# REVIEW OF THE ROAD FUND IN MALAWI

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## 1. INTRODUCTION

In response to deteriorating conditions of the road network and its adverse impact on economic growth, the Government of Malawi established a Road Maintenance Initiative (RMI) Country Program in 1995, which set the broad outline of a new policy framework for the road sector.[1] The various stakeholder workshops since 1995 under the aegis of the Ministry of Transport (MOT), the National Economic Council (NEC), the Road Maintenance Initiative (RMI) and Rural Travel and Transport Program (RTTP) have all helped to create better awareness of the nature of the transport problems facing the country. Based on consensus emerging from these discussions, the Government prepared a Road Sector Policy, which formed the basis of preparation and implementation of a five year (1999-2004) Road Maintenance and Rehabilitation Program (ROMARP).[2] The central focus of the government's policy objective is to put in place a framework for management and financing of the road sector and assure the technical and financial capacity for a road maintenance program of an appropriate level that can be sustained.

To improve management and financing of the road sector, an Act of Parliament has been passed in 1997 creating the National Roads Authority (NRA), which is mandated to manage the road sector on behalf of Government with resources generated from a Road Fund (RF), for which the NRA Board has full responsibility.[3] This paper is a review of the Road Fund experience in Malawi. Following this introduction, the paper is divided into four sections. Section 2 presents the *institutional and management structure* of the Road Fund administration; section 3 analyzes the *process* of setting up and implementation of the Road Fund, including adequacy, stability and performance monitoring of the flow of funds; section 3 evaluates the *objective achievements*, as measured by the performance of the NRA in prioritizing annual road program, managing use of RF, monitoring maintenance and development of the public road network, raising the required funds for meeting maintenance needs and developing the local construction industry. The key conclusions and recommendations are presented in Section 5.

[1] Malawi is a land locked country bordered by Tanzania, Zambia and Mozambique. As a landlocked country, it is important for Malawi to have a variety of well maintained, competitive international routes for transport of her export and import traffic. Road transport is by far the most heavily used transport mode in terms of both freight volume and passengers moved and the size of the network. Road transport dominates movement of agricultural and other produce. Transport costs remain very high which has a negative impact on the cost of imports and exports and which also constrains national development.

[2] For details, please see the Road Sector Policy Paper, Government of Malawi (1998)

[3] The resolutions of the RMI Mangochi Workshop in May 1995, forms the basis of Government's transport sector policy towards the management and financing of the road sector.

## 2. INSTITUTIONAL/MANAGEMENT STRUCTURE

### 2.1 The Structure

The legislation establishing the NRA, managed by a private sector dominated Board, and a RF was passed in April 1997. The Act confers on NRA the status of a road authority (with direct jurisdiction over central government roads) concurrently with the local authorities (who have direct jurisdiction over district and local government roads in their areas) and responsibility for the management of the RF to meet the maintenance needs of the entire road network including paths and trails.

The NRA Board created under the Act was appointed in July 1997 with the direct responsibility to recommend raising road user charges for the RF and to determine allocation mechanisms for priority maintenance needs on the road network. The NRA only though became operational on July 1, 1998 in that this was the start of the first (fiscal) year for which it had responsibility for managing a maintenance program. Management responsibility for the RF was vested in February 1998. The specific functions of the Board are to:

- (a) manage and direct the utilization of the Road Fund;
- (b) monitor the maintenance and development of the public road network of Malawi.
- (c) raise the required funds for adequate maintenance and rehabilitation of public roads;
- (d) prioritize annual road program submitted to the authority by the various central and local road agencies;
- (e) advise the Minister (i.e. at the time the Act was passed – of Works and Supplies) and, where appropriate, the Minister responsible for Local Government and the Minister responsible for Transport on: (i) preparation of efficient and effective implementation of the annual roads program as specified; and (ii) control of overloading of vehicles on public roads.

