

**Costa Rica: Road Maintenance Equipment**

**Ex-post evaluation**

<b>OECD sector</b>	21020 – Road transport	
<b>BMZ project number</b>	1987 65 182	
<b>Programme executing agency</b>	Ministry for Public Works and Transport (MOPT)	
<b>Consultant</b>	Tasks were performed by GTZ as part of the Technical Cooperation project, Advisory Services to the Ministry of Transport – Road Maintenance.	
<b>Year of evaluation</b>	<b>2003</b>	
	<b>Project appraisal (planned)</b>	<b>Ex-post evaluation (actual)</b>
<b>Start of implementation</b>	3rd quarter 1988	1st quarter 1992
<b>Period of implementation</b>	14 months	9.5 years
<b>Investment costs</b>	EUR 8.2 million	EUR 9.2 million
<b>Counterpart contribution</b>	EUR 0.8 million	EUR 1.9 million
<b>Finance, of which FC funds</b>	EUR 7.4 million	EUR 7.3 million
<b>Other institutions/donors involved</b>	None	None
<b>Performance rating</b>	4	
• <b>Significance/Relevance</b>	4	
• <b>Effectiveness</b>	4	
• <b>Efficiency</b>	4	

**Brief description, overall objective and programme purpose with indicators**

The programme aimed at improving the condition of translocal earth and gravel roadways in Costa Rica and reduce motor vehicle running costs at the same time. Its overall objective was to reduce goods and passenger transport bottlenecks and thus also improve access to rural areas and establish favourable transport conditions for economic development. The indicator for assessing programme purpose achievement was the reduction in the share of translocal earth and gravel roadways classified as being in 'normal' condition and a simultaneous increase in the share of this type of road rated by MOPT as good to very good. The achievement of the overall objective was to be assessed with the help of traffic volume as an indicator – measured using regular traffic censuses at certain points of the earth and gravel roadways, the assumption being that it would increase. Using FC funds, the executing agency MOPT therefore obtained new road maintenance equipment and a small quantity of workshop equipment and overhauled available and repairable road maintenance equipment.

**Project design/major deviations from original project planning and the main causes**

The programme appraisal envisaged the repair of 201 and the procurement of 127 machines. As it emerged that procurement was no longer economical for many machines, only 13 ma-

chines were actually repaired and a total of 144 new ones obtained instead. The outcome was that only 157 machines were available rather than the 328 anticipated in the programme appraisal, which had a decisive effect on the prospects of achieving the programme purpose.

### **Key results of impact analysis and performance rating**

The programme was able to contribute to achieving the overall objective (reducing goods and passenger transport bottlenecks), as MOPT was able to keep most of the roads passable all-year-round and especially carry out repair and some maintenance work on particularly important and damaged roads with the FC-financed equipment. The programme purpose (improving the condition of roads) was not, however, attained, because the translocal earth and gravel roadways had worsened compared with their condition at programme appraisal. Nevertheless, the earth and gravel roadways would presumably be in a much worse condition today than if the FC-financed equipment had not been used.

With an availability of only some 60% or operating time of a mere 22% of available capacity, the utilization of the financed or repaired road maintenance equipment is so low that the effectiveness of the project cannot rate as satisfactory (Subrating 4). Since the condition of the roads concerned has worsened on the one hand and on the other the overall system of road maintenance is being reorganized along quite different lines, we must attest the programme dissatisfactory significance and relevance from a sectoral standpoint also (Subrating 4). The utilization of the roads repaired with the maintenance equipment is clearly good, but the scale of maintenance work due to the low operating times of this equipment as well as other MOPT machinery is evidently too low to meet the standards specified for the programme. The equipment is not being used economically at present and this is hardly likely in future, either. The efficiency of the project therefore gets an unsatisfactory rating as well (Subrating 4).

Altogether, the programme lacks sufficient developmental effectiveness (Rating 4).

### **General conclusions applicable to all projects**

The main reason for the deterioration in the condition of the roads as compared with the programme appraisal as well as for the low and diminishing availability and operating times of the equipment - apart from a predictable general decrease in availability due to age - is the inadequate equipment and funding of the programme executing agency for carrying out proper road maintenance works, including the acquisition of spare parts.

The inadequate funding of the MOPT was already perceived in the programme appraisal as a considerable risk, which was, however, regarded as acceptable in view of the anticipated priority accorded road maintenance by the government of Costa Rica and planned programmes by other donors in the road sector. To mitigate this risk, MOPT was required by way of an implementation arrangement to the loan agreement to seek additional budgetary funds.

The following conclusions of relevance to other projects can be drawn:

- a) The implementation arrangement was not able to take adequate account of the risk of insufficient MOPT funding. Therefore, in future projects with similarly difficult initial conditions, a more effective instrument should be sought to counter this risk, e.g. a payout condition or a conditionality.
- b) When the agreement is reinterpreted during programme implementation (in this case repair of far less maintenance equipment than assumed in the programme appraisal and instead procurement of fewer road maintenance machines than originally intended for repair) the

programme purpose must be brought into line with the changed operational scope of the programme.

## Key

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 evaluating project success

The evaluation of a project's developmental effectiveness and its assignment in ex-post evaluation to one of the various levels of success described in more detail below addresses the following fundamental questions:

- Have the **project objectives** been reached to a sufficient degree (aspect of project **effectiveness**)?
- Does the project generate sufficient **significant developmental impacts** (project **relevance** and **significance** measured by the achievement of the predefined overall developmental objective and its political, institutional, socio-economic, socio-cultural ecological impacts)?
- Was/Is **funding/expenditure appropriate** for achieving the objectives and how can the project's microeconomic and macroeconomic impact be measured (aspect of **efficiency** of project design)?
- Where undesired **(side) effects** have occurred, are these acceptable?

Instead of treating **sustainability**, a key aspect in project evaluation, as a separate category, we look at it as a cross-sectional element of all four fundamental questions on project success. A project is sustainable if the project executing agency and/or the target group can continue to use the project facilities set up for an economically viable period of time in all or to carry on with the project activities on their own to beneficial effect after financial, organizational and/or technical assistance has ended.