

**Uganda: Maintenance and Repair of Locomotives from the Uganda Railways Corporation, Phases I to V**

**Ex-post evaluation**

<b>OECD sector</b>	21030 – Railway sector	
<b>BMZ project number</b>	Phase I: 1980 65 310 Phase II: 1985 65 293, training and further training 1985 029 Phase III: 1988 66 287 Phase IV: 1992 65 018, 1992 70 000 Phase V: 1995 66 456	
<b>Project-executing agency</b>	Uganda Railways Corporation (URC)	
<b>Consultant</b>	DE-Consult	
<b>Year of evaluation</b>	<b>2002</b>	
	<b>Project appraisal</b>	<b>Ex-post evaluation</b>
<b>Start of implementation</b>	1980	1981
<b>Period of implementation</b>	1996	1998
<b>Investment costs</b>	EUR 23.23 million	EUR 20.2 million
<b>Counterpart contribution</b>	EUR 3.16 million	EUR 0.3 million
<b>Financing, of which FC funds</b>	EUR 20.07 million	EUR 19.9 million
<b>Other institutions/donors involved</b>	-	-
<b>Performance rating</b>	Phases I and II: 3 Phases III to V: 4	
<b>• Significance / relevance</b>	Phases I and II: 3 Phases III to V: 4	
<b>• Effectiveness</b>	Phases I and II: 3 Phases III to V: 4	
<b>• Efficiency</b>	Phases I to V: 4	

**Brief Description, Overall Objective and Project Purposes with Indicators**

The five projects comprised measures for the repair, general overhaul and maintenance of locomotives belonging to the Uganda Railways Corporation (URC). In the context of these measures, URC's workshop facilities for locomotive maintenance were also improved. The training and further training measure in Project II promoted the training of locomotive maintenance personnel. Improvements in various areas of workshop management were addressed in a complementary measure to Project IV, which also included preparatory work prior to granting the workshop concession (joint venture). The projects were designed to maintain and improve the URC's operational capability. As they shared common objectives, the projects were also viewed as Phases I – V of one programme. The total costs of the five projects, including the costs of personnel support measures, amounted to approx. EUR 25 million, of which some EUR 24.5 million were foreign exchange costs. The total costs of the projects were financed through FC grants to the amount of EUR 24.5 million and funding from the project-executing agency to the equivalent of EUR 0.5 million.

An explicit **overall objective** for Projects I and II was not agreed (and for Phase I there was no explicit project purpose). **Project I** focused on the repair and maintenance of 26 main-line and switching locomotives supplied from Germany, as well as the maintenance of a further 20 main-line locomotives supplied to URC from Germany in 1980. The measures constituted an emergency programme to relieve the acute transport situation, with the aim of securing an emergency rail service after the end of the civil war and the overthrow of Idi Amin. **Project II** focused on keeping the 44 locomotives supplied from Germany in good working order and ready for service. This phase also took on the character of an emergency programme, as the full restoration of peace in Uganda and the associated economic revival were being held up. The project purpose of Phase II was to raise the operational availability of the locomotives. The training and further training measure was designed to enable URC to carry out the necessary locomotive maintenance measures and train the additional maintenance personnel needed independently. In **Projects III to V** the operational availability of the repaired locomotives and those additionally supplied from Germany was to be maintained or improved. The following locomotive availability figures were defined as indicators for the achievement of objectives: 50 - 60% (for 43 respectively 56 locomotives, Project III), 70% (for 41 main-line and 6 switching locomotives, Project IV) and 80% (for 51 locomotives, 22 of which were overhauled, Project V). In Projects III and IV, the achievement of objectives was limited to the period during which measures were implemented. Project V focused on sustainable achievement of the targeted objectives and, as a secondary objective, the development of a private-sector structure for efficient and sustainable maintenance of URC's locomotive fleet. The **overall objective** of Projects III, IV and V was to stabilize (Project III) or raise (Projects IV and V) the volume of URC's freight transport.

### **Major Deviations from the Original Project Planning and their Main Causes**

When the support commenced, URC's **rail network** measured approx. 1,230 km. Over the course of the programme, network length decreased to around 260 km as a result of line closures. These closures, which were due not least to KfW's influence, considerably reduced URC's losses. In addition to the rail network, URC also runs two shipping routes on Lake Victoria. Between 1980 and 1990, the volume of URC **passenger transport** fell from some 1.2 million to about 0.3 million passengers p.a. These services were finally phased out in 1997. In the first years of cooperation, URC **transported** between 280,000 and 300,000 **tons** of freight annually (1981 – 1983). After gradual increases were recorded from the late 80s onwards and a considerable jump was noted in 1995, freight volumes declined. They did not increase again until 1997, and this positive trend has continued up to the present, reaching around 800,000 tons in 2000. However, a comparison of **URC's freight transport volume** over the last 3 years with the figures at the commencement of cooperation reveals no significant increase. The increases recorded in URC's freight transport since 1997 were chiefly the result of reactivating the ferry transport, which is dependent on the rail feeder services. Most of the freight carried by URC is made up of imports, routed from the ports in Mombasa and Dar es Salaam. In the last four years, exports accounted for only 10 – 15% of goods transported. Domestic transport, which was in any case low when cooperation began, has now fallen to a negligible 3 – 4% of URC's total transport volume. The proportion of goods transported by URC's ferries has risen from approx. 20% in 1996 to almost 60% in 2000.

