The Urban Transport 1998 – 2002
Strategic Development Plan

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The Sub-Saharan Africa Transport Policy Program (SSATP) is a joint initiative of the World Bank and the United Nations Commission for Africa (UNECA) to improve transport sector performance by promoting policy reforms and institutional changes.

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FOREWORD

Within the Sub-Saharan Africa Transport Policy Program (SSATP), the purpose of the Urban Transport component is to identify ways to provide affordable and safe mobility in urban areas, with special regard for the poorest parts of the population. Designed as a partnership between national and local governments, local communities, the urban transport industry, research institutions, consultants, and exterior donors, the component has achieved valuable results in policy reforms, user participation, and consensus building. It also contributes to World Bank’s operations in countries such as Burkina Faso, Cote d’Ivoire, Ghana, Kenya, Senegal and Tanzania.

Over the last years, the objective of the component has been pursued through a series of activities on issues such as institutional reforms, the establishment of partnerships with African authorities, a program on Non Motorized Transport, and data collection on road safety. As of September 1998, sixteen Sub-Saharan Africa countries are active partners in the component.

Having taken stocks of the lessons learned and with the aim of covering the main features and problem areas of urban transport in Sub-Saharan Africa, the Urban Transport Component of the SSATP now presents an agenda which has been updated together with its partners, as part of its 1998-2002 Strategic Development Plan.

The purpose of the present Working Paper is to give an overview of these main features, the constraints which they impose and the opportunities which they offer, and present the key elements selected as focal points for the component for the next years. These elements are: the pursuance of institutional reforms, the implementation of a Road Safety Action Plan for Pedestrians, a research on Microenterprises (informal sector), an Air Quality Management Initiative, the enhancement of performance indicators, the completion of the Non Motorized Transport Program, the analysis of the externalities (indirect costs) generated by the urban transport system, a training program for municipal staff, and an analysis of the links between poverty and urban mobility. Additional elements could be included, depending on the desires of member countries and the availability of resources.

By focusing on issues such as air pollution, road safety and the sustainable development of the private sector (microenterprises), the SSATP-Urban Transport Component is demonstrating its dedication to the improvement of an effective, affordable and safe mobility in urban areas of Sub-Saharan Africa.
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I. **URBAN MOBILITY IN SUB-SAHARAN AFRICA**

1. Traffic congestion, noise, pollution and frustration are the ingredients of city travel in many parts of the world. But few areas can match the urban transportation problems that are faced every day by the major cities in sub-Saharan Africa (SSA). Surging tides of human and vehicular movement clog the arteries within these cities, slowing commerce, increasing noise and air pollution, and sometimes making it difficult for the cities to provide even basic services. The efficient movement of people and goods is a challenge for any city, but in SSA the 5 percent annual urban population growth since 1970 has left city infrastructures, already short of resources, far behind. As populations continue to grow and transportation systems are stressed even further, the prospects for improvement become even more remote because poor transportation systems impede development and make it harder for people to find work or stay employed.

2. Although actual situations vary widely, urban transport systems in sub-Saharan Africa have a number of points in common: most urban travel still takes place on foot; there is little or no coordination among the different modes of transport; the artisanal or informal elements of the private sector play an important role in the supply of transportation; the accident rates in urban traffic are high; regulations governing transport services are inadequate; institutional fragmentation; the roads are in poor condition; and skill levels of planning and regulatory personnel are inadequate or nonexistent.

3. The city of Lagos, Nigeria, is an example of traffic congestion and worsening urban transport crisis. Apart from the chaos created by the vehicles traffic and parking as well as the difficulty in passengers finding appropriate buses, an average 30% of the roads are taken over by road side traders, thereby worsening an already bad situation. The waiting time in bus stops is sometimes over 45 minutes, depending on the location and time, the journey averages two hours for a 8 Km distance on some roads.

4. These common characteristics are compounded by the factors arising from the general environment in which urban transport is evolving — a growing urban population, the continuing high incidence of poverty among the urban population, the impact of the city as the center of economic productivity, the evolution of the role of government, the low density of the cities and the process of decentralization under way in most countries of the region. With their influence on the urban transport environment, they constitute its challenges.

- **Growth of the urban population.** In 1980, the population of sub-Saharan Africa was estimated at 380 million inhabitants, 23% of whom lived in cities. Under the twofold influence of the migration of the rural population to the cities and the natural growth of the urban population, this proportion had risen to 30% by 1993. While the average national population growth rate in sub-Saharan Africa is 3% a year, the rate is often closer to 6% in the metropolises. This sustained urban growth places unprecedented demands on urban infrastructure and services. Based on
current trends, it is estimated that demand for goods and passenger transport in the
developing countries is likely to outpace population growth.

The youngest segment of the population accounts for more than half of the total
urban population. This phenomenon places heavy demands on urban transport
services. This situation has an impact: (a) on large-scale travel flows at limited
times, (b) on fare policies, and (c) on the size and funding of fare reductions granted
to this category of users. Finally, as a direct consequence of the growth of the cities,
the way most metropolises are laid out is involving their inhabitants in longer and
longer distances and travel times. The general conditions of mobility are worsening,
while travel costs and times are increasing.

- **Urban poverty.** In 1992, between 45 and 50 percent of the population of sub-
Saharan Africa was living below the poverty threshold. Even if poverty remains a
predominantly rural phenomenon, its persistence and magnitude in urban areas will
constitute a politically and socially explosive factor in the decades to come. As for
mobility, more than half of all trips in urban areas are made on foot. This situation,
which affects mainly the most disadvantaged urban population groups, can be traced
in part to the failure of public mass transit companies in the 1980s and their high
fare levels. More often than not, the poor cannot afford mass transit that is beyond
their purchasing power (ability to pay). The citizens hardest hit by the dysfunction or
cost of urban services (including transport, of course) are the poorest groups of city
dwellers.

An effective urban transport system is a powerful tool for improving the efficiency
and accessibility of the labor market, social services, and schools. A key challenge,
therefore, is to develop a reliable and affordable urban transport system under
satisfactory conditions of safety. At this time no city in sub-Saharan Africa meets all
three criteria.

- **Urban productivity.** The urban transport subsector is a powerful engine of
development. Indeed, there is a direct correlation between economic performance
and the productivity rate of activities associated with the urban economy. By the
same token, how well the urban transport system operates is a significant
determinant of urban productivity. In this respect, the reduction of transport costs
and travel times has a direct impact on urban productivity. The sector is also a major
employer for the urban community, mainly in the informal sector in which the most
disadvantaged work.

In the conurbation of Dakar, for example, some 32,000 people derive their
livelihood, directly or indirectly, from the delivery of urban transport services. The
failure or dysfunction of transport services places a heavy burden on the urban
economy in terms of travel times, safety, atmospheric pollution, and traffic
congestion. In the cases of Dakar and Abidjan, targeted studies will shortly be
conducted to quantify the costs of urban transport system’s dysfunction in
economic, social and environmental terms.
**Redefining the role of government.** During the 1960s and 1970s, several public mass transit companies were set up in sub-Saharan Africa. With a few exceptions, all of them were liquidated and replaced by a welter of minibus-type services, urban taxis or motorcycle-taxis (as in Lomé and Cotonou) provided by the informal private sector. As noted in the World Bank's *1997 World Development Report*, the state has a key role to play in economic and social development. To perform this role effectively, however, it should not be a direct player as much as a partner, catalyst and promoter of growth.

In urban transport, as in other sectors, the role of government is increasingly to regulate, coordinate, plan, and act as arbitrator, rather than to provide the services. As it defines the rules of the game in the urban transport subsector, the state also has an important part to play in setting standards for road safety, traffic management, construction of lanes restricted to mass transit and other to Non Motorized Transport, providing or supervising infrastructure works for travel within city limits, and environmental protection.

**Decentralization process.** Despite its diversity and the different forms it has taken, a broad process of decentralization is under way in most countries of sub-Saharan Africa. The process primarily affects the capital cities, which are home to most of the country's administrative, economic and industrial activities. In their new functions, local authorities find themselves with broader responsibilities in terms of urban planning, construction permits, real estate development, and management of roads and urban infrastructure works.

Lessons drawn from experience with decentralization suggest that, in order to succeed, this process must be accompanied: (a) by a clear definition of the division of responsibilities between central government and local authorities; (b) by a transfer of resources commensurate with the responsibilities being transferred from central to local government; (c) by improvements in the technical and financial expertise of the local authorities; and (d) by the ability to mobilize local resources and collect taxes, especially taxes on land.

While local authorities are, by definition, better equipped to track movements in local demand for infrastructure and urban services, their financial situation and, in the case of urban transport, their lack of financial and technical resources still leave them heavily dependent on national agencies and hence on budget transfers or assistance from abroad. Accordingly, the key factor for local authorities lies in their capacity for, and their independence in, the planning of urban growth.

