



<b>1. Project Data:</b>		<b>Date Posted :</b> 07/30/2001	
<b>PROJ ID:</b> P009465		<b>Appraisal</b>	<b>Actual</b>
<b>Project Name :</b> Second Road Rehabilitation & Maintenance	<b>Project Costs (US\$M)</b>		
<b>Country:</b> Bangladesh	<b>Loan/Credit (US\$M)</b>	146.8	210.22
<b>Sector(s):</b> Board: TR - Roads and highways (100%)	<b>Cofinancing (US\$M)</b>	9.08	10.4
<b>L/C Number:</b> C2638			
	<b>Board Approval (FY)</b>		94
<b>Partners involved :</b> DFID	<b>Closing Date</b>	03/31/2000	12/31/2000
<b>Prepared by :</b>	<b>Reviewed by :</b>	<b>Group Manager :</b>	<b>Group:</b>
Robert C. Varley	Patrick G. Grasso	Alain A. Barbu	OEDST

**2. Project Objectives and Components**

**a. Objectives**

The objective of the project was to reduce the cost of road transportation and support modernization of road sector administration by assisting the Roads and Highways Department (RHD) of the Government of Bangladesh (GOB) in:

1. Initiating physical implementation of the project in areas west of the Jamuna, thus preserving the country's capital base of road infrastructure and improving high priority sections in a systematic manner .
2. Developing its institutional and technical capacity to plan and program works, administer and supervise works contracts and operate and maintain the country's main road system .
3. Rehabilitating the road network devastated by 1998 floods, the worst in living memory, and restoring them to pre-flood conditions.

**b. Components**

Total project costs of \$343.52 million comprised: Rehabilitation (25%); Widening (6%); Periodic Maintenance (34%); Preparation and Implementation Support (5%); Institutional Development (3%); Land Acquisition, Staff Incentives and Vehicles (2%); Restoration of Damaged Roads and Bridges (23%); and Consultant Services for Flood Damaged Work (2%.)

**c. Comments on Project Cost, Financing and Dates**

The Bank initially committed to finance a 4-year time slice of a program for physical implementation of the national Road Master Plan, including 168 km of rehabilitation, 100 km of widening and 1,800 km of periodic maintenance. In May 1999 a supplemental credit of \$80 million was given to permit financing of repair and reconstruction of physical facilities and replacement of equipment damaged by the 1998 floods. This work included rehabilitation of 270 km of national, regional and feeder roads.

**3. Achievement of Relevant Objectives:**

1. The main objective of reducing the cost of road transport both through rehabilitation /widening as well as periodic maintenance was achieved - the realized EIRRs exceeded the already high levels estimated at appraisal . The periodic maintenance component EIRR increased from 45% to 66% and the rehabilitation from 22% to 28.7%. Interim economic re-evaluations of individual road sections for the rehabilitation component, conducted in 1999, showed a similar magnitude of increase in the EIRR over the first 4 years of the project. The SAR projected a total of 2068 kms while the ICR reports a total length of only 1478 kms for realized rehabilitation, widening and periodic maintenance.
2. The institutional development component (IDC) increased capacity within RHD to plan, manage and implement civil works. Amongst the indicators that this was achieved were enhanced capacity in implementing RRMP 3 (the third and overlapping Road Rehabilitation and Maintenance Project which is already underway ) were the use of HDM and its adaption; the use of information systems; the capacity for quality control of works; and the development of local engineering and construction industries . Amongst the milestone events for road safety improvement were the establishment of a Road Safety Unit, a National Road Safety Council, and preparation of a draft Road Transport Act. A Unit under RHD was set up to address the environmental impact of activities on a regular basis.

3. Some 270 kms of flood damaged national, regional and feeder roads were restored to their pre -flood condition.

#### 4. Significant Outcomes/Impacts:

1. Systematic procedures have been established in RHD for planning and executing regular network maintenance, thereby deferring costly rehabilitation and maintenance .
2. This was one of the first projects in Bangladesh to be benchmarked against IDA's Operational Directives 4.01 and 4.30 standards. The environmental assessment( EIA) and resettlement action plan (RAP) were implemented successfully by the Christian Commission for Development in Bangladesh
3. The capacity of RHD to adapt its survey and assessment for flood rehabilitation was evidence of the efficacy of the newly improved systems (The 1998 floods had reversed some of the earlier physical achievements .)
4. In a 1998 QAG review the project was ranked 28th out of 200 and rated a "best practice" example of building effective collaboration between the borrowing agency, suppliers, consultants engaged in implementation and Bank staff."