### **Key Results of the Impact Analysis and Performance Rating**

During the implementation period, the measures undertaken in **Projects I and II** secured the repair and maintenance of the German locomotives on URC's books. The 50 – 60% availability of the maintained locomotives targeted in **Project III** was achieved, but with fewer locomotives than planned due to withdrawals from service. The project purpose was only partly achieved. The 70% availability of the 47 German locomotives aimed for in **Project IV** was met at the

conclusion of the project in 1996. When the implementation of **Project V** commenced in 1998, only 40 main-line locomotives and 6 switching locomotives supplied from Germany remained on URC's books. Of these, 22 were overhauled, and they achieved an average availability of over 80% in 1999 and 2000. However, for the German locomotives in the inventory, only around 50% availability was achieved in 1999 and 2000 for the 60 main-line locomotives, and about 63% for the 6 switching locomotives. These figures fell again in 2001. The purpose of Project V was achieved only in part. The volume of freight carried by URC during the implementation of the five projects rose overall, but not in the rail sector, which was the target of project measures. The increase aimed for in rail transport performance (overall objective) was therefore not attained. Nevertheless, considerable progress was made in creating a private sector maintenance structure - the secondary objective.

All in all, the **effectiveness** of **Projects III – V** is no longer regarded as adequate (**partial evaluation: Rating 4**). **Projects I and II** still exhibit an adequate degree of **effectiveness** (**partial evaluation: Rating 3**), as the rehabilitation and maintenance (Phase I) or the maintenance (Phase II) of the German-manufactured locomotives – which were also used in the subsequent period – was achieved despite the post-conflict situation following the overthrow of the Amin regime. However, the targeted increase in URC's freight transport performance in the rail sector did not materialize. The conditions necessary for URC to continue rail operations self-reliantly have not been met. The developmental effectiveness hoped for in the framework of **Projects III – V** was not sustainably secured. For this reason, **Projects III – V** do not demonstrate adequate **relevance** and **significance** (**partial evaluation: Rating 4**). The conditions for improving URC's transport performance were temporarily met with **Projects I and II**, and increases were recorded. As this made an important, albeit modest, contribution to the economic upswing after the fall of the Amin regime, these projects are categorized as having distinct developmental **relevance** and **significance** (**partial evaluation: Rating 3**). The funds made available contributed to maintaining a locomotive fleet which, provided the locomotives were efficiently operated, exceeded URC's requirements. This situation fostered less than efficient use of the locomotive fleet, as well as continued operation of lines that should have been closed. If the URC ferry services had been taken into account in the promotional concept, the targeted increase in URC's freight transport could have been more effectively pursued. In view of the insufficient spending by the project-executing agency on railway systems maintenance, better coordination of the promotional concept with the Ugandan government would have been expedient. On the other hand, the line closures, the corresponding reduction in URC staffing levels and, in particular, the introduction of locomotive maintenance services by the private sector are all evidence of positive developments. These, in turn, led to a general improvement in the conditions for URC's privatization. However, sustainable increases in the volume of rail transport have not been seen to date. In particular, based on the productivity figures for URC's locomotives, it is evident that the **efficiency** of the funds employed in the programme was low (**partial evaluation: Rating 4**).

If one views **Projects I and II** as emergency measures with a very limited claim on sustainable impact, then these projects can still be judged to have an **overall adequate degree of developmental effectiveness** (**Rating 3**). For **Projects III – V**, positive impacts are evident, in particular the maintenance of locomotive availability during the implementation period. Overall however, the projects are categorized as having an **inadequate degree of developmental effectiveness** (**Rating 4**). Phase V, nevertheless, made an important contribution to the introduction of private-sector structures, and this was also viewed positively within the framework of the BMZ evaluation on "Public-Private Partnerships in Development Cooperation".

#### **General Conclusions Applicable to All Projects**

Support for state-run railways within the framework of FC should not be considered before agreement has been reached on transparent concepts for managing rail operations according to economic efficiency criteria, or for the privatization of the railways.

### Legend

Developmentally successful: Ratings 1 to 3	
Rating 1	Very high or high degree of developmental effectiveness
Rating 2	Satisfactory degree of developmental effectiveness
Rating 3	Overall adequate degree of developmental effectiveness
Developmental failures: Ratings 4 to 6	
Rating 4	Overall inadequate degree of developmental effectiveness
Rating 5	Clearly insufficient degree of developmental effectiveness
Rating 6	The project is a total failure

### Criteria for the Evaluation of Project Success

The evaluation of a project's "developmental effectiveness" and its assignment during the final evaluation to one of the various success levels described below in more detail focus on the following fundamental questions:

- Are the **project objectives** reached to a sufficient degree (aspect of project **effectiveness**)?
- Does the project generate sufficient **significant developmental effects** (project **relevance** and **significance** measured by the achievement of the overall development-policy objective defined beforehand and its effects in political, institutional, socio-economic and socio-cultural as well as ecological terms)?
- Are the **funds/expenses** that were and are being employed/incurred to reach the objectives **appropriate**? How can the project's microeconomic and macroeconomic impact be measured (aspect of **efficiency** of the project concept)?
- To the extent that undesired (**side**) **effects** occur, are these tolerable?

We do not treat **sustainability**, a key aspect to consider for project evaluation, as a separate category of evaluation (as is the case at the World Bank) but instead as a cross-cutting element of all four fundamental questions on project success. A project is sustainable if the project-executing agency and/or the target group are able to continue to use the project facilities created over an economically reasonable period of time or to successfully continue the project activities on their own once the financial, organizational and/or technical support has come to an end.