Report Number : ICRR12312

IEG ICR Review
Independent Evaluation Group

1. Project Data:		Date Posted :	02/16/2006	
PROJ ID :	P000755		Appraisal	Actual
Project Name :	Road Sector Development Program	Project Costs (US$M)	538	534
Country :	Ethiopia	Loan/Credit (US$M)	309.2	306.5
Sector(s):	Central government administration; Sub-national government administration; Roads and highways	Cofinancing (US$M)	14.9	14.5
L/C Number :	C3032			
		Board Approval (FY)		98
Partners involved :	GTZ, EU, DfID, NDF, KfW, Japan, ADF, Italy, Netherlands	Closing Date	05/31/2003	05/31/2005
Evaluator :	Panel Reviewer :	Division Manager :	Division :	
Kavita Mathur	Roy Gilbert	Alain A. Barbu	IEGSG	

2. Project Objectives and Components

a. Objectives

The primary aim of the project was to contribute to Ethiopia's economic development by:
(i) improving trunk and regional road access and utilization to meet the agricultural and other economic development needs;
(ii) building up the institutional capacity in both the public and private sectors for sustainable road development and maintenance; and
(iii) providing economic opportunity for the rural poor both through increased employment in rural road works and development of appropriate and Affordable Means of Transport (AMT) and services.
The project development objectives remained the same throughout project implementation.

b. Components (or Key Conditions in the case of Adjustment Loans):

The project included the following components:
(i) rehabilitating and upgrading paved trunk roads (Original cost US$154.8 million, Actual cost US$129.7 million),
(ii) upgrading trunk roads from gravel to asphalt pavement (Original cost US$309.6 million, Actual cost US$331.7 million),
(iii) consultancy services for construction supervision (Original cost US$32.5 million, Actual cost US$37.0 million),
(iv) institutional strengthening and capacity building support for Ethiopian Roads Authority (ERA) (Original cost US$29.8 million, Actual cost US$35.8 million),
(v) institutional support for four Regional States Roads Organizations (RROs) (Original cost US$7.3 million, Actual cost not available),
(vi) Environmental Guidelines (EG) and Sector Environmental Assessment (SEA) capacity building (Original cost US$1.4 million, Actual cost not available), and
(vii) technical preparation of rural roads improvement (Original cost US$2.6 million, Actual cost not available).
The project components remained the same throughout project implementation.

c. Comments on Project Cost, Financing, Borrower Contribution, and Dates

The total cost of the first five years of the program (1997-2002) was estimated to be US$2,757 million. IDA's overall support envisaged at appraisal was US$756 million, to be provided in three successive but overlapping sector projects. IDA's support under this project (the first phase) was estimated to be US$309.2 million.
The credit was fully disbursed. The credit was extended by two years because of delays in mobilization (when the major port of operation was shifted from Assab in Eritrea to Djibouti) and unsatisfactory performance of some contractors during the execution of works.

3. Relevance of Objectives & Design :

The project objectives were well aligned with the Government's 10-year Road Sector Development Program (RSDP) (July 1997 to June 2006) with the goal to improve transport operating efficiency and provide access to isolated rural areas. The project was designed as the "first" of a phased participation by IDA in a Sector Investment Program, to implement the Ethiopian Government's (GOE) RSDP. The RSDP aimed at restoring Ethiopia's road network (which was considered a major obstacle to economic development) and developing institutional capacity of the road agencies to better manage the networks. The project would focus on the rehabilitation and strengthening of the priority trunk road network, help develop the programming and contract administration capacity of ERA and RRO, and help prepare the components for the next phase of RSDP.

The project objectives were highly consistent with the Bank's Country Assistance Strategies (CAS) (August 1997 and March 2003) and remained relevant throughout the lifespan of the project. The 1997 CAS proposed large lending operations in the roads sector that would have significant poverty impact as the roads would improve the access of the poor to markets, social services and, in times of drought, to food.The project supported the 2003 CAS objective of enhancing pro-poor growth by accelerating rural growth by the provision of more effective infrastructure and infrastructure services in transport, and improving transport access to rural and economically productive areas.

4. Achievement of Objectives (Efficacy) :

Improve trunk and regional road access and utilization to meet the agricultural and other economic development needs.

Achievement was Substantial. Of the planned 1,300 km, road works were completed on 1,264 km. Additional rehabilitation of 70 km of the 140 km Gewane-Mille road (financed under credit 2438) were also done. The network in good condition (from 1997 to 2004) increased from 17% to 49% for paved roads, and 25% to 35% for Federal gravel roads. The improvement in the condition of four roads resulted in the reduction of Vehicle Operating Costs by 16% and Journey Time by 25 to 30%. The freight rates were reduced by 25% on the import-export route and 47% on the trunk roads. The improved roads have improved trunk and regional road access and improved the marketing of agricultural commodities. The IMF estimates show a positive export growth since 1999/00.

Build-up the institutional capacity in both the public and private sectors for sustainable road development and maintenance.

Achievement was Substantial. ERA was re-established as an autonomous institution with its management accountable to a Board. The Road fund was strengthened and a Road Board comprising representatives of the Federal Government of Ethiopia (5), regional States (6) and the Private Sector (4) was formed to administer the fund.