**Role of the private sector.** Transportation in the cities of SSA has for the past decade been increasingly dominated by private sector operators. Minibuses, collective taxis and a host of other types of privately run and maintained systems criss-cross most cities. Their growth has been dramatic. In most cities, the private sector now provides virtually all public transportation facilities. Supply, nevertheless, is still not able to meet the demand.
Most private bus and minibuses services are small enterprises or family businesses comprising 2, 3 buses, either owner-operated or leased on a daily basis: Cars Rapides (Dakar), Woro-Woros (Abidjan), Durumi (Bamako), Molus (Nigeria), Matatus (Nairobi), Dala Dalas (Dar es Salaam), Boda-Boda (Kampala). Vehicles are maintained by the owners themselves or mechanics shared with other operators. All the vehicles are second-hand ones and are financed through cooperative mechanisms. They are run on a day by day basis, without any consideration for fleet renewal. The economic crisis and the difficulty to get credit explain the present situation where most of the owners are unable to renew their fleet, which has an average age of 20 years.

As far as the financial aspect of the operation is concerned, in most African countries, capital markets are relatively undeveloped and banks are often unable or reluctant to undertake term lending. Moreover, banks prefer to lend to larger established businesses with developed balance sheets and credit histories. Operations in microenterprises and small businesses are cash-flow oriented but rarely do they have organized historical financial records or the assets needed for collateral for conventional bank financing. In this context, the average age of the fleet becomes older with second-hand vehicles and in face of a situation where the renewal of the fleet is unaffordable for small owners/operators.

Road Safety Action Plan. There is more than just inconvenience and inefficiency involved on the roads and byways of SSA. The situation can quickly become deadly. Accidents on the road, between vehicles and with pedestrians, are all too common, and their frequency is growing rapidly. Between 1968 and 1990, road facilities in Africa increased by 350 percent, with the pedestrians and the passengers of urban transport services making up the largest single group of accident victims.

The motorized segment of the transportation mix usually attracts the most attention, but in SSA pedestrians are an equally important part of the picture. Most of the trips (50 percent on average) are made on foot. Meanwhile, segregated traffic facilities for pedestrians and non motorized transport are mostly non existent. A recent appraisal of Road safety Initiatives in 5 African cities carried out within the SSATP shows that pedestrians and public transport passengers are the largest group among the fatalities, about 30-40 percent each.

The road accident risk, expressed as fatalities per 10,000 vehicles is 66 in Tanzania and 60 in Kenya, compared with 1.4 in United Kingdom. These figures clearly show that in Western European countries, the potential growth in road accidents caused by the increase in motor vehicles has been counterbalanced by effective road safety programs implementing a number of road accidents countermeasures.

5. Like in most sectors, policy decisions in urban transport are notably constrained by political considerations. The beneficiaries of the projects are often the poor and middle class, who wield political power. Consequently, desirable projects regarding pricing and cost recovery are often postponed or never instituted. Political economy considerations also make policy decisions on street rationalization, agency downsizing and restructuring
difficult. For similar reasons, may municipalities do not adequately enforce traffic regulations and licensing rules.

6. No lasting solution to any of these challenges is possible without a degree of institutional synergy between the main actors involved in urban transport issues, the key players being the national ministries and the local authorities. The institutional fragmentation that characterizes the urban transport environment (where one commonly finds at least eight ministries involved in one way or another in urban transport issues) and the emerging role of local authorities in policies on urban services make it vital to achieve this partnership goal, which is part of the broad objectives of the SSATP Urban Transport component.

II. THE NEED FOR REFORM: THE SSATP AND ITS URBAN TRANSPORT COMPONENT

7. Since 1987 the Sub-Saharan Africa Transport Policy Program (SSATP) has been an initiative of the World Bank, in partnership with the United Nations Economic Commission for Africa (ECA), aimed at improving transport sector performance by promoting policy reforms and revamping the institutional framework.

8. The approach followed by the SSATP rests on a twofold premise: (a) reforms are vital if transport services are to be improved, and (b) African countries and their partners in development are working together with a shared vision in terms of sector strategy and policy framework.


10. Apart from the World Bank, which coordinates the program, participation in the work of the SSATP is shared by the African authorities involved in transport issues, regional and professional organizations, donors (12 countries, in addition to the European Union and the United Nations Development Program), researchers and consultants.

11. So far there have been two distinct phases in the Urban Transport component: from 1989 to 1993 (Phase 1) work centered on a series of comparative studies on the evolution of urban transport in twelve Sub-Saharan African cities during the 1980s. These studies took into account the institutional, economic, technical and regulatory environment underlying the widespread deterioration in urban mobility during the decade. The findings of these studies were discussed at a regional seminar held in Yaoundé in March 1991. Identification of the main causes responsible for the deterioration in urban transport in the region provided the basis for designing a sector strategy at the regional, national and local level.

12. Since 1993 (Phase 2), a number of countries have set up working groups at the national level to formulate national strategies for improving the operation of urban
transport services and, on a broader scale, urban mobility as a whole. Some countries have reached the stage of implementing the strategies identified by the working groups. They include, among others, Senegal, Burkina Faso, Côte d'Ivoire, and Ghana. Also introduced during this phase was a Non-motorized Transport program, which started with a comparative analysis of non-motorized transport in Western and Eastern Africa. This study was followed up in Kenya and Tanzania by specific actions based on user participation.

13. Participation in the work of the SSATP is based on each country's individual approach, in the context of a partnership formula with the SSATP. Depending on needs, certain actions or studies are funded (a) to help in the identification phase and (b) to formulate proposals in the area of urban transport policy.

14. Current participants in the work of the SSATP Urban Transport component include sixteen (16) countries: Côte d'Ivoire, Senegal, Burkina Faso, Benin, Togo, Ghana, Cape Verde, Nigeria, Guinea, Cameroon, Mali, Congo, Kenya, Tanzania, Zimbabwe and Mozambique. It is hoped that Niger and South Africa will decide to join the component in September 1998.

15. Strictly speaking, there are no conditions governing admission to the component. The sole consideration is a country's desire to benefit from the framework of exchanges and its willingness to take part in the consensus-building process which is intended to lead to changes in urban transport policy. The process is thus voluntary and based on partnership.

16. The SSATP is a program, not a project. While its context is one of discussion and dissemination, it also in some cases forms an integral part of World Bank operations in the transport sector (as, for example, in Côte d'Ivoire, Burkina Faso, and Tanzania) and even in the area of urban transport (Ghana, Kenya). In the case of Senegal (see below), work under the SSATP Urban Transport component has led directly to the preparation and execution of a specific urban transport project.

17. The SSATP thus exerts a leverage impact in terms of the resources that can be mobilized to implement the principles of this component and its associated works. It also has its own operating budget, which relies on the participation of donors in financing particular actions. So far, Belgium, France, Sweden and the Netherlands have been the donors for the Urban Transport component.

18. Each year, the members of the SSATP Urban Transport component meet as the Steering Committee to exchange information and experience and discuss a sector-specific topic. These meetings also afford an opportunity to debate strategy issues affecting the component.

19. In 1995 (Brussels meeting), the specific topic was the privatization of mass transit companies. In 1996 (Dakar meeting), the topic was road safety. The specific topic selected for the Abidjan meeting (October 1997) was the role of local authorities in urban
transport issues. The next Steering Committee Meeting is being organized in September 1998 in Cape Town, South Africa, in conjunction with CODATU VIII conference.

20. This institutional environment, coupled with broad-scale attendance by local authorities at the Abidjan meeting, carries the SSATP Urban Transport component to its third phase, which is to set up partnership arrangements between the national institutions and the local authorities in the subsector. A prerequisite for shaping this third phase is to define the context of urban transport in Sub-Saharan Africa and to examine where the local authorities stand in the decentralization process and their evolving role in the delivery of particular urban services. An updated agenda for the coming years is now considered as part of the 1998-2002 Strategic Development Plan.

III. BROAD OBJECTIVES OF THE SSATP URBAN TRANSPORT COMPONENT

21. The component's two main operating principles are: (a) to work as partners to enhance the multiplier effect of actions and involve as many actors as possible, and (b) to focus actions on countries that have stated their intention to proceed with reforms to their urban transport policies.

22. The objectives of the component are:

(A) To consolidate and expand urban transport policy reforms through sectoral dialogue and institutional coordination;

(B) Identify ways to provide affordable and safe mobility, with special regard for the poorest population groups; this means taking account of all modes of transport, motorized or otherwise, including walking, and promoting an intermodal approach to transportation;

(C) At the regional level, to strengthen African expertise in planning, operating services, regulation, and research in the urban transport subsector;

(D) To disseminate best practices in other countries of the region and expand the exchange of information at the regional level.

IV. 1998-2002 STRATEGIC DEVELOPMENT PLAN FOR THE URBAN TRANSPORT COMPONENT

23. At the occasion of the Cape Town Steering Committee Meeting in September 1998, a 1998-2002 Strategic Development Plan will be presented. The main actions to be included in this 5 Year Plan are:

- Pursuing the policy of institutional reform in the countries involved in the SSATP process. These countries are Senegal, Côte d'Ivoire, Ghana, Burkina Faso,
and Tanzania. For their part, such countries as Congo, Mozambique, Cape Verde and Zimbabwe are intending to launch or finalize a reform process and to this end have set up working groups involving the main actors in the sector. This side of the SSATP has from the very outset formed the core business, the primary activity, and in large measure the raison d'être of the Urban Transport component. Given the initial results achieved and considering the impact of such an exercise, SSATP support for and promotion of this process will remain a priority for the component. A regional seminar on initial achievements and prospects for the institutional reform process in sub-Saharan Africa is to be organized by the SSATP Urban Transport component in early 2000.

