

Ex Post-Evaluation Brief

Bangladesh: Joint Project - Rural Markets and Roads, Khulna Division



Programme/Client	Bangladesh: Joint Project - Rural Markets and Roads, Khulna Division BMZ (2002 66 817)*	
Programme executing agency	LGED (Local Government Engineering Department)	
Year of sample/ex post evaluation report: 2012/2012		
	Appraisal (planned)	Ex post-evaluation (actual)
Investment costs (total)	USD 117.2 million (BDT 6,797.6 million)	USD 119.95 million (BDT 8,156.55 million)
Counterpart contribution (company)	BDT 2,099.0 million	BDT 2,362.9 million
Funding, of which budget funds (BMZ)	EUR 15.0 million (FC) EUR 6.0 million (TC) USD 60.0 million (ADB)	EUR 15.12 million** (FC) EUR 8.5 million (TC) USD 60.0 million (ADB)

* random sample

** Incl. balance of funds from the "Rural Roads" FC project

Project description: This project forms part of the "Rural Infrastructure Improvement Project" (RIIP), a programme covering a total of 16 districts which is cofinanced by the Asian Development Bank (ADB) and German Technical Cooperation (TC). Financial Cooperation (FC) funds were used to finance initiatives in just four of these districts: Jhenaidah, Kushtia, Meherpur and Chuadanga. The project objective was to improve transport and market infrastructure through the following measures: developing rural feeder roads and unsurfaced roads leading to markets; developing market places and market stands specially reserved for women; improving the operation and maintenance of these facilities; strengthening capacity at the project agency; improving road safety; and providing supporting consultancy services.

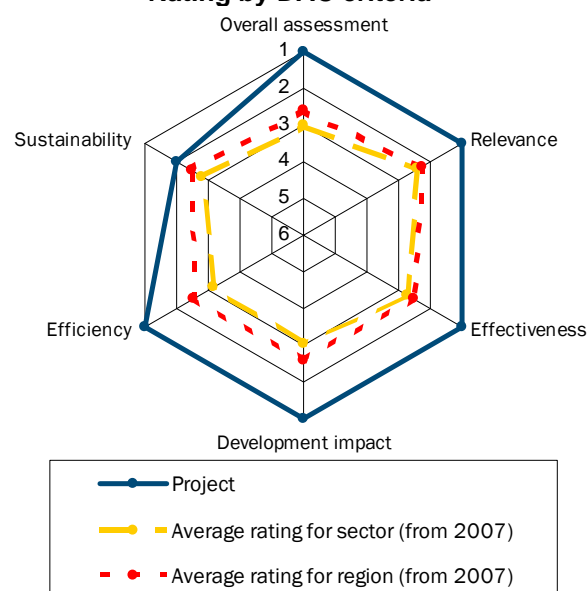
Objective: The **overall objective** of the project was to help raise the incomes of the rural population and to support economic development in the target region, with an increase in the income of poor households of 20% over three years as an indicator. The **project objective** was to improve access to selected markets for the rural population as well as for traders and service providers and to increase market trading in agricultural and commercial goods – to be measured by the increase in traffic volume and goods handling and the fall in transport costs. The **target group** comprised assorted road users, passengers, residents, operators of motorised and non-motorised vehicles and rural inhabitants living in the catchment area of these roads within the project region, totalling around 10 million people. It was intended that poorer strata of the population and women should gain particular benefit.

Overall rating: 1

This rating is based on the excellent results achieved and the low risk to sustainability.

Of note: High population density combined with a high standard of agricultural productivity, set against a background of small-scale farming practices, creates an excellent socio-economic context for projects of this kind. The project achieved its intended effects regarding the advancement of women, with the socially liberal project environment making a positive contribution in this respect.

Rating by DAC criteria



EVALUATION SUMMARY

Overall rating: Project design was appropriate. With the sole exception of maintenance, all the main objectives were either achieved or surpassed. Furthermore the project also contributed to institutional development (*capacity building*) at the project agency.

If FC activities are to continue in this sector, the following design modifications should be pursued, in close cooperation with other major donors such as the ADB and the World Bank:

- In operational terms, the model used - parallel financing, regional demarcation, and the individual inspection of hundreds of small projects - is expensive, and, in view of the strong institutional framework in place at LGED (the project agency), this is no longer necessary. Today LGED may well be in a position to manage a comparable project with a greater degree of responsibility; alternatively, targeted measures should be taken to increase capacity in particularly sensitive areas (procurement, project monitoring, and financial management).
- Future projects should specifically consider climate protection issues, since Bangladesh is one of the countries most severely affected by climate change.
- In the KfW-financed districts the project achieved its intended effects in the advancement of women, with the socially liberal project environment making a positive contribution in this regard. It should not be assumed that this format can be transferred to future projects in other regions; project design must depend instead on the specific socio-cultural framework, and here the social acceptance of women being economically active (and, most of all, economically independent) must receive particular attention.