The current NRA Board, constituted in September 1999, consists of 13 (now 12) members, with a private sector Chairman nominated by Tea/Tobacco/Sugar Associations and appointed by the Minister of Works and Supplies. The three public sector members are represented by the relevant government ministries: Transport; Works and Supplies; (since March 2000 one ministry - of Transport and Public Works) and Local Government. The majority members are from the private sector and are the nominees of the following: Road Transport Operations Association (Vice Chairman), Mini Bus & Taxi Operators Association, Chamber of Commerce and Industry. Two other members represent National Construction Industry Council (NCIC) and National Road Safety Council (NRSC), which are both statutory bodies set up under their own Acts. One member represents the local authorities association. Three members are appointed by the Minister in the public interest, all form the private sector. The Board is assisted by two committees: (i) the

Technical Committee; and (ii) the Finance Committee. Each of these committees is chaired by a member of the Board.

The Secretariat of the Board is headed by a Chief Executive Officer (CEO), who is supported by a small front office and two departments headed by an Operations Director and by a Finance Director (see Figure 1). The Operations Department is made up of Central Roads Division (CRD), Urban District Roads Division (UDRD) and the Central Planning and Procurement Unit.[4] The Finance Department is expected to coordinate project accounting, maintain overall records, manage disbursements, produce project management reports, annual accounts and ensure their timely audit. The Technical Director of the CRD is expected to manage implementation of civil works for the main and secondary roads. i.e. NRA is in part an executing agency and in part the focus of road sector planning and financing. The Technical Director of the UDRD is expected to coordinate implementation of civil works for urban and rural district roads – the modalities are in the process of being worked out in view of the fact that, as of end 1999, local district (rural) authorities were in the process of being established. Four urban authorities undertake their own road programs, but these are in the process of being folded into a single national road program. In view of the NRA's critical role in implementation of the road sector program and the need to establish its capacity, the Government has secured technical assistance for the NRA. NRA pays competitive salaries and staff is recruited from the public and private sectors, financed out of the proceeds of the RF.

## 3. PROCESS

### 3.1 Adequacy of Road Financing.

[4] Within the new policy framework, the Government sees its role as that of creating an enabling environment for efficient and adequate elaboration and implementation of transport goals, objectives and strategies. The Government is also seeking to decentralize executing agency functions. This is in contrast to previous years, when effectively, MOWS was managing (since the early 1980s) all public roads (DRIMP, etc.) as district authorities did not exist. As part of the reform program, functions performed by NEC have been moved to the MOT whereas those performed by the Ministry of Works and Supplies (MOW&S) are in the process of being transferred to the NRA or MOT. At the same time, measures are being taken to increase the capacity of MOT to undertake analytical work in the functional area of transport policy formulation. The staff in MOWS has been reduced from almost 1,200 in 1997 to about 300 today and the Government is committed to further reducing the staff to about 100 in a few years as NRA is fully established and functional. Further institutional reform may be possible as the executing agencies take full responsibility for program implementation.

Budget management and allocation of resources to the road sector, prior to the introduction of the road sector reforms, were not conducive to proper planning and management of the road works. MOWS typically prepared estimates based on the initial proposals of the Roads Department, which were then "approved" by the Ministry of Finance, after revision. The final allocation to MOWS often bore no relation to initial proposals. The budgetary allocation for road maintenance were vulnerable to fluctuations in fiscal revenues (see Table 1). Up until 1995/96, resources allocated to road maintenance expenditure were well below what was needed to assure the quality of the network, e.g. in 1994/95, US$2.7million was budgeted, less than 15% of the requirements (for details, see Public Expenditure Review, Government of Malawi, June 2000).