- **Continued execution of the Non-motorized Transport Program** in Kenya and Tanzania. This program, launched in 1993, entered its second stage — pilo t execution— at the beginning of 1996. Two cities in Kenya (Nairobi and Eldoret) and two in Tanzania (Dar es Salaam and Morogoro) had been selected for implementation of a strategy for expanding non-motorized transport. In its initial phase, this program, which is funded by the Dutch Ministry of Foreign Affairs, identified the various socio-cultural behaviors associated with the image of non-motorized transport in sub-Saharan Africa, as well as the role of this mode of transport in urban mobility. Studies carried out on these subjects in Western Africa (Burkina Faso, Mali and Senegal, with financial support from Coopération Française) formed the basis for preparing an action plan to expand non-motorized transport in sub-Saharan Africa. The conclusions of this initial phase were presented at a regional seminar held in Nairobi in October 1994.

For Kenya and Tanzania, the second phase of this program is aimed at implementing the action plan. During the first part (1995-96), efforts focused on: (a) the installation of Pilot Project Units within each municipality in the four cities; (b) consultations with users of non-motorized transport; (c) selection of an initial battery of interventions or tests; (d) the carrying out of test actions in terms of traffic management; and (e) establishment of a platform for the development of local capacity for planning and designing actions in the field of non-motorized transport.

The second part of this second phase is currently being implemented (1997-1998). Its goal is (a) to train municipal staff in institutional matters pertaining to non-motorized transport, (b) to organize systematic consultations with users, (c) to initiate awareness campaigns on the safety of pedestrians and cyclists, (d) to develop urban mobility plans, (e) to design test interventions in the area of traffic management and urban infrastructure facilities, and (f) to propose affordable financing schemes for the purchase of bicycles in the urban areas under consideration.

As far as urban infrastructure is concerned, the investments required form part of two World Bank projects in Kenya (Urban Transport project) and Tanzania (Urban Infrastructure Rehabilitation project), respectively. A financial and technical assessment of the Non-Motorized Transport program is scheduled to be carried out late 1998.
• **Road Safety Program.** The French Cooperation has for some years been financing a program to computerize data on road traffic accidents in a number of West African countries, as well as efforts to train and sensitize national and local authorities.

Moreover, in view of the prevalence of walking as a mode of travel in sub-Saharan Africa, a program of road safety campaigns (Road Safety Action Plan) has been prepared for *pedestrians* in two African cities: Ouagadougou (Burkina Faso) and Harare (Zimbabwe). The Swedish International Development Cooperation Agency has indicated its agreement to finance this program, which is based for the most part on (a) awareness and prevention campaigns and (b) user participation. It is to be carried out in two cities in two stages: (a) identification of factors which cause accidents on the most dangerous roads for pedestrians, and (b) execution of pilot programs at the accident "black spots" identified, combining awareness campaigns aimed at users and the removal of conflicts between motorized vehicles and pedestrians.

The Road Safety Action Plan is due to be implemented from November 1998. On a more general level, the road safety element is expected to assume increasing importance within the SSATP Urban Transport component.

• **Urban Air Quality Management Initiative in Sub-Saharan Africa.** The deterioration of air quality has become a major environmental problem in many Sub-Saharan cities. Motorized transport is a major factor of this deterioration due to the growing fleet of vehicles in operation and the poor maintenance practices combined with the aging of the imported used cars. Hence, the SSATP, in cooperation with the Economic Development Institute (EDI) will launch a regional initiative to reduce the vehicle air pollution. This overall objective will be pursued through the implementation of the following specific objectives in six African cities (Dakar, Abidjan, Douala, Harare, Nairobi and Ouagadougou):

(a) Raise the awareness of the national and local authorities as well as the urban transport industry on the health effects of air pollution caused by motor vehicles;

(b) Help policy-makers formulate, implement and monitor strategy to control pollutants, including institutional reform and the analysis of ambient air quality;

(c) Identify vehicle and fuel targeted as well as traffic management measures to control air vehicle pollution.

The first seminar is due to be organized in Dakar, Senegal, in December 1998.

• **Microentreprises Development Plan.** The importance of the private sector in the provision of urban transport services, its role in the urban economy and the externalities generated by the way the system is currently run justifies to launch an initiative with a research as the starting point. The objectives of the research are to:

(a) Identify the main characteristics of the system: management practices, operational environment, fares practices;
(b) Analyze the financial market and the conditions under which the small enterprises can get the access to credit schemes under the present bank and financial regulation and markets;

(c) Analyze conditions for grouping of small operators in order to improve credit guarantees;

(d) Identify measures to improve financial, operational and environmental conditions under which the services are provided;

- **Cooperation with research institutes and African consultants.** With financial assistance from the French Cooperation, the SSATP-UT finalized end of 1997 a Cooperation Agreement with the grouping Solidarité Internationale sur les Transports et la Recherche en Afrique Sub-Saharienne (SITRASS). SITRASS' network of African expertise will allow the two programs to develop joint actions in terms of disseminating data, calling more systematically on African researchers for studies, assistance in supervising a road safety action plan, and gathering data on performance indicators.

- **Identification and monitoring of performance indicators.** This issue has been on the work agenda of the Urban Transport component for a number of years, but so far no concrete action has been undertaken for reasons having to do with the difficulty of identifying representative indicators and, more basically, of data gathering and updating by local institutions (problem of local linkages).

  Starting in early 1998, a limited number of performance indicators data has been gathered and kept up to date in a limited number of cities using SITRASS' network of experts: Abidjan, Cotonou, Dakar, Lomé, Ouagadougou, Yaoundé. Since it focuses on a few key data that are easy to collect, this data collection of indicators should make it possible to measure the impact and evolution of urban mobility.

- **Dissemination of results.** Over the last few years this has been a weak point of the SSATP and particularly its Urban Transport component.

  Beginning in 1999, an overview of recent developments in the component will be published quarterly and distributed within the SSATP-SITRASS network. An Urban Transport task manager from the SITRASS network will assist in promoting this activity. Particular attention will be paid to disseminating items that are candidates for replication in other countries of the region.

- **Analysis of transport conditions for the poorest city dwellers.** The purpose of this study is to identify what needs to be done to provide the poorest city dwellers with better and more affordable access to transport. Indeed, the burden of transit fares on their incomes, the locations where the poorest live within the city confines, the inadequate access to transit services in the districts concerned, and the pitiful state of available means of transport (chiefly for women and young children) lead them to forgo the use of mass transit. One study is to be carried out in Dakar in 1999, and a second in Abidjan, under projects being financed by the World Bank.
In addition, since 1997 INRETS has been conducting research into the mobility needs of the poorest population groups. These studies, financed by Coopération Francaise as part of the SSATP, focus on Senegal, Burkina Faso, Cameroon and Mali. The initial regional findings should be available in 1999.

- **Strengthening local expertise in urban transport.** A twinning program to link four cities in sub-Saharan Africa and one or more cities in other developing regions (the city of Curitiba would be a good point of reference) is under study. To give shape to this project, the following actions are needed: (a) identification of suitable African cities and definition of training needs; (b) organization of the training sessions; and (c) dissemination of instruction materials.

This proposal, adopted during the Steering Committee meeting in Dakar in May 1996, has not yet taken concrete shape for lack of funding. The new role of the local authorities in the UT component now makes the proposal more timely.

- **Analysis of the economic and social impact of dysfunctions ("externalities") in the system for transporting passengers and goods.** Two studies on externalities in urban transport are to be carried out in 1998-1999 in Dakar, Abidjan and Ouagadougou respectively. Their goal is to identify and quantify in monetary terms the externalities of urban transport on the urban economy, the smoothness of traffic flows, travel times, the incidence and seriousness of traffic accidents, urban pollution, and the difficulty of commuting. These studies will also identify the direct and indirect beneficiaries of the urban transport system and what advantages they may derive from any improvements. Accordingly, they call for large-scale data gathering on the different parameters of urban transport before they can be subjected to cost analysis. These two studies are to be conducted in 1998 as part of projects being financed by the World Bank. In view of their interest to other sub-Saharan African countries, their findings will be disseminated by the SSATP.

V. **THE REFORM PROCESS IN SENEGAL**

24. The work of the Coordinating Committee set up in 1993 as part of the SSATP-U.T. paved the way for preparation and implementation of a free-standing Urban Transport Project financed by the World Bank. This project, which began to be implemented in September 1997, provides assistance in implementing the institutional reform adopted by the Senegalese Government to rehabilitate the urban transport subsector. Its two components are: (a) strengthening of institutional expertise and revamping of the regulatory framework governing mass transit services, and (b) construction work on urban infrastructure facilities associated with mass transit (such as the building of terminals, bus stops, priority roads, etc.).

