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A Contrasting Approach to Road Reforms

The Case Study of Uganda Experience

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ABBREVIATIONS AND ACRONYMS

AFTTR	Africa Transport Region, World Bank
CU	Coordination Unit
DURCAR	District, Urban and Community Access Roads
HMS	Highway Management Service
LG	Local Government
MC	Management Committee
MIS	Management Information System
MoFPED	Ministry of Finance, Planning and Economic Development
MoPS	Ministry of Public Services
MoWHC	Ministry of Works, Housing and Communications
MTEF	Medium Term Budget Framework
NPMRMP	National Prioritized Main Roads Maintenance Program
PEAP	Poverty Eradication Action Plan
PIP	Project Implementation Plan
RAFU	Road Agency Formation Unit
RMI	Road Management Initiative
RSDP	Road Sector Development Plan
RSISTAP	Road Sector Institutional Support Technical Assistance Project
RWMS	Road Works Management System
SC	Steering Committee
SREC	Staff Recruitment and Evaluation Committee
SSA	Sub-Saharan Africa
SSATP	Sub-Saharan Africa Transport Policy Program
TRP	Transport Rehabilitation Project
TSIREP	Transport Sector Investment and Recurrent Expenditure Plan

TABLE OF CONTENT

PREFACE

This publication – a study of Uganda's experience with regard to some aspects of the design and implementation of road management and financing reforms – represents the first in a new series of SSATP Discussion Papers. It is the result of fieldwork and stakeholder discussions held by the author in Uganda in the latter part of last year. It also responds to interest expressed by other RMI members in the Ugandan approach and its impact.

The SSATP is keen to ensure that greater efforts are devoted to the generation of new knowledge and its effective dissemination to countries, partner organizations and donors. Discussion Papers will provide an additional channel alongside Working Papers, Technical Notes, the website, videos and CD-ROMs. They will focus on exposing and analyzing case studies of promising or innovative practices – both at country and subregional level – and are intended to stimulate discussion and reflection on lessons learned and their applicability. Consequently, comments, responses or reactions to this paper are encouraged and can be forwarded to me at nings@worldbank.org or to the RMI component Manager Stephen Brushett at sbrushett@worldbank.og. While the current paper is issued by the RMI component, it is expected that there will be offerings from the other components of the SSATP. We anticipate authors being drawn from a variety of sources, including but certainly not limited to program management, consultants and country coordinators.

Nigel Ings

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SSATP Program Manager

SYNOPSIS

This study is a documentation of the Ugandan experience with road management and financing reforms pursued over the past few years. The study also provides a comparison with the road reform process pursued in some of the other countries under the Road Management Initiative (RMI).

Background

In 1996, the Government of Uganda developed a 10-year Road Sector Development Plan (RSDP) for the classified road network with the objective to: (a) provide an efficient, safe and sustainable road network; (b) improve managerial and operational efficiency of road administration; and (c) develop the domestic construction industry. The key focus of the reform program is to restructure the Government's involvement from direct provision of transport services to provide policy guidance and a clear legal framework. The reforms focus on: (a) separating planning/financing functions from procurement and implementation; (b) providing policy and regulation functions by the Ministry of Works, Housing and Communications (MoWHC); and (c) commercializing technical/engineering and procurement services.

The Reform Context

The key features of the road reform process initiated in Uganda are: (a) development of an analytical basis to review different road financing and management options; (b) commitment and ownership of the reform program; (c) perception of transport as one of the important sectors of the economy; and (d) development of a sector investment policy and plan. Consistent with the Government's objective of eliminating direct state involvement in all but essential public services and improving institutional efficiency, key initiatives include:

(a) *restructuring the role of MoWHC and MoFPED*. As part of this reorganization, operational and policy/strategy responsibilities in MoWHC have been separated with the objective of strengthening road sector management capacity. The role of the Ministry is being redefined with a focus on regulatory and monitoring functions. The Ministry of Finance, Planning and Economic Development (MoFPED) is responsible for planning and updating of the mid-term and long-term investment programs, disbursing funds as needed by the road sub-sector and monitoring the use of these funds. The Transport Sector Investment and Recurrent Expenditure Plan (TSIREP), prepared by MoFPED, is the instrument for determining expenditure priorities and allocating these through the budgetary process. An active involvement of the Ministry of Finance in the road sector reform program demonstrates ownership and commitment on the part of Government to improve financing in this sub-sector. To oversee implementation of the Road Sector Development Plan (RSDP), Government has set up a Steering Committee (SC), supported by a full time Coordination Unit (CU) (performance evaluation unit), to monitor and coordinate the RSDP activities.

(b) *creating a road agency*. A Road Agency Formation Unit (RAFU) was established in 1998 as a performance oriented engineering organization, to purchase resources from the market through competitive bidding, under public procurement rules. RAFU is staffed with a core of qualified professional technical specialists (about 20) engaged on a performance contract basis. RAFU is administratively established outside the MoWHC framework, with its functions and operations supervised by a Management Committee (MC), chaired by the Minister, MoWHC.

(c) *funding for road improvements and maintenance***.** In June 1994, Government agreed with the donors on a National Prioritized Main Roads Maintenance Program (NPMRMP). According to the program, Government would gradually increase its contribution to road maintenance and, in turn, donors would initially assist Government in eliminating the maintenance backlog. The NPMRMP was later integrated in the RSDP in 1996/97. The RSDP estimated that the annual road maintenance expenditure would level off at about US$44.0 million. The Government is committed to increase its funding by US$4.0 million annually with a target of fully financing road maintenance by the year 2004/05.

Evaluation of Road Reforms in Uganda

While road reforms in the country appear to be steadily gaining ground as reflected in improved contract management and administration, the short time for which they have been in existence, preclude obtaining definitive evidence on quality or quantity of road development and maintenance. There are certainly a number of areas where reforms could be further strengthened as the country moves on to prepare and implement phase 2 of the roads program. Some of these issues are:

(a) *Developing a basis for road maintenance*. A financial and engineering audit of main road maintenance reported deficiencies in the maintenance and reporting practices followed by the Ministry. It is proposed to transfer main roads maintenance responsibility from the Ministry to RAFU as its capacity is built up, to ensure that a market discipline is introduced and work is performed under hard budgetary constraint. There is, however, no firm commitment on how this will be accomplished and in what time frame. It is also not clear whether RAFU is to manage both development and maintenance work or whether there should be a parallel unit to manage the road maintenance program. It is imperative that these issues are addressed in an expedient fashion to ensure that the responsibilities are clearly specified and the transitional period is smooth.

(b) *Streamlining the arrangements for financing road maintenance*. At the RSDP inception in 1996, the Government had committed itself to fully finance road maintenance by the year 2001/02, which is now planned to be provided by 2004/05. What is required is a comprehensive assessment of the road maintenance needs and a strategy for meeting those requirements in a realistic time frame to give credibility to the reform process. The Coordination Office within the MoFPED is preparing such a plan.

(c) *Updating the RSDP prioritized investments*. The Coordination Unit in the MoFPED is responsible for updating the RSDP and developing a prioritized list of road development projects, which is now entering phase 2. With changes in the socio-economic environment in the country, there is a need to consider new elements to adequately reflect the evolving priorities. This requires building a link between the National Development Strategy and the road sector in order to include social issues like poverty alleviation, gender equity, environment mitigation, and resettlement along with the engineering and economic issues.

(d) *Developing sustainable arrangements for financing road agency recurrent costs*. The recurrent costs for the road agency (RAFU) and the Coordination Unit are mainly financed by donor assistance. Experience suggests that setting up administrative units, financed by donors, is not sustainable in the long run. Given that the Government is strapped for resources and is facing difficulties in financing road maintenance, the prospects of taking on additional financial responsibility do not seem promising. Arrangements to develop RAFU into a fully-fledged and self-financing agency should be examined.

(e) *Strengthening managerial accountability.* It is imperative for RAFU to maintain an arms-length relationship with the executive (the Ministry) and have specific deliverables and well identified performance indicators to ensure that it performs as a business in the market environment. Effective performance also requires that the RAFU Director has sufficient freedom to sign and award contracts, offer reasonable terms and conditions of employment and operate without outside interference.