Table 1: MOWS Revenue Budget for Road Maintenance

| Fiscal Year | Budgeted Amount (US$ million) |
|---|---|
| 1992/93 | 5.9 |
| 1993/94 | 5.4 |
| 1994/95 | 2.7 |
| 1995/96 | 1.3 |
| 1996/97 | 7.0 |

Source: Review of Activities, NRA, Republic of Malawi, March 2000

During the period 1993-97, budgeted expenditure on roads through MOWS was in the range of 1.3% to 2.9% of the Government recurrent expenditure. Estimated capital spending in 1996/97 was MK320 million (US$21.5 million) and the ratio of capital to maintenance had declined to about 3:1 from above 21:1 in the early part of the 1990s (Public Expenditure Review, Republic of Malawi, June 2000).[5]

The RF was established in April 1998 with the objective to develop a dedicated and sustainable funding source for road maintenance, financed by incremental user fees and managed by users and stakeholders. At the present time, the primary resource base is the fuel levy which was initially set at MK 1/liter for petrol and MK0.99/liter for diesel. This is an incremental road user charge which is specifically identified element of the wholesale fuel price structure. The levy has been progressively increased to MK1.25/liter in October 1998 to MK1.75/liter (about US$0.038/liter) in July 1999 for both petrol and diesel. The only other source of funding identified for routine maintenance is an extraordinary contribution from EU (MK250 million equivalent) for two years (1999/2000 and 2000/2001) to help address the backlog of work.

Table: Malawi Prices of Petroleum Products
(in Kwacha per liter, March 2000)

| | Petrol | Diesel |
|---|---|---|

[5] About 85% of the capital expenditure in 1996/97 was by donor financing.

| | | |
|---|---|---|
| FOB | 9.70 | 10.24 |
| Transport, storage, insurance | 5.24 | 5.24 |
| PCC levy (Adm) | 0.15 | 0.15 |
| Energy Fund | 0.04 | 0.07 |
| *Fuel Levy* | *1.75* | *1.75* |
| Excise, VAT, dealer margin | 5.60 | 1.69 |
| Total | 22.48 | 19.13 |
| Total (US$ cents) | 0.46 | 0.40 |

Up to February 2000, a total of MK 614 million (US$14 million) was received in the RF. This amount should have been sufficient to meet routine maintenance requirements (of roads in maintainable condition), but in the event an appreciable sum is being spent on "holding" maintenance (preserving a road awaiting maintenance in a fair or good condition) and on urban road rehabilitation. Analytical work on the levels which would need to be attained for the fuel levy to meet the requirements of the anticipated maintenance program suggests that the fuel levy would have to increase by a factor of about 56%, in real terms, over the next five years, if it were to be the only source of funding for road maintenance (reference Public Expenditure Review).

The NRA has proposed an expenditure budget of MK1.2 billion (US$25 million) for fiscal 2000/2001 as compared to the projected revenue of MK729 million, of which 57% (MK414 million – US$8.6 million) is projected to come from the fuel levy, 21% (MK150 million) is from other (unspecified) road user charges, 1% (MK5.4 million) is from interest receivable and the remaining 22% (MK160 million) is from donor funds. The fuel levy would have to be increased from the current rate of MK1.75/liter to MK3.78/liter (US$0.078/liter) to cover this deficit in full. No decision on any further fuel levy adjustment however is expected before last quarter of 2000. The delay may not be critical as NRA has been able - in 1998/99 and 1999/2000 its only too years of operation – to accomplish only 60-65% of its planned work program (in aggregate), i.e. they have yet to spend as much as 2000/2001 projected revenue in any one year.

## 3.2 **Stability of Road Financing**

The funds for the RF are credited to a commercial bank account managed by NRA directly by the Petroleum Control Commission (PCC). Beginning April 1998, the funds have been regularly credited every month, though with a delay of about 45 days from receipt by the PCC (receipts in April were related to February collections, for example). The NRA monitors petroleum product import data and is in a position to verify that amounts credited are consistent with the product uplift. This should in due course be formally included as part of the external audit process. Availability of a secure and stable flow of funds for road maintenance provides an opportunity to the NRA to develop and implement a sustainable road maintenance program. The continuation of this degree of regularity of funds flow has though been rendered uncertain by the decision to liberalize petroleum product importation and marketing which will lead to a different and changed role for PCC. Alternative but equivalent arrangements may have to be put in place.

