



1. Project Data:		Date Posted : 06/21/2002	
PROJ ID: P007913		Appraisal	Actual
Project Name: Eighth Highway Project	Project Costs (US\$M)	90	136.3
Country: Paraguay	Loan/Credit (US\$M)	65	65
Sector(s): Board: TR - Roads and highways (94%), Central government administration (6%)	Cofinancing (US\$M)	0	0
L/C Number: L3685			
	Board Approval (FY)		94
Partners involved :	Closing Date	06/30/1999	06/15/2001
Prepared by :	Reviewed by :	Group Manager :	Group:
Kavita Mathur	Laurie Effron	Alain A. Barbu	OEDST

2. Project Objectives and Components

a. Objectives

The overall objective of the project was to strengthen the Ministry of Public Works and Communications (MOPC) organization and improve its capacity to deliver good roads and well maintained road network. Its subsidiary objectives were: (a) reduce environmental hazards and the nuisance caused by the frequent flooding along Asunción's ringroad; (b) expedite exports by facilitating the use of alternative ports; (c) lower the costs of trucking soybean exports to the Brazilian border; (d) enhance Directorate of Highways (DH) highway design and roadwork's planning capability; (e) improve environmental assessment skills at the ministry; and (f) assist MOPC in establishing a National Vehicle Registry.

b. Components

To achieve the objectives described above, the project included the following components:

- Civil Works** for (a) road improvements (US\$ 59.5 million), road rehabilitation (US\$6.1 million); and pilot soil stabilization program (US\$1.0 million).
- Consulting Services** (US\$ 8.8 million). This included the provision of consulting services to assist MOPC in the supervision of civil works, preparation of engineering designs, road stabilization program, and studies. The project also included technical assistance aimed at: (i) strengthening MOPC's organization and management capacity; (ii) strengthen MOPC's Environmental Unit; (iii) strengthening of the Directorate of Roads and Highways Department of Planning and Projects; and, (iv) establishment of a National Vehicle Registry.
- Equipment.** The project also included provision of equipment required for the implementation of various technical assistance components.

The loan was amended in April 1999 and August 2000, but the original project components were maintained throughout implementation.

c. Comments on Project Cost, Financing and Dates

At appraisal, total project cost was estimated at US\$90 million. The final cost was US\$136.3 million. The loan was fully disbursed. Government counterpart funds increased substantially from US\$25 million at appraisal to US\$71.3 million at completion. The project closed on June 15, 2001, two years after the original closing date.

3. Achievement of Relevant Objectives:

- Physical targets for construction were largely met except for the construction of Asuncion ringroad. At project closing, 85% of the physical works were completed.
- Most of the institutional objectives were achieved.
 - The capacity of the Ministry of Public Works and Communications (MOPC) to construct and maintain roads was strengthened through the creation of two institutions - the National Transportation Directorate (DINATRAM) and Metropolitan Transportation Secretariat (SETAMA) to develop policies and regulations for

national and international passengers and goods.

- A new government accounting system was implemented and the administrative process for payment of contractors was streamlined.
- An Integrated Road Maintenance Management System (SIAMV) was developed to plan and estimate budget requirements for road maintenance.
- DH is developing a strategy for outsourcing maintenance operations. A pilot program to carry out road maintenance by private sector was implemented under the project.
- The environmental assessment skills of MOPC was strengthened through establishment of an Environmental Unit. The Unit will carry out environmental evaluations and also propose mitigation plans for road investments prepared by DH.
- A National Motor Vehicle Registry was established to assist MOPC, DINATRAN and the police to access relevant data for transport research and planning.

3. The objective to reduce frequent flooding along Asunción's ringroad was partially achieved through the construction of drainage system and flood control canals. However, the improvements in drainage conditions along the Ytai and Lambare creeks were not completed. By project closing MOPC had just finished preparing the final engineering designs.

