

Document of
The World Bank

Report No: ICR1467

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IBRD-7230-ME)

ON A

LOAN

IN THE AMOUNT OF US\$108 MILLION

TO THE

NATIONAL BANK OF PUBLIC WORKS AND SERVICES (BANOBRAS)

WITH THE GUARANTEE OF THE UNITED MEXICAN STATES

FOR THE

DECENTRALIZED INFRASTRUCTURE REFORM AND DEVELOPMENT LOAN
PROJECT

June 28, 2010

Sustainable Development
Colombia and Mexico Country Management Unit
Latin America and the Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective – May 6, 2010)

Currency Unit = Mexican Peso (Mx\$)

Mx\$1.00 = US\$0.07826

US\$1.00 = Variable Mx\$12.7780

FISCAL YEAR

January 1 - December 31

ABBREVIATIONS AND ACRONYMS

BANOBRAS	National Bank of Public Works and Services
CAS	Country Assistance Strategy
CEAG	Guanajuato State Water Commission
COVEG	Housing Commission of the State of Guanajuato
ESMF	Environmental and Social Management Framework
ESU	Environmental and Social Unit
FM	Financial Management
FMR	Financial Monitoring Report
HDM4	Highway Development and Management Model
IBRD	International Bank for Reconstruction and Development
ICR	Implementation Completion Report
IEEG	Ecology Institute of the State of Guanajuato
IRR	Internal Rate of Return
ISR	Implementation Status Reports
IVEG	Housing Institute of the State of Guanajuato
KPI	Key Performance Indicator
LCR	Latin American and the Caribbean Region
MAGAS	<i>Manual de Gestión Ambiental y Social</i> (Environment and Social Manual)
MTR	Mid-term Review
Mx\$	Mexican Peso
M&E	Monitoring and Evaluation
NGO	Non-government Organization
NPV	Net Present Value
NWC	National Water Commission
OBD	Output-based Disbursement
OBDI	Output-based Disbursement Indicator
PAD	Project Appraisal Document
PDO	Project Development Objective
PRF	Project Result Framework
PREM	Poverty Reduction and Economic Management
PROSAVI	Housing Credits and Subsidies Special Program
PSR	Project Status Report
QAE	Quality at Entry
QSA	Quality of Supervision
SAS	<i>Subcomité Ambiental y Social</i> (Environment and Social Sub-Committee)
SDSH	Secretariat of Social and Human Development of the State of Guanajuato
SFA	Secretariat of Finance and Administration of the State of Guanajuato

SIL	Standard Investment Loan
SoG	State of Guanajuato
SOP	Secretariat of Public Works of the State of Guanajuato
SWAp	Sector Wide Approach
TA	Technical Assistance
TTL	Task Team Leader
UFW	Unaccounted-for Water
USA	United States of America
US\$	United States Dollar

Vice President:	Pamela Cox
Country Director:	Gloria M. Grandolini
Sector Manager:	Guang Zhe Chen
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MEXICO

DECENTRALIZED INFRASTRUCTURE REFORM AND DEVELOPMENT PROJECT

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A. Basic Information			
Country:	Mexico	Project Name:	MX -Decentralized Infrastructure Reform & Development Loan
Project ID:	P080149	L/C/TF Number(s):	IBRD-72300
ICR Date:		ICR Type:	Core ICR
Lending Instrument:	Specific Investment Loan (SIL)	Borrower: Sub-borrower:	BANOBRAS State of Guanajuato (SoG)
Original Total Commitment:	US\$108 million	Disbursed Amount:	US\$105.2
Environmental Category: FI-Financial Intermediary			
Borrower: <i>Banco Nacional de Obras y Servicios Públicos</i> , S.N.C. (BANOBRAS)			
Sub-borrower: State of Guanajuato (SoG)			
Implementing Agencies: The main implementing state agencies were: the Secretariat of Finance and Administration (SFA), the Water Commission (CEAG), the Housing Institute—which later became the Housing Commission (IVEG/COVEG) and Secretariat of Public Works (SOP).			
Co-financiers and Other External Partners: N.A.			