(f) *Preparing a strategy to restructure the MoWHC*. To put reforms on a sustainable basis requires developing a strategy for restructuring MoWHC, including an assessment of the staffing needs, specific functions to be performed by the staff, arrangements and criteria to phase out additional staff and to secure a proper staff mix corresponding to its residual functions.

(g) *Developing performance monitoring and auditing arrangements*. Accountability requires clear management objectives, monitorable targets, a regular reporting system, systematic auditing and effective oversight arrangements. One of the requirements to strengthen managerial accountability is to set up monitorable targets based on clear objectives. Reporting systems are also an important tool for strengthening managerial accountability and should be produced on a regular basis using a set of agreed performance targets. The Coordination Office has developed a set of indicators for evaluating RAFU performance, while RAFU has developed performance parameters for its staff.

(g) *Developing user participation in the reform program*. One of the elements of policy reforms in the road sector is to introduce transparency and accountability in the decision making process, which requires active support of the road users and other stakeholders with a vested interest in sound road management. Arrangements to have stakeholders more fully involved in issues related to resource generation, allocation and prioritization of road investments should be developed in Uganda.

(i) *Building the capacity of domestic construction industry*. The Government's policy aims to develop the domestic construction industry, with a view to increasing the share of contractor executed road maintenance works from 55% in 1999/2000 to 85% in 2003/04. The strategy to increase the share of domestic contractors, including access to plant and equipment needs to be developed and a realistic time plan identified.

Comparison with Some Other Countries

How does the reform process in Uganda compare with some other RMI countries, which have chosen to proceed in a different manner?

The key focus of reforms in many of the RMI countries (such as Zambia, Kenya, Ethiopia, Mozambique, Tanzania, Ghana, Malawi) is on: (a) *financing* by stabilizing road financing through securing an adequate and stable flow of funds; (b) *responsibility* by securing clear definition, separation and assignment of responsibilities with matching authority and performance targets; (c) *independent management* by establishing professional management agencies run according to sound business principles to obtain value for money; and (d) *ownership* by involving road users and civil society stakeholders in the management of roads to encourage better management, demand for efficiency and control of monopoly power.

While the countries examined have attempted to follow the reform program, the performance presents mixed results (Kumar, 2000). On *sustainable financing for road maintenance*, many of the road funds financed "off budget" by designated road user charges and based on user pays principle, still face problems such as: (a) inadequacy in meeting road maintenance requirements[2]; (b) instability in financing arrangements[3]; (c) inefficiency in resource allocation[4]; and (d) weak linkage between user charge and economic costs imposed[5].

On establishing *clear responsibility* and assignment of responsibility, the results are mixed. Some of the countries (Zambia) have a weak legal framework and there often exists inadequate action on the part of governments to provide clear definition, clarification, separation and assignment of responsibilities with matching authority. In Malawi, in spite of the legislation authorizing the road fund board to adjust fuel levy to address maintenance needs, the Board's effective role is limited to advising the Ministry of Finance. The record on establishing monitorable performance contracts between the road fund board and executing agencies remains less than satisfactory. Only a few countries (Zambia, Malawi) have succeeded in establishing arrangements for independent financial audits and even here, there is a need to follow up on the recommendations. Arrangements for setting up technical audits remain few and far between (Ghana).

On the need to set up an *independent management* of road executing agencies, countries are still in the process of restructuring road agencies to ensure effective and efficient use of money. While road works are increasingly contracted out to the private construction industry on a competitive basis, governments are reluctant to delegate road management to autonomous agencies operating according to sound business practices. (Nyangaga, 2001). Government departments (ministries) are mostly cumbersome and largely ineffective managers, with no commercial approach to the tasks at hand. While the road fund has made available substantial money at the disposal of road agencies, lack of political commitment to safeguard the use of funds and inability of road administrations to efficiently use the money audited on a regular basis has compromised delivery to road users.

On *developing ownership of the reform program*, many RMI countries have representation from the private sector and user groups in the road fund boards to ensure that the use of money is related to users' prioritized needs and introduce transparency and accountability in

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[2] Whereas in some countries (Kenya, Ethiopia) the road fund is meeting 80% or greater of road maintenance requirements, in other cases (Zambia, Tanzania) only about 25% to 50% of the road maintenance requirements are being met. Requests for the adjustment of fee rates to meet maintenance needs and compensate for inflation are often only considered after external pressure.

[3] In practice, Governments are reluctant to relinquish control of the cash flows and of opportunities to "borrow" funds for other purposes when need arises. In addition, the flow of funds (user charges) from collection to road fund accounts often takes a long time and is not always regular.

[4] Funds have been allocated to roads with little reference to economic priority and, in some cases, without compliance with the construction contracts. In addition, with fuel levy as the dominant component of the road fund, allocation mechanisms for non-commercial, low volume feeder roads are not very clear. In the process, environmentally and socially justified investments often get neglected.

[5] Fuel levy remains a quasi-user charge and does not distinguish by intensity of road use. Both users and non-users of road end up paying the incremental fuel levy and arrangements to protect non-users of road from paying into the road fund have not been successful.

the decision making process. Ownership can become the basis for a genuine partnership, with road users working with the Government to improve road safety, control fuel smuggling (a major problem in Uganda) and control overloading. However, in practice, dissemination of the road reform agenda and a clear understanding of the merits of setting up a user-financed fund remain weak, both among policy makers and the user groups. Recommendations by the boards to diversify road user charges and increase the available funding have met with partial success.

Some of these concerns were reflected by RMI coordinators during the 15th RMI meeting in Saly, Senegal (May, 2001). A general sense of the presentation of the country coordinators during the meeting focused on four issues: (a) how best to sensitize the Government and policy makers on the importance of road maintenance? (b) what are the difficulties of dealing with road reform process in "isolation" of other sectors? (c) how to ensure sustained involvement of the donors and RMI in building capacity in each of the countries? and (d) how to measure the performance of program achievements, both over time in a country and across space among different countries? Of particular concern to most countries was less than satisfactory performance (as measured by impact on quality of the road network) in spite of their following the RMI principles. A partial answer to this concern could be found in an attempt by the countries to monitor the structure and the process of road reforms rather than focusing on performance targets. The result is an attempt at "ticking the boxes" signifying whether the appropriate structure was in place or not without fully understanding the impact of those decisions, or ownership on part of the policy makers. Critical to reform principles related to "clarifying responsibility" and "creating ownership" is the acceptance by the government of the need to address road development and maintenance issues as a priority sector and by the Ministry of Finance of the need to ensure that the road fund available is sufficient to address the programmed maintenance needs.

The central philosophy in the Uganda reform process is that the "sectoral" based approach is not sufficient, emphasizing the need to discipline the overall public expenditure process and creating a sense of ownership among the decision makers. In terms of work methods, the focus in Uganda is on outsourcing to the private sector, managed by a commercially set up, performance driven agency as a starting point of reforms. In financing arrangements, even though a dedicated road fund has not been set up, the Ministry of Finance has consistently met most of its maintenance budget requirements through the normal budget process.

However, there exist a number of areas where the reform program could be further strengthened as the country moves on to implement phase 2 of the road sector development program. A key focus should be on protecting and consolidating the reform program initiated under phase 1. In particular, firming up the basis of road maintenance funding arrangements, developing sustainable arrangements for financing a fully formed road agency, strengthening managerial accountability and performance monitoring and developing user participation in the reform process are some of the areas requiring further attention.

I. INTRODUCTION

The Study Context

The rehabilitation of road networks, as well as build up of the institutional and financial capacity for their continued maintenance, are the most critical challenges confronting transport planners and policy makers in Sub Sahara Africa. In response to the deteriorating condition of the road network and the high associated economic cost, various stakeholder consultations were held during the 1980s under the umbrella of the Bank-managed and donor-financed Road Maintenance Initiative (subsequently renamed in 1997 as the Road Management Initiative—RMI), which set the broad outline of a new policy framework for the road sector. The RMI has, since 1988, undertaken to develop awareness about the importance of road maintenance and has supported country level programs designed to identify the root cause of the problem and to initiate actions needed to set the management and financing of roads on a sustainable basis. At present, seventeen (17) African countries are collaborating within the framework of the RMI and a number of other countries are either implementing or seeking to implement RMI-inspired reforms. A particular focus of RMI has been on financial stability of road management, in particular road maintenance. RMI has worked particularly on the concept of road funds, financed off-budget by designated road user charges, based on user pays principle.

