

Malawi: Road Maintenance Programme III

Ex-post Evaluation Report

OECD sector	21020/Road transport	
BMZ project number	2001 65 183	
Project executing agency	Roads Authority (RA)	
Consultant	DIWI Consult, Essen	
Year of ex-post evaluation report	2008	
	Project appraisal (planned)	Ex-post evaluation (actual)
Start of implementation	4th quarter 2002	4th quarter 2003
Period of implementation	17 months	31 months
Investment costs	EUR 5.1 million	EUR 4.5 million
Counterpart contribution	None	None
Finance, of which FC funds	EUR 4.5 million	EUR 4.5 million
Other institutions/donors involved	None	None
Performance rating	2	
• Relevance	2	
• Effectiveness	3	
• Efficiency	2	
• Overarching developmental impact	2	
• Sustainability	3	

Brief description, overall objective and project objectives with indicators

The project was the third and last phase of a road maintenance programme supported with FC funds in Malawi. The overall objective was to make a contribution to secure sustainable, efficient transport services in Malawi and thus also to sustainable economic growth and poverty reduction. The indicator for overall objective achievement was the ongoing and consistent implementation of the action plan for road sector reform started in 1998. The project objective was to have cost-effective roads for users that were also efficient in macroeconomic terms. The cost-effective use criterion was to be met through the proper maintenance of the individual stretches and the measure of efficient macroeconomic use was traffic volume development on the programme roads at least on a par with the regional average. The programme measures comprised the one-off repair of selected stretches of the national highways M1 and M5 as well as a gravel road to the Nyika and Vwaza Marsh nature reserves over a total distance of 399 km. The target group consisted of road users and indirectly all users of transport services on the programme roads. In terms of conceptual design, the project continued the two previous phases.

The project executing agency was the Namibian Roads Authority (RA), which is in charge of maintaining classified roads. Including consultancy services, total costs amounted to EUR 4.5 million, fully financed from FC funds. Owing to the precarious national budget finances and the high development-policy priority of the project, no counterpart contribution by the Malawian side was planned.

Project design / major deviations from original planning and main causes

The Roads Authority (RA) is responsible for maintaining Malawian roadways. Road construction is financed by the Road Fund (RF), with fuel levies accounting for 90%.

In 2006, the revenue from the RF covered just about 15% of total requisite expenditure by the RA for regular and periodic maintenance and upgrading measures. Recent estimates by the World Bank predict that about US\$ 50 million a year will have to be earmarked for the road sector in the long term. Malawi will therefore continue to remain dependent on external finance in this sector.

As envisaged at project appraisal, the maintenance work is generally carried out by private building contractors with the RA in charge of awarding, supervising and financially administering the contracts via its regional setup (five zonal units in Mzuzu, Kasungu, Lilongwe, Zomba and Blantyre). The inspection of activities on site confirmed that the RA is capable of conducting sustainable maintenance work on its own with the help of the private construction industry. The professionalism of personnel engaged in road construction is, however, in need of improvement.

The introduction of the lengthmen system for routine maintenance has proved to be a failure. The tentative introduction of the system on some stretches of road did not ensure regular road maintenance of sufficient quality.

Key results of impact analysis and performance rating

The project aimed at general poverty reduction. The poverty rate in the different project regions ranged between 51% and 63%. Poverty reduction impacts are more indirect, raising income by improving the accessibility of workplaces and rural markets and better education thanks to shorter travel times to school, for example.

The road maintenance did not cater for environmental protection and resource conservation. No adverse environmental impacts have occurred. The project afforded little scope for gender equality. Studies on similar projects have shown that women can reach health facilities faster, which reduces maternal and infant mortality above all. School attendance by girls also increases above average due to the safe and fast journey to school. Participatory development/good governance was not an objective.

In summary, we assess the developmental efficacy of the project as follows:

Relevance: The sustainable improvement of the transport system is one of the Malawian government's declared development-policy goals. Besides energy supply, the lack and poor quality of roads place a major constraint on national socio-economic development. By rehabilitating major stretches of the main roadways in Malawi and supporting other donors in setting up a sustainable maintenance system, the project made an important contribution to improving the national transport system. The results chain assumptions at project appraisal that road rehabilitation would improve access to social and economic infrastructure and with that make a contribution to growth and poverty reduction remain valid. The project was carried out in close coordination with

and complementary to the activities of other donors, for example, the Road Maintenance Initiative (RMI) of the World Bank and EU, the World Bank Road Maintenance and Rehabilitation Project (ROMARP), the institutional sectoral reform largely supported by the EU and various projects for improving rural thoroughfares and bridges. There was therefore sufficient donor coordination and alignment with the broader programmes and capacities of the partners. Although the road sector no longer numbers among the priorities of bilateral development cooperation with Malawi, there is still a large need for donor commitment here. In future, the EU will concentrate on continuing to implement road sector reforms. Since the World Bank in particular will place its focus on the energy sector in future, there is still a substantial need to improve rail and air as means of transport and also to make good a significant backlog in rehabilitation, particularly in rural roads (sub-rating: 2).

Effectiveness: The relative increase in traffic volume at least on a par with the regional average was defined as an indicator for project objective achievement (cost-effective use of project roads) on the demand side. Increases in vehicle numbers could be checked using data from over 40 counting locations on the whole Malawian road grid for 2001 and 2006. Altogether, traffic volume on all stretches of roadway increased by 2.7% a year in this period, roughly equal to the regional average (3%). On the supply side, proper maintenance has been performed, except for the secondary access roads to the Nyika and Vwaza Marsh reserves. The project roads are in a very good condition and routine upkeep measures are carried out (e.g. tending to the verges and drainage works). At present, vehicle speeds and weights (in goods traffic) are not checked in practice. The small number of radar measuring devices will only be operational in the course of the year. The mobile weighing stations are not in use, either. This will impair traffic safety due to speeding and the overloaded trucks will place an excessive burden on the roads. This situation can be expected to improve considerably over the medium term with further support from the EU. Road levy collection and transfer to the RF has now been established, although the amounts are still insufficient (sub-rating: 3).