B. Key Dates				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	5/22/2002	Effectiveness:	n.a.	6/14/2005
Appraisal:	12/10/2003	Restructuring(s):		12/10/2008
Approval:	6/8/2004	Mid-term Review:	12/15/2006	10/23/2006
		Closing:	12/31/2008	12/31/2009

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Satisfactory
Risk to Development Outcome:	Moderate
Bank Performance:	Moderately Satisfactory
Borrower Performance	Moderately Satisfactory
Sub-borrower Performance:	Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	Ratings	Borrower	Ratings
Quality at Entry:	Moderately Unsatisfactory	BANOBRAS:	Moderately Satisfactory
Quality of Supervision:	Satisfactory	Sub-Borrower Agency/Agencies:	Satisfactory
Overall Bank Performance:	Moderately Satisfactory		

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	Indicators	QAG Assessments (if any)	Rating
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Satisfactory		

D. Sector and Theme Codes		
	Original	Actual
Sector Code (as % of total Bank financing)		
Roads and highways	40	40
Water supply	30	30
Housing finance and real estate markets	10	10
Housing construction	10	10
Sanitation	10	10
Theme Code (Primary/Secondary)		
Access to urban services and housing	24	24
Decentralization	25	25
Municipal governance and institution building	13	13
Other financial and private sector development	13	13
Rural services and infrastructure	25	25

E. Bank Staff		
Positions	At ICR	At Approval
Vice President:	Pamela Cox	David de Ferranti
Country Director:	Gloria M. Grandolini	Isabel M. Guerrero
Sector Manager:	Guang Zhe Chen	John Henry Stein
Project Team Leader:	Greg J. Browder	Krishna Challa
ICR Team Leader:	Greg J. Browder	
ICR Primary Authors:	Maria Cecilia Zanetta/Greg Browder	

F. Results Framework Analysis
Project Development Objectives (from Project Appraisal Document – PAD)
The Project Development Objective (PDO) defined in the Loan Agreement and Operational Manual is used for this ICR.
PDO: To improve the provision and performance of infrastructure services in the eligible state. In the case of State of Guanajuato (SoG) these included roads, water supply and sanitation, and low-income housing.
Revised Project Development Objectives (as approved by original approving authority)
The PDOs were not modified during the life of the loan.

(a) PDO Indicators

Indicator	Baseline Value	Original Target Values (from Approval Documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1	Increase in the share of the state road network, managed by the Secretariat of Public Works (<i>Secretaría de Obras Públicas – SOP</i>), that is in good or fair condition.			
Value quantitative or Qualitative	86% of the state's paved road network in good or fair condition (Based on IRI-Roughness Index)			86% of the state's paved network good or fair condition (Based on IRI-Roughness Index)
Date achieved	12/31/2005			12/31/2009
Comments (incl. % achievement)	Not Achieved. The percentage of the state paved road network in good or fair condition fluctuated between 92% and 86% during the course of the project, with both the baseline (2005) and the final (2009) value at 86%. This means that 14% of the roads were in poor condition. There was no formal target in the results monitoring framework. In general, the			

