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PROJECT PERFORMANCE ASSESSMENT REPORT

HONDURAS

TRANSPORT SECTOR REHABILITATION PROJECT (CREDIT 2458-HO)

May 27, 2004

Sector and Thematic Evaluation Group Operations Evaluation Department

Currency Equivalents (annual averages)

 $Currency\ Unit = Lempira\ (L/.)$

Currency Unit = (October 1992) L1.0 = US\$ 0.185 US\$ 1.0 = 5.40 Lempiras

(December 2002)

L1.0 = US\$ 0.063 US\$ 1.0 = 15.88 Lempiras

Abbreviations and Acronyms

ICRImplementation Completion ReportOEDOperations Evaluation DepartmentPPARProject Performance Assessment Report

DGC Dirección General de Carreteras (Directorate General for Roads)

DGAC Dirección General de Aeronáutica Civil (Directorate General for Civil Aviation)
DGOP Dirección General de Obras Publicas (Directorate General for Public Works)
DGPS Dirección General de Planificación Sectoral (Directorate General for Sector

Planning)

DGT Dirección General de Transporte (Directorate General for Transport)

ENP Empresa Nacional Portuaria (National Port Company)

FNH Ferrocarril Nacional de Honduras (Honduran National Railways)

Fondo Vial Road Fund

GOH Government of Honduras HDM Highway Design Model

IDB Inter-American Development Bank

PCU Project Coordination Unit PMU Project Management Unit

SECOPT Secretariat de Obras Publicas, Comunicaciones y Transporte (Secretariat of

Communications, Public Works, and Transport)

SOPTRAVI Secretaria de Obras Publicas, Transporte y Vivienda (Ministry of Public Works,

Transport and Housing)

TSRP Transport Sector Rehabilitation Project

UPEG Unidad de Planificación y Evaluación de Gestión (Planning and Management

Evaluation Unit

PPAR Project Performance Assessment Report

SAR Staff Appraisal Report TA Technical assistance

Fiscal Year

Government: January 1—December 31

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OED Mission: Enhancing development effectiveness through excellence and independence in evaluation.

About this Report

The Operations Evaluation Department assesses the programs and activities of the World Bank for two purposes: first, to ensure the integrity of the Bank's self-evaluation process and to verify that the Bank's work is producing the expected results, and second, to help develop improved directions, policies, and procedures through the dissemination of lessons drawn from experience. As part of this work, OED annually assesses about 25 percent of the Bank's lending operations. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming studies or country evaluations; those for which Executive Directors or Bank management have requested assessments; and those that are likely to generate important lessons. The projects, topics, and analytical approaches selected for assessment support larger evaluation studies

A Project Performance Assessment Report (PPAR) is based on a review of the Implementation Completion Report (a self-evaluation by the responsible Bank department) and fieldwork conducted by OED. To prepare PPARs, OED staff examine project files and other documents, interview operational staff, and in most cases visit the borrowing country for onsite discussions with project staff and beneficiaries. The PPAR thereby seeks to validate and augment the information provided in the ICR, as well as examine issues of special interest to broader OED studies.

Each PPAR is subject to a peer review process and OED management approval. Once cleared internally, the PPAR is reviewed by the responsible Bank department and amended as necessary. The completed PPAR is then sent to the borrower for review; the borrowers' comments are attached to the document that is sent to the Bank's Board of Executive Directors. After an assessment report has been sent to the Board, it is disclosed to the public.

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Relevance of Objectives: The extent to which the project's objectives are consistent with the country's current development priorities and with current Bank country and sectoral assistance strategies and corporate goals (expressed in Poverty Reduction Strategy Papers, Country Assistance Strategies, Sector Strategy Papers, Operational Policies). *Possible ratings*: High, Substantial, Modest, Negligible.

Efficacy: The extent to which the project's objectives were achieved, or expected to be achieved, taking into account their relative importance. *Possible ratings*: High, Substantial, Modest, Negligible.

Efficiency: The extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives. *Possible ratings:* High, Substantial, Modest, Negligible. This rating is not generally applied to adjustment operations.

Sustainability: The resilience to risk of net benefits flows over time. *Possible ratings:* Highly Likely, Likely, Unlikely, Highly Unlikely, Not Evaluable.

Institutional Development Impact: The extent to which a project improves the ability of a country or region to make more efficient, equitable and sustainable use of its human, financial, and natural resources through: (a) better definition, stability, transparency, enforceability, and predictability of institutional arrangements and/or (b) better alignment of the mission and capacity of an organization with its mandate, which derives from these institutional arrangements. Institutional Development Impact includes both intended and unintended effects of a project. Possible ratings: High, Substantial, Modest, Negligible.

Outcome: The extent to which the project's major relevant objectives were achieved, or are expected to be achieved, efficiently. *Possible ratings:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Bank Performance: The extent to which services provided by the Bank ensured quality at entry and supported implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of the project). *Possible ratings:* Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.

Borrower Performance: The extent to which the borrower assumed ownership and responsibility to ensure quality of preparation and implementation, and complied with covenants and agreements, towards the achievement of development objectives and sustainability. Possible ratings: Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.

Contents

Pr	rincipal Ratings	V
K	ey Staff Responsible	V
Pr	reface	vii
Su	ummary	ix
1.	Introduction and Background	1
2.	Preparation and Objectives	2
3.	Implementation and Results	4
4.	Ratings	11
5.	Conclusions and Lessons Learned	12
Aı	nnex A. Basic Data Sheet	15
Aı	nnex B. Borrower Comments	17

Principal Ratings

	ICR*	ICR Review*	PPAR
Outcome	Satisfactory	Satisfactory	Satisfactory
Sustainability	Likely	Likely	Likely
Institutional Development	Substantial	Substantial	Substantial
Bank Performance	Satisfactory	Satisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Satisfactory

^{*}The Implementation Completion Report (ICR) is a self-evaluation by the responsible operational division of the Bank. The ICR Review is an intermediate Operations Evaluation Department (OED) product that seeks to independently verify the findings of the ICR.