### 3.3 Performance Monitoring

Planning and programming are still in their infancy. Much of the documentation, guidelines and detailed procedures for ensuring effective planning, programming, monitoring and evaluation of the road program are not yet in place. Procedures for managing the resources of the Road Fund and allocating its proceeds are in place, e.g. 50% of funds are to go to central roads and the balance to local authority roads. Evaluation of actual disbursements for 1999/2000 suggests that planning guidelines are not exactly being followed. Currently, there is no clear agreement between the priority given to eliminating the backlog of periodic maintenance and road rehabilitation/ reconstruction. Steps are being taken to carry out an external audit of the RF, which is long overdue. One of the critical requirements for establishing and monitoring maintenance needs of the country's road network is to carry out a functional road classification exercise with update of the road network data and road conditions.

## 4. OBJECTIVE ACHIEVEMENTS

### 4.1 Performance of the NRA

NRA is a relatively young organization. The senior management staff is only recently fully in place (the Finance Director position was vacant up until May 2000, though the person has now been selected and is expected to join soon) and there have been a number of performance problems which have reduced the effectiveness of NRA (the Operations Director was dismissed in July 2000). The executing agencies (other than NRA itself) are as yet unformed or, in the case of the local authorities, not really geared up to play their anticipated role in the road sector. Zonal offices have yet not been established, which has delayed devolution of district road planning and management to local authorities. The Secretariat's activities for the past two years have been dominated by supervision of the initial maintenance contracts and addressing "emergency" requirements. The NRA has not yet developed a work plan and prioritized road maintenance needs based systematically on identified long- term needs of the country – although a long term development plan has been prepared. An under-resourced operations unit has hampered the development of standard documentation and efficient procurement. The annual publication of the NRA activities is long overdue.

One of the central objectives of the sector reform was to unbundle the tasks which were formally handled by government ministry (Works and Supplies), including: (i) policy and regulation; (ii) programming and financing; and (iii) management and execution of works. Under the reformed arrangement, the first stays with the government, the second is managed by the finance and planning department of the NRA and the third is the responsibility of the operations department in the NRA and/or of the local authorities for roads within their jurisdictions. At present, CRD and URD is a "de facto" roads agency (taking over many of the functions and most of the professional roads staff of the ministry), though the reform envisages the creation of a Central Roads Authority (CRA) as an executing agency to provide management services under contract to the NRA. The road agency is thus not fully separate from the RF administration. This is in contrast to some other countries (Zambia, Ghana, Ethiopia) where RF administration is institutionally separate from road agencies, but similar to others (Mozambique).

Further legislative reforms are required to clarify roles and responsibilities of the local authorities and the NRA. The Public Roads Act needs to be amended to reflect the changing roles of the Government ministries and provide clarification on road authorities for different classes of roads.[6] The NRA Act does not clearly distinguish the roles of the NRA and local authorities with regard to planning, programming and execution of district road works. As the functions formerly performed by Roads Department in MOWS are taken over by the NRA, the issue of various assets previously "owned" by MOWS needs to be resolved.

## 4.2 Developing an Annual Program Based on Prioritized Road Network Needs.

Consistent and appropriate project selection criteria as well as appropriate design specifications and maintenance standards are fundamental to sound decision making on maintenance and investment priorities. At present, there is a disconnect between decisions on maintenance and development expenditure on key strategic issues related to arrangements to prioritize investments in low volume roads, especially in rural areas; and mechanisms to allocate across different road types in the network. Key issues with the current policies on resource allocation are:

- absence of a fully functional maintenance management system makes it difficult to ensure that the maintenance budget is correctly allocated across all road types;
- it is not clear if the roads in good or fair condition are consistently being allocated sufficient resources to ensure that their quality does not deteriorate;
- the procedure for determining allocation of resources among competing district level priorities (volume of traffic carried by the class of road) is biased in favor of main and urban roads.

Comparison of planned budget for 1999/2000 with actual disbursements underscore the bias towards central and urban roads in resource allocations (Table 4). Two key conclusions emerge: (i) allocation to district roads (excluding the two cities of Lilongwe and Blantyre) is less than 10%, while their share of the total road network is 23%; (ii) almost 50% of the contracts awarded are for Lilongwe and Blantyre, of which 50% is for rehabilitation.