The creation of dedicated funds has long been opposed by public finance economists (Deran, 1965)[6] on the grounds that this distorts allocation of resources, hampers budgetary control, impairs flexibility of the revenue structure and infringes on requirements of efficient cash and financial management. Potter (1997)[7] has argued that poor governance or government's lack of self-discipline may make it impossible to maintain roads even with the existence of a statutory road funds. In contrast, from a purely micro-economic efficiency argument, road funds are seen as offering the advantages of decentralization and assuring a better fit between what is demanded by the public and what is supplied based on what the users are willing to pay for. According to Gwilliam and Shalizi (1999)[8], "the issue is not one to be resolved on general principles, but on a case-by-case basis." In an earlier paper, Kumar (2000)[9] has argued,

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[6] Deran, Elizabeth Y. 1965. *Earmarking and Expenditures: A Survey and New Test*, National Tax Journal 18: 354-61.

[7] Potter, Barry (1997) *Dedicated Road Funds: A Preliminary View on a World Bank Initiative*. Working paper wp/97/7. International Monetary Fund, Washington, D.C.

[8] Gwilliam, Kenneth and Zmarak Shalizi (1999) *Road Funds, User Charges and Taxes*, The World Bank Research Observer 14, 2, 159-85

[9] Kumar, Ajay (2000). Assessment of Selected Road Funds in Africa: Case Study of Benin, Ethiopia, Ghana, Kenya and Zambia, SSATP, The World Bank, Working paper No. 51

based on an assessment of the road funds in some of the RMI countries, that the available evidence provides mixed results and there is no clear evidence that setting up dedicated financing mechanisms will, by themselves and in isolation of other changes, lead to better and more efficient maintenance of the road network. That begs the question of what alternative arrangements may exist as a counterfactual to countries which have proceeded to reform road management first by setting up road funds and what has been their experience.

The Study Objective

Uganda presents one such example, which even though is one of the member countries collaborating within the framework of the RMI, has taken a different path to road financing and management. This study is a documentation of the Ugandan experience and provides a comparison with the reform process pursued in some of the other RMI countries. The study has three main objectives:

(a) provide a description of the reforms in road management and financing pursued in Uganda over the past few years
(b) evaluate the Uganda experience and provide a comparison of road sector reforms in Uganda with those followed in some other RMI countries
(c) present key findings of the study and the way forward

II. THE UGANDA EXPERIENCE

The Background

The road network in Uganda is 35,700 km, of which the classified (national) roads are 9,500 km, the district roads 23,200 km and the urban roads 3,000 km. Prior to 1974, Uganda had one of the best highway networks in Sub-Sahara Africa. Between 1974-1985, the road network deteriorated sharply due to neglect, mismanagement and lack of adequate maintenance as a consequence of civil strife and disruption of public administration. The economic consequences of neglecting road maintenance took the form of increased transport costs, a reduced transport fleet and a loss in road network investment of about 55% due to deterioration.[10] Since 1986, the Government policy has focused on improving transport and communication infrastructure for accelerated economic development, alleviating poverty and connecting all parts of the country.

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[10] Project Appraisal Document, Road Development Program, AFTTR, The World Bank, (Report No. 21471-UG) April, 2001

The Reform Process

In 1995, the Government developed a 10-year Road Sector Development Plan (RSDP-1996/97-2005/6) for the classified road network endorsed by the participating donors in November 1996.[11] [12] The objectives of the RSDP were to: (a) provide an efficient, safe and sustainable road network in support of market integration and poverty alleviation, with a focus on effective road maintenance, continued road rehabilitation and viable network improvements; (b) improve managerial and operational efficiency of road administration; and (c) develop the domestic construction industry. Projected total expenditures under the RSDP over ten years were estimated at about US$1.8 billion in constant end-1998 prices (including an estimated US$380 million to be allocated to the district feeder roads, urban roads and other transport projects).

The key focus of the reform program is to restructure Government's involvement from direct provision of transport services to provide policy guidance and a clear legal framework. This is part of the Government's overall objective to reform the public sector in the country with a view to: (i) limit the Government's role to policy formulation; (ii) develop an incentive based structure; and (iii) privatize service provision. Since the 1996 donor's conference on roads infrastructure development and maintenance, major institutional reforms have been designed to allow efficient and professional implementation. The institutional reforms put in place as part of the RSDP basically focus on:

- commercializing/contracting of technical services delivering on a performance basis under hard budgetary constraints;
- separating planning/financing functions from procurement and implementation;
- assuring policy and regulation functions continue to be provided by the ministry of Works, Housing and Communications (MoWHC);
- providing stable and secure funding for road maintenance; and
- decentralizing delivery of road transport services, particularly with regards to maintenance of district, urban and community roads.

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[11] The scope of the 1996 RSDP did not address needs for feeder/district roads, urban roads and other transport projects.

[12] The full implementation of the RSDP, which includes institutional reforms and strengthening of the road sector management capacity will be in a manner that is consistent with Government's budgetary reforms, which emphasizes a sector-wide approach to budgeting, improved coordination between sectors, increased transparency in funds utilization and management and effective monitoring and evaluation by all key stakeholders. The road sub-sector will continue to benefit from increased resource allocation for national roads maintenance as well as from the poverty Action Fund as a priority for increasing incomes of the poor, which is one of the pillars in the Poverty Eradication Action Plan (PEAP).

Road Institutional Responsibilities

The government structure of Uganda consists of two tiers—Central Government (GoU) and Local Government (LG). The GoU executes its functions through Ministries, which receive their mandate from the Parliament. The LG structure consists of 50 districts, governed by autonomous District Councils and 64 urban areas governed by autonomous Urban Councils. The Urban Councils consist of one City Council (Kampala), 12 Municipal Councils and 51 Town Councils (the number of districts has been increasing over the past year and are expected to be around 55 by July 1, 2001).

The MoWHC is responsible for planning, development and maintenance of the transport infrastructure. The LG Act of Uganda was promulgated in 1997 to decentralize functions, powers, and responsibilities, including devolution of road maintenance services of rural district or feeder roads, urban roads and community roads to local and urban authorities. Although this act allows districts to fully implement routine and periodic maintenance, rehabilitation is still mainly the responsibility of the Central Government through the MoWHC. Following the restructuring of the ministries, the Engineering Desk formerly in the Ministry of Local Government was transferred to the MoWHC (the data base for District and Urban roads has been integrated into the entire national road network, maintained by the Planning Department of the Ministry).

At the district level, Planning Departments have been established and district planners incorporate district road programs in their annual district plans.

Consistent with the Government's objective of eliminating direct state involvement in all but essential public services and improving institutional efficiency, key reforms pursued by the RSDP are to be achieved through: (a) restructuring the role of the Ministry of Works, Housing and Communications (MoWHC) and the Ministry of Finance, Planning and Development (MoFPED); (b) improving the road sector management through the establishment of a sustainable and effective implementation and procurement capacity (setting up of a Road Agency); (c) developing performance monitoring arrangements; (d) ensuring sustainability of funding for road improvements and maintenance; and (e) defining an overall transport sector strategy and updating the policy framework and strategy for district (feeder), urban and community roads development, maintenance and financing. Each of these initiatives is discussed in detail in the following sections (for a diagrammatic view of the proposed reform process, see Figure 1).

Restructuring the Role of MoWHC and MoFPED

The Government recognizes the need to address weak MoWHC implementation and coordination capacity and the urgent need for major institutional reforms in order to strengthen the coordination, management and implementation of the 10-year RSDP. As part of this reorganization, operational and policy/strategy responsibilities in MoWHC have been separated with the objective of strengthening the road sector management capacity. The role of the Ministry is being redefined with a focus on regulatory and monitoring functions, with emphasis on sector policy formulation, investment planning, public expenditure management, performance monitoring of sector agencies and road safety and environmental protection. In view of the limitations in the MoWHC's capacity to manage the expanded road program under the RSDP, studies are being conducted to determine the viability of establishing an autonomous Road Agency and the contracting out of road services, which can be more effectively provided by the private sector. As an interim measure, the Road Agency Formation Unit (RAFU) has been established. RAFU has been mandated to be in charge of the road network development and management, with emphasis on technical and financial monitoring and performance evaluation.