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Preface

This is the Project Performance Assessment Report (PPAR) on the Honduras Transport Sector Rehabilitation Project, for which a credit (Credit 2458-HO) of US\$65 million was approved in 1993. The project closed, fully disbursed, four years later than planned in December 2001. The main reason for the extension was hurricane Mitch, which also occasioned a supplementary Bank credit of US\$20 million in 1998 for technical assistance, rebuilding and repairing critical infrastructure, and replacing computer equipment and vehicles.

The Operations Evaluation Department (OED) prepared this report based on a review of the President's Report, Staff Appraisal Report, transcripts of Board proceedings, project correspondence files, Bank documents on other transport projects and other Bank material. In June 2002, an OED mission traveled to Honduras to discuss the project with official representatives of the appropriate ministries and representatives of the beneficiaries. Further discussions with Bank staff took place during 2003 and early 2004.

The PPAR had four objectives: to examine project preparation and supervision, including borrower participation; to assess institutional developments and government commitment to restructuring; to evaluate project outcomes; and draw lessons for the future. The project was selected for assessment on ICR recommendation to document and draw lessons from reforms on the road and aviation sub-sectors as well as concessions and private sector participation in the transport sector.

Following standard procedures, copies of the PPAR were sent to the borrower for comments and are attached as Annex B.

Summary

This is a Project Performance Assessment Report (PPAR) prepared by the Operations Evaluation Department (OED) for the Honduras Transport Sector Rehabilitation Project, for which a credit (Credit 2458-HO) of US\$65 million was approved in 1993. The project closed fully disbursed four years later than planned in December 2001. The main reasons for the extension were the devastation caused by hurricane Mitch - which led to a supplementary credit of US\$20 million in 1998, for rebuilding and repairing critical infrastructure – and implementation delays following a change in government.

The project had two objectives. The first was to improve and rehabilitate transport infrastructure in the main trade corridors in support of the government's efforts for export and private sector-led growth and to reduce the backlog of deferred maintenance. The second was to improve the institutional and regulatory framework of the sector.

There were three project components. The **investment component** (94 percent) supported a time slice of the government's Transport Sector Investment Plan. The specific investments and their supervision included the rehabilitation and periodic maintenance of important main roads and bridges as well as rural roads and bridges in agriculturally rich areas, and the San Pedro Sula airport's facilities, runway, taxiways, and apron. The **institutional development component** (five percent) strengthened the capabilities of the transport sector administrations in regulation, asset management and environmental planning; provided technical assistance in privatizing the ports and airports; and supported studies in railways and urban transport. The **policy component** (one percent of the project total) was embodied in the government's *Transport Sector Policy Statement*, which emphasized competition and increasing the role of the private sector through restructuring the port, airport, and railway sub-sectors.

The project was very complex due to its broad coverage of the transport sector and to the pervasive changes it sought in the sector framework and functioning. Its implementation was further complicated by the occurrence of two hurricanes, one right after approval and the other, the very destructive hurricane Mitch toward the end of the planned project period in 1998.

The long implementation delay was a consequence of a change in government immediately after project effectiveness, leading to a reassessment of the project's policy and institutional reforms, which in the end were not altered; this took much more time than anticipated. In addition, hurricane Mitch not only led to a supplemental credit for new civil works, but also repairs to civil works already completed that were damaged by the storm. The supplemental credit became part of the project and has been evaluated as part of this report.

The achievement of institutional development objectives was very successful. In the road sector it went well beyond expectations and established a modern framework consisting of *owner*, *administrator*, *manager*, and *supplier* entities. The private sector is now the *supplier* of all service delivery and the government has sold all its road construction and maintenance equipment. The management of the four Honduran airports

is now a concession awarded to an international consortium. In the port and railroad sectors useful studies were undertaken, but this restructuring is still evolving. In urban transport no private sector model was found to be viable because of equity and poverty considerations.

The investment component exceeded its targets and kept costs under control. Road maintenance funding improved and the creation of the Road Fund institutionalized it. The Road Fund finances road maintenance that is now carried out by small private sector entrepreneurs. As expected at appraisal, the economic returns to the road improvements were well above 12 percent.

The assessment finds that the project achievements were substantial, especially considering the change in government, which required re-creating ownership, and the difficult conditions under which the civil works were carried out due to the hurricanes. Sustainability of the results of the project is likely within the framework that has been established

The assessment rates the **project outcome** as **satisfactory** based on its high relevance, substantial efficacy, and substantial efficiency. The only criticism is that preparation for appraisal may have been too detailed for this type of project. The assessment rates **sustainability** as **likely**, and **institutional development impact** as **substantial**; it rates **Bank performance** as **satisfactory** and **borrower performance** also **satisfactory**.

The key lessons from the project are as follows:

- Good preparation is important, but must allow for a realistic time frame. For
 policy/institutional restructuring projects, it should set out the broad study
 direction and assist the borrower to take full ownership of the process, which
 should be fine-tuned as the project proceeds, with full input from the key sector
 players.
- The project preparation plan should include an assessment of possible risks. In the event that the project experiences internal and/or external shocks necessitating institutional restructuring, such restructuring can best be expedited through a flexible approach and good supervision.
- Key elements of a project's policy and institutional development agenda may still be completed after a project's closing date if the project staff and consultants have nurtured an appropriate relationship for that agenda and remain engaged, if possible, beyond project closing.