4. The objective to expedite exports by facilitating the use of alternative ports was largely achieved. The construction of the southern access road (Road Paranguari - Ita-Cuatro Mojones) has substantially improved the accessibility of the ports of Villetta and San Antonio.

5. The objective to lower the costs of trucking soybean exports was achieved. The rehabilitation of Route 6, the principal road for soybean exports, has resulted in 20% reduction in average operating costs for all vehicles. Moreover, MOPC has awarded a concession to upgrade Route 7, converting it into a four lane road up to the access to Puente La Amistad, which will facilitate the transportation of soybeans.

4. Significant Outcomes/Impacts:

Significant achievements of the project are:

- (i) preparation and subsequent approval of the new "Transport Law" to regulate the National Transport System;
- (ii) development of a Transport Master Plan for Asuncion metropolitan area;
- (iii) promotion of private sector participation through outsourcing of road maintenance and introduction of road concessions; and
- (iv) increasing the environmental awareness within MOPC through establishment of an Environmental Unit to carry out environmental evaluations of road investments.

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

- The resettlement plan did not fully meet the Bank's guidelines for involuntary resettlement. The Bank developed a resettlement plan without adequately addressing the institutional framework at the client's side. TA to help the client address the resettlement problem, for example through providing support for developing the legal framework for expropriations was provided very late (this was completed in 1999). Also, the resettlement plan did not reflect adequately the real situation as proper land titling and land use mapping were incomplete (urban growth occurred more rapidly than registration).
- The execution of road works experienced delays due to shortage and untimely provision of counterpart funds. In addition, there were cost over-runs due to poor quality of feasibility studies and substantial lags between completion of engineering studies and start of works.
- The project improved the capacity of MOPC to construct and maintain roads. However, it did not address the road maintenance funding issues. Absence of sustainable road maintenance financing and the low level of budgetary resources allocated to maintenance, will result in an increased maintenance backlog.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	
Institutional Dev .:	Modest	Substantial	The Institutional Development impact is assessed as substantial because MOPC capacity for road network planning, contracting out works to private sector and conducting

			environmental analysis has substantially improved (see Sections 3 and 4).
Sustainability :	Unlikely	Unlikely	
Bank Performance :	Satisfactory	Satisfactory	Bank performance since the outset and until the mid term review was unsatisfactory as it was characterized by a less proactive stance, lack of timely feedback and poor results on the ground. However, performance after the mid term review improved substantially. The Bank developed a framework defining impact and output performance indicators. Also, action plans were developed and the dialogue between the Bank and MOPC improved. Overall, Bank's performance is rated satisfactory.
Borrower Perf. :	Satisfactory	Satisfactory	
Quality of ICR :		Exemplary	

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

7. Lessons of Broad Applicability:

Several important lessons are identified by the ICR. Three are repeated here:

- All preparation activities relating to land acquisition, resettlement, and relocation of affected people should be completed well in advance of the procurement process for civil works. Also, it is important to closely monitor the implementation of the resettlement program through the development of key indicators.
- Stronger attention needs to be given to cost estimation during project preparation. In Paraguay, the underestimation of the construction costs at the design phase lead to higher than expected bids and significant cost overruns during construction.
- The project should include clear and measurable indicators to plan and monitor project implementation and performance.

The ES adds the following lesson - For a sustainable improvement of roads network, there is a need not only to develop capacity for rehabilitation and maintenance but also a stable funding mechanism.

8. Assessment Recommended? Yes No

Why? According to the ICR, some of the project benefits are contingent on the successful completion of Asuncion Ringroad. The project should be audited to assess the benefits from this project and also to draw lessons from the resettlement program pursued under this project.

9. Comments on Quality of ICR:

The quality of ICR is Exemplary. It is comprehensive and provides a wealth of data such as unit cost of construction, increase in exports and number of vehicles, which permits a ready evaluation of the project. Also, the Lessons Learned section is insightful and useful.