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[6] Cabinet is expected to adopt a revised national transport policy by May 2000, which has the approval of an inter-ministerial Committee of Transport. It reflects a growing public private partnership in transport.

Table 4: Distribution of Planned and Actual Contracts (in KW million)
1999/2000

| Division | Planned Budget | Actual | | | Total |
|---|---|---|---|---|---|
| | | Civil Contracts, including consultancy (Phase 1) | Emergency, Urgent Repairs, Recent Commitments, Retainer Contracts | Rehabil -itation | |
| Urban & District Roads | *218.1* | *66.4* | *97.8* | *135.0* | *299.3* |
| Central Roads | *208.9* | *60.9* | *155.5* | *9.4* | *225.8* |
| Total | 427.0 | 127.3 | 253.3 | 144.4 | 525.1 |

Source: NRA Accounts, May 2000

Low allocation to feeder roads may be a reflection of the Road Board composition, with a predominance of members from the central ministries or the national private associations, based in the two big cities. This would require modifications in the current structure of the Board, to include representatives of non-commercial, environment and local interests in the management of the RF. However, lack of capacity in both planning and implementation at the district level has also constrained efforts to maintain rural roads. This will require providing guidance to local district authorities who should increasingly take the lead in program preparation and objective setting in their respective parts of the network.

NRA is leading the process of identifying and adopting a more rational approach for allocation, based on social and environmental considerations, in additional to a simple economic rate of return calculation. Provision for emergency and urgent repairs should, to the extent possible, form part of the annual works program and be subjected to a maximum ceiling amount.

## 4.3 **Managing the Use of Funds.**

During 1998/99, a total of MK237 million of contracts were let—Urban and Rural for MK65 million, washaways and other unplanned contracts for MK6.5 million; Central for MK47 million, unplanned for MK101 million and washaways for MK16 million. NRA prepared a comprehensive budget for 1999/2000, with the total planned physical maintenance works estimated at MK 427 million, to be implemented in four phases (July-August, September-December, January to March and April to June). The provision for administrative and overhead is about 13%, which is high in relation to program goals, and a provision of 17.5% for emergencies, which is also high. Evaluation of actual award of contracts till December 1999 suggests that disbursements had little relation to the planned works (see Table 4).

Total contracts awarded till December 1999 were for MK525 million (about MK100 million more than the planned budget), of which less than 25% were for planned maintenance road works; almost 50% of the contracts awarded were for emergency, urgent repairs and recent commitments; and the remaining 25% of the contracts were for roads rehabilitation. It is also not clear how the excess of the expenditure was financed. A review of road rehabilitation works carried out in Lilongwe over the past year reveal sub-optimal use of resources, with priority focus on meeting the short-term immediate needs without adequate justification or balancing long-term economic benefits.

### 4.4 Raising Required Funds for Meeting the Maintenance Needs.

Though the NRA has the legal mandate to determine user fees/expenditures to meet the maintenance needs of the road network, in practice this role has been constrained. By political convention, the Board has preferred to make recommendations and forward them to the Minister for consideration. No increases in fuel levy in practice have been made without, firstly the approval of the Minister of Works and Supplies ands secondly without the subsequent endorsement of the Minister of Finance. The Board has not been successful in raising the fuel levy to the extent it would like – nor has it made any recommendations yet regarding the introduction of other user charges as justified by the road maintenance needs. Nonetheless the reform process enjoys widespread public support and Malawi has been able to raise fuel levy to a greater extent and more rapidly then many more established neighboring countries. The fuel levy still remains a proxy charge for road usage. It does not discriminate between the users and non-users of roads. Arrangements to diversify road user charges, with the possibility of introducing direct charge for road use will need to be explored.