Rating: 1

Relevance: At least half the Bangladeshi economy is based on agricultural production, with 76% of the total population and 73% of the poor population living in rural areas. Rural development is therefore a government priority, based on key government strategy papers (cf. the *Second National Strategy for Accelerated Poverty Reduction, 2009-11 (NSAPR II)*, and the Government of Bangladesh's *6th Five-Year Plan 2010-15*). The design of the project fits well with sector policies and strategies for rural areas. Recent studies by the World Bank (*impact studies*) confirm the impact on poverty and the advantages created by improved transport links to markets, social infrastructure and administrative centres. High population density combined with a high standard of agricultural productivity set against a background of small-scale farming practices offer an excellent socio-economic context for projects of this kind. Based on credible cause and effect relationships, the approach adopted targets improved living conditions for the disadvantaged rural population and thus makes a direct contribution to solving the core problem of poverty. It is worth noting that the approach adopted employed various measures - some at a local level, some at a sector level, and some directed toward the project agency - to target wide-ranging improvements in a number of locations (the sector, the project agency, user groups, and physical infrastructure), and that the intended effects were still in evidence even when sector improvements in road maintenance fell short of expectations.

The project implementation organisations involved (KfW, GIZ, and ADB) – guided by the responsible party, the *Local Government Engineering Department (LGED)* – reached suitable agreements over the division of tasks, both in terms of content and regional responsibilities. By targeting improvements in rural infrastructure the project supports cooperation between Germany and Bangladesh within the priority area of good governance (Sub-Rating: 1).

Effectiveness: The project objective was to improve access to selected markets for the rural population as well as for traders and service providers, and to increase market trading in agricultural and commercial goods. The following indicators were defined to measure progress toward the objective:

Indicator	Status at ex-post evaluation
An increase in the income of poor households (after three years of operation) of 20% .	The income of poor households rose by 47%, whereas income levels in a comparison group (where no measures were implemented) fell by 11%, indicating a net effect of 58% .
An increase in traffic on the rehabilitated roads of 30% .	Motorised traffic increased by 140% and non-motorised traffic by 57%, whereas traffic in the comparison region grew by only 78% (motorised traffic) and 28% (non-motorised), showing a weighted net effect of 37% .
A fall in the cost of transport (for goods and passengers) of 10-15% .	Due to inflation and increased energy prices, transport costs rose by 150% between 2004 and 2011. However, compared to cost trends on roads used for comparison purposes, cost reductions of 65% were achieved for passengers, and 63% for goods.
An increase in the volume of goods handled by the markets of 15% .	Market sales increased by 43%, whereas on comparison markets sales rose by 19%, giving a net effect of 24% .

Each project component was implemented successfully and hence the project objective was achieved. All objective indicators save one - that the infrastructure should be free of defects, an aim which was not quantified in any greater detail - were either met or exceeded. Out of a total population of 23 million living in the region covered by the project, around 10 million people (2.37 million of them in the districts which received FC support) benefited directly or indirectly from the measures implemented.

The staff of LGED, the project agency, received training in the areas of planning, budgeting, tendering and supervision. Instruction took the form of taught sessions and on-the-job training. The training proved successful (Sub-Rating: 1).

Efficiency: There were minor delays when construction started, but the construction schedule was maintained (planned completion date at project appraisal: October 2009; actual completion: June 2009). Because of the savings that were achieved and favourable movements in the exchange rate, the outcome of the road development component, measured in physical terms, exceeded expectations (by approx. 21%). When compared to the specifications that were being followed, similar results were achieved in the development of the markets, the construction of buildings for local administrative authorities (*Union Councils*), the planting of roadside trees and the construction of bridges and culverts. An exception here were the buildings provided for the local administrative authorities (20, instead of 25 as planned). This reduction happened at a very early stage (around the end of 2003), without the particular circumstances being documented in any further detail. The costs of the measures implemented stayed largely within the bounds of the original estimates. Local cost increases, especially in building materials, were more than offset by currency exchange gains and the efficiency of project implementation, which allowed the original scope of the project to be extended. Moreover, the labour-intensive nature of this programme's project implementation activities had a substantial effect on employment (totalling approx. 40,000 man years).

Once project activities were completed, an overall economic cost-benefit analysis (EIRR) was carried out. This showed an overall economic rate of return of 38.1% – far higher than the level of 12% estimated at project appraisal. For rural development measures, these results are good to very good, and they far exceed original expectations. In view of the high rate of return, the extensive utilisation of the road transport infrastructure provided, and the substantial developmental impact on poorer strata of the population, the use of funds was both efficient and appropriate (Sub-Rating: 1).