25. The main specific features of this project are:

- Creation of an agency to provide institutional coordination of urban transport in greater Dakar (Conseil Exécutif des Transports Urbains de Dakar, CETUD),
membership in which is shared equally by the national ministries involved in urban transport issues, the local authorities, and the operators.

- Assistance for the privatization of the mass transit company SOTRAC and support in developing a leasing mechanism on attractive terms that will be affordable by all operators for purposes of fleet renewal.

- Establishment of an Urban Transport Development Fund fed by contributions from the government, the local authorities, and subsector operators. This fund is intended primarily to finance urban infrastructure and training programs. Use of resources from this fund is controlled by CETUD, which thus has financial resources at its disposal for subsector development.

- Coordination between the different modes of transport (including the suburban railroad) and the different kinds of operators.

- Design and implementation of a program to enhance professionalism in the subsector, encompassing both private operators (the Cars Rapides) and the Urban Community of Dakar. In addition, a road safety action plan will be carried out, based on the training/awareness of drivers and user participation (6000 drivers of the informal sector are due to have training sessions on road safety).

26. On the institutional level, the creation of the Conseil Exécutif des Transports Urbains (CETUD), with all actors in the system placed on an equal footing, ensures that they are fully and permanently represented in the process of decision-making, regulation and coordination. CETUD has a plenary meeting (deliberating organ), one of whose functions is to elect its chairman. The latter, in tandem with the Permanent Secretariat, is responsible for executing the action program adopted by the sector. This mechanism gives the committee legitimacy and a stronger hand in implementing reform measures. The World Bank will appraise in 1999 a second Urban Transport Project in Senegal which will be targeted on investments in urban infrastructures promoting the public transport services.

27. Several of the actions that form part of the Urban Transport component are likely to be of interest to other sub-Saharan African countries (e.g., the programs to enhance professionalism and to partially regroup the informal sector, and the road safety program). To this extent, and as necessary, the findings and lessons drawn from these actions will be disseminated within the framework of the SSATP.

VI. MAIN LESSONS FROM THE REFORM PROCESS

28. Several lessons can already be drawn from the experiments conducted within the SSATP in recent years to improve the urban transport system through sector policy reforms. The following lessons, while by no means exhaustive, are typical:
• To stand a chance of lasting success, sector policy reform programs must be initiated, promoted and monitored on the basis of strong local demand. Such ownership by local public stakeholders (ministries or local authorities) means local needs and constraints can be taken into account more effectively.

• Over the long haul, reaching consensus by involving the main stakeholders offers the best chance of forging solutions. The search for such a consensus also involves the economic operators, as well as user associations once they have become reasonably representative.

• Establishing an institutional and regulatory framework is a prerequisite if the sector is to be placed on a sound and sustainable footing. With this in mind, a project dealing specifically with urban transport will be more effective if preceded by reforms to the institutional environment and strengthening of related expertise.

• Developing and maintaining an urban road network is an important but not exclusive prerequisite for the supply of good-quality transportation. Indeed, this supply can only exist or expand if there is coordination between modes of transport and if optimum use is made of their complementarities. In this respect, effective use of the urban railroad layout can, in many African metropolises, form the backbone of the urban transport system.

• Expatriate experts should act as ad hoc advisers and facilitators. Thirty years of experience with technical assistance in sub-Saharan Africa has shown that it has seldom achieved its goals in terms of developing local capacities. This is achieved only through ownership by the local people, identification of real needs, and targeted training programs tailored to the local environment.

• To an increasing extent, financing in the urban transport sector is being channeled through public or private partnership arrangements, whether in programs to improve road safety, as in Burkina Faso, or through creation of a specific urban transport financing fund, as in Senegal (see above). This partnership is predicated on not increasing the tax burden on the sector but on identifying the role of each group of operators in the overall urban transport system, in terms of both the expenses they cause to the system (congestion, pollution, accidents) and the benefits they stand to derive from its improvement.

• Recent experience around the world shows that long-term development of an urban transport policy calls for increased accountability on the part of local authorities and greater ownership at the institutional, financial and technical level. In the case of sub-Saharan Africa, the best way to bring about this ownership is through a partnership between the local and the national authorities.

• The ongoing privatization of mass transit companies in some countries of the region raises questions regarding the future of the fare subsidies or concessions granted to certain categories of users (civil servants, students, etc.). The principle behind these
concessions, and more particularly the way they are actually paid (extended to companies), are to blame for one of the perverse impacts on productivity levels. The purchase of "block of subscriptions" by requesting entities (ministries, employers), besides being far more transparent, would serve to relieve private operators from the kind of public service obligations traditionally imposed on them by the authorities.

VII. THE ROLE OF THE LOCAL AUTHORITIES IN THE SSATP URBAN TRANSPORT COMPONENT

29. There are several ways to improve urban mobility in sub-Saharan Africa. One is a better fit between the functions of the national and the local authorities. The latter are responsible for such areas of intervention as maintenance and expansion of the secondary road network, traffic plans, parking policy, construction of urban facilities, issue of operating licenses for city taxis, road signaling and lighting, and, more generally, management of the urban area.

30. These areas of responsibility complement those of the central authorities (essentially, the overland transport department of the transport Ministry): transport planning, coordination of modes of transport, road safety, issue of operating licenses to trucking companies, regulation of the profession, and regulation of transportation services. These complementary functions are both long- and short-term, notably for local authorities as far as urban development is concerned.

31. With respect to urban transport, harmonious urban growth should aim at controlling the long-term factors and hence at achieving greater consistency between control over the evolution of urban options (such as those contained in development plans) and those concerned with transport plans and mobility. It is this consistency that will in the long run pave the way for improved linkages between land use, the road system, and modes of transport, with priority going to mass transit and pedestrians over private cars.

32. The models needed for sub-Saharan African countries are not so much those of developed countries as those of countries which, when faced with similar institutional, financial and technical environments, have successfully instituted urban transport policies that blend effectively with the way the city is being developed. The case of Curitiba in Brazil shows that such a strategy can succeed if built on consistent objectives, complementary institutions, and continuity over time. This success is explained by the fact that the development of urban transport is part and parcel of a long-term vision of the development of the city and its available land.

33. The SSATP's forum for exchanging experience, its information network, and its role in dissemination make it a suitable vehicle for managing the interfaces between national and local responsibilities in the area of urban transport. Without necessarily assuming any particular institutional form at the local level, this partnership formula
within the framework of the SSATP Urban Transport component will be achieved through:

♦ Systematic participation of local authority representatives in the Steering Committee, with the corresponding broadening of its membership.

♦ Formation of local level working groups tasked with defining a partnership strategy. Some such working groups already exist (Senegal) or are being formed (Côte d'Ivoire, Burkina Faso, Tanzania). Countries initiating an institutional reform process will be encouraged to take this step in agreement with the municipal authorities.

♦ Identification of action plans (studies, training) involving an urban approach to urban transport issues; priority will be given to actions entailing synergy between national and local actors, such as, to mention just a few, institutional coordination, road safety, urban pollution, traffic management, coordination between modes of transport, enhancing professional standards in the informal sector.

VIII. CONCLUSIONS

34. The World Bank's role in sub-Saharan Africa's urban transport subsector has evolved in the last few years. Recent projects concerned specifically with urban transport (e.g., in Ghana, Kenya, and Senegal, Côte d’Ivoire), are based on a comprehensive approach to urban mobility issues. Indeed, apart from the traditional components concerned with urban infrastructure works or road construction, these projects take into account such factors as: (a) the role of the local authorities; (b) the strengthening of local human resources; (c) institutional reform; (d) integration of non-motorized traffic; (e) participation in the project preparation process by the main stakeholders in the system; (f) road safety measures for pedestrians, (g) concern about the impact of motorized transport on air pollution and (h) an enhanced but regulated private sector role in the supply of transport services.

35. Such an evolution has been achieved through a combination of (a) sector dialogue including the participation of all major stakeholders, (b) the overall application of a regional approach to exchange information, disseminate best results and compare experiences and (c) the contribution of the Donors community to the program. This comprehensive approach pursued by the SSATP and the partnership with African Authorities have contributed to pave the way for a sustainable development of urban transport services in Sub-Saharan Africa cities.
## SSATP-Urban Transport: Objectives, Action Plan, and Funding Arrangements as of September 1998

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Title of Research: Urban Air Quality Management Initiative in Sub-Saharan Africa


Managing Division: Economic Development Institute (EDI), in collaboration with AFTU2

Task Team: EDI and SSATP-Urban Transport Component

Justification and Objectives

Urban transport plays a major role in the development of urban areas and economic growth at the overall national and trans-national levels. In Sub-Saharan Africa, this importance is exacerbated by the very high rate of urban growth (close to 6% in the major cities, with overall national population growth of 3% a year).

Notwithstanding this role, the sector generates negative externalities such as an important level of road accidents and vehicle air pollution. As far as Burkina Faso is concerned, the capital city of Ouagadougou is deeply affected by atmospheric pollution caused by two wheel motorized transport which represents 80% of the motorized transport in the city.