	road network in Guanajuato is considered to be stable and in reasonably good condition, and among the best in Mexico.			
Indicator 2	Increased use of water and sanitation services by consumers measured by the annual volume of accounted-for water in municipal capitals.			
Value quantitative or Qualitative)	129.6 million m ³	n.a.		171.5 million m ³
Date achieved	12/31/2005			12/31/2008
Comments (incl. % achievement)	Achieved: Although no specific target was specified at the time of project preparation, a substantial improvement was observed in the accounted-for water during the life of the project, from 129.6 to 171.5 million m ³ between 2005 and 2008—i.e., equivalent to a 32% increase. Access to water and sanitation services expanded substantially during the life of the project, positioning the SoG above the national averages in terms of both water and sanitation coverage in urban and rural areas.			
Indicator 3	State implements low-income housing program using clear eligibility criteria, supported by transparent subsidy instruments.			
Value quantitative or Qualitative)	IVEG's statute does not allow it to grant subsidies. Indirect subsidies are embedded in housing programs State transfers are the main source of IVEG's financing.			A new housing law was approved in 2008 that provides the foundations for a more sustainable low-income program IVEG has been replaced by the State Housing Commission (COVEG) However, the more robust policy framework has failed to translate into clear eligibility criteria or transparent subsidies.
Date achieved	12/31/2004			12/31/2009
Comments (incl. % achievement)	Not achieved: Progress was made toward the development of a low-income housing strategy. Its basic tenets are embedded in the Housing Law that was approved in 2008. Likewise, there were some improvements in COVEG's administrative capacity, including portfolio management, loan origination practices, and customer service. However, these improvements have not been sufficient to compensate for COVEG's lack of coherent long-term strategy and pro-poor focus, as well as its financial fragility and unsustainable financial practices. As a result, the agency's performance in terms of both production of low-income housing and targeting deteriorated substantially during the life of the project.			
Indicator 4	The SoG's fiduciary and safeguards procedures and systems, as well as access to information, have been improved.			
Value quantitative or Qualitative)	Environmental and social safeguards are applied mainly to physical investments with federal funding A new Access to Public Information Law is approved in September 2004 The State's 25-year development plan is developed using extensive consultations with			Environmental and social safeguards in place Ample consultation with civil society on the project Strong emphasis on enhancing access to public information

	civil society			
Date achieved	12/31/2004			12/31/2009
Comments (incl. % achievement)	Achieved: The operation succeeded in mainstreaming sound environmental and social safeguards in sector agencies—i.e., SOP, CEAG, and COVEG. It also supported the strengthening of the state's environmental agency IEEG, promoting a consistent approach across sectors. In addition, the project supported the considerable efforts to enhance governance on the part of state authorities. The implementation of an e-procurement system was initiated under the project, which will ensure consistency and transparency in procurement procedures across all state agencies.			

(b) Intermediate Output Indicators

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Roads				
Indicator 1 (*)	Share of road work program that has been derived using the HDM4 methodology for planning and maintenance decisions.			
Value (quantitative or Qualitative)	2,163.6 km of road inventory completed and road condition quantified in terms of roughness	2,240 km of road inventory completed and road condition quantified in terms of roughness		2,437 km of road inventory completed and road condition quantified in terms of roughness
Date achieved	12/31/2004			12/31/2009
Comments (incl. % achievement)	Achieved: In 2008, a total of 2,437 km of paved roads were included in the state's HDM4 system and road condition quantified in terms of roughness. The original target was amply exceeded, as an additional 273 km were added into the state's HDM4 system compared to the original target of 169 km. Between 2004 and 2009, the coverage of the HDM4 system increased from 82% to 86% of the total state's paved road network, as the kilometers of paved road incorporated into the system exceeded those of new paved roads. SOP's annual work program for conservation activities is derived using the HDM4 model. Guanajuato is the only state in Mexico that has a fully developed HDM4 system.			
Indicator 2	Increased productivity of water operators that serve more than 20,000 inhabitants as measured by the revenue/production ratio. ¹			
Value quantitative or Qualitative)	Mx\$3.93 per m ³ (average for the largest ten municipalities, excl. Leon)	64 increments in the revenue/production ratio (measured in terms of 10% intervals for each m ³ of water produced).		81 increments greater than 10% in the revenue/production of 24 water operators that received efficiency-related investments under the project
Date achieved	12/31/2004			12/31/2006

¹ The *revenue/production ratio* is a measure of efficiency that is defined as the ratio of total revenues collected per cubic meter of water produced. Thus, increases in the *revenue/production ratio* indicate improvements in commercial and physical management. This indicator was operationalized as follows: each 10 percent increase in this ratio obtained by individual water operators in municipalities with more than 20,000 inhabitants in a given year was considered as an increment. For example, if for a specific operator, this ratio increased from Mx\$4 per m³ in 2004 to Mx\$4.8 and Mx\$5.3 per m³ in 2005 and 2006, respectively, this increase was counted as three increments (i.e., two increments for 2004-2005 and one increment for 2005-2006).