Overarching developmental impact: The overall objective for this project was defined as “to help raise the incomes of the rural population and to support economic development in the target region”. This objective was achieved. The relevant indicator (an increase of 20% in the incomes of poor households) was, at 58%, significantly exceeded. Furthermore, in terms of employment, the impact achieved was substantial. Over the lifetime of the project (20 years), 82,000 years of employment were created (40,000 during project implementation, of which FC accounted for 8,000; and 42,000 during infrastructure maintenance, of which FC accounted for 8,400). In addition, several hundred long-term posts were created for particularly disadvantaged women (the “*hard-core poor*”), tending the trees that were planted and the roadside verges. In all, around 2.37 million people are benefiting from project activities financed by FC (out of 10 million people who benefit from the overall project).

The project's direct developmental results also include the transition from non-motorised vehicles to motorised vehicles (a “*modal shift*”). This has enabled journey times to be reduced by 42%. It has also significantly improved access to social services¹ and markets,

¹ School enrolment increased by 28.4%; the number of weekly health visits per km of road made by nurses/ *Union Health Workers* in Khulna rose from 40 to 141.

and has ensured they can be reached on a year-round basis. At the same time, this increase in traffic volume and density has not been accompanied by an increase in accident frequency rates. Official statistics for the Divisions targeted by KfW state that road traffic accidents have fallen by approx. 13%. However, the actual numbers may well be higher, as only a small proportion of road accidents in Bangladesh are officially reported.

The various measures included for the advancement of women were also developmentally significant. In this regard, the erection of special market stands for women ("*Women's Market Corners*") and the participation of women in decision-making bodies (*Union Councils and Market Mgt. Committees*) enabled the greatest structural effects to be achieved: both these changes have become well established and now, in an otherwise male-dominated area, they meet with widespread acceptance. However, this success must also be seen against the liberal socio-cultural environment which prevails in the project region, where the participation of women in public and community life is more widely accepted and more in evidence than in other provinces. To that extent, this approach can only be transferred to other regions with appropriate modifications – and, in certain regions (or in certain circumstances), it cannot be transferred at all (Sub-Rating: 1).

Sustainability: Project appraisal identified the risk posed by insufficient medium to long-term funding for road maintenance and saw that this, despite increasing budgetary allocations, would jeopardise the sustainability of the project. However, the "*Road Fund*" that was discussed at the time has yet to be put in place, although a legislative proposal in this area is currently under discussion. The same applies for the "*Road Maintenance Policy*", which is presently being discussed within the Cabinet. This notes a funding shortfall of approx. BDT 20.98 billion (approx. EUR 200 million), with an LGED maintenance budget for 2011/12 of approx. EUR 625 million (approx. EUR 60 million). Despite steady and substantial increases in the allocation of budget funds (approx. EUR 35 million being made available for this purpose at the start of the project), the funding shortfall - partly due to the marked expansion in the rural road network (from 20,693 km in 2002 to 82,573 km in 2012) - has continued to grow, and has now reached a size which threatens continuity. This situation is mitigated by the highly effective "*Road and Structure Database Management System*", which enables funds to be allocated efficiently in accordance with clearly defined criteria. One of the selection criteria used refers to "donor-financed" roads, with these stretches demonstrating a comparatively good standard of maintenance. With one exception all the roads that were inspected are still in a good condition. This issue is very clearly understood by the project agency and is treated as a high priority. If the "*Rural Road Maintenance Policy*" is adopted as it stands, the proposed financing mechanism could close the funding gap within seven years. We are therefore of the view that the prospects for the lasting, sustainable upkeep of the roads financed by this programme are, in principle, assured.

With regard to the *Growth Center Markets* and the local administration buildings (*Union Complexes*), the sustainability of these infrastructure projects seems assured: for these facilities not only require less maintenance, they have also led to direct increases in local

authority revenues which are sufficient to finance forthcoming maintenance work, all the more so as the “*Market Management Committees*” contribute to decisions on the use of funds. The markets and administrative buildings visited in the course of ex-post evaluation were in excellent condition. Moreover, since there is a direct correlation between the level of revenue and the condition of the *Growth Center Markets*, the sustainability of these measures may well be secure for the long term.

Future projects should give specific consideration to climate protection issues, since Bangladesh is one of the countries most seriously affected by climate change, although this only applies to a limited extent of the region covered by this project (and the KfW districts of Jhenaidah, Kushtia, Meherpur and Chuadanga in particular) (Sub-Rating: 2).

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).