Gregory K. Ingram Director-General Operations Evaluation

1. Introduction and Background

- 1.1 Honduras's economy is one of the least developed in Latin America. Historically it has been dependent on banana and coffee exports, but in the 1990s efforts were made to diversify production to include shrimp, melons and *maquila* (offshore assembly for reexport). Investment incentives were aimed at attracting foreign capital. This strategy has been particularly successful for *maquila*; in 2000 value-added export revenue was the largest single generator of foreign exchange earnings.
- 1.2 In 1994, just after the project became effective, there was a change of government. Partido Liberal, which won the elections, inherited a large public-sector deficit, a foreign-exchange shortage, and an energy crisis. Through an austerity program the country was brought out of recession, but inflation persisted. Economic reforms proceeded slowly. The government continued to promote socioeconomic development through private sector participation in the economy, modernization of state institutions and the implementation of social programs. In 2001, the opposition party won the elections and took power after the project closing.
- 1.3 In October 1998, hurricane Mitch struck Central America with devastating consequences. Some 7,000 people were killed, over 200,000 dwellings were destroyed, and 1.5 million people were left homeless. Infrastructure was damaged nationwide, including 163 bridges, 6,000 kilometers of roadway, water and sewage pipes, airports, ports, and schools. The replacement cost of the damage was an estimated US\$5 billion, equivalent to 95 percent of the Honduran GDP in 1998. Agriculture suffered the greatest degree of destruction. Flooding ruined 70 percent of the banana plantations in the northern Sula valley and led to heavy losses of basic grains. About 20 percent of the coffee harvest and shrimp farming was affected; only the maquila sector survived largely unscathed.
- 1.4 Traditionally, Honduras's economic performance has been related to international prices for the country's main exports, bananas and coffee. Growth reached an average of four percent in the period 1995–98 with higher coffee prices and general economic recovery driven by manufacturing, finance, and other service sectors. Given extensive hurricane damage, the 1.9 percent contraction in GDP in 1999 represented a good containment effort, attributable in part to efforts to diversify the economy away from agriculture in the 1990s.
- 1.5 The transport sector, at the beginning of project preparation, was organized as government administrations and entities and much of the work was done by direct labor with little private sector participation. Regulation of the sector were not grounded on the principle of separating the policy and regulatory functions, pricing had little role in regulating firms' behavior, and project design and resource allocation in the sector were not guided by economic considerations. The aim of this project was to introduce a new approach to managing the entire transport sector.

2. Preparation and Objectives

- 2.1 The Bank has been active in the Honduras transport sector since 1955 and had implemented six successful highway projects and three port projects before beginning the preparation of the Transport Sector Rehabilitation Project (TSRP) in the early 1990s. The previous highway projects had focused on developing physical infrastructure, both main roads and rural local roads, and on developing a maintenance culture and a well-equipped maintenance organization within the Highway Department (DGC). Institutional development had gradually assumed greater significance and was a central concern when TSRP was designed. The three port projects had successful institution building components, while some of the physical components suffered from cost overruns and low economic rates of return. The previous road loans and credits totaled US\$119.6 million and the port loans and credits totaled US\$31.3 million.
- 2.2 The TSRP was a new concept, prepared in a context that allowed for increased private sector participation. It coincided with government reforms in key sectors, including transportation, and with IDA's new lending strategy in Honduras. The project broadened the Bank/IDA strategy in Honduras from project lending to sector-wide lending. The goals of the government and of IDA were to redefine the government's role in the transport sector and to finance a percentage of the sector's investment program. Specifically, the government and IDA had two goals: first, to help improve and rehabilitate transport infrastructure in the main trade corridors in support of government efforts to stimulate export and private sector-led growth and to reduce the backlog of deferred maintenance, and, second, to help improve the sector's institutional and regulatory framework. These goals were detailed in the project's objectives: to support the rehabilitation and maintenance of important roads; to increase private sector provision of transport services; to establish investment and pricing policies based on efficiency and equity; to integrate into the Secretariat of Communications, Public Works, and Transport (SECOPT) a systematic consideration of environmental concerns; to strengthen the planning and regulatory capability of SECOPT (later reorganized as SOPTRAVI); to restructure the port subsector and redefine the role of the National Port Company (ENP); to design and implement a strategy for the development of the airport subsector; and to rationalize railway operations.
- 2.3 To achieve these objectives the project had three components:

The *investment component* (93.9 percent of the project total) was designed to support a time slice of the government's 1993–96 Transport Sector Investment Plan, expected to total about US\$547.7 million. The specific investments to be financed were: (i) rehabilitation of about 150 kilometers of roads in the main export corridors; (ii) periodic maintenance of about 1,800 kilometers (of which 800 kilometers were expected to be paved) of the road network; (iii) construction and rehabilitation of about 1,000 meters of bridges; (iv) rehabilitation of 1,000 kilometers of feeder roads in agriculturally rich areas; and (v) rehabilitation of the runway, taxiway, and construction of the apron of the San Pedro Sula airport.

The *policy component* (1.2 percent of the project total) was embodied in the government's Transport Sector Policy Statement, which included an Action Plan to be

implemented under the project. The Action Plan emphasized regulatory and pricing policies to improve competition and cost recovery and aimed at: (i) designing and implementing an appropriate regulatory framework for urban and inter-urban road transport, as well as the revision of Transport Law; (ii) increasing the role of the private sector in road maintenance; (iii) implementing sound road user charges and axle load controls; and (iv) designing measures to reorganize the port, airport, and railway subsectors.