Common air pollutants in urban cities of developing countries are:

- Respirable particular matter from smoky diesel vehicles, two-stroke motorcycles, burning of waste and firewood, road dust and stationary industrial sources;
- Lead aerosol from combustion of leaded gasoline;
- Carbon monoxide vehicles and burning waste and firewood;
- Photochemical smog (ozone) produced by the reaction of volatile organic compounds and nitrogen in the presence of sunlight: motor vehicle emissions are indeed a major source of nitrogen oxides and volatile organic compounds;
• Sulfur oxides from combustion of sulfur-containing fuels and industrial process;

Hence, the deterioration of air quality has become a major environmental problem in many Sub-Saharan Africa cities. Dakar and Ouagadougou are two examples of such a deterioration caused by motor vehicles operating in unfavorable meteorological environment and poor operational practices. Moreover, the vehicle fleet, in Dakar, as well as the motorized two-wheelers in Ouagadougou are expected to grow even more over the next decades. If appropriate measures are not taken now, vehicular air pollution in those cities is likely to worsen, posing a great threat to human health and welfare.

Such a concern is now taken into consideration by the Urban Transport Component of the Sub-Saharan Africa Transport Policy Program (SSATP), which has placed air pollution issue as one of the priority issues of the next years.

In this framework, Dakar and Ouagadougou have been selected as pilot cases to identify an appropriate action plan targeting the reduction of vehicle air pollution. The organization of national workshops during the FY 1999 in Dakar and Ouagadougou could be the starting point of such an initiative.

The overall objective of the proposed workshops is to prepare an Urban Air Quality Management Strategy based on the reduction of vehicle air pollution. This overall objective will be pursued with the following specific objectives: (a) raise the awareness of national and local authorities as well as the urban transport industry on the health effect of air pollution caused by motor vehicles; (b) help policy-makers formulate, implement and monitor strategies to control air pollutants, including institutional reform and the analysis of ambient air quality; and (c) identify vehicle and fuel targeted as well as traffic management measures to control vehicle air pollution.

**Audience**

The institutions responsible for environment, transport and traffic, fuel quality and supply, industry and health would participate as well as the urban transport operators, the labor unions, non-governmental organizations, journalists and the media.

**Targeted Countries**

The program would be initiated in Senegal (Dakar) and Burkina Faso (Ouagadougou) in FY99. The selection of both cities is justified by the importance of the air pollution caused by motorized urban transport and the role of motorized transport in the overall mobility rate.

The same workshop will be organized during the FY 2000 in Douala and Abidjan and during the FY 2001 in Nairobi and Harare.

**Program Design and Content**

The seminars would last 2 days with the following content:
(a) identification of the main sources of pollutants as well as the current state of vehicle emission standards and vehicle inspection programs. Data on air traffic, number of motorized vehicles and level of existing air pollution in the metropolitan area will be collected as preparation to the seminar;

(b) institutional issues at stake: institutional arrangement and responsibilities related to environment protection and regulation at the national and local level with specific reference to air pollution from vehicles;

(c) identification of potential measures to abate vehicle air pollution: vehicle-targeted measures, fuel-targeted measures, traffic management measures, park and ride facilities, shift in the increase of bus capacities, promotion of public transport in lieu of private cars, fares incentives, improvement of the public transport network, service elasticity, services coordination, construction/improvement of bus terminals;

(d) debate on the main content of an Urban Air Quality Management Strategy to be considered by the national authorities to reduce vehicle air pollution with proposal of time frame for the implementation of the agenda. The preparation of the Strategy would include large consultation with the main stakeholders. An ad-hoc task-force will be set up as follow-up of the seminar in order to assist in the preparation and finalization of the Strategy; and

(e) develop proposals for technical measures (mix of investments, training, traffic management initiatives and awareness campaigns) which could be considered as part of the Bank’s operation under preparation and appraised as part of the Project’s preparation.

A number of training materials, including short technical notes and case studies, will be prepared prior to the workshops. These documents, as well as extracts of the workshops proceedings would be later integrated into a web page and disseminated in Sub-Saharan Africa.

**Partnerships**

In Dakar, the seminar would be organized with the newly set up Conseil Exécutif des Transports Urbains de Dakar (CETUD) which comprises the three major actors of the sector: ministries, the Local Government and the industry, among which the operators (the so-called Cars rapides, operating a fleet of 2,500 minibuses most of them on a microenterprise structure of ownership).

In the case of Ouagadougou, it is suggested to organize the seminar with the City of Ouagadougou which is a major actor in the urban transport sector and has shown a growing interest and capacity to deal with urban transport issues.
Integration with World Bank Operations

In Senegal, the World Bank is preparing a second Urban Transport Development Project (UTDF). One of the issues to be addressed by the project is the sustainable development of the private sector (Cars rapides) and the way the services provided could be improved in terms of air pollution and level of traffic accidents. As part of the ongoing Urban Transport Reform Project (effective since September 1997), training sessions will be organized on road safety for 6,000 minibuses drivers.

The UTDF is also considering the construction of a Vehicle Control Center to monitor the emission of air pollution caused by the motorized transport in the metropolitan area of Dakar. The preappraisal mission is due to take place in March 1999. The organization of the EDI workshop on the Urban Air Quality Management Strategy on December 15-16, 1998 will help in the identification of concrete measures which could be integrated into the UTDF. The CETUD would also act as the Implementing Agency for the Urban Air Quality Management Strategy identified and financed by the UTDF.

In Burkina Faso, the World Bank is considering a Transport Sector Project, as a follow-up to the Transport Adjustment Project. The future Transport Project would have an important urban transport component, focusing on institutional reforms, road safety, air pollution, traffic management, and municipal capacity building. As part of the preparation of the second Transport Project, a study will be carried out end 1998 to analyze the negative externalities of the urban transport system in Ouagadougou, including air pollution. Air pollution is considered the major source of pollution in Ouagadougou. In this context, it is proposed to hold the workshop around April 1999.

In Cote d’Ivoire, the World Bank has approved in May 1998 a Transport Sector Adjustment/Investment Program. Urban Transport is one of the component of the Program and deals with institutional reform, privatization of the public transport company, SOTRAC, road safety and air pollution. The Urban Transport Component of the Transport Program is designed to prepare a free standing Urban Transport Project in FY 2001, or earlier, institutional arrangements permitting. The Urban Air Quality Management in Abidjan will perfectly fit with the issues to be dealt by the Urban Transport Project.

Dissemination of Bank Findings of Best Practice

The initiative will represent a key opportunity to disseminate widely the lessons learned from the Bank’s involvement with urban air management, primarily in LAC and Asia, as well as the conceptual and methodological research carried out by the institution on issues of pollution and air quality. Both DEC and ENV will be called upon to provide updated training materials.

Impact

In the short term, it is expected that the initiative will: 1) increase public awareness on the primary importance of urban pollution from vehicular emissions and its direct impact on health and the environment; and 2) disseminate knowledge and best
practices in the sector. In the medium and long term, the initiative will help 1) prepare and implement urban transport projects that will effectively target air pollution; and 2) strengthen the capacity of local authorities, environmental agencies and other stakeholders in dealing with one of the most critical aspects of urban environmental management and implement strategies that will effectively improve air quality.
SSATP URBAN TRANSPORT COMPONENT

Microentreprises Development Plan

RESEARCH DESCRIPTION BRIEF

Status: partially financed

Title of the Research: Microentreprises Development Plan for the Urban transport services


Managing Division: AFTU2

Task Team: SSATP- Urban Transport Component

Framework

The urban transport services in Sub-Saharan Africa are mostly provided by small operators running minibuses or taxis. With only three exceptions (Dakar, Abidjan, Harare), most public transport companies which were running in the 80’s have been liquidated, due a combination of poor operational and financial performance as well as inefficient intervention of the State, acting as a regulator and customer and shareholder of the company.

The role of private operators is an important element to develop urban mobility. The development of the private sector presents many advantages such as: (a) an increase in the overall capacity of a system in which the offer of the public transport companies alone is inadequate or even non-existent, (b) operational flexibility and adaptability to routes and schedule changes and travel increases on passengers demand, (c) provision of services in urban areas unlikely to be serviced by large scale -standard- buses.

The operation of urban transport services by the private sector also generates employment opportunities especially for the urban poor. As an example, the Cars Rapides operation in Dakar (2500 minibuses) provides direct and indirect employment for 32,000 persons in the metropolitan area of Dakar.

However, the main limits of the system are the following: (a) contribution to road congestion in central areas, (b) unsatisfactory performance at peak hours, (c) high transport costs for passengers who often pay two or more fares for a single trip because of
the operator interchange and trip segmentation, (d) high level of accidents due to driving conditions, (e) poor passenger information and quality of services.

In addition, the way the system is running in most of the Sub-Saharan cities raise concern on the social, economic and environmental sustainability of the operation due to the negative externalities generated by such services on the whole urban economy in terms of air pollution, road accidents, traffic congestion.