The MoFPED is responsible for planning and updating of the medium-term and long-term investment programs and for disbursing the funds needed by the road sub-sector. The Ministry also monitors the use of these funds. As discussed later, an active involvement of the Finance Ministry in the road sector reform program is unique to Uganda and demonstrates ownership and commitment on the part of the Government to improve management and financing in this sub-sector.

Creation of a Road Agency

One of the key institutional reforms pursued by the RSDP is to increase private sector involvement in road management. Pursuant to the privatization program, the Government has decided to form a Road Agency by 2002 to supervise the road network. In the transition period, RAFU was established in September, 1998 to manage the implementation of the RSDP in the Ministry as a performance-oriented organization as it paves the way for formation of the Road Agency. RAFU functions administratively as a quasi-autonomous executing agency under the authority of the MoWHC.

RAFU is an engineering organization, which purchases resources from the market through competitive bidding under public procurement rules. The Unit adopts the applicable guidelines and procedures of the Government and the relevant financial institutions when procuring works, goods and services. The ultimate objective is to spin off from the Ministry by testing autonomous project execution mechanisms. To ensure efficiency, RAFU is staffed with a core of highly qualified professional technical specialists engaged on a performance contract basis. Services of additional consultants and contractors are procured on an as-needed basis. Currently RAFU has a staff of 44, with 20 professional persons (half of whom are international consultants). It is anticipated that at full operation stage, RAFU would have a staff of about 80 persons. All staff, including both professional and support staff, is hired through formal competitive procedures, and employed mostly on a one-year contract, to be extended for a maximum period of three years, based on annual performance. The selected candidates are employed on the basis of performance contracts, signed by the Permanent Secretary (PS), MoWHC, upon approval of the Staff Recruitment and Evaluation Committee (SREC). All RAFU establishment and operation expenditures are financed under the Road

Sector Institution Technical Assistance Project jointly funded by the Government and the International Development Association (IDA) on percentage of 10 and 90, respectively (the European Commission is also funding some of the RAFU professional staff). After closing of the IDA project, MoFPED has committed to create a special budget line to cover the administrative costs of the Unit.

RAFU consists of three corporate Divisions: (a) the *Engineering Division*, initially focusing on projects above the minimum threshold of UShs 250 million.[13] The specific tasks involve: programming and evaluation, project preparation, procurement, project implementation and maintenance supervision; (b) the *Information and Internal Monitoring Division*[14]. The specific tasks include: developing Management Information System (MIS), Highway Management Service (HMS), monitoring unit costs, traffic surveys, operate PMS, Road Works Management System (RWMS) and quality control; and (c) the *Administrative Division*. The specific task is to provide corporate management support to RAFU's Directorate. In future, as the capacity of RAFU is developed, it is also expected to manage maintenance works. Key functions undertaken by RAFU include:

- advise to the MoWHC on RSDP execution and report to the Ministry on physical and financial progress, constraints and proposed solutions;
- update the road maintenance and development data base;
- organize procurement systems complying with national and international standards;
- advertise tenders to execute the RSDP components and prepare contracts with successful bidders for signature by the Ministry;
- monitor the performance of consultants and contractors on compliance with specified quality standards;
- prepare yearly budgets and rolling financing schedules;
- conduct sectoral policy studies, such as Transport Sector Management, Transport Master Plan, Road Fund and establishment of Environment Units;
- procure consultancy services and supervise feasibility analysis, engineering design, pre-qualification, tendering, contract negotiations and award of contract; and
- administer and manage the works.

[13] While the 10-year RSDP includes projects of all sizes, RAFU's workload will be limited to large projects, valued in excess of UShs 250 million, which is the threshold above which competitive bidding procedures must be employed

[14] Internal monitoring team will adopt the following yardsticks: overall improvement in quality of road project implementation, streamlining of tendering procedures, quality assurance in studies and work performance, efficiency in financial control, cost of procurement services, level of output achieved.

Performance Monitoring Arrangements

RAFU is administratively established outside the MoWHC framework, with its functions and operations supervised by a Management Committee (MC). Membership of this committee consists of the Minister, MoWHC as the Chairman and Permanent Secretary (PS), MoWHC, the Engineer-in-Chief, MoWHC and Director, RAFU as the members. The Committee meets on a regular basis to discuss performance and strategic planning reports prepared by RAFU. The Committee is responsible for appointment of RAFU staff and annual performance review.

For effective implementation of the RSDP, Government has set up a Steering Committee (SC), supported by a full time Coordination Unit (CU) (performance evaluation unit), to monitor and coordinate the RSDP and RAFU activities. The SC consists of the PS, MoFPED as the Chairman and officials from the Ministry of Public Service (MoPS) and MoWHC as members. Key functions of the SC include:

- Monitor the overall corporate efficiency of RAFU[15]
- Coordinate planning and implementation of the RSDP program
- Monitor and evaluate the RSDP performance and update components in the PIP
- Monitor and guide the transition of RAFU into an autonomous Road Agency
- Approve appropriate road sector policies
- Technical and financial audit
- Organize donor consultative meetings

The RSDP Coordination Unit (CU) has been established[16] in the MoFPED (supported by a small professional staff) to serve as the secretariat for the SC and its roles include: (a) *program information management*. Collect, analyze and disseminate management information on implementation plans, progress and problems, costs and financial resources available from financiers; (b) *performance reviews,* including quarterly and annual program technical and financial performance evaluation and appraisal audits, to be contracted out to independent consultants; (c) *updating of the RSDP*, including annual review of the RSDP and adjusting the program based on current available information; (d) *transport sector studies,* conducted on request by the SC; (e) *prepare quarterly and annual progress reviews*, as a basis for discussions in the SC meetings; and (f) *disseminate information* to the media and stakeholders.

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[15] The indicators to be quantified include: project turn over and absorptive capacity, quality of works, cost efficiency, level of legal management, standards of environment impact assessment, results of internal and external auditing.

[16] The CU is professionally and administratively responsible to the SC and financially accountable to DANIDA.

Funding for Road Improvements and Maintenance

The Government recognizes the need to develop a sustainable financing mechanism for road maintenance. In June 1994, the Government agreed with the donors on a National Prioritized Main Roads Maintenance Program (NPMRMP). According to the program, the Government would gradually increase its contribution to road maintenance and, in turn, donors would initially assist in eliminating the maintenance backlog. The NPMRMP was later integrated in the RSDP in 1996/97. The RSDP estimated that the annual road maintenance expenditure would level off at about US$44.0 million. The Government is committed to increase its funding by US$4.0 million annually with a target of fully financing road maintenance by the year 2004/05.

Medium-Term Sectoral Allocations. In order to maintain and improve the road network, the Government has prepared a 10-year Road Sector Development Program (RSDP), stretching between 1996/97 and 2005/06. Expenditures under this program would amount to US$1.88 billion, of which US$1.397 billion is already committed under the Transport Sector Investment and Recurrent Expenditure Plan (TSIREP) and a further US$483 million is planned. Of the US$1.397 billion already committed, about US$783 million has been allocated through the international donor community and US$614 million from the government's commitments. The TSIREP planning implies an increase from a spending of US$70 million per annum in 1996/97 to US$260 million per annum in 2002/03.

During the period 1996/97 to 1998/99, the budget allocation to the road sector was UShs 159 billion (US$143.0 million), or on an average annual basis of UShs 53 billion (US$48 million).[17] The disbursement under the RSDP reflected a strategy focusing on preservation and selective upgrading of the existing road assets and resulted in the following expenditures during the three year period: improvement of main paved and gravel roads (42%); maintenance of main roads (36%); maintenance of district roads (18%); urban roads (1%); and institution and capacity building (2%). Budget allocations to the road sector have increased from 4.3% in 1994/95 to 9.6% in 1999/00 (Table 1).

The table below provides actual disbursements for the national road network maintenance for the period 1996/97 to 2000/01 and projected disbursements till 2004/05, as reflected in the TSIREP (April, 2001). As shown in the table, the Government is committed to gradually increase its share of main roads maintenance, with a decline in donor financing, such that by the year 2004/05, main road network maintenance is completely financed from the budget allocations.