## 5. CONCLUSIONS.

The road sector reforms in Malawi can be seen as the start of a process for increasing private sector participation in the planning, programming and management of the road works. The reforms have created a framework under which the private sector, as a key player on the NRA Board, has a pivotal role to play in planning and resource allocation mechanisms. The introduction of the fuel levy is a major step forward from the earlier days when resources for road works were based on “allocations” by the Ministry of Finance, which had no relation to the actual maintenance needs.

However, the Board has only been partially successful in setting up the planning, programming and monitoring role. Though funding available for maintenance has improved, the funds so far have mainly been utilized for rehabilitation of the city roads, to the detriment of maintenance needs of the rest of the road network. Critical issues faced by the NRA include:

- Unclear roles and responsibilities of local authorities and NRA, requiring further legislative reforms. The Public Roads Act needs to be amended to reflect the changing roles of the Government ministries and provide clarification on road authorities for different classes of roads. The NRA should improve its focus on planning, programming and management of RF, with arrangements for conducting financial and technical audit on the use of funds;
- Lack of performance based contracts between the operations department and the NRA Secretariat;
- Insufficiency of the RF to cover "full" maintenance needs, including "holding maintenance";
- Constraints in the capacity of executing agencies to carry out the works efficiently and effectively, and this is particularly of concern at the regional level;
- Arrangements to diversify road user charges, with the possibility of introducing direct charge for road use to be explored.
- Inability to develop routine and periodic maintenance program based on relative priorities of different road types.
- Need to ensure that programmed rehabilitation and development works are consistent with financial capacity to maintain the roads and technical capacity to manage both the rehabilitation and maintenance works.

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Key lessons emerging from the evaluation of RF in Malawi are:

(a) Setting up dedicated financing arrangements is a necessary but not a sufficient condition to ensure that a sustainable and stable basis of road maintenance is established which translates to improved service delivery. It is equally necessary to ensure that: (i) political commitment exists to safeguard the use of money; (ii) check-and-balance governance system to restrict government's discretionary powers and arbitrary use of funds; (iii) aggregate resources sufficient to cover all of the road network; (iv) road user fees based on the maintenance "needs" of the road network; (v) Road Fund Board capable of defining and enforcing contractual agreements; (vi) Road Fund Board to include diverse interest groups to ensure equitable distribution of resources; (vii) clear allocation of responsibilities between RF Authority and government departments; and (viii) road agencies with capacity to carry out road maintenance works efficiently and effectively.

(b) Very often, inflation eats away at the real value of the fuel levy, undermining the very purpose of the levy, which is to provide a reliable and dependable source of road maintenance financing. To compensate for the impact of inflation, there is a need to built in mechanisms to adjust the levy regularly on the basis of a quantifiable criteria (say, increase in road maintenance cost index since the previous inflation-related fuel levy adjustment took place).

(c) Revenue-raising through Road Funds should match absorptive capacity rather than identified maintenance expenditure needs.

(d) Ability of the NRA to determine user fees/expenditures, even when supported by some legal basis, in practice may not always be exercised. The best that can be hoped for is that: (i) administration is capable of working out and supporting sustainable financing strategy based on road user charges; and (ii) NRA is successful in convincing governments (still the ultimate owner) that it is in the national interest to raise charges to meet road maintenance needs.

(e) In an economic sense, the fuel levy must be related to the damage vehicles actually cause to the road.

(f) Transfer of the fuel levy to the RF must be accomplished in efficient, transparent and accountable ways. There should be a premium on reducing the amount of intermediate steps to a minimum, subject to ex-post reporting and sound audit practices.

(g) Technical audit should involve continuous auditing of projects-in-progress for improving performance. This would eliminate projects being technically audited after the event rather than during the event. There is a need to: (i) establish a Road Works Inspectorate to monitor the quantity and quality of work and ensure transparency and accountability in the use of road maintenance funds, most of which are now derived directly from the road-users; (ii) set up appropriate reporting responsibility of the Inspectorate to ensure its effectiveness; (iii) develop an updated and rationalized inventory and condition survey of the classified road network

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**MALAWI:  NATIONAL ROAD AUTHORITY**