As far as the financial aspect of their operation is concerned, in most African countries, capital markets are relatively undeveloped and banks are often unable or reluctant to undertake term lending. Moreover, banks prefer to lend to larger, established businesses with well-developed balance sheets and credit histories. Operations in microentreprises and small businesses are cash-flow-oriented but rarely do they keep historical financial records or the assets needed for collateral for conventional bank financing. In this context, the average age of the fleet increases, second-hand vehicles dominate fleet composition and the renewal of the fleet is unaffordable for the small operators/owners.

**Organization of the private sector: some reference cases**

Operator associations have been set up in most of the major cities of Sub-Saharan Africa. Those associations are usually in charge of coordinating routes departures, regulation on passenger capacity and terminals management.

- **In Abidjan, Cote d’Ivoire**, the Gbakas get a formal authorization from the government to operate on interurban routes, but as the public transport company - SOTRA - becomes weaker, they run their services on urban and suburban routes.

- **In Lagos, Nigeria**, several associations have been created. They negotiate with public regulating agencies, coordinate vehicle and spare parts purchase which are retailed to individual operators. They also finance new vehicle purchases, manage maintenance and train drivers.

- **In Nairobi, Kenya**, about 35 route associations of Matatus have been set up since the 1980’s. They oversee negotiations with the City of Nairobi parking sites for vehicles, provide insurance, ensure a certain level of maintenance of vehicles. They also discourage external operators to run services on routes run by their members.

**Objectives of the research**

The importance of the private sector in the provision of urban transport services, its role in the urban economy, its importance in terms of employment opportunities as well as the way the system is currently run justifies considering ways to improve the long term sustainability of the urban transport services in Sub-Saharan Africa. Such an exercise is part of the effort to improve the overall mobility of the urban community, with a special attention to those who need those kind of services the most, the urban poor.
Hence, the objectives of the research are to:

- Identify the main characteristics of the private sector operation in the provision of urban transport services, including model, age and costs of the vehicles used, fleet management including maintenance practices, operational environment and coordination of services, fare policy and cost of the average passenger trip;

- Analyze the financial market and the conditions under which the small enterprises can get access to credit schemes under the present bank and financial regulation and markets;

- Prepare, available data permitting, draft financial analysis of the operation including possible regrouping of some small owners in order to improve credit guarantees;

- Recommend actions and measures to improve financial, operational and environmental conditions under which the services are provided, at a national level as well as at regional one: such recommendations could include the support to the creation/development of route associations, training programs, data collection analysis of alternative and affordable financing schemes such as the leasing one, the support to a higher level of maintenance, passengers information and overall measures to promote the use of public transport (traffic management, terminals construction).

**Targeted countries**

The research will be carried out in cities with important private sector operating urban transport services whether on a regular or non-regular basis. In this respect, the following cities will be selected: Dakar (Cars Rapides), Abidjan (Woro-Woros), Bamako, Nairobi (Matatus), Harare (Commuter Services), Dar es Salaam (Dala Dalas). In some cities, the private-informal-sector- competes with services provided by public transport companies (Dakar, Abidjan, Harare), with weak or non existent coordination. In other cases, the private sector covers all services provided. One of the issues to be analyzed by the research is to identify the differences regarding tariffs, quality of services and costs of operation.

All the countries selected are members of the SSATP-Urban Transport Component and are involved in the process of a policy reform on urban transport.

**Research Design and content**

The research will be carried out by a joint venture between a team of International consultants skilled in urban transport economy and microentreprise and a selected research institution by city. Where possible, the research institutions should be members of the SITRASS network of African experts or a comparable network of local expertise.
The program will be managed by the SSATP-UTC in close cooperation with the national and local authorities. A Mid-term review report will be prepared by the team of international consultants and submitted to the SSATP-UTC Steering Committee for comments and dissemination.

**Partnerships**

In all the selected countries, the research team will be working in close cooperation with the institutional forum set up as part of the SSATP policy reform, such as the CETUD in Dakar.

**Integration with World Bank Operations**

The role of the private sector in the provision of urban services is one of the key issues in World Bank transport operations. Traditionally, the privatization of existing public companies has been the major instrument to increase the role and effectiveness of the private sector. As far as the Urban Transport Sector is concerned, three public transport companies remain in operation in Sub-Saharan Africa: SOTRAC (Dakar), SOTRA (Abidjan), ZUPCO (Harare). All of them are in the process of being privatized in the future.

Financing mechanisms such as Leasing are under consideration to support Small Business and Microentreprises in the Urban Transport Development Project in Senegal. The same approach is under consideration in Cote d’Ivoire as part of the implementation of the Transport Sector Adjustment/Investment Program which includes an Urban Transport Component. As a financing technique, leasing can be effective in overcoming barriers imposed by interest rate ceilings and collateral requirements of commercial bank financing. In addition, lease payments can be tailored to fit the cash flow generation patterns of the lessee-borrower’s business, the security deposit is smaller than the equity stake required in conventional banking financing. Hence, the leasing scheme seems particularly appropriate for the financing of minibuses owned by small operators.

The proposed research would help to identify the main issues to be analyzed for such consideration. The findings of the research program will be useful not only for the two mentioned Bank operations but for any future operations related to Urban Transport in Sub-Saharan Africa where most of the microentreprise experiences in the urban transport sector can be found.

**Dissemination of Findings and Best Practices**

Since most of the urban transport services in Sub-Saharan Africa are operated on similar operational and financial conditions, dissemination will be an important aspect of the research and will also target those who benefit the most from the findings of the research: the urban transport operators.

The conclusions and findings of the research will be presented at a regional seminar sponsored by the SSATP-UTC during the FY 2001. The proceedings of the
seminar will be disseminated by the SSATP-Urban Transport as Working Papers. Representatives (Trade Unions, national associations of operators, Chamber of Trade) of the private sector will be invited to attend the seminar together with national and regional authorities involved in the urban transport policy. The dissemination will be carried out in the Bank’s Africa Region, the Ministries of Transport and the Local Governments in Sub-Saharan Africa, the representatives of the private sector in the selected cities.

**Impact**

Traditionally, the World Bank Policy was for the last ten years to focus on the restructuring and privatization of existing public companies, within the framework of an adjustment process focused on State intervention in the transport operation. Such an approach has also been promoted by other Donors involved in the Urban Transport Sector. However, in Sub-Saharan Africa, the effort of European Donors with support to public transport companies in the region did not produce the expected results in terms of long term sustainability of the financing provided to the operators.

The effort to restructure and privatize public transport companies is needed to improve the efficiency of services offered. The lessons learned and the information collected by the research on the cities selected will give a broad picture and first hand data on the way to improve, on a sustainable basis, the efficiency of the services provided.
SSATP URBAN TRANSPORT COMPONENT

Seminar on the Assessment of the Urban Transport Policy Reform

DESCRIPTION BRIEF

Status: fully financed

Title of the Activity: Seminar on the Assessment of the Urban Transport Policy Reform in Sub-Saharan Africa

FY: 2000

Managing Division: AFTU2

Task Team: SSATP- Urban Transport Component

Framework and objectives

Policy reform has been one of the core activities of the SSATP-Urban Transport Component for the last years. From the lessons learned by the comparative studies on twelve cities in Sub-Saharan Africa carried out in 1991 and presented at a regional seminar in Yaounde in March 1991, it appeared that changes of the institutional and regulatory framework would be the first step to improve the efficiency of the urban transport services in Sub-Saharan Africa.

Based on this comprehensive approach, countries in the region embarked on a large scale policy dialogue to debate the current urban transport issues at the country level and identify measures to develop and implement long-term solutions.

Such initiatives were initiated in Senegal (with the set up of a Comité de Suivi), in Burkina Faso (with the set up of the Comité des Transports Urbains de Ouagadougou), Cote d’Ivoire (with a coordination forum), in Ghana, in Congo, Cameroon (with the set up of the Comité de Gestion des Transports Urbains), Zimbabwe (with an ad-hoc Committee), in Tanzania (Urban Transport Policy Committee). In most cases, the policy dialogue gathers representatives from the National as well as Local Government. In some cases, such as in Senegal, Burkina Faso and Cameroon, representatives from the transport industry (such as operators, unions and insurers) were associated to the policy dialogue.

All these initiatives were launched under the umbrella of the SSATP-UTC which provided overall advice, financed some ad-hoc studies, organized local seminars (Dakar in 1996, Ouagadougou in 1997 and 1998, Yaoundé in 1996, Abidjan in 1996). The
experiences developed at the national level are presented and debated at the annual SSATP-UTC Steering Committee Meetings with Donors, consultants as well as representatives from National and Regional African Authorities.

Lessons learned and outputs produced by these initiatives differ from countries. In Senegal, the policy dialogue was debated at a national seminar which laid the foundation of an Urban Transport Policy Letter issued by the Senegalese Government in September 1996. The Government of Senegal has requested the World Bank’s assistance to implement these reforms. The Bank has approved a first Urban Transport Project in May 1997 and is preparing a second one due to be appraised in 1999.

