Ex Post-Evaluation Brief  
Cameroon: Bridge Rehabilitation Programme I

<table>
<thead>
<tr>
<th>Sector</th>
<th>Road transport (CRS: 21020)</th>
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| Programme/Client | Bridge Rehabilitation Programme I  
BMZ ID 1998 66 849 |
| Programme executing agency | Ministère des Travaux Publics (MinTP) |
| Year of sample/ex post evaluation report | 2012*/2012 |

<table>
<thead>
<tr>
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<th>Appraisal (planned)</th>
<th>Ex post-evaluation (actual)</th>
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<tbody>
<tr>
<td>Investment costs (total)</td>
<td>EUR 6.14 million (+VAT**)</td>
<td>EUR 8.80 million (+VAT**)</td>
</tr>
<tr>
<td>Counterpart contribution (company)</td>
<td>EUR 1.02 million (+VAT**)</td>
<td>EUR 1.50 million (+VAT**)</td>
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<tr>
<td>Funding, of which budget funds (BMZ)</td>
<td>EUR 5.12 million</td>
<td>EUR 7.30 million</td>
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* random sample  
** Costs of value added tax were not estimated at programme appraisal

**Project description:** The intervention was designed as an open programme for the rehabilitation of reinforced concrete bridges on priority roadways, primarily in the Centre, Ouest and Littoral regions. Specified programme components were the bridges over the Sanaga at Ebebda (N4 motorway) and over the Noun at Foumbot (N6). In addition, two viaducts in the Ouest region (N4) were selected for rehabilitation. This was to ensure the permanent trafficability of the bridges. The original FC loan (EUR 5.12 million at project appraisal) for Programme I was curtailed in the course of government negotiations in 1999 to EUR 4.35 million. FC finance finally amounted to EUR 7.30 million, with additional costs paid from funds of the follow-on phases - Bridges Programme II (BMZ ID 200265439) and III (BMZ ID 200465260). The contractually agreed FC loan for the programme was converted into a FC grant by the German Federal Government in 2002 as part of a debt relief initiative for Cameroon.

**Objective:** The programme was to contribute to economic development in the regions located in the catchment area of the roads and to a steady, efficient supply with goods and services (overall objective/impact) to the affected population. The programme objective (outcome) was modern and cost-effective road transport operation, with full trafficability of the rehabilitated bridges and increased local volume of traffic as indicators. The target group of the measures were road users and the population in the catchment area around the road links selected for maintenance.

**Overall rating: 3**

The selected priority bridges were effectively repaired, but implementation efficiency was inadequate. There are also risks for sustainability due to lack of maintenance in the transport sector.
EVALUATION SUMMARY

Overall rating: Altogether, the objectives of the programme were achieved, though with long delays in implementation and at additional costs. There are also risks to sustainability due to a lack of preventive maintenance (Rating: 3).

Relevance: Although no longer a priority sector of German-Cameroonian development cooperation, road transport infrastructure still plays a major role for the Cameroonian Government and the international donor community. In its current 10-year economic plan (2010 - 2020), Cameroon defined development of infrastructure as a major factor for poverty reduction and higher growth. 85% of goods are transported by road, thus underlining the importance for national economic development and supply of the population. However road density is low at 2.7 km per 1,000 inhabitants - also in comparison with the Sub-Saharan African average of 3.6 km per 1,000 inhabitants. As traffic ability of available priority roads is all the more important under such conditions, the programme intervened at major bottlenecks. The bridges rehabilitated under the programme are located at major transport routes connecting the North and North-West of the country with the capital Yaoundé. The Noun Bridge on the N6 motorway is also part of the transit corridor for goods between landlocked Chad and the port of Douala at the Cameroonian coast. There is donor coordination in the sector and with the ministry to the extent that e.g. the Agence Française de Développement (AfD) is engaged in other regions than FC, with the World Bank supporting the extension of transit corridors from Douala to Chad and the Central African Republic. We assess the relevance of the programme as good (Sub-rating: 2).

Effectiveness: Achievement of the programme objective - the modern and cost-effective operation of road transport - is measured by two indicators: For one thing, it presupposes the full usability of the rehabilitated bridges. Since the completion of the measures, the bridges concerned are fully trafficable and, according to the ministry, there have not been any closures. At the time of evaluation, the rails on the viaducts and Sanaga Bridge were, however, badly damaged in places due to road accidents, which particularly puts pedestrians in danger.