The capacity of ERA to manage procurement, contract administration, financial management and planning was enhanced through Technical Assistance (TA) support from EU and DFID and IDA. A Pavement Management System (PMS) was established, ERA's Financial Management System was updated and the Maintenance Management System was computerized. The capacity of 10 District Maintenance Organizations was also improved.

The project also supported the development of the capacity of the Domestic Contracting Industry (DCI). Although, all contracts were awarded to international contractors, local contractors were engaged as sub-contractors in drainage works and other activities. However, the actual involvement of the private sector in road maintenance did not progress as planned due to: (a) the weaknesses in the organization of local contractors, (b) the rigidity of the commercial banking system in meeting the credit needs of the contractors, and (c) the slow pace of the establishment of equipment rental enterprises.

International consultants in association with local consultants carried out feasibility, environmental and other studies as well as design review, prequalification of contractors, tender evaluation and supervision of works.

Provide economic opportunity for the rural poor both through increased employment in rural road works and development of appropriate and Affordable Means of Transport (AMT) and services.

Achievement was Substantial. The civil work contracts created employment and income earning opportunities for the skilled and unskilled labor in rural areas. Regarding AMT, the project had limited direct impact as the start up interventions required a longer implementation period. However, the project did increase the awareness of the key issues in the use of AMT and services and assisted in setting up the required institutional measures.

5. Efficiency :

The Economic Rate of Return calculated at appraisal was 19%. The reassessment at completion showed an ERR of 30% which is satisfactory. The Highway Design and Maintenance Model III (HDM III) was used for the economic evaluation both at appraisal and at completion. The higher traffic growth and substantial reduction in vehicle operating cost offset the higher actual unit construction cost.

As noted in Section 4, the improvement in the condition of four roads resulted in substantial reduction of vehicle operating costs and journey time. Also, the freight rates were reduced on both the import-export route and on the trunk roads.

6. M&E Design, Implementation, & Utilization:

- At appraisal, six indicators - Traffic Flow, Journey Times, Pavement Roughness, Maintenance Expenditure, Pavement Loading, and Road Freight Prices were included. These performance monitoring indicators were well selected. M&E implementation was adequate and key output/impact indicators were included in the ICR.
- During implementation, RSDP indicators were further developed and expanded with EU funds and a Performance Monitoring System was established.
- A Monitoring and Evaluation Unit was established in ERA's Planning and Programming Division to collect information and provide data from MIS. The validation of the data and performance indicators would be done by the Roads Inspectorate Unit (RIU). The RIU would also conduct internal technical and financial audits and submit them to ERA's Board of Directors.

7. Other (Safeguards, Fiduciary, Unintended Impacts--Positive & Negative):

Safeguards: At appraisal, most aspects of the environmental assessments were satisfactory. However, the quality at entry review by the Quality Assurance Group (QAG) found that the project underestimated the resettlement needs on one of the roads. During implementation, the higher amounts of resettlement noted by QAG were minimized during construction through careful final road relocation design management. Also, proactive actions were taken by ERA to evaluate the compensation paid, as part of the resettlement audit. A new compensation law was published in the National Gazette in July 2005.

The Environmental Management Branch (EMB) was created and is operational. The Environmental Procedures Manual was published in 2001. During implementation, Environmental Monitoring Plans were prepared for each road works contract. Compliance was ensured through the supervision engineers and monitored by EMB.

Unintended Impacts - Positive: The project initiated an HIV/AIDS strategy for the sector. The target groups were the staff of ERA, contractors, consultants, and the local communities at the project sites. The project provided initial funding of US$1.3 million for Ethiopia Multi-Country HIV/AIDS Program(MAP).

8. Ratings:	ICR	ICR Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	
Institutional Dev .:	Substantial	Substantial	
Sustainability :	Highly Likely	Highly Likely	
Bank Performance :	Satisfactory	Satisfactory	The quality at entry was moderately satisfactory as the resettlement needs on one of the roads were underestimated.
Borrower Perf .:	Satisfactory	Satisfactory	
Quality of ICR :		Satisfactory	

NOTES:
- When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.
- ICR rating values flagged with ' * ' don't comply with OP/BP 13.55, but are listed for completeness.

9. Lessons:

Several important lessons are identified by the ICR. Four are repeated here for their broad applicability:

- Policy and institutional reforms are critical for project sustainability. Therefore, these reforms should be maintained and deepened in the long-term.

- Borrower capacity needs to be enhanced to enable proactive and effective contract administration. This will ensure improved contractor performance in future contracts.
- The project experience shows that price variations for fuel and other petroleum products such as bitumen are unavoidable. However, to keep price variations to minimum, the works should be completed within the contract period. Delays caused by the Employer/Consultants should be avoided as much as possible.
- In order to avoid lengthy litigation or arbitration, Dispute Review Experts should be used regularly and early in contract implementation.

The Borrower's report provides the following lessons:

- Continuous and close monitoring of the execution of contracts is essential for achieving a faster construction rate.
- In order to complete the road projects within the original contract time period, the methodology for planning and execution of works needs to be developed.

10. Assessment Recommended? ○ Yes ● No

11. Comments on Quality of ICR:

The ICR is clearly written and generally provides enough information to enable the project to be rated satisfactorily . There are some discrepancies in the data presented in the text versus the annexes . The actual costs for some components is not available. The first table in Annex 2 only represents the Bank's share. Also, Annex 2 is duplicated.