The same experience emerged in Ghana. The Urban Transport Committee has been strongly involved in the preparation of the Urban Transport Project approved by the World Bank in 1994.

In countries such as Tanzania, Burkina Faso, Cote d’Ivoire, Congo, Zimbabwe and Nigeria, an Urban Transport Policy Paper has been prepared by a national committee as part of the policy dialogue and is under consideration to be approved by the Authorities.

Meanwhile, the initiatives launched in countries such Guinea and Kenya have shown little progress so far.

Finally, additional countries have recently expressed their interest in launching such an initiative at the national level: Mozambique and Ethiopia are considering to launch an Urban Transport Policy Reform in a near future as part of the liberalization process under way in the transport sector.

The variety of approaches and outputs, the level of political willingness to move ahead and coordinate the institutional reform under a single umbrella has followed different paths and methods, involving different categories of actors and hence producing different results.

Hence, it is proposed to organize early 2000 a Regional Seminar to draw the lessons of the Urban Transport Policy Reform in Sub-Saharan Africa as part of the SSATP-Urban Transport Component.

The main objectives of the regional seminar would be to:

- Analyze the different approaches used country by country to coordinate the institutions involved in the urban transport sector, the level and effectiveness of sector participation;

- Compare the legal and financial arrangements which has led to a new institutional forum and the institutional links between the national and the local level;
• Identify the achievements reached and determine the reasons of success and failures;

Targeted countries
Representatives from around twenty African countries will be invited to attend the regional seminar, with an average of 3 delegates by country (national Ministry, local government and the transport industry). In view of the White Paper on National Transport Policy recently approved by the South African Parliament, representatives of South Africa will be invited to attend the seminar and share their experience. It is hoped that South Africa will join the SSATP-UTC in September 1998 on the occasion of the Cape Town Steering Committee Meeting due to be organized in conjunction of the CODATU VIII conference.

In addition to African Authorities, regional organizations such as the Municipal Development Program (MD), the UNECA will be invited to attend as well as African consultants, research institutions and Donors.

Assessment Design and content
The assessment will be carried out in three phases:

• A consultant will be selected to identify a joint methodology, collect data and information on the process in each of the countries involved in the process of policy reform;

• A two-days regional seminar will be organized to debate the issues identified in the research. Each country will be asked to present its own experience under a joint format, covering the technical, institutional, regulatory and financial aspects of the process;

• The proceedings of the seminar will be disseminated at the regional level;

Dissemination of Findings and Best Practices
The main lessons and conclusions of the seminar will be disseminated by the World Bank as SSATP Working Paper.

Impact
The initiative will represent a key opportunity to disseminate widely the lessons learned from the SSATP as a regional program involving the World Bank, Donors, regional organizations, national and local Authorities and research institutions.
**SSATP- URBAN TRANSPORT COMPONENT**

**Road Safety Action Plan Focused On Pedestrians**

**DESCRIPTION BRIEF**

**Title of the activity:** Road Safety Action Plan focused on Pedestrians

**FY:** 1999-2000-2001

**Managing Division:** AFTU2

**Task Team:** SSATP-Urban Transport Component

**I. Background**

Road accidents are one of the leading causes of death in developing countries resulting in unacceptable economic and social cost, averaging 1.5 percent of the GNP. Pedestrians are identified as a group of road users with a particularly high accident rate: two thirds of the fatalities in urban areas of Sub-Saharan Africa involve pedestrians and one third of these are children.

Some safety components commonly used in developed countries—such as vehicle inspection centers, seat belts and specialist training of police are not considered particularly relevant for road safety focused on pedestrians in developing countries. Both the nature of the problems (such as the lack of experience of drivers, the unsuitability of much of the infrastructure for mixed traffic as well as the safety education) and the implementation capacities are different. Such an environment explains the significant portion of the level of road fatalities involving pedestrians. It also justifies to design and implement tailored-made measures.

An effective road safety program requires a combination of actions such as the set up of ad-hoc national and local institutions, the establishment of accurate and updated databases, awareness campaigns, traffic segregation measures, appropriate road designs and efficient law enforcement.

From 1992, an important portion of the SSATP-Urban Transport is dedicated to a program on Non Motorized Transport in Kenya and Tanzania financed by the Dutch Ministry of Foreign Affairs. One of the objectives of this program is to improve the safe
mobility of cyclists along urban roads of four selected cities (Nairobi and Eldoret in Kenya, Dar es Salaam and Morogoro in Tanzania).

As part of its 1996-1998 Action Plan, the SSATP-Urban Transport Component has put the road safety as one of the major objectives of the component.

The present framework for a road safety action plan is therefore targeted on the design and implementation in two SSA cities of low-cost road safety measures to improve the effective mobility of those the most affected by the road accidents: the pedestrians.

II. Objectives

The overall objective of the Action Plan is to pinpoint pedestrian safety as a target for road safety actions in two cities of Sub-Saharan Africa involved in the SSATP Workprogram.

This overall objective will be pursued through the following specific objectives:

(a) Assess the knowledge among pedestrians as to accident risk and identify required pedestrian behavior;

(b) Examine the effect of specific safety measures on pedestrian behavior, drivers behavior and accident risk;

(c) Raise the awareness of policy makers and road safety officials towards pedestrian safety and related traffic law enforcement;

(d) Select particularly dangerous urban areas in terms of road safety records to design and implement, on a pilot basis, Pedestrian Safety Guidelines conducing to a Pedestrian Safety Policy including, when appropriate, the redesign of the urban road network.

III. Scope of Work

The tasks to be carried out by a team of international and local consultants will include the following main elements:

Identification of the main factors explaining the importance of road accidents involving pedestrians in some specific urban areas. The selection of these areas will be based on the analysis by the team of consultants of the available road accidents database.

In addition to the database analysis, the team of consultants will (a) identify the level of knowledge and the distribution of responsibility within the relevant national and local authorities as to actions in favor of pedestrians safety; (b) make surveys among pedestrians, especially young pedestrians and among drivers, about pedestrian accidents, required pedestrian and driver behavior and about actions to be taken by the authorities;
(c) identify the impact of the road design and equipment on the level and gravity of accidents; (d) assess, in the national/local road accidents database, the factors of accidents involving pedestrians.

In order to increase the effectiveness and impact of the design phase, focus groups, with strong community participation, will be organized by the team of consultants. Priority will be given to the participation of road users living in the neighborhood of the selected urban areas.

The outputs of this identification phase will provide the background of Pedestrian Safety Guidelines which will be debated during a local workshop conclusions of which will form the backbone, under a test intervention basis, of the Implementation Phase.

The Identification Phase is due to last 9 months.

**Implementation** of pilot interventions of relevant safety measures at critical sites. The purposes of the pilot interventions are to (a) test potentially attractive safety interventions in the traffic and their impacts on the pedestrian’s safety and (b) improve road users education and awareness on the requirements of pedestrian's movements and the way to improve the safe mobility of pedestrians. The tests are, by definition, for learning purposes. They will be complemented by a set of media campaigns and ad-hoc training programs for the road safety officials.

The background of the proposed guidelines will refer, as much as possible, to the elimination of pedestrian-vehicular (including bicycles) conflicts. Each of the type of separation will refer to different designs and planning requirements using physical, psychological, visual and legal tools to eliminate the conflicts. The type of separation will take into account the operating environment of the urban roads and the importance of the different modes of transport in the modal split.

The impacts of the test interventions will be scrutinized by the team of consultants with an analysis of their cost/benefits and their overall effect on the improvement of the pedestrian’s safety. The conclusions of this phase will allow the preparation, by the national and local authorities and with the assistance of the team of consultants of a Pedestrian Safety Policy in the whole urban area of the two selected cities.

The Implementation Phase is due to last 15 months.

**Dissemination.** At the end of the Identification Phase, the proposed Pedestrian Safety Guidelines in both cities will be disseminated in a special issue of the SSATP Newsletter. The achievements and impacts of the Pilot interventions will be disseminated through the same channel within the Africa region.
IV. Organization and Management

Since the road safety is one of the major objective of the Urban Transport Component of the Sub-Saharan Africa Transport Policy Program (SSATP), the action plan will be included in its workprogram.

The Action Plan will cover two SSA cities, one in Western Africa and one in Eastern Africa. Due to the importance of pedestrians and cyclists in Ouagadougou (Burkina Faso) and the commitment of the local authorities in road safety policy, it is proposed to select this city as the one for Western Africa. As far as the Eastern Africa city is concerned, Harare (Zimbabwe) has been selected, in view of the commitment of the authorities in road safety policy.

The project will be carried out as a joint venture between a Team of International consultants skilled in the road safety research and assistance in Sub-Saharan Africa and one selected local research institution by city selected. The project will be managed in close cooperation with the national and local authorities.

A Mid-term review report will be prepared by the team of international consultants and submitted to the SSATP for appropriate dissemination.

In order to evaluate the impact of the action plan on the level and gravity of road accidents in the selected urban areas, performance indicators will be established and implemented at the beginning, Mid-term and end of the project.