Comments (incl. % achievement)	<p>Achieved: Actual achievements exceeded original targets by roughly 45%, as 81 annual increments greater than 10% in the revenue/production were achieved among the 24 water operators that received efficiency-related investments under the project between 2004 and 2006. Seven of these achieved two increments, while one of them achieved three increments during this period.</p> <p>Overall, the average revenue/production for the 36 municipalities with more than 20,000 inhabitants increased by 44 percent between 2005 and 2008—from Mx\$3.49/m³ to Mx\$5.03/m³.</p>			
Indicator 3	Increase in the percentage of the subsidies granted that are targeted to low-income households (i.e., targeting).			
Value quantitative or Qualitative)	79% of loans (i.e., 2,178 out of 2,765 loans) in IVEG's low-income housing programs were targeted to hhlds. with an income less than four times the minimum wage (VSM) in 2004			42% of loans (i.e., 1,557 out of 3,699 loans) in IVEG's low-income housing programs were targeted to hhlds. with an income less than four VSMS during 2006-2007 52% of IVEG/COVEG's loans were targeted to low-income hhlds. during 2008-2009
Date achieved	12/31/2004			12/31/2009
Comments (incl. % achievement)	<p>Not achieved: Targeting of IVEG's low-income housing programs deteriorated during the life of the loan, with the percentage of loans granted to low-income households (i.e., those with an income less than 4 times the minimum wage) decreasing from 79% in 2004 to 42% for 2006-2007—i.e., equivalent to almost a 50% reduction. Targeting improved slightly after the restructuring, as roughly 52% of the outputs under COVEG's loans were granted to low-income hhlds. during 2008 and 2009.</p>			
Indicator 4	Number of project implementation agencies that have in place systems and trained staff for procurement planning, financial management, implementation of environmental and social safeguards and consultation process.			
Value quantitative or Qualitative)	Little institutional capacity for environmental and social impact analysis and management within individual agencies Uneven application of environmental procedures for physical investments			Environmental and social units established in SOP, CEAG, and COVEG IEEG's institutional capacity strengthened A total of 516 physical investments subjected to environmental review under the project
Date achieved	12/31/2004			12/31/2009
Comments (incl. % achievement)	<p>Achieved: One of the project's most remarkable achievements was the substantial strengthening of institutional and technical capacity in environmental and social management of investment projects both within individual institutions and across sectors. As mentioned earlier, environmental and social units have been established in SOP, CEAG and IVEG/COVEG, with newly adopted environmental and social procedures being applied across each of the agencies. In addition, the institutional capacity of the state's environmental agency – IEEG was also substantially strengthened as a result of the project, as it played a central role coordinating the actions of the cross-sector committee responsible for environmental review of the physical investments supported under the project.</p>			