[17] During this period, (1996/97 to 1998/99), petroleum duty has accounted for about 23% of the total revenues of the Government. License fees has accounted for another 2%. The total income from these two sources has, thus, accounted for about 25% of the total Government revenue. About 23% of the revenue from fuel (excise duty) and license fees was disbursed on the road sector.

Table: Disbursements for the national roads network maintenance

Fiscal Year	GoU (US$m)	Donors (US$ m)	TOTAL (US$ m)
1996/97	20.6	6.9	27.5
1997/98	23.8	11.5	35.3
1998/99	26.3	13.6	39.9
1999/00	31.9	25.6	57.5
2000/01	36.0	14.7	50.7
2001/02 (subm)	40.0	10.1	50.1
2002/03 (proj)	44.4	3.3	47.7
2003/04 (proj)	46.5	3.2	49.7
2004/05 (proj)	48.5	0.0	48.5

Source: 1. Institutional Reforms in Uganda's Road Sector Management, Paper presented for the Consultative Group Meeting, May 2001
2. TSIREP, MoFPED, April 20, 2001

Formulation of a District, Urban and Community Access Roads (DURCAR) Strategy

In 1992, the Government published a strategy for rural feeder roads rehabilitation and maintenance. The strategy sets out a program detailing action plans for sustainable improvement of rural roads. Since its publication, the Government has undertaken a number of policy changes that have affected implementation of the program, including: decentralization of power to local governments, liberalization of the economy, divestiture of public enterprises, civil service reform and enactment of the Land Act 1999. In light of these policy changes, the Government reviewed the 1992 Strategy and has prepared a Draft White Paper (October, 2000) setting out new strategies and plans for sustainable maintenance of district, urban and community access roads (DURCAR) over the next seven years. This White Paper represents a commitment on the part of the Government to address the urgent needs of district and community roads, which are seen as an integral part of the network development and critical to poverty alleviation.

The Local Government Act was promulgated in 1997 to decentralize functions, powers, and responsibilities, including devolution of road maintenance services of rural district or feeder, urban and community roads to local and urban authorities. Although this act allows districts to fully implement routine and periodic maintenance, rehabilitation works are still mainly the responsibility of the Central Government through the MOWHC. Following restructuring of ministries, the Engineering Desk formerly in the Ministry of Local Government was transferred to the MOWHC (the data base for District and Urban roads has been integrated into the entire national road network, maintained by the Planning Department of the Ministry). At the district level, Planning Departments have been established and District Planners incorporate district roads programs in their annual district plans. As part of its decentralization strategy, the Government has recently initiated a program of directly allocating central revenues to sub-national levels of Government for rural infrastructure, including feeder roads, through conditional grants. Through their local representative, beneficiaries are thus called upon to play a more important role than before in selecting expenditure priorities. A 10-year district feeder roads improvement plan will be prepared to complement the RSDP program for main roads.

Quality of the Road Network

Uganda's road network consists of national (classified) roads, district, urban and community access roads. The national road network consists of 9,500 km, of which 2,200 km are bitumen and 7,300 km are gravel; the district road network consists of 8,500 km gravel and 14,700 km earth surfaced roads; urban roads consist of 600 km bitumen, 940 km gravel and 1,460 km earth surface; and community roads are 30,000 km and predominantly earth surfaced.

Over the past decade, the Government, with the assistance of development partners, has invested heavily in the classified road network, which has resulted in an increase in percentage of fair to good road conditions from 50% in 1990 to about 70% in 1999; for the district roads, it is estimated that about 50% are in poor or very poor condition, 40% in fair condition and only 10% in good condition[18]; urban roads are in a similar state of disrepair as district roads with only 5% in good condition (excluding Kampala roads) and almost 60% in poor to very poor condition. As for the community access roads, the corresponding indicators are 86%, 9% and 5% in poor (or very poor), fair and good condition, respectively.

Table: Network Length and Condition, 1999

Network	Length (km)	Good	Fair	Poor	Very poor
Classified roads	9,500	18%	56%	20%	5%
District roads	23,200	10%	39%	26%	26%
Kampala roads	550	24%	16%	45%	16%
Urban roads	2,450	5%	37%	54%	3%
Total	*35,700*	*12%*	*43%*	*27%*	*19%*

[18] Since 1987, the Government has carried out an extensive feeder road rehabilitation effort. The Government, together with many donors, has implemented programs of district feeder roads rehabilitation as part of its overall strategy. About 9000 km (30%) of the RFRs have been rehabilitated/maintained over the period 1995-2000.

Network	Length (km)	Good	Fair	Poor	Very poor
Community access roads	30,000	5%	9%	10%	76%

Source: Road Management and Financing Study, Ministry of Works, Housing and Communications, February, 2001

III. EVALUATION OF THE UGANDA EXPERIENCE

Key Design Features of the Uganda Road Reform Process. Key elements of the Uganda road sector reform process are:

(a) *Developing a Strategy*. The underpinning of the reform program was the preparation of a 10-year Road Sector Development Program (RSDP) (1997-2006), as part of a strategy to promote growth and poverty alleviation. The strategy is focused on: (a) addressing weak implementation and coordination capacity of MoWHC; (b) providing a sustainable financing for road maintenance; and (c) strengthening local road construction industry.

(b) *Government ownership and commitment*. The Government places road improvement amongst its top priorities for development and is committed to providing efficient and effective delivery of transport services. The Government has demonstrated its commitment to provide the necessary funds for the entire roads sector over the medium term as illustrated in the Medium Term Budget Framework (MTEF), which is the mechanism for determining its medium term expenditure priorities and allocating these funds through the budgetary process. The MTEF gives three-year expenditure projections, which are revised annually as part of the budget process. The commitments for road sector allocations are also shown in the TSIREP, developed by the MoFPED. In addition, the Government is in the process of restructuring road sector institutions with the objective to change its involvement from direct provision of transport services to providing policy guideline and a clear legal framework.

(c) *Phasing the Program*. The size and scope of the RSDP requires an increased absorptive capacity in MoWHC to effectively manage and implement the program. As an initial step, an IDA in support of institutional development (RSISTAP) was provided, to assist in setting up the RAFU and finance initiating capacity building activities. The approach favors introducing institutional reform to ensure that implementation arrangements were in place in the form of RAFU prior to implementing an expanded roads improvement program.

(d) *Creating a System of Incentives and Sanctions*. There is clear recognition in the road sector strategy that the public sector model of road development and maintenance has not, in the past, led to an effective and efficient delivery of services. In a public sector environment, the incentive mechanisms are not always directed to make best use of available resources and a lack of accountability mitigates against efficient delivery. Even though the staff has high loyalty to the organization, absence of a clearly defined performance criteria and quality based career advancement prospects serve as disincentives to good performance. The objective of sector reform in Uganda was, therefore, to commercialize road management and separate implementation functions from those of planning and coordination. To meet this objective, as observed earlier, a performance oriented semi-autonomous road agency is to be set up – with RAFU as a first step in that direction - to serve as an engineering organization, purchasing resources from the market through competitive bidding.

(e) *Reforming Institutional and Management Basis*. Key elements of the reform program were to:

- develop an overall transport sector strategy and update the policy framework and strategy for district feeder roads development, maintenance and financing
- separate programming and financing functions from execution and procurement functions
- separate organizational of implementation and monitoring functions
- develop a performance basis under hard budgetary constraint with the road agency purchasing resources from the market through competitive bidding under public procurement rules
- ensure sustainability of funding for road improvements and maintenance
- increase the effectiveness and involvement of private contractors in road works through strengthening project management and contract administration

What has been the impact of road sector reforms initiated in the country on the quality and quantity of road maintenance? This question has to be viewed in light of the short period for which the reform program in Uganda has been under implementation. Development is a slow process and reform program needs time to materialize and have an impact. The road sector reforms were initiated in 1996 and the transitional road agency (RAFU) was established about two years back. This is an early study to evaluate the direction of reform in Uganda to examine if this promises sustainability in the long run.

Prior to 1996, road sector in Uganda lacked a strategic approach and faced financing problems, resulting in a deterioration of the network. All development and maintenance works for main roads were the responsibility of MoWHC, which was suffering from all ills of the civil service, with little accountability and monitoring. In contrast, reforms initiated since 1996, have developed a long-term strategy coupled with the creation of a commercially oriented road agency and the setting of performance monitoring targets. Predictability of funding has improved over the past two years by fixing the budget and national accounting system.

