the management and development of bus and truck parks	More transparency in revenue collection from bus and lorry parks and reduction of queuing time by 90% (2004)	Government, donor and consultant reports	