#### 5. Significant Shortcomings (including non-compliance with safeguard policies):

1. It is hard to reconcile statements that (a) "implementation of physical components can be considered highly satisfactory.. and the targets for the periodic maintenance have also largely been achieved ." (page 5 of the ICR) and (b) "project succeeded in completing all physical targets within the approved cost ", with the 25% shortfall in rehabilitation, widening and periodic maintenance reported above .
2. No data on daily traffic volume, improved riding quality, reduced journey times, reduced congestion and lower vehicle operating and maintenance costs are presented . The ICR does not make clear whether changes in the International Road Roughness Index were based on direct observation or on output of the HDM model . Confident assertions about reductions in transport cost (which could be directly captured by inflation adjusted rates for transportation of transport and goods ), are claimed but there are no supporting data .
3. No tangible indicators of improved IDC are presented but simple indicators were given in the SAR .
4. Sustainable funding for maintenance has not yet been established .
5. Stronger enforcement of the legal axle limit is required and is a critical issue for the sustainability of project roads.
6. RRMP3 proceeded with undue haste before RRMP2 had been adequately evaluated .

6. Ratings :	ICR	OED Review	Reason for Disagreement /Comments
<b>Outcome :</b>	Satisfactory	Satisfactory	The apparently high EIRR's are the dominant factor determining this rating .
<b>Institutional Dev .:</b>	Substantial	Substantial	The demonstration of increased skills and capacities is convincing, but the picture of institutional development impact and its relation to the Bank's policy dialogue is somewhat opaque.
<b>Sustainability :</b>	Likely	Likely	Initiatives to establish a Road Fund are under way and in the meanwhile it is likely government will sustain adequate budgetary allocations to maintain rural roads.
<b>Bank Performance :</b>	Satisfactory	Satisfactory	
<b>Borrower Perf .:</b>	Satisfactory	Satisfactory	
<b>Quality of ICR :</b>		Unsatisfactory	

NOTE: ICR rating values flagged with '\*' don't comply with OP/BP 13.55, but are listed for completeness.

#### 7. Lessons of Broad Applicability:

Some of the lessons learned are scarcely new, even if they are very broadly applicable - "Careful supervision of contractor performance is needed to assure adequate quality of works, with payments tied to fulfilling the quality requirements" and "it is important for RHD to emphasize strict quality control, planning, scheduling and timely delivery of civil works with their contractors."

#### 8. Assessment Recommended? ☒ Yes ☐ No

**Why?** A third follow-on project has started implementation and taken with the preceding two projects represents a substantial investment in the sector . The time is opportune for an evaluation of the impact . In view of the weak IDC evaluation and lack of presentation of supporting data on achieved benefits /road costs, triangulation in the field is indicated. Most of the relevant project files and consultant reports are located in Bangladesh .

#### 9. Comments on Quality of ICR:

The ICR lacks basic information and analysis and is thus rated unsatisfactory . The economic analysis is just a table of results with no critical assessment of the validity of the assumptions used in the computer model - HDM. The

economic costs and benefits of individual road stretches refer to studies conducted in 1999, at the time of the additional flood rehabilitation component. In contrast, the SAR had been of a high quality, providing extensive quantitative and qualitative baseline information. This included an unusually detailed capacity evaluation and an institutional development plan. The SAR identifies "overdependence" on consultants, ineffective and slow implementation of the institutional development program, and lack of motivation on the part of the RHD staff " as main risks. In contrast, the ICR's treatment of institutional development impact is shallow. The borrowers comments are particularly weak, appearing to comprise largely a report on the status of engineering works and no comments were provided by DFID which co-financed the project.

The ICR does not use the rich baseline data for evaluation - for instance the SAR Credit and Project Summary talks of efforts to maximize effectiveness through incorporating safeguards - "minimum criteria for staff as specialist's counterparts, initiatives to motivate staff, and milestone achievement and target handover dates for key tasks ." Similarly the SAR's abundance of quantitative data on road maintenance, rehabilitation costs, surface conditions, traffic flow rates, standards, staffing and cumulative expenditures on various stretches of road, are not used as baseline for reporting results. The "logframe analysis" merely lists values for a few inputs and outputs.

Regardless of the difficulties of attributing causation to specific project works, one would expect some account of the status of sector dialogue with GOB and a reporting of progress (following up the policy matrix - Annex 1 of the SAR). Is there any evidence that supporting a timeslice approach has achieved the envisaged policy objectives? Citing a sectoral review might have served this purpose. The size of the project (\$343 million) in such a critical client country should have warranted assigning more resources to the preparation of this ICR.