Need for Further Action

While road reforms in the country appear to be steadily gaining ground as reflected in improved contract management and administration, the short time for which they have been in existence, preclude obtaining specific evidence on quality or quantity of road development and maintenance. As indicated earlier, institutionalizing the reform process, with commitment and ownership by the Government, requires that a number of related issues ought to be addressed before the arrangements can be on a secure and sustained footing. Some of these issues are discussed in the following section.

(a) *Developing a basis for road maintenance*. Maintenance of the main road network continues to be the responsibility of the MoWHC. A financial and engineering audit of main road maintenance was conducted in 2000 to provide an independent verification and certification that funds and other resources that have been applied to the maintenance programs are adequate, fully accounted for and have provided the intended output. The audit was based on examination of 12 engineering stations and 1200km of roads. Generally speaking, the audit reported deficiencies in the maintenance and reporting practices followed by the Ministry[19] It is proposed to transfer main roads maintenance responsibility to RAFU as its capacity is built up, to ensure that a market discipline is introduced and work is performed under hard budgetary constraint. There is however no firm commitment on how this will be

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[19] Key findings of the technical auditing: (a) GoU road maintenance funding is below objectively calculated levels of road maintenance needs, well below the funding targets agreed with the donors and will not meet the US$44 million target for 2002/03; (b) substantial portion of maintenance budget was expended on emergency road works or improvements; (c) audited expenditures for road works in TRP appears lower than that reported by the MoWHC; (d) delays in implementation is caused by slow appointment of consultants; (e) financial administration at the District Stations is weak, with significant defects in bookkeeping and accounting records; (f) labor based contractor interventions are below MoWHC's own 1996 minimal targets in funding terms and physical inspection of routine maintenance indicated that many necessary and higher priority activities have not been undertaken; (g) general staff shortages at all levels on MoWHC and unsatisfactory reporting systems; (h) road data base has not been updated since it was established in 1997; and (i) in respect of the *gravel roads*, evaluation reported inadequate carriage way drainage, sunken carriageway below the surrounding natural ground level, defective chamber, defects in riding surface; for *bitumen surfaced roads*, of the 31 roads inspected, 23 roads required some patching of the road surface or edge repairs, 17 roads required reconstruction or an overlay and lack of surface maintenance

accomplished and what is the time frame. It is also not clear whether RAFU is to manage both development and maintenance work or there is to be set up a parallel unit to manage the road maintenance program. It is imperative that these issues are addressed in an expedient fashion to ensure that the responsibilities are clearly specified and the transitional period is smooth.

(b) *Streamlining the arrangements for financing road maintenance*. At the RSDP inception in 1996, the Government had committed itself to fully finance road maintenance by the year 2001/02, which is now revised and is planned to be provided by 2004/05. What is required is a comprehensive assessment of the road maintenance needs and a strategy for meeting those requirements in a realistic time frame to give credibility to the reform process. The Coordination Office within MoFPED is preparing such a plan, which should be based on realistic targets.

(c) *Updating the RSDP prioritized investments*. The Coordination Unit in the MoFPED is responsible for updating the RSDP and developing a prioritized list of road development projects, which are now entering phase 2. Uganda is evolving quickly with changes in the socio-economic environment and there is a need to consider new elements to adequately reflect the changing priorities. This requires building a link between the National Development Strategy and the road sector in order to include social issues like poverty alleviation, gender equity, environment mitigation, resettlement along with the engineering and economic issues, which were the primary focus of the initial program developed in 1996.

(d) *Developing sustainable arrangements for financing road agency recurrent costs*. The recurrent costs for the transitional road agency (RAFU) and the Coordination Unit are mainly financed by the donor assistance. Experience suggests that setting up administrative units, financed by donors, is not sustainable in the long run. The Units become ineffective agents of change as the donor financing is withdrawn, jeopardizing the entire reform program. The Government is well aware of this concern and is committed to financing recurrent costs out of the normal budget once the donor financing is withdrawn. However, the arrangements to meet the recurrent costs of the road agency from Government's budget have not been clearly specified and there is no time frame of when that could be achieved. Given that the Government is strapped for resources and is facing difficulties in financing for road maintenance, the prospects of her taking additional financial responsibility do not seem promising. Under the circumstances, the Government may consider one of the following options: (i) develop a cost-sharing basis for financing administrative and planning costs between the Government and the donors, on a declining basis, such that after some years, the responsibility for funding completely shifts to the Government; or (ii) in the spirit of making RAFU an autonomous unit, operating along commercial principles, it should be developed into a self-financing unit, charging a "contract fee" from the contracts let out. Arrangements to ensure that this option does not lead to the possibility of inflating road projects to increase contract fees would have to be identified.

(e) *Strengthening managerial accountability.* RAFU has been in existence for over two years but it is still in the process of building capacity in planning, monitoring and contract management. It is monitored on a day-to-day basis by the Management Committee, with the Minister, MoWHC as the chairman. All RAFU staff is hired by the Staff Recruitment and Evaluation Committee, and the performance contracts signed by the PS, MoWHC. It is imperative to maintain an arms-length relationship with the executive (the Ministry) and RAFU must have specific deliverables and well identified performance indicators to ensure that it performs as a business in a market environment. Effective performance also requires that the RAFU Director has sufficient freedom to sign and award contracts, offer reasonable terms or conditions of employment and operate without outside interference.

(f) *Preparing a strategy to restructure the MoWHC.* A major thrust of the reform program has been to set up a commercially oriented road agency and to separate planning functions from procurement and implementation. In the past, MoWHC has been responsible for both planning and implementation functions and, therefore, the reforms have a direct impact on how the Ministry is restructured and staffed, in parallel with enhancing the capacity of RAFU. To put the reforms on a sustainable basis requires developing a strategy for restructuring MoWHC, including an assessment of the staffing needs, specific functions to be performed by the staff and arrangements and criteria to phase out the surplus staff. The Government has prepared a White Paper on this strategy, though the specific details and a time bound action plan are yet to be developed.

(g) *Developing performance monitoring and auditing arrangements.* Accountability requires clear management objectives, monitorable targets, a regular reporting system, systematic auditing and effective oversight arrangements. One of the requirements to strengthen managerial accountability is to set monitorable targets based on clear objectives. Reporting systems are also an important tool for strengthening managerial accountability and should be produced on a regular basis using a set of agreed performance targets. Effective auditing is an important tool for strengthening agency performance. In some of the countries, auditing is done by the government audit office, which checks to ensure that budget allocations have not been exceeded and that funds have been handled according to government guidelines. This may not be enough. Staff in the auditor general's office lack institutional independence and the audit usually falls short of the rigorous auditing needed to account for the large sums of money associated with a fully-funded road maintenance program (Heggie, 1995)[20]. Some road agencies have, therefore, adopted for an independent audit by a member of the Institute of Chartered Accountants (Ethiopia). Other countries have gone even further and are introducing independent technical and financial audits (Ghana). It is not sufficient just to report on the use of money but also to verify the technical appropriateness of the works completed.

(h) *Developing a framework for addressing needs of district and urban roads*. The LG Act of Uganda was promulgated in 1997 to decentralize functions, powers and responsibilities, including devolution of road maintenance services of rural district or feeder roads, urban roads and community roads to local and urban authorities. However, the method of allocating funds from Central Government and Development Partners for district and urban road maintenance is not clear. There is no objective criteria to determine the amount to be disbursed to any district. Therefore, problems in the road network system are not appropriately addressed. The scarce resources have not been optimally utilized for best returns. Current arrangements to implement district and urban roads maintenance program are infested with a number of problems[21], which, coupled with weak technical capacity at the district level have resulted in a deteriorating condition of the roads. In addition, frequent division of existing districts to create new districts has compounded the problem of weak capacity. The Government has recently brought out a draft White Paper (October, 2000) which sets out new strategies and plans for sustainable maintenance of district, urban and community access roads over the next seven years. The program could be further strengthened by: (a) developing sustainable resources for financing district and community roads maintenance, based on cost-sharing basis; and (b) expanding the program of road rehabilitation and maintenance using labor-based technologies.