Institutional development and technical assistance (4.9 percent of the project total) was intended to implement the Action Plan for consultancy services to: (i) strengthen the capabilities of the SECOPT's Under Secretariat for Planning and Finance (SSPF) and the Directorate General of Transport (DGT) to carry out project evaluation and implement a regulatory framework; (ii) expand the role of the Environment Unit to encompass all transport modes and effectively integrate environmental aspects in SECOPT's investment decisions; (iii) support the implementation of the action plan in the areas of privatization/divestiture in the port and airport sub-sectors; and (iv) strengthen SECOPT's capacity for bridge management.

- 2.4 The project was highly complex and prepared in great detail. Identification and appraisal took 102.3 staff weeks at a cost of US\$285,100. The Staff Appraisal Report (SAR) is extensive and includes the government's policy direction and action plan. Institutional analysis and an institutional development plan preceded the design of the institutional development and technical assistance components and are also contained in the annexes in the SAR, as well as much quantitative background data and the terms of reference for the technical assistance. By any measure each component was thoroughly planned. Finally, the specific investments to be financed by the investment component were selected using engineering economy criteria using the Highway Design Model (HDM), which was introduced and adopted by the Highway Department (DGC) during project preparation.
- 2.5 The previous six projects had supported and helped establish the core road network, capacity for planning road maintenance and capacity to implement civil works. These capabilities were of enormous importance as this project unfolded. The port projects had helped create reasonably well-functioning ports and a semi-autonomous national port company. The new project sought to develop an integrated transport sector with policies and capacities appropriate for a new environment. It delineated the role of the Ministry as the policymaker, developed and reinforced the capacity of government administrations, which were to be managed independently under Ministry (SOPTRAVI) oversight, and transferred service delivery and supplier functions to the private sector. This ensured that the government's policies had parliamentary support, established independent or quasi-private administrations and entities to administer and manage the administrations' programs and secured efficient private sector service delivery through competition. Given Honduras's development stage and context, the thinking in project preparation, in the early 1990s was innovative, even from the perspective of 10 year's hindsight.
- 2.6 The amount of resources (time and money) spent on project preparation was, however, considerable and should have been better justified in the ICR. The SAR details

the Bank's previous work in Honduras, but it does not reveal the extent of the task team's historical knowledge of Honduras. Such knowledge is important in project preparation. On the one hand, if the team's historical knowledge was limited, it could justify the significant preparation expenditure of a complex project. On the other hand, if its historical knowledge was substantial, it is arguable whether it was efficient to spend so much time and effort to prepare the project. This is especially so when Honduras's political history shows that administration can switch every one or two election cycles. Indeed, the change in administration immediately after project approval and the hurricanes (Gert and Mitch) substantially altered the course of the project.

2.7 In retrospect, it is apparent that the project was over-prepared. Too much effort was spent on issues and details that could not be planned ahead with certainty. The substantial institutional and administrative changes envisaged for the sector should not be planned in depth at that point and require a different approach to deal with them, including risk assessment. The project does, however, provide lessons on how to deal with project preparation and supervision effectively, and how to manage complex projects in difficult environments, be they caused by external shocks (a hurricane) or internal shocks (change in administration) or both (economic recession).

3. Implementation and Results

3.1 The project was extended four times by a total of four years and closed at the end of 2001, instead of 1997. The project components were amended five times without amending the project objectives. The first amendment, in 1994, financed an additional 260 kilometers of feeder roads and bridges damaged by hurricane Gert, and provided an advance of \$10 million from the credit for civil works to relieve temporarily the pressure on counterpart funding. The second amendment, in 1996, was to construct and rehabilitate additional bridges and expand the maintenance program to an additional 750 paved roads. The third amendment provided for construction of the apron to the San Pedro Sula airport terminal. In response to the extensive damage caused by hurricane Mitch, the fourth amendment, in 1998, provided a supplementary credit of \$20 million for technical assistance, rebuilding and repairing critical infrastructure, and replacing computer equipment and vehicles. The fifth amendment, in 2000, facilitated the financing of equipment and vehicles required to launch the operation of the Road Fund.

Achievement of Objectives and Results

Investment Component: The Civil Works

3.2 The project's civil works component met or exceeded its targets (Table 1). This is a very significant achievement given the impact of Gert in 1993 and Mitch in 1998. The latter caused extensive damage, including some civil works that had already been completed. The Bank team acted swiftly and reoriented the program to repair the damage to critical infrastructure and procured prefabricated Bailey bridges to reconnect the main transport routes in the country. This was done using the technical tools that had been acquired with project support to ensure that infrastructure with the highest economic

return was restored first. Ex-post evaluation shows that the implemented projects were efficient; their ERRs are above 21 percent, higher than estimated at appraisal.

Table 1. Outputs of the Transport Sector Rehabilitation Project

Type of civil works	Planned (km)	Executed (km)	Percent
Rehabilitation of highways roads	150	170	113
Rehabilitation of feeder roads	1,000	1,236	124
Maintenance of roads	1,800	1,864	104
Rehabilitation of bridges (meters)	1,000	1,170	117
Rehabilitation of San Pedro Sula Airport runway	Entire runway	Entire runway	100

