

**Mali: 1<sup>st</sup> Region Road (Tambaga-Manantali)**

**Ex-post evaluation**

<b>OECD sector</b>	21020 / Road traffic	
<b>BMZ project number</b>	1992 65 828	
<b>Project-executing agency</b>	Direction Nationale des Travaux Publics (DNTP)	
<b>Consultant</b>	Road construction: Rhein-Ruhr Ingenieur Gesellschaft mbH Bridge construction. Groupe D'Ingénieurs Consultants (CIC)	
<b>Year of evaluation</b>	<b>2002</b>	
	<b>Project appraisal (planned)</b>	<b>Ex-post evaluation (actual)</b>
<b>Start of implementation</b>	Q 1/1993	Q 2/1994
<b>Period of implementation</b>	30 months	31 months (+ 26 months for the bridge)
<b>Investment costs</b>	EUR 9.2 million	EUR 7.5 million
<b>Counterpart contribution</b>	None	None
<b>Financing, of which Financial Cooperation funds</b>	EUR 9.2 million	EUR 7.5 million
<b>Other institutions/donors involved</b>	None	None
<b>Performance rating</b>	3	
• <b>Significance / relevance</b>	3	
• <b>Effectiveness</b>	3	
• <b>Efficiency</b>	3	

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

The project comprises the upgrading of the section Tambaga – Manantali (98 km) situated in the 1<sup>st</sup> region of Mali into a laterite road passable year round including specific sections with a bituminous surface and the construction of a bridge across the Bakoy river on the road section Kita – Tambaga. This is to contribute to opening up the 1<sup>st</sup> region, especially east of the Manantali reservoir. The project costs of EUR 7.52 million were fully financed from Financial Cooperation funds.

Overall objective: Contribution to increasing the marketed agricultural production and to improving the supply with services

Target indicator: Comparison of the levels of supply with services

Achievement of objectives: The offer of services was improved significantly in the area of education and only marginally in the area of health. The marketed agricultural production was clearly increased.

Project Purpose: Year-round cost efficient handling of the expected traffic on the Tambaga – Manantali section

Target indicator: Three years after completion the traffic volume is 30 vehicles/day

Achievement of objectives: Medium traffic volume in 2000/2001/2002 = 25 vehicle/day

### **Project Conception / Major Deviations from the original Project Planning and their main Causes**

The support for the maintenance of the project road over a period of three years, which had been proposed in the appraisal report, was dropped in 1997 in agreement with the Mali government. This was mainly due to reasons of principle. After the road had been officially included in the priority road network we assumed that – as contractually agreed – the Republic of Mali would take care of the road maintenance.

Instead of financing road maintenance it was proposed to include the construction of a bridge across the Bakoy river on the road connecting Kita and Tambaga into the project in order to complement the Kati-Kita and Tambaga-Manantali roads and to ensure the year-round passability of the section from Bamako to Manantali.

To support the TC project “rehabilitation of roads and small constructions in the 1<sup>st</sup> region” part of the funds remaining from the bridge construction was used to build a 9.5 km section of the rural Manantali-Koundian road, which is 36 km in total.

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

The target indicator set to measure the achievement of the project goal was not fully reached. So far, the number of vehicles using the road has remained below the estimated traffic volume. However, this deficiency cannot be attributed to the road itself. Up to now, the road has generally met the current traffic requirements but possibly the use of the road is hampered due to the poor condition of the connecting roads, in particular the Kita-Tambaga road. Nevertheless, the maintenance situation for the project road itself and the connecting roads has improved considerably in 2002 due to further progress in the implementation of sector reforms. For this reason we rate the project's effectiveness as overall sufficient (partial evaluation: rating 3).

The opening up of the catchment area of the road, which was one objective pursued with the project, was successful and the new road is used effectively and as intended. The new road connection is highly appreciated by the population and the users and has a high developmental effectiveness. Throughout the year the road ensures the connection with a region which had been cut off from the road network before the construction of the road. Many villagers have pointed to the fact that prior to the construction of the road famines had frequently occurred because in the rainy season when stocks had been used up there were no possibilities to supply food, whereas today it is easy to procure foodstuffs over the new road. The road has a positive impact on mobility when looking for work and supports agricultural production, marketing, trade ac-

tivities and the offer and usability of services. The achievement of the overall objectives – in terms of increasing the sale of agricultural produce and the educational offer – is excellent. The supply with other services, mainly in the field of health, is still insufficient. However, further improvements can be expected in the near future here as well. Still, the maintenance risk mentioned above jeopardizes the sustainability of the overall very positive impacts. Thus, we classify the project's developmental relevance and significance as only adequate (partial evaluation: rating 3).

Reductions in vehicle operating costs alone do not produce any significant macroeconomic rate of return, however, due to the clearly positive economic and socio-economic effects there can be no doubt about the overall economic appropriateness of the project, provided that the road maintenance is performed properly. Owing to the verified structural improvements in road maintenance (though there are still considerable deficiencies concerning timing and continuity of maintenance measures) the sustainability of the projects results is not seriously jeopardized. We rate the project's effectiveness as overall sufficient (partial evaluation: rating 3).

In terms of development-policy evaluation of the project success, we assign the project an overall sufficient effectiveness (rating 3).

### **General Conclusions applicable to all Projects**

The ongoing maintenance turns out again and again to be a severe central problem in infrastructure projects in general, and especially in the field of road projects, which threatens the sustainability and thus jeopardizes the longer-term developmental impacts of such projects. Though it is widely known that a regular ongoing and periodic road maintenance is less expensive in the long run than the fast wear and new construction of a road, which will be required after some time, the project-executing agencies often do not draw the necessary consequences and as a result roads, in particular in Africa, decay and fall apart in a short period of time. Since, besides organisational deficiencies, the acute shortness of funds is the main reason for this there can be no generally accepted solution to the problem. To ease the problem reforms of the transport sector have been implemented and road maintenance funds been established at great efforts in many countries in the last decades. The reforms should at least prepare the ground for a secure funding and a better organisation of the allocation of funds for road maintenance.

At the time of the project appraisal it was known that the planned transport sector programme was designed to launch this process in Mali as well. For a transitional period of three years after completion we had envisaged to take care of the maintenance of the road still in the context of the project. This was done, though in a slightly modified way. The further maintenance risk was considered high but we still assumed that after the transitional period the maintenance of the project road would be ensured as a result of the outcome of the transport sector reform. With hindsight, this expectation of a relatively rapid implementation of the programme has turned out as too optimistic since the realisation of the far-reaching measures requires much more time than had been planned. It would have been better if the substantial funds, which had been provided for the maintenance as a precaution, had not been reprogrammed but rather been used to ensure the longer-term maintenance. The targets of the reform have not yet been achieved and the impacts still remain to be seen.

## 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 sufficient degree of developmental effectiveness

Developmental failures: Ratings 4 to 6

Rating 4 Overall slightly insufficient 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 levels of success described below in more detail concentrate 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** and how can the project's microeconomic and macroeconomic impact be measured (aspect of **efficiency** of the project conception)?
- 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 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 that have been built for a period of time that is, overall, adequate in economic terms or to carry on with the project activities on their own and generate positive results after the financial, organizational and/or technical support has come to an end.