Efficiency: Despite delays, the project was implemented in an acceptable timeframe, at reasonable cost and to a good quality standard. At an average of EUR 15,200, unit costs per kilometre for the main roads kept well below the EUR 26,500 estimated at project appraisal. This enabled the repair of many additional stretches. Altogether, the allocation of funds can be judged as adequate. The follow-on costs for maintenance and operation are also adequate based on the available data. The comparatively favourable investment costs make for a real macroeconomic return of 36% on all stretches. The project measures thus merit a very positive macroeconomic assessment (sub-rating: 2).

Overarching developmental impact: Together with the project stretches from Phases I and II, a major part of the North-South road corridor in Malawi has been developed up to a good to very good standard. The corridor directly improves the accessibility of central and northern regions of Malawi with over 5 million inhabitants. The improved connection with lower transport costs and times raises the economic performance of the central and northern commercial centres in Malawi. Besides improving conditions for foreign trade, it also facilitates the more effective development of industries (wood, tobacco) and mineral deposits (coal, uranium) in the North for the benefit of Malawi's national economy. Non-motorized mobility for local residents is considerably improved on the rehabilitated roads, making markets, workplaces, schools and health centres faster to reach. There are plausible grounds to believe that the project makes effective

contributions to attaining the Millennium Development Goals. The only problem here are the current high speeds of the motor vehicles due to lack of control, causing an inordinate number of accidents. The favourable real macroeconomic return on its road stretches is an approximate indicator of the positive contribution to growth made by the project. The overall project objective was also achieved through the implementation of the sectoral reform (which is to be continued by a Sector Wide Approach (SWAP) of the EU. Overarching developmental impact thus rates as good (sub-rating: 2).

Sustainability: The SWAP as intended by the EU would appear to ensure the sustainable long-term functionality of the new institutions. Insufficient self-finance for the sector from the Road Fund, however, will pose a problem in the long term as well. Only routine maintenance has been able to finance itself so far. Although there has been a nominal rise in the fuel levy over the last few years, it has declined in real terms. Since most inputs in road construction in particular need to be imported, this means a real curtailment of the budget. A significant increase in self-finance by raising the fuel levy, for example, is unlikely to be politically feasible. For some time, therefore, Malawi will remain dependent on external support provided by the EU and other donors. The main risk here are funding constraints on financing repair and rehabilitation. There is already a certain backlog in the periodic maintenance of existing roads today, which is not fully covered by donor funds. The building sector is now sufficiently qualified to carry out high-quality road construction measures. Capacity building measures are nevertheless needed in road construction occupations here, too (e.g. establishing relevant approved occupations and courses of study in engineering). Provided the donors can furnish sufficient funds, the new planning department in the NRA ought to be able to ensure timely periodic maintenance of the project roads. Considering the relatively low volume of traffic on the project stretches so far, capacity would seem sufficient for the foreseeable future. Both speed and weight checks should, however, be effectively implemented as soon as possible. With increasing demand, at least finance for routine maintenance of the main grid, including the project roads, seems assured. Sustainability is assessed as sufficient (sub-rating: 3).

To sum up the project is fully in line with expectations and without any significant shortcomings. Therefore we attest the project a good overall performance (rating: 2).

General Conclusions

The implementation of sectoral reforms as part of a larger sectoral programme that involves several donors (World Bank, KfW and EU) in financing advisory services and investments to enable the joint mobilization of more resources has also proved to be effective in Malawi's road sector. The conflict between increasing costs for road maintenance due to rising prices for construction and fuel on the one hand and the declining ability of citizens and industry to pay road use fees due to lower earnings on the other is a difficult problem to resolve. In this kind of situation, the international donors should concentrate on strengthening the Road Fund and refrain as far as possible from project-financed construction measures. Building new roads raises the burden on the Road Fund and jeopardizes the sustainability of the sector.

Notes on the methods used to evaluate project success (project rating)

Projects are evaluated on a six-point scale, the criteria being relevance, effectiveness (outcome), “overarching developmental impact” and efficiency. The ratings are also used to arrive at a final assessment of a project’s overall developmental efficacy. The scale is as follows:

- 1 Very good rating that clearly exceeds expectations
- 2 Good rating fully in line with expectations and without any significant shortcomings
- 3 Satisfactory rating – project falls short of expectations but the positive results dominate
- 4 Unsatisfactory rating – significantly below expectations, with negative results dominating despite discernible positive results
- 5 Clearly inadequate rating – despite some positive partial results the negative results clearly dominate
- 6 The project has no positive results or the situation has actually deteriorated

A rating of 1 to 3 is a positive assessment and indicates a successful project while a rating of 4 to 6 is a negative assessment and indicates a project which has no sufficiently positive results.

Sustainability is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability)

The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability)

The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected.)

Sustainability level 3 (satisfactory sustainability)

The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability)

The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and an improvement is very unlikely. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The overall rating on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. A rating of 1 to 3 indicates a “successful” project while a rating of 4 to 6 indicates an “unsuccessful” project. In using (with a project-specific weighting) the five key factors to form an overall rating, it should be noted that a project can generally only be considered developmentally “successful” if the achievement of the project objective (“effectiveness”), the impact on the overall objective (“overarching developmental impact”) and the sustainability are considered at least “satisfactory” (rating 3).