Policy Component

- 3.3 The government's ambitious Sector Policy Statement for the transport sector was partially achieved. In the road sector, where it was fully achieved, the project helped evolve and reorganize the responsibilities of the sector players into *owner*, *administrator*, *manager*, *and supplier*. This is a very modern approach to road management, which has been implemented only in a handful of (developed) countries. The following presents the current organization and directions for its further development:
 - The owner, Secretariat of Communications, Public Works, and Transport (SECOPT), was reorganized and transformed into the Ministry of Public Works, Transport, and Housing (SOPTRAVI). The staff of SECOPT's Department of Road Maintenance (DGCCA) was reduced from about 5,500 in 1993 to about 700 in 1999. Later that year the department was closed and the remaining staff were either released or was transferred to the Road Fund when that began operating in 1999. Many of the retrenched staff went to the private sector to become road maintenance contractors. The section of SECOPT responsible for undertaking road maintenance was thus disbanded and its equipment sold to the private sector. Outsourcing maintenance has increased efficiency as the separation of production and management roles has increased accountability. In generic terms, the new sector organization clarified the responsibilities of the government as the road owner for funding, policy, and the legal and regulatory framework for management of the road (and transport) network. In Honduras, a new ministry, SOPTRAVI, was created and it acts as the owner of the road networks for the state. SOPTRAVI is the parent ministry for all transport mode entities.
 - The administration of roads is directed from a unit in SOPTRAVI, UPEG (Unidad de Planificación y Evaluación de Gestión), for economic evaluation, planning and programming of road investments. The project was instrumental in the creation of this unit. UPEG now has a geographic information system and road and bridge management systems with appropriate data collection procedures. A system for monitoring projects and procurement processes was also implemented. The project assisted in the establishment of an environment unit within UPEG to mainstream environmental assessments in all transport sector investments. In generic terms, Road Administration is the entity responsible for

6

effecting the owner's road sector policies (and in some cases specifying activities to be carried out) and ensuring that the performance of the road network meets the political aims of the owner. In Honduras, UPEG was created, staffed, and trained to act as the administrator for the road sector. Currently UPEG is part of the ministry and it has delegated some functions that normally reside with the administrator to the road sector managers. Institutional development of UPEG needs to continue to broaden its responsibilities in authority and oversight, and in monitoring and evaluation.

- The management of roads and bridges also underwent change. The Road Fund became responsible for routine and periodic maintenance (of the paved network, but its responsibility is being expanded to cover all roads). The reorganized Directorate General for Roads (DGC) continued its responsibility as manager of the road rehabilitation investments and the Directorate General for Public Works (DGOP) for managing the highway construction and development of the road network. All are government entities. All of these units received planning and programming advice, and the framework budget from UPEG. In generic terms, Road Manager is an entity or entities responsible for specifying activities to be carried out, supervising, controlling, and monitoring them. In many countries, for the main roads at least, the managerial role is combined with that of the road administration. Increasingly, there is a worldwide movement toward administrations appointing managers under contract for different parts of the network, especially the lower functional classes. These network managers are typically consulting companies. In Honduras, there are three principal road managers DGOP, DGC, and the Road Fund. It is unusual to fragment the road and bridge management responsibilities by program rather than network. This arrangement may be unique to Honduras and probably owes its existence to the weakness of the Road Administration, UPEG, to exercise control over the road managers' activities. The danger being avoided seems to be that a road manager would spend the money inefficiently, but succumb to political pressures and prefer new construction to maintenance, for example.
- The supplier for the service delivery is now primarily the private sector in Honduras. Periodic and routine road maintenance is undertaken by contract for the most part. The Road Fund underpins the financing and supports the maintenance of the paved, main road network with plans to extend the coverage to all public roads as experience is gathered. Private companies also deliver road rehabilitation and development investments. In generic terms, the supplier is the entity or entities responsible for delivery of services: design, construction, or maintenance of roads, selected competitively, and supervised by the manager. The preferred supplier is the private sector. In Honduras, the Road Fund was established during the project and it subsequently led to the creation of viable small enterprises.¹

1. The work of the small enterprises was visible. Roads with small enterprise maintenance contracts were better, including the roadside, and that had material effect on driving experience and also conveyed a perception of better traffic safety.

7

- 3.4 That this rational division of responsibility between owner, administrator, manager, and supplier was accomplished in a single project demonstrates skilled management by the Project Coordination Unit. However, the sharing of road management responsibilities between four entities—three government and one private—is not the best possible model. It can be justified as an evolutionary phase in order to ensure that priorities do not become exclusively political, to mitigate political risks, and that experimentation is necessary to find the right arrangement and mix between public and private entities. Nonetheless, the results of the reorganization have been positive. The Road Fund has stabilized maintenance of the paved road network and created (private) small enterprises and employment opportunities in the road sector. These enterprises now undertake routine maintenance activities with simple (hand)tools and a vehicle. They are legally registered and owned by the employees. There is nothing that prevents them from acquiring mechanical equipment and from bidding for more complex works, especially on gravel roads, or diversifying (as has happened in Peru).
- 3.5 The Road Fund income is derived from a percentage contribution (31 percent) from the fuel excise tax. This arrangement, while an improvement over the history of unpredictable road (maintenance) financing in Honduras, is not satisfactory as the government can "raid" the Road Fund when it so wishes. A "fee for service" principle should preferably to be established whereby the road user charges, consisting of fixed charges (license and heavy vehicle fees) and variable charges (a tariff on fuel, border crossing charge) go directly to the Road Fund. The Road Fund also needed a governing board at the time of review. Finally, it is worth mentioning that the government passed a Concession Law in 1998 to provide a framework for private financing and management of transport infrastructure.
- 3.6 The project supported studies of urban transport, ports, railways, and aviation. Only the study of airports has so far resulted in definite actions. Nonetheless, the other studies clarified the issues and actions are expected regarding the railways during the follow-on project; Highway Rehabilitation and Reconstruction project (Credit 3432-HO) approved in 2000 which also includes consultancy studies for other modes of transport. The urban transport study focused on one urban region, San Pedro Sula. The goal was to improve fiscal performance (for example, by improving bus fare pricing in urban transport). The study concluded that, in urban transport, targeted subsidies are necessary for equity reasons and that ill-designed subsidies (in Tegucigalpa) need to be eliminated. The study also proposed that the municipalities, instead of the central government, assume responsibility for regulating the services. The results were not unexpected, but nevertheless remained unimplemented at the time of the assessment. It is a common experience that targeted user-side subsidies are very difficult to implement because it takes time to develop regulation and regulation enforcement capacity and, in poor countries, municipalities often lack the financial resources to provide the subsidies.
 - Studies for the privatization of the Port of Cortés were completed in November 1996. The plan had not been implemented at the time of the PPAR review.
 - Two studies on the Honduran National Railways (Ferrocarril Nacional de Honduras) examined its financial aspects and the restructuring with a view to introducing private management and ownership into the railway sector. The