	A total of 516 physical investments were subjected to environmental review under the project, together with an additional 298 ones that, although not financed under the project, were also subjected to the same procedures. In addition, all executing agencies (which included some municipal water operators) received training in procurement. Consultation mechanisms were vigorously implemented, particularly at the project level and in the water and sanitation sector.
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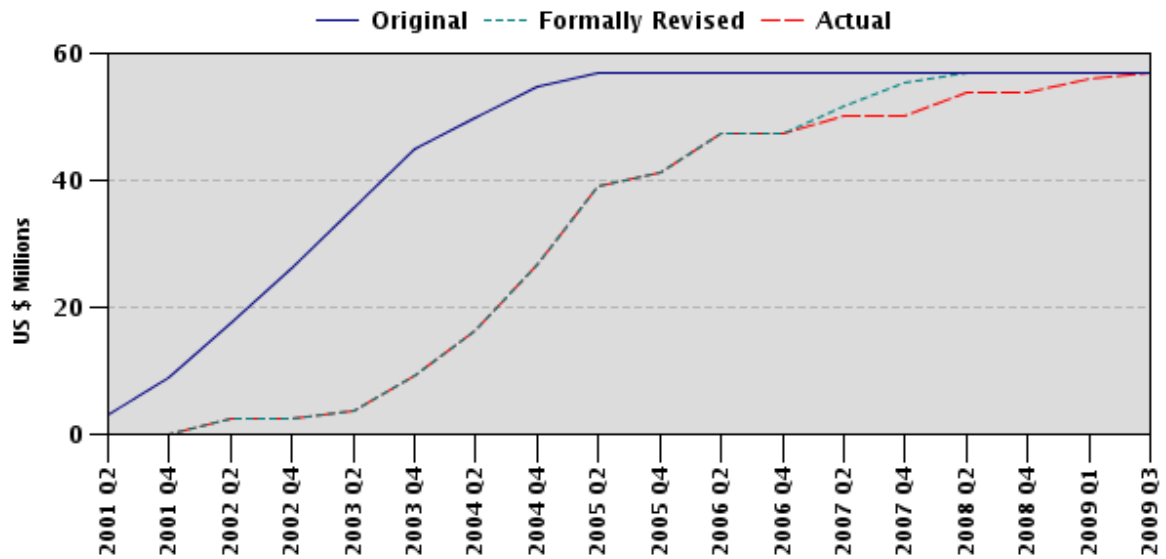
G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	12/03/2004	Satisfactory	Satisfactory	0.00
2	05/09/2005	Moderately Satisfactory	Moderately Satisfactory	0.00
3	01/04/2006	Moderately Satisfactory	Moderately Satisfactory	28.27
4	06/08/2006	Satisfactory	Satisfactory	28.27
5	06/30/2006	Satisfactory	Satisfactory	51.87
6	12/18/2006	Satisfactory	Satisfactory	51.87
7	06/04/2007	Satisfactory	Satisfactory	51.87
8	12/13/2007	Satisfactory	Satisfactory	61.12
9	06/20/2008	Satisfactory	Satisfactory	88.44
10	11/24/2008	Satisfactory	Satisfactory	88.44
11	05/28/2009	Satisfactory	Satisfactory	105.17
12	11/23/2009	Satisfactory	Satisfactory	105.17
13	12/22/2009	Satisfactory	Satisfactory	105.17

H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring (in US\$ million)	Reason for Restructuring & Key Changes Made
		DO	IP		
12/10/2008	N.A.	S	S	88.44	Restructuring of the housing component

I. Disbursement Graph



1. Project Context, Development Objectives and Design

1.1 Context at Appraisal

Mexico's constitutional amendments and corresponding legislation adopted in the 1990's aimed to firmly link the country's future economic and social development to a much more decentralized model in most economic and service sectors. However, the majority of the states still lacked the institutional and technical capacities needed to effectively undertake the responsibilities to be transferred to them and to formulate comprehensive economic and sector strategies to guide the decentralization process at the state level. Thus, ensuring that Mexican states had adequate capacities was a necessary condition to guarantee the success of Mexico's decentralization process.

In this context, Mexican authorities requested the Bank to provide support to the National Public Works Bank (*Banco Nacional de Obras y Servicios Públicos* - BANOBRAS) to develop a multi-sector infrastructure reform and development strategy program to support the implementation of comprehensive infrastructure reform and development strategies in Mexican states. The State of Guanajuato (SoG) was selected by Mexico's Secretariat of Finance and Public Credit (*Secretaría de Hacienda y Crédito Público* – SHCP) to be first state to participate in this program.

In order to facilitate sub-national investment lending in Mexico, the Bank worked with BANOBRAS to develop new mechanisms and modalities, which were incorporated into the project on a pilot basis, most prominent of which were:

- Financial intermediation through BANOBRAS which on-lent to Guanajuato
- Currency SWAP with BANOBRAS to lower overall peso lending costs to the state
- Sector wide approach (SWAp)
- Output based disbursement concepts
- Use of country safeguard systems that meet the spirit of the Bank's policies.

