ICR Review

Operations Evaluation Department

Report Number : ICRR10957

1. Project Data:		Date Posted : 08/07/2001		
PROJ ID : P007788			Appraisal	Actual
Project Name :	Roads Rehab & Maint	Project Costs (US$M)	28.4	30.96
Country :	Nicaragua	Loan/Credit (US$M)	25	25
Sector(s):	Board: TR - Roads and highways (84%), Central government administration (16%)	Cofinancing (US$M)		
L/C Number :	C2871			
		Board Approval (FY)		96
Partners involved :		Closing Date	12/31/2000	12/31/2000

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2. Project Objectives and Components

a. Objectives

The objectives were:

1. Strengthen the institutions that are responsible for road transport in Nicaragua .
2. Improve the planning, funding and implementation of road maintenance .
3. Improve the quality and the capacity of selected trunk roads on a sustainable basis so as to enhance Nicaragua's export potential.

For poverty alleviation reasons participation was broadened to include community groups in undertaking minor routine maintenance work.

b. Components

Total project costs of $30.96 million comprised:
Institutional Strengthening, TA, Training and Studies (13%); Road Maintenance Pilot (5%); Road Network Rehabilitation and Improvement (82%.)

c. Comments on Project Cost, Financing and Dates

The cost annexes are not in the required format and mix local currency (C$) and $ values. Annex 2 Table 1, for Project Cost by Component, is expressed in local currency while in the other annex tables C$ have been converted at $1=C$7.8 (the 1995 exchange rate) and expressed in US$. In the main text (5.4) project procurement categories are used even though the paragraph starts by citing the Annex table for "Cost by Component" as the source.

3. Achievement of Relevant Objectives:

1. The Ministry of Construction and Transport (MCT) was transformed into the Ministry of Transport and Infrastructure (MTI). The project was instrumental in bringing discipline and accountability to the MCT and later the MTI. Focus has been moved away from construction and maintenance (using state owned organizations), to planning, regulation, safety and the environment. Ministry staffing was rationalized and reduced from about 8000 in the 1980's to under 1400 at present. Capacity was substantially increased with adoption of modern transport management, appraisal and planning techniques. Procurement skills were developed and have been adopted to some extent in other Government activities.
2. Systematic road maintenance planning procedures were introduced. A Pilot Project of Microenterprise for Maintenance (PPMM) was perfected and by 2000 over 900 km of roads were being maintained under contract. The legislative approval of the Road Maintenance Fund (RMF) in 2000 represented the achievement of a major institutional milestone. The adverse budgetary impact of three major natural disasters (2 hurricanes and El Nino induced climate change) delayed approval of the special surcharge needed to fund the RMF automatically from domestic sources.
3. The high ERR's projected in the SAR for the two stretches of road were largely achieved - 118% and 78% in the ICR compared to ex-ante rates of 85% and 97%. The International Rougness Index (m/ km) decreased from 6.8 in 1996 to 1.5 in 2000. Average daily traffic on the two roads increased 25% at a time when real gasoline prices increased 50% - part of this increase is attributed to national economic growth and part induced by road improvements that resulted from the project.

4. Significant Outcomes/Impacts:

1. The rehabilitation of 68 kms of severely deteriorated road revitalized a crucial economic development growth pole containing a significant portion of Nicaragua's agriculture, livestock and agro -industrial investments.
2. The initially experimental PPMM is now emulated by other donors. It is an effective mechanism for maintenance which also has poverty alleviation and employment benefits. These were enhanced by involving community groups in the maintenance program. Among the unforeseen benefits of PPMM have been reductions in accidents and improved security.
3. Despite a string of natural disasters the project was successfully completed on time, without experiencing serious cost overruns.

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

Unless dependable sources of funding for road maintenance are identified and tapped, sustainability of maintenance benefits will be undermined.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Highly Satisfactory	Highly Satisfactory	
Institutional Dev .:	Substantial	Substantial	
Sustainability:	Uncertain *	Likely	It is likely that given several ongoing IDA road projects and prospects of improved fiscal conditions, the securing of off-budget funding for the RMF will be achieved.
Bank Performance:	Satisfactory	Satisfactory	
Borrower Perf .:	Satisfactory	Satisfactory	
Quality of ICR:		Satisfactory	

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

7. Lessons of Broad Applicability:

1. There are substantial non-economic benefits of maintenance by contract using the PPMM model - "The PPMM has thus initiated a virtuous cycle of training, microenterprise establishment, employment creation, income generation and poverty alleviation being local, it leaves a community better endowed, after project completion, in terms of skills acquired."
2. There is a need for flexibility in project execution in areas that are prone to natural disasters - a quick response to Hurricane Mitch by the IDA helped mitigate losses that would have occurred if work had been stopped on the road sections under construction due to lack of counterpart funding .
3. Firm corrective action taken over the quality of contracted construction has a powerful demonstration effect - the testing of defective steel beams by international laboratories demonstrated a will to enforce contracts in a transparent manner and was also beneficial for other construction activities in Nicaragua .
4. Adaptations of designs to fit local traffic improve safety - adding shoulders in and around towns and villages, not called for in the original Nicaraguan design ,were especially useful in isolating pedestrian and animal from fast moving motorized traffic.

8. Assessment Recommended? ○ Yes ● No

9. Comments on Quality of ICR:

Satisfactory with the exception of the presentation of cost data . The logframe presentation in Annex 1 (with "inputs", "outputs", "outcomes" and "impact."), is particularly welcome