economic situation, the industries in the Sula Valley, and demand for railway traffic had all changed radically from the situation prevailing during appraisal. Tela Railway Company had discontinued service, the banana industry had diminished and was now served by trucks, and the *maquila* has emerged as the dominant industry and employer. The study on railway restructuring, completed in 2001, identified one railway line with potentially profitable cargo traffic that could make it attractive for private sector management and operation. The government has not yet taken action on the study's recommendations, but its findings continue to be valid. There are related issues—the responsibility for the retirees and the titles of real estate believed to belong to the railways—that need to be resolved before actions can be taken. The follow-on Highway Rehabilitation and Reconstruction project provides support to the new government to privatize or concession the railroad.

- A new Civil Aviation Law was enacted, and the Congress approved the "Open Skies" Law in March 2000 allowing free reciprocal rights to foreign countries to provide air service to Honduras. The operations of the four airports Tegucigalpa, San Pedro Sula, Ceiba, and Roatán were concessioned in October 2000. A Honduran-Multinational Consortium took over the operation of the four airports under an agreement that called for the immediate investment of Lps. 150 million as part of a long-term commitment to upgrading the facilities in these airports. The result of these policy actions was that the Directorate General responsible for Civil Aviation (DGCA) in the ministry became strictly a regulatory entity.
- 3.7 The airport concession has been hailed as a great success, but it is too early to be sure. Critics maintain that the airport services are now more expensive and, worse, that Inter-Airports SA, the consortium that holds the concession, is not investing in the airports as it promised (US\$120 million over 20 years), that training of the airport personnel is neglected and their salaries reduced, and that the airport is making insufficient efforts to attract foreign investment and industries, which was one of the objectives.

Technical Assistance and Institutional Development

- 3.8 There was a strong training and technical development component to improve the capabilities of SECOPT (later reorganized as SOPTRAVI) in all aspects of (mostly road) administration and management.
 - Personnel in several transport sector departments and entities, including DGCA, FNH, ENP, SOPTRAVI, and DGT were trained in Honduras and abroad. The training program covered project evaluation and environmental assessment, planning and budgeting, new road technologies, airport privatization, and road and bridge design and management. About 11 person-months (during the first phase) and 116 person-months (during the second phase) of technical assistance were provided to SSPF, DGT, and UPEG in transport planning, budgeting, financial management, environmental assessment, and bridge management.

- Technical tools such as geographic information system, bridge management system, pavement management system, and other tools for transport planning, budgeting, financial management, and environmental assessment were developed or improved during project implementation.
- In addition to technical assistance and training, the project successfully reoriented the government entities either to administrative, regulatory, or managerial roles away from the traditional civil works-oriented execution. SOPTRAVI reduced its staff and sold its maintenance equipment to the private sector in support of a policy of contracting out all maintenance services. The project also broadened the scope and mission of the "re-engineered" entities. The environmental unit within SOPTRAVI with newly trained staff is the most concrete example. All major investments in the sector must now include an environmental impact statement.
- Institutional development was also part of the project's *policy component*. It comprised, as already mentioned, the reorganization of the road sector, creation of the Road Fund, airport concessions, and studies on urban transport, the railways, and the ports. These followed directly from the government's changed policy orientation in which the administration, policymaking, regulation and most management responsibilities reside with the government, and the service delivery and some management responsibilities were transferred to the private sector.
- 3.9 It is noteworthy that the implementation of most of the policy agenda took place late in the project, well after the original closing date. The success in achieving the objectives of the policy agenda is partial, but its scope was vast. It is unlikely that such large changes could have been achieved in four years as originally planned. Moreover, it is remarkable that while the implemented policy and technical assistance components were reasonably specific, such as a bridge management system or airport concession, the implementation success was led by the more indefinable components for which the outcome was less clear. Policy and structural changes for the road sub-sector also took place in a complex political environment, but where there were concurrent and successful "experiments" underway elsewhere that served as a guide. For example, the consultancy for the organization of the Road Fund and for small enterprises, Consultoria Individual Para la Organization y Puesta en Marcha del Fondo Vial en Honduras, used the model established elsewhere in Latin American countries, and in the Peru Rural Roads Rehabilitation and Maintenance Project, Loan 3962-PE, PPAR Report No 22474.

Project Management

- 3.10 Under TSRP a project coordination unit (PCU) was created. A private Honduran consulting company served the administration as a manager and a coordinator; the same approach as was used in organizing the road sector. The PCU developed the procurement documents and requests for consultant proposals and organized competition. It certified disbursements and managed all of the project's components.
- 3.11 This experiment was very successful. The ICR posed the following questions for analysis: (a) whether a foreign firm or a joint-venture would have the same acceptance

and access to government officials as the Honduran consulting firm did; (b) whether the arrangement is suitable for both policy and investment components and the extent to what the technical requirements of the project become critical to opting for a private firm.