The SSATP-Urban Transport Component will supervise the whole action plan and will disseminate its achievements through special issues of Technical Notes as well as relevant regional dissemination tools.

V. Time Schedule and Budget

The design of specific road safety actions targeted on pedestrians as well as the implementation of pilot measures make it necessary to cover a two-year period starting in November 1998. The distribution of the work load is made under the assumption of a task-sharing between an international team of consultants acting as Task Team Leader and local research institutions. During each phase, the progress of the different tasks will be planned in cooperation with the local research staff and the local authorities. The evolution and achievements of the action plan will be disseminated in a special SSATP Technical Note at mid-term and at the end of the project.

VI. Conclusions

64. The priority given to the pedestrians in a road safety action plan reflects the importance of this mode of transport in Sub-Saharan Africa and the social impact of the present pattern in road accidents. By designing and implementing a specific set of measures, the proposed action plan could significantly improve the mobility of those the most affected by the lack of affordable modes of transport. Finally, the regional
framework of the SSATP will provide the leverage impact of the Action Plan through the dissemination of the results achieved.
ANNEX 6

SSATP URBAN TRANSPORT COMPONENT

Training Program for Municipal Staff in Urban Transport

DESCRIPTION BRIEF

Status: To be financed

Title of the Program: Training Program to strengthen the technical expertise of the municipal staff in the urban transport


Managing Division: AFTU2

Task Team: SSATP- Urban Transport Component

Framework and objectives

Africa’s urban local government have access to approximately one percent of GNP to manage areas in which about two thirds of GNP is produced. Even allowing for the fact that in many countries a large scale of urban infrastructure is still centrally managed and financed, the point remains that urban management is difficult to achieve with such limited financial resources.

The problems are compounded by limited human resources, due to a general scarcity of qualified professionals as well as low salaries and poor working conditions in the public sector. In addition, in many countries, local government service has become a low prestige career path as a result of the steady weakening of its role and resources.

Those problems are currently addressed in most of the Urban Project financed by the World Bank. Attention is given to the building of technical capacity at the municipal level, together with fiscal reforms to increase the managerial and financial autonomy of the municipalities to cope with the growing needs of additional infrastructures and services in the metropolitan areas.

To address those issues and increase the political awareness of the regional and international community, a pan-African summit (AFRICITIES) was organized in Abidjan in January 1998. This summit, organized by the Municipal Development Program (MDP) was designed to bring local governments to the forefront of the political scene in Africa and to consolidate the decentralization process.
One of the major conclusions of the summit was the need to strengthen the technical capacity of the African Local Governments in the planning, coordination, and supervision of urban services.

As far as Urban Transport is concerned, the Local Government has very limited expertise to deal with sensitive matters such as traffic management, road safety, maintenance of secondary roads, infrastructure management.

In view of the challenges ahead, the SSATP-Urban Transport Component has launched in 1997 two initiatives to bring the African Governments at one of the key actors in the urban transport sector.

At the Steering Committee Meeting Organized in Abidjan in October 1997, it has been unanimously agreed to include representatives of the Municipalities as part of the Steering Committee.

In addition, a cooperation agreement has been drafted with the MDP in order to strengthen the role of this regional organization in the urban transport sector. An understanding has been reached in March 1998 between the SSATP-UTC and the MDP to organize specific training sessions on urban transport within regional training sessions to be organized by the MDP on infrastructures maintenance (see annex 7 for more details on the content of the training sessions). Hence, the proposed training sessions on urban transport will be held within the MDP training program.

**Targeted countries**

120 persons from the technical services of African Municipalities are expected to attend the training sessions. Countries concerned are mostly from Western Africa. The costs of the training session will have to be borne by the trainees. Such costs include registration fee, travel costs and subsistence costs in the field. It is proposed to finance a portion of the training sessions on a lump sum basis and upon justification.

**Research Design and content**

The content of the training sessions will be finalized by the MDP. As far as Urban Transport is concerned, the SSATP-UTC will be associated. Annual evaluation of the achievements will be made at the occasion of the Steering Committee Meetings.

At the end of the three year program a regional seminar will be organized to assess the progress made and determine the more appropriate venue and content of the training program.

**Partnerships**

The implementation of the Training Program will be carried out in coordination with the Municipal Development Program based in Cotonou.
Dissemination of Findings and Best Practices

The findings of the training sessions will be presented at each of the SSATP-UTC Steering Committee Meeting. The conclusions and proceedings of the regional assessment seminar will be disseminated by the SSATP as Working Paper.

Impact

The initiative is conceived as the transport sector content of local government strengthening and the rationale for the involvement of the SSATP-Urban Transport Component.
I. Principles

(1) The Urban Transport module is part of the two-week training cycle devoted to the maintenance of municipal infrastructure and facilities (40 trainees for each of the three cycles organized by the Municipal Development Program - MDP).

(2) The module itself lasts for three days. The total time required for the sessions presented below is longer than three days. Certain tradeoffs will therefore have to be made, taking into account the profiles of available trainers and candidates. It might be possible to come up with an "à la carte" menu reflecting the availability not only of trainers and candidates but also of the financial resources to be applied.

(3) The basic principle of the module is to make use of successful experiments in urban transport that have been carried out in Africa. The Urban Transport component provides the reference framework for identifying those cases.

(4) A small group from the MDP and the SSATP-Urban Transport component could identify the resource persons and the best examples to be discussed during the sessions. A special task force would be set up to handle practical organization of the sessions. The World Bank's Economic Development Institute (EDI) would be associated with this task force.

(5) The purpose of this module is not to cover all of the issues involved in each topic (not enough time), but to raise the awareness of African municipal officials to the problems of urban transport within the framework of urban service management.

II. Topics of the sessions

Road safety

This session covers (a) sensitization activities, and (b) development of urban infrastructure and facilities, given that the very concept of road safety covers the two aspects, preferably both at the same time. The candidates are municipal officials and directors of training centers and technical control centers.
- Development and implementation of road safety campaigns involving users (specifically school zones and residents of areas particularly susceptible to traffic accidents).

- Education of motor vehicle drivers.

- Identification and management of accident black spots.

- Design of roadways with room for pedestrians and cyclists.

- Crossroads development and installation of speed bumps.

- Development and use of a traffic accident database (such as the Motor Traffic Accident Bulletin [*Bulletin d’Accidents de la Circulation Automobile - BACC*] developed in certain West African countries, and the Micro-computer Accident Analysis Package - MAAP, developed in various East African countries by Transport Research Laboratory - TRL).

**Proposed duration:** two days.

**Development of bus stations and mass transit stops**

- Design of bus stations and their inclusion in the plans for redeveloping parking areas as a means of reducing motorized traffic congestion.

- Planning of the best locations for urban transit stops.

- Bus stations and urban rail transport, where applicable.

- Passenger and goods transport, intra-urban and inter-urban transit; how can these best be integrated into parking and facilities development policies?

**Proposed duration:** half a day.

**Urban development, housing, and urban transport**

- Urban planning and integration of transport requirements in the development plans.

- Economic and spatial development planning, densification and land occupancy plan, including measures to deconcentrate urban centers and promote integrated urban development.

- Control of land management.

- Issuance of building permits, real estate promotion, and transport requirements.
• Development of squatter settlements in urban areas and access to means of transportation for the poorest population groups through appropriate development of access routes to all urban settlements.

• Preparation and use of mapping tools.

• Participation in master plan preparation and use.

  Proposed duration: one day.

Traffic management and roads development

• Formulation of the traffic plan and monitoring of its implementation.

• Development of priority roads and special locations for mass transit and for non-motorized transport.

• Installation of traffic regulation systems and management of traffic lights and road signs and markings.

• Design and use of origin-destination travel flow studies.

• Preparation of an action plan for combating air pollution caused by motorized travel.

• Improving ease of traffic flow and of the commercial speed of mass transit services.

• Management of transport demand (combined actions in the areas of urban development, tariffs for transport services, daily rush hours).

• Urban traffic management and impact on energy and air pollution.

• Development of sidewalks and other facilities such as pedestrian and two-wheeler paths.

  Proposed duration: half a day.

Institutional, regulatory and organizational framework

• Coordination of transport services.

• Issuance of licenses for taxis, motor-cycle taxis, issuance of authorizations to operate mass transit services within the territorial limits of a municipality, including, as appropriate, school transport services.

• Highway and municipal police codes.
• Preparation of an urban transport observation system [observatoire] with regular gathering of data and establishment of performance indicators linked to urban mobility.

• Partnership with the Ministry of Transport, setting up of an institutional coordination system, involvement of economic operators.

• Sustainable financing of the sector and private-sector participation, identification of indirect beneficiaries of the transport system, and mobilization of financial resources.

• Organization of municipal technical services in the area of urban transport (organization chart, task definition, mobilization of local resources).

• Delegated contract management and execution of works and services.

• Choice of procedures for the operation under concession of transport-related urban services (bus stations, mass transit stops).

• Mobilization of publicity resources.

• Programming of urban-transport related investments.

• Decentralization laws and allocation of functions in the area of urban public transport organization: transition and effective transfer of resources.

**Proposed duration:** two days.