[20] Heggie, Ian (1995) *Management and Financing of Roads: An Agenda for Reform*, World Bank Technical Paper No. 275.

[21] For example, LAs and UAs do not follow uniform standards; lack of donor coordination and use of different mechanisms to channel funding for district roads; failure of some districts to follow policy regulations, strategies and funding conditionalities; limited capacity of districts to raise adequate revenue to finance road maintenance; insufficient implementation and technical capacity both at the Ministry and District level; weak local construction industry; over-reliance on capital intensive technologies; inadequate supervision, monitoring and auditing due to shortage of funds and qualified staff; use of force account; and under-utilization of equipment and poor maintenance.

(i) *Building the capacity of domestic construction industry*. As part of the country's medium term strategy for the transport sector, the Government has developed a Letter of Development Policy. The Policy aims to develop the domestic construction industry, with a view to increasing the share of contractor executed road maintenance works from 55% in 1999/2000 to 85% in 2003/04.[22] However, the strategy to increase the share of domestic contractors, including access to plant and equipment needs to be developed and a realistic time plan identified.

IV. COMPARISON OF UGANDA EXPERIENCE WITH REFORMS PURSUED IN SOME OTHER COUNTRIES

How does the reform process in Uganda compare with some other RMI countries, which have chosen to proceed in a different manner? Some of the key differences between road management and financing reform process pursued in Uganda as compared to some other countries (Zambia, Kenya, Ethiopia, Mozambique, Tanzania, Ghana, Malawi) are:

(a) *financing* by stabilizing road financing through securing an adequate and stable flow of funds. Many RMI countries have opted for road funds which are financed "off-budget" by designated road user charges, based on user pays principle. The principal source of road fund, in almost all countries examined is through an incremental fuel levy. In contrast, a major feature of road reforms in Uganda is that the Government has made a conscious decision to address road maintenance needs through the TSIREP process. It has also given explicit undertakings to sustain the maintenance funding as well as salary levels and conditions of employment offered by the CO and RAFU when IDA financing ends—with a view to the sustainability of the institutional arrangements. The central philosophy in the Uganda reform process is that the "sectoral" based approach is not sufficient, emphasizing the need to discipline the overall public expenditure and creating a sense of ownership among the decision makers.

The policy makers in Uganda extend the standard public economics arguments against setting up earmarked sector specific "funds" suggesting that earmarking distorts resource allocation and impairs flexibility in the revenue structure. Within the normal budget framework, Uganda has been able to commit greater resources for road maintenance (per kilometer of

[22] Project Appraisal Document, Road Development Program, AFTTR (Letter of Development Policy, Annex 11), April 2001.

road network)[23] over the past few years as compared to some countries with a "secure" road fund. The critical issue here is the need to secure adequate funding, irrespective of the source. The justification for road funds was defended on grounds of "to compensate for political or administrative myopia and ensure the allocation of resources to a low-profile economic activity with particularly high rates of return" (Gwilliam and Shalizi, 1999). In an environment of political uncertainty, road funds may be seen to provide resource allocation for maintenance and preservation of the existing road infrastructure. However, the setting up of road funds does not guarantee that adequate and secure funding would be made available for road maintenance. The road fund should be seen as a tool to realize the broader objective of sustainable funding for maintenance, rather than an end in itself – and a tool that may not always be the best one to select.

Some of the problems faced by countries with a road fund relate to: (i) *inadequacy of funds to meet maintenance requirements.* In almost all countries examined (Zambia, Malawi, Ghana, Tanzania, Ethiopia), road funds are unable to meet all road maintenance requirements (although in some cases such as Ethiopia and Kenya the percentage has reached or exceeded 80%). It is not always clear how the resource gap would be filled. The Governments (in countries with a road fund) are often of the view that setting up the road fund releases them of the obligation to provide any additional resources. There can also be a temptation to use the poor quality of roads (because of insufficiency of fund) as an argument to approach donor agencies to finance road rehabilitation. (ii*) instability in financing arrangements*. One of the key potential advantages in setting up road funds is that user charges provide a link between the level and quality of service and price to be paid. However, in practice, Governments are reluctant to relinquish control of the cash flows and of opportunities to "borrow" funds for other purposes when need arises (Nyangaga, 2001)[24]. Requests for the adjustment of fee rates to meet maintenance needs and compensate for inflation are often only considered after donor pressure. (iii) *inefficiencies in resource allocation*. Road funds, with representation from users and private sector on the board, were seen as efficient means of delivering funding for prioritized road maintenance needs. However, in practice, funds have been allocated to roads with little economic priority and, in some cases, without compliance to the construction contracts (Zambia, Kenya). In addition, with fuel levy as the dominant share of the road fund, allocation mechanisms for non-commercial, low volume feeder roads are not very clear. In the process, environmentally and socially justified investments often get neglected. (iv) *inability to link user charges with economic costs imposed*. Road user charges are not linked to damage caused to the road network. Fuel levy remains a quasi-user charge

[23] In 1999, Zambia with a main road network of 17,000 km disbursed about $2 million from the road fund for maintenance; Ghana with 13,000 km of main roads disbursed $39 million; Ethiopia with 16,000 km of main roads disbursed $12 million. These numbers compare with a disbursement of $32 million in Uganda with a main road network of 9,500 km in that year.

[24] Francis N. Nyangaga, *Reforming Road management in Sub-Saharan Africa*, Africa Transport Technical Note No. 32, March, 2001.

and does not distinguish by intensity of road use. Both users and non-users of road end up paying the incremental fuel levy and arrangements to protect non-users of road from paying into the road fund have not been successful. In most countries, legislative reform leading to broadening of the road fund resource base (vehicle license fees, transit fees, weigh bridge fees/fines, etc) has not yet led to results.

(b) *Independent management* by establishing professional management agencies run according to sound business practices. While road works are increasingly contracted out to the private construction industry on a competitive basis, SSA governments are reluctant to delegate road management to autonomous agencies operating according to sound business practices. (Nyangaga, 2001) [25] Government departments (ministries) are mostly cumbersome and largely ineffective managers, with little or no commercial approach to the tasks at hand. While the road fund has made available substantial money at the disposal of road agencies, lack of political commitment to safeguard the use of money and inability of the road administrations to efficiently use money, which is audited on a regular basis, has compromised delivery to road users. In sharp contrast to the reform program followed in other countries, Uganda has set up a semi-autonomous road agency to manage implementation of the roads program, with a core professional staff hired through a formal competitive process on a contractual basis. A clear distinction is made between the financing and planning functions and procurement functions. This arrangement has introduced a commercial culture with clear accountability in the decision making process.

(c) *Ownership* by involving road users and civil society in the management of roads. One of the elements of policy reforms in the road sector is to introduce transparency and accountability in the decision making process, which requires active support of road users and other stakeholders with a vested interest in sound road management. The idea of ownership is to encourage users to take an interest in road management, resource allocations and decide on prioritization of projects. Ownership can become the basis for a genuine partnership, with road users working with the Government to improve road safety, control fuel smuggling (a major problem in Uganda) and control overloading. Some of the countries with road fund boards (Zambia, Malawi, Ethiopia, Ghana) have representation from the private sector and user groups, which has helped to provide support for addressing the problem of road financing and introduce incentives to see that more money is spent on road maintenance. In Uganda, there is currently an absence of key private sector stakeholders in transport sector discussions and road management. Arrangements to get stakeholder involvement in deciding the allocation and prioritization of road investments should be developed in Uganda.

Responsibility by securing clear definition, separation and assignment of responsibilities with matching authority and performance targets. Some of the countries (Zambia) have a weak legal framework and there often exists inadequate action on the part of government to

[25] Op cit.

provide clear definition, clarification, separation and assignment of responsibility with matching authority. In Malawi, in spite of the legislation authorizing road fund board to adjust fuel levy to address maintenance needs, often the Board's role is limited to advising the Ministry of Finance. The record on establishing monitorable performance contracts between the road fund board and executing agencies remains less than satisfactory. Only a few countries (Zambia, Malawi) have succeeded in establishing arrangements for independent financial audits and even in case of Zambia there is a need to follow up on the recommendations made in the audit reports. Arrangements for setting up technical audits remain few and far between (Ghana is an exception in this regard).