3.12 The consultants, mainly engineers formerly employed by SOPTRAVI, coordinated the project and gave high-quality technical support to the project implementation unit in SOPTRAVI. The consultants brought to the task not only their skills but also knowledge of how public administrations work, good rapport with public sector officials, and efficiency. This is an interesting alternative for a traditional PIU and the consulting technique the PCU employed is worth analyzing further. The question is why the PCU company was successful in managing the project when some other consultants, notably for urban transport, ports, and the railways were not.

Project Process and Technique in Working with the Client

3.13 Several consultancies succeeded, including the bridge management system, the geographical information system, all the design consultancies, most of the training activities and, probably, the consultancies serving the airport concessions. However, several important consultancies did not lead to swift decisions, among them the consultancies for the railways, the ports, and urban transport. It appears then, that consultancies in more complex political environment or requiring process and consultations with several stakeholders for decisions required more time than anticipated and had the least chance of implementation or at least securing a final decision during the project.

Poverty Reduction

- 3.14 Because IDA financed the project it should have poverty reduction effects. However, no formal studies have been undertaken on this score. Even though poverty reduction became an explicit objective later, poverty reduction effects of this project should be studied during the follow-on project. These studies should focus on the effects of the significant institutional and policy changes that were instituted during the project on efficiency of resource use and the effects of the foreign emergency aid. There is strong reason to believe that the civil works in this project had a very strong effect on poverty because they directly alleviated the damage caused by hurricane Mitch, which probably affected the low-income population most.
- 3.15 Two aspects of poverty reduction are the employment and business opportunities in the private sector. Large sums of foreign emergency aid were made available after hurricane Mitch and pledged to using World Bank processes. Several Honduran private sector representatives complained to the assessment mission that this aid was tied to using consultants and contractors from the donor country and that foreign companies used the highly necessary aid to enter the market at little cost to themselves when the local companies, professionals and labor were the ones that truly needed jobs. PPAR observations confirmed some of these claims.

4. Ratings

Outcome

4.1 The PPAR rates the outcome of the project as satisfactory, sustainability as likely, and institutional development impact as substantial. The project objectives were both timely and relevant, even when emergencies occurred.

Civil Works

4.2 The physical targets were met or exceeded under very difficult circumstances and amply satisfied both efficiency and efficacy requirements. The project procured the civil works or temporary bridges in a manner that responded quickly to the emergencies caused by Gert and Mitch. The task team and the PCU successfully engaged the government's several agencies in these emergencies in order to promote sustainability of the civil works and the viability of the private sector.

Institutional Development Impact

- 4.3 The policy and institutional development components were also relevant and many were, as noted earlier, "ahead of their time." These polices were consistent with the country assistance strategy and emphasized competition and private sector development. The assessment of outcomes for institutional development must also be judged with a broader definition and understanding than could be shown with progress in the time since project closing.
- 4.4 The new road sector organization is consistent with modern thinking; there is a separation of policy and regulatory functions; training and technical assistance did result in increased local managerial capacity and entrepreneurship and modern road management tools were developed and taken into use. As indicated, there is, however, an unfinished agenda on institutional development and some policy actions were delayed. On the other hand the government maintains that there never was an intention to complete all the policy issues included in the Policy Statement during the project, but to study them in order to select and reach agreement on the best course of action at the "right" time. This contention is supported by the continuing government pursuit of both rail and port reforms, and its examination of options for urban transport.

Sustainability

4.5 Sustainability of the project's outputs and outcomes is likely. First, they are economically viable and there is a funding source for their maintenance either through the Road Fund or concessions. And second, they are consistent with international best practice and local conditions. Other aspects of sustainability of project's outcomes are equally important, e.g. increased local managerial capacity and adoption of viable management and business strategies by government administrators, as well as numerous qualified small enterprises capable of maintaining roads.

4.6 However, there is a remaining unfinished government agenda on institutional development that ultimately will have a bearing on sustainability. It is important that the Bank remains an active partner with the government to ensure continuation of the work begun in the urban transport, railway, and port sectors, and that the Bank observes the performance of the airport concession and cooperates with the government and the private sector if an intervention is deemed desirable. Continued attention and development is also needed to further consolidate the road sector organizations, and to clarify and strengthen the roles of the *owner*, *administrator*, *manager*, *and supplier*. Finally, much of the road sector's sustainability and development rests on the Road Fund. The road user charges that constitute the Road Fund income must be based on better studies and ideally be deposited directly to the Road Fund. To increase transparency in resource use it would be desirable that a Road Board be established to oversee the workings of the Road Fund.

Bank and Borrower Performance

- 4.7 Bank performance was satisfactory. This rating is supported by the project results and the discussion of the salient aspects of the project in the previous sections. Notable aspects of the task team's performance included, most obviously, its prompt and successful response to the damages of two hurricanes, but also its ability to retain the project objectives and keep the project together in the face of a devastating hurricane, to gain the cooperation and ownership of the new government for the project's objectives, and to maintain cost control and targets using project supervision despite external emergencies and political changes. Part of the satisfactory Bank performance is also the creation of sustained interest—if not prompt implementation—for policy and institutional issues at many levels of the government and the task team's ability to work seamlessly both with the PCU and the government entities.
- 4.8 Borrower performance was also satisfactory. The borrower fully "owned" the project from beginning to end, despite the change in administration that triggered a review of the project, slowed it down and delayed some policy actions. The borrower managed the civil works well, helped develop the private sector, coordinated with relevant interests, and its PCU was an effective spokesperson and coordinator among the affected interests in Honduras in respect of the project's social and economic impact.