The project was considered a pilot, which operated at three levels: i) the first of a series of state investment programs with BANOBRAS (which did not materialize); ii) adopting Bank procedures and policies to fit the needs of an advanced middle-income country such as Mexico; and iii) working directly with a state government to address multiple sectors. Although this ICR recognizes the multiple implicit objectives of the project, the evaluation process is based upon the agreed-upon Project Results Framework (PRF) which focused mainly on sector performance for roads, water, and housing sectors in Guanajuato.

During loan preparation and negotiations, the dialogue was mainly between the Bank, BANOBRAS, and the SoG. The interaction with specific state implementing agencies was more limited. BANOBRAS, in turn, on-lent to the SoG under a subsidiary loan agreement. The project specific agreements in the IBRD-BANOBRAS loan were passed on to the SOG through an Operations Manual (OM), which was approved by the Bank. The OM formed part of the subsidiary agreement between BANOBRAS and SoG. Thus, for the state implementing agencies, the OM was the key project document.

1.2 Original Project Development Objectives (PDOs) and Key Performance Indicators

Project Development Objectives (PDOs) and Key Performance Indicators (KPIs)
Project Development Objective - PDO
<p>The Project Development Objective (PDO) was defined slightly differently in the PAD and in the Loan Agreement (LA). The Operations Manual (OM) adopted the PDO utilized in the LA.</p> <ul style="list-style-type: none">▪ PAD: To achieve sustainable investment levels and an efficient operation of the sector strategies for the following sectors: road transport, water supply and sanitation, and low-income housing, with enhanced basic services for the poorest population segments and financial sustainability.▪ Loan Agreement and OM: To improve the provision and performance of infrastructure services (i.e., roads, water supply and sanitation, and low-income housing) in the eligible state (i.e., the State of Guanajuato).
Key Performance Indicators
<p>The Project Result Framework (PRF) presented in the Loan Agreement and Operations Manual is utilized for this ICR.² There are four Outcome Indicators to assess the impact of the project after its completion, as well as several Intermediate Indicators for each of the project's four components. The project's <i>outcome indicators</i> are:</p> <ul style="list-style-type: none">▪ Increase in the share of the state road network managed by the Public Works Secretariat (<i>Secretaría de Obras Públicas – SOP</i>) that is in good and fair condition.▪ Increased use of water and sanitation services by consumers as measured by the volume of water sold in municipalities.▪ The housing institute (IVEG) implements low-income housing program using clear eligibility criteria, supported by transparent subsidy instruments.▪ State fiduciary and safeguard procedures and systems, as well as transparency and access to information, have been improved.

1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification

The original PDO remained unchanged during the life of the project. Two new Intermediate Indicators were added for the low-income housing component under the 2008 restructuring to reflect the modifications that were introduced at the time.

1.4 Main Beneficiaries

Primary Target Groups
<p>The project's beneficiaries were not explicitly identified at appraisal. However, based on the project's design, these can be defined as:</p> <ul style="list-style-type: none">▪ the participating state agencies, as a result of enhanced technical and institutional capacity; and▪ the state's population, as a result of improved and expanded service provision.

² The PRF in the PAD is significantly different than in the Loan Agreement/Operations Manual, indicating that the PAD PRF was not updated after negotiations.