These differences between Uganda and other RMI countries underscore some of the key concerns expressed by Country Coordinators during the 15th RMI meeting, held in Saly, Senegal (May, 2001). One of the objectives of the meeting was to take stock of the reform process with a view to plot the way forward. A general sense presented by the Coordinators during the meeting focused on four issues: (a) how best to sensitize the Government and policy makers on the importance of road maintenance? (b) what are the difficulties of dealing with road reform process in "isolation" of other sectors? (c) how to ensure continued involvement of donors and RMI in building capacity in each of the countries? and (d) how to measure the performance of country achievements? Of particular concern to most countries was their unsatisfactory performance (as measured by impact on quality of the road network) in spite of their following the RMI principles. A partial answer to this concern could be found in an attempt by the countries to monitor the structure and the process of road reforms rather than focusing on the performance targets. The result is an attempt at "ticking the boxes" signifying whether the appropriate structure was in place or not without fully understanding the implications of those decisions.

V. THE WAY FORWARD

The central philosophy in the Uganda reform process is that the "sectoral" based approach is not sufficient, emphasizing the need to discipline the overall public expenditure and creating a sense of ownership among the decision makers. In the work methods, the focus in Uganda is on outsourcing to the private sector, managed by a commercially set up, performance driven agency as a starting point of reforms. In financing arrangements, even though a dedicated road fund has not been set up, the Ministry of Finance has consistently met most of its maintenance budget requirements through the normal budget process.

However, there exist a number of areas where the reform program could be further strengthened as the country moves on to prepare and implement phase 2 of the road sector development program. A key focus should be on protecting and consolidating the reform program initiated under phase 1. In particular, firming up the basis of road maintenance funding arrangements, developing sustainable arrangements for financing the road agency, strengthening managerial accountability and performance monitoring and developing user participation in the reform process, are some of the areas requiring further attention.

Table 1
Medium Term Sectoral Allocations
(in UGS billion)

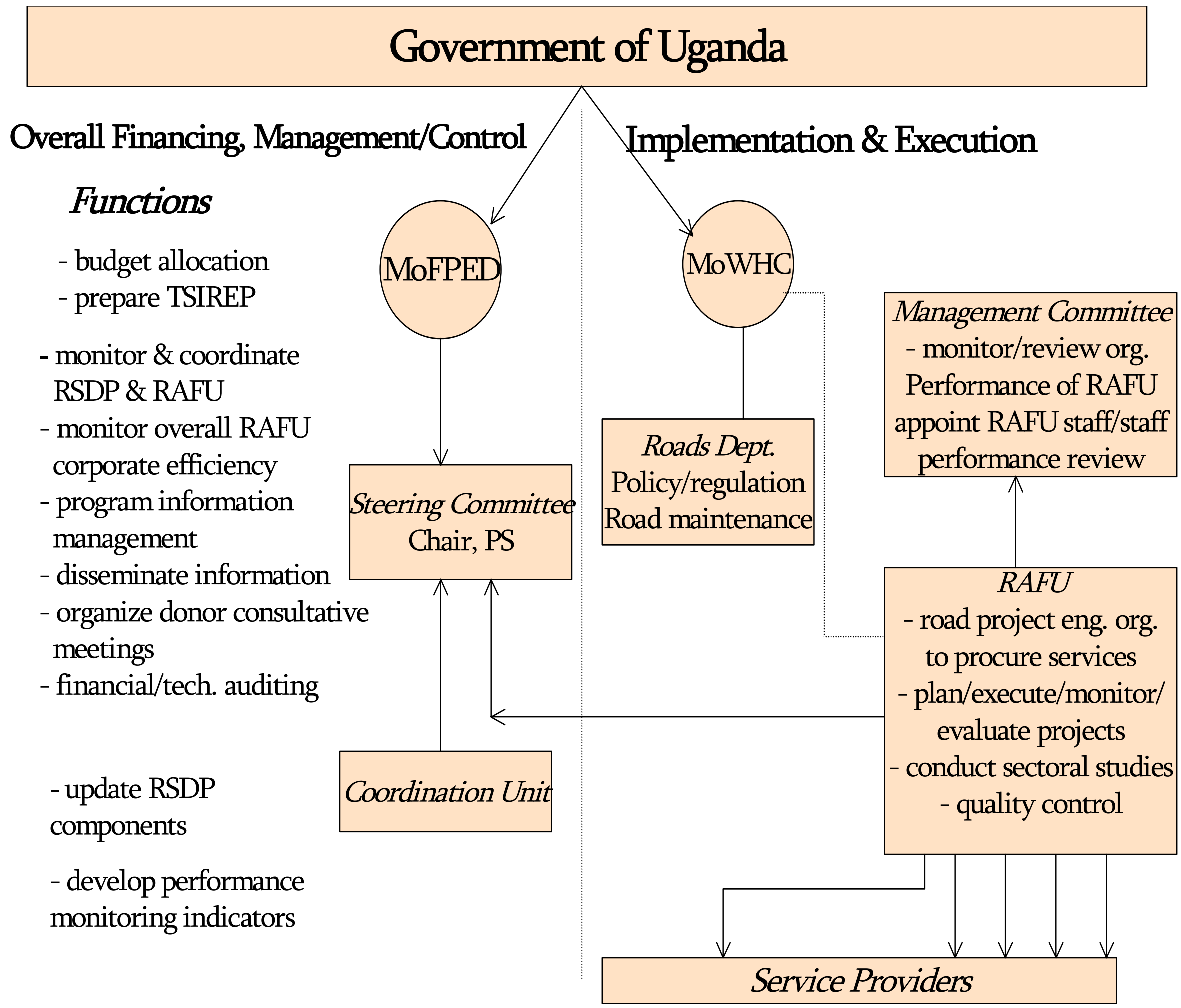
Sectoral Total	1994/95 Actual	1995/96 actual	1996/97 Actual	1997/98 Actual	1998/99 actual	1999/00 Provis.	2000/01 Budget	2001/02 project.
Security	103	130	145	127	164	194	215	245
Road & Works	*25*	*28*	*44*	*44*	*71*	*123*	*138*	*160*
Agriculture	14	7	10	10	18	21	26	31
Education	118	119	173	204	251	343	388	437
Health	39	42	55	58	73	84	96	116
Law & Order	66	67	72	67	77	86	96	114
Social Service.	54	40	41	43	46	86	89	109
Public Adm.	118	153	168	154	207	260	277	288
Int. Payment Due	47	54	56	76	82	89	97	100
TOTAL	584	640	764	783	989	1286	1422	1600
UGS per USD	1000	943	1020	1080	1200	1500	1623	1707

Source: Ministry of Finance, Planning and Economic Development Budget Framework Paper, May 21, 2000.

	1998/99 Donor	(actual) GoU	1999/00 Donor	(provis.) GoU	2000/01 Donor	(budget) GoU	2001/02 Donor	(submision) GoU
Main Rds Maint.	10.9	28.8	37.9	47.7	23.8	52.9	17.2	79.2
Main Rds. Imp.	15.3	19.8	66.7	38.6	115.6	38.5	96.3	30.9
District Roads	3.2	20.7	4.8	24.1	16.1	27.2	9.2	29.2
Urban Roads	6.1	0.6	12.2	3.0	7.8	4.8	13.9	6.8
Studies	1.1	1.0	16.5	2.0	13.8	3.5	13.5	3.3
TOTAL	36.6	70.9	138.1	115.4	177.1	126.9	150.1	149.4

Source: Transport Sector Investment and Recurrent Expenditure Program, MoFPED, April 20, 2001

Figure 1



Government of Uganda
Overall Financing, Management/Control
Implementation & Execution
Functions
- budget allocation
- prepare TSIREP
- monitor & coordinate RSDP & RAFU
- monitor overall RAFU corporate efficiency
- program information management
- disseminate information
- organize donor consultative meetings
- financial/tech. auditing
- update RSDP components
- develop performance monitoring indicators
MoFPED
MoWHC
Management Committee
- monitor/review org. Performance of RAFU appoint RAFU staff/staff performance review
Roads Dept.
Policy/regulation
Road maintenance
Steering Committee
Chair, PS
RAFU
- road project eng. org. to procure services
- plan/execute/monitor/ evaluate projects
- conduct sectoral studies
- quality control
Coordination Unit
Service Providers