5. Conclusions and Lessons Learned

5.1 It has already been indicated that the project objectives were and continue to be relevant. They were consistent with the views of both the old and new governments and enjoyed support from the worldwide professional community. The same applies for the general conceptual model that was promoted: greater private sector participation or outright privatization. However, in spite of this agreement, the measures for rail, ports, and urban transport are still evolving. For the road sector, a good institutional model emerged. It would appear then that the objective and the (mental) model, and even the process for achieving the objectives were spelled out in too great detail during

preparation when a less specific definition would have been more pertinent.² This detail was both time-consuming and costly and, in the end, was only partially followed. This leads to the following Lessons Learned:

13

- Good preparation is important, but must allow for a realistic time frame. For
 policy/institutional restructuring projects, it should set out the broad study
 direction and assist the borrower to take full ownership of the process, which
 should be fine-tuned as the project proceeds, with full input from the key sector
 players.
- The project preparation plan should include an assessment of possible risks. In the event that the project experiences internal and/or external shocks, necessitating institutional restructuring, such restructuring can best be expedited through a flexible approach and good supervision.
- Key elements of a project's policy and institutional development agenda may still be completed after a project's closing date if the project staff and consultants have nurtured an appropriate relationship for that agenda and remain engaged, if possible, beyond project closing.

^{2.} Again, this is observed in several other audited projects (Pakistan, PPAR No. 20123 Fourth Highway Project, Loan 2814-PAK; Transport Sector Project, Loan 3241-PAK; Karachi Port Modernization Project, Loan 3335-PAK; and Peru, PPAR No. 22474 Rural Roads Rehabilitation and Maintenance Project, Loan 3963-PE; even the results of a Bolivia project can be viewed in the same way, Bolivia PPAR No.19515: Export Corridors Project, Credit 2012-BO).

Annex A. Basic Data Sheet

TRANSPORT SECTOR REHABILITATION PROJECT (CREDIT 2458-HON)

Key Project Data (Amounts in US\$ million)

	Appraisal Estimate	Actual or current estimate	Actual as percent of Appraisal estimate
Total project costs	82.88	84.27	102%
Credit amount	85.00	85.00	100%

Staff Inputs (staff weeks)

	Actual Weeks	Actual US\$000	
Identification/Preparation	51.3	143.8	
Appraisal/Negotiation	51.0	141.3	
Supervision	132.9	384.2	
Completion	3.3	15.8	
Total	235.2	669.3	

Project Dates

	Original	Actual
Appraisal	-	06/29/92
Approval	-	02/16/93
Effectiveness	07/27/93	07/27/93
Closing	12/31/97	12/31/01

Mission Data

	Date	No. of		Specialization Performance rating**		
	(month/year	e) persons		mplementation Status	Development objectives	
Identification/ Preparation	1991-1992	4	TTL, HE, ENV, DO			
Appraisal/ Negotiation	June/July 1992	7	TTL,HE,PT,RL, Cons, ENV			
	December, 1992	4	TTL,HE,LA,DO			
Supervision						
•	May 1993	3	TTL, HE, IS	S	S	
	August 1993	4	TTL,HE,CA,PA	S	S	
	January 1994	3	HE,AV, FA	S	S	
	April 1994	2	HE, FA	S	S	
	October 1994	4	HE,TE,LA,WP	S	S	
	March 1995	1	HE	S	S	
	August 1995	2	HE, PR	S	S	
	January 1996	3	HE,AV, ENV	S	S	
	March 1997	1	HE	S	S	
	January 1998	2	TTL (HE), FA	S	S	
	May 1998	1	TTL (HE)	S	S	
	October 1998	4	TTL,FA, Cons, Cons	S	S	
	February 1999	3	TTL, HE, Cons	S	S	
	March 1999	6	TTL,HE,ENV,BR ,ME,RL	S	S	
	October 1999	2	TTL (HE), CE	S	S	
	February 2000	6	TTL,HE,FM,CE, DE,RL	S	S	
	August 2000	4	TTL,EC,HDM, ENV	S	S	
	January 2001	2	TTL (HE), RL	S	S	
ICR	June, 2001	1	FM			
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* TTL=Task Tea			ENV=Environmental	Specialist		
HE=Highway E	_		BR-Bridge Specialist			
IS=Institutional Specialist		RL=Railway Specialist				
CA=Civil Aviation Specialist		ME=Micro-enterprise Specialist				
PA=Project Assi			CE=Civil Engineer			
AV=Aviation Sp			DE=Drainage Enginee			
FA=Financial A	•		FM=Financial Manage	1		
TE=Transport E	ngineer		HDM=Highway Desig	gn Model Program Ext	реп	
LA=Lawyer	-4: C:-1: /		Cons=Consultant			
WP=Water Pollu			EC=Economist			
PR=Procuremen	it Specialist		PT=Port Specialist			

^{**}S = Satisfactory

Annex B. Borrower Comments



SECRETARIA DE ESTADO
EN EL DESPACHO DE
OBRAS PUBLICAS,
TRANSPORTE
Y VIVIENDA
"SOPTRAVI"
OFICIO NO. DM-00243

Comayaguela, M.D.C. Mayo 24 de 2004

Mr.

Alain Barbu

Manager Sector Thematic Evaluation Group
Operations Evaluation Department
World Bank, Washington, D.C. 20433

Dear Mr. Barbu:

SOPTRAVI has revised the draft of The Transport Sector Rehabilitation Project (Credit 2458-HO) and we agree in all parts contained on such draft.

The four objectives of the PPAR are well presented and wisely approached.

Sincerely yours,

Jorge G. Carranza D.

Ministro

Cc: Ing. Roberto A. Ordóñez W, Asesor Principal del Ministro

Cc: Ing. Roberto Atuán, Unidad Bco. Mundial

Cc: Archivo RAOW/anaq