1.5 Original Components (as approved)

Original Project Components
Component A - Implementing the Road Transport Sector Strategy Model <i>(US\$117 million, of which US\$59 million will be financed under the IBRD loan)</i>
This component provided support to the state's three-year sector strategy to improve overall performance of the road transport sector. It was structured into five sub-components: <ol style="list-style-type: none">1.1 Institutional strengthening of the State Public Works Secretariat (<i>Secretaría de Obras Públicas – SOP</i>);1.2 Expansion of the state's managed network;1.3 Improvement of bridges and elimination of bottlenecks;1.4 Pre-investment studies for construction of toll roads; and1.5 Improvement and construction of rural roads.
Component B – Implementing the Water Supply and Sanitation Sector Strategy <i>(US\$94 million, of which US\$38 million were to be financed under the IBRD loan)</i>
This component addressed the problems identified by the SoG in its water and sanitation service provision. It was structured into three sub-components: <ol style="list-style-type: none">2.1 Improve water resources management;2.2 Increase coverage of water supply and sanitation; and2.3 Institutional strengthening of the State Water Commission (<i>Comisión Estatal del Agua de Guanajuato - CEAG</i>) and support mechanisms to operators.
Component C – Implementing the Low-Income Housing Strategy <i>(US\$ 7 million to be financed under the IBRD loan)</i>
This component addressed the problems faced by the SoG in low-income housing provision. It was structured into two sub-components: <ol style="list-style-type: none">3.1 Institutional strengthening of the State Housing Agency (<i>Instituto de Vivienda del Estado de Guanajuato - IVEG</i>);3.2 Increase Loans for low-income families
Component D – Technical Assistance to Cross-Sector Areas <i>(US\$1.9 million of which US\$1.5 million were to be financed under the IBRD loan)</i>
This Technical Assistance (TA) component was included to strengthen cross-sectoral capabilities within the state to achieve full compliance with the Program's Operating Regulations. It was structured in five sub-components: <ol style="list-style-type: none">4.1 Strengthening of the mechanisms to screen, prioritize and monitor public investments;4.2 Strengthening of the existing consultation, participation and disclosure mechanisms;4.3 Enhancing the capacity of relevant state agencies and practices in the safeguard areas;4.4 Strengthening of procurement policies and practices; and4.5 Optimization of the existing financial management and audit systems and processes.

1.6 Revised Components

Revised Project Components
Only the housing component was formally revised through a restructuring in 2008. The program to promote housing loans for low-income families was dropped and a new activity was added to Component C: sites and services (<i>Lotes con Servicio</i>), which provided basic infrastructure (roads, power, water, etc.) for lots that were to be sold to low-income families to progressively build their houses on. In addition, an additional component was added as described below.
Component E – 'Piso Firme' Program <i>(US\$1 million will be financed under the IBRD loan)</i>
An additional component was introduced as part of the 2008 project restructuring. It provided support to low-income households through the provision of building materials to replace up to 50 m ² of dirt floors for cement floors. Although this activity supported the same low-income housing objective as Component C, a new component was added to facilitate project financial management by a new executing agency—i.e., the Human and Social Development Secretariat – SDSH.

1.7 Other significant changes

Loan Amendments

- **First loan amendment:** The Loan Agreement was amended to include municipalities and municipal water operators as executing agencies on Nov. 2006.
- **Second loan amendment:** The project's Loan Agreement was amended again on Dec. 2008 to reflect the modifications introduced during the restructuring of the project. Specifically, the project was restructured to address the low performance of the low-income component, by reallocating US\$1 million to a new component (Component E – ‘*Piso Firme*’ Program) and the balance of funds to a new sites-and-services program. Additional modifications included: i) extending the original closing date from 31 Dec. 2008 to 30 June 2009; ii) defining the utilization of originally unallocated funds; and iii) modifying the submission deadline for the quarterly Financial Monitoring Reports (FMRs).
- **Extension of closing date:** The closing date was extended a second time, from 30 June 2009, to 31 Dec. 2009 in May 2009.
- **Cancellation of funds:** In Feb. 2009, US\$2.83 million (equivalent to 2.6 percent of the original loan amount) that resulted from fluctuations in the exchange rate had to be cancelled because the loan amount was specified in Mx Pesos in the debt decree issued by the SoG's legislature.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry (QAE)

This ICR considers the operation's overall QAE rating to be Moderately Unsatisfactory. While the project's design included some valuable innovations, some of these innovations were not sufficiently developed and made implementation overly complex. Likewise, the scope of the project was too ambitious, particularly in view that it was a pilot experience and that there were multiple actors