The second indicator - the average traffic volume at the relevant stretches of road - was to remain at least steady. With an approximate total of 5,245 motor vehicles a day (all types) along the three stretches (Sanaga Bridge, viaducts, Noun Bridge) in 2000, the latest available figure for 2010 was 6,915. This amounts to a growth of 32%, which is slightly less than the real economic growth of Cameroon over the period. This development roughly corresponds to that of other national motorways. Altogether, the effectiveness of the programme is rated as good (Sub-rating: 2).

Efficiency: When comparing alternatives (allocative efficiency), the rehabilitation measures were a cost-effective approach to ensure the reliable transportation of passengers and goods over the relevant stretches of roadway. The closure of the bridges would - sooner or later - have become necessary without the interventions; this would have led to significant transport costs
and travel time increases for road users. Closing the bridges over the Noun and Sanaga, for example, would have meant a detour of approx. 60 km on non-asphalt roads. Although it is impossible to specify the time and duration of a possible closure, the available data on vehicle running costs in Cameroon and on the volume of traffic at the bridges indicate that the macroeconomic benefit more than offsets programme costs.

Besides a high macroeconomic benefit of the intervention, the programme’s production efficiency is inadequate due to long delays and additional costs. The works took 73 months to complete as compared to 33 months estimated initially. Programme costs totalled EUR 8.8 million (planned: EUR 6.14 million). As this was an open programme, the scale of measures could be adapted during implementation, but the additional costs for the individual bridge repairs are substantial: costs for Sanaga Bridge as well as consultancy expenses have more than tripled in comparison with estimates at appraisal, while the costs for Noun Bridge increased more than sixfold. In turn, only EUR 1.2 million could be spent for the two viaducts finally selected as additional measures, instead of EUR 3.9 million as planned at appraisal.

The actual additional costs are due in part to the works on the bridges over Sanaga and Noun, which turned out to be more extensive than originally thought, but they primarily result from delays due to the insolvency of the building contractor selected – as well as lengthy administrative procedures on the Cameroonian side. Altogether, programme efficiency is assessed as insufficient (Sub-rating: 4).

**Overarching developmental impact:** The overall objective of the programme was a contribution to economic development and to a steady, efficient supply of goods and services to the population in the road catchment areas. As the bridges (and the connected roads) have been trafficable throughout till now, with the volume of traffic having risen on the transport routes since programme appraisal, this overall objective can be considered achieved. Although poverty incidence in the population in the project region (North-West) has declined somewhat more than the national average between 2001 and 2007, it remains at a considerably higher absolute level of 51% (Cameroon: 40%). The overall objective achievement of the programme is rated as good (Sub-rating: 2).

**Sustainability:** Since completion of the rehabilitation measures, no upkeep has been carried out at all. The first visual inspection of the bridges was not made by the programme executing agency, MinTP, until mid-2012. The findings coincide with the mission’s impressions of the bridges’ condition being acceptable considering their age, but with considerable need for smaller repairs and maintenance. Whilst, according to MinTP, unsatisfactory axle load controls and overloading no longer pose a significant problem for the bridges, inadequate preventive maintenance is still the norm in the Cameroonian road sector. If at all, spot repairs are carried out after damage.

As of 2013, regular servicing and repair of the bridges will be financed from the MinTP budget. Adequate funds are reportedly earmarked for this in the next fiscal year, although the specific
needs of the programme bridges are still being ascertained. The finances for the measures are administered by the competent *Fond Routier* for maintenance works in the sector; despite sufficient funds it has, however, had problems with disbursement in recent years. The main reasons for this are the insufficient services/quality of the locally contracted road construction firms. Sustainability risks to are thus less due to lack of repair/ maintenance funds, but rather to the quality of the works actually executed, above all insufficient supervision and the poor qualification of building contractors.

Due to these risks to sustainability, the programme is assessed as still satisfactory (Sub-rating: 3).
Notes on the methods used to evaluate project success (project rating)

Projects (and programmes) are evaluated on a six-point scale, the criteria being relevance, effectiveness, efficiency and overarching developmental impact. 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 result that clearly exceeds expectations
2. Good result, fully in line with expectations and without any significant shortcomings
3. Satisfactory result – project falls short of expectations but the positive results dominate
4. Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results
5. Clearly inadequate result – despite some positive partial results, the negative results clearly dominate
6. The project has no impact or the situation has actually deteriorated

Ratings 1-3 denote a positive or successful assessment while ratings 4-6 denote a not positive or unsuccessful assessment.

**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 is very unlikely to improve. 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. Ratings 1-3 of the overall rating denote a "successful" project while ratings 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally “successful” only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least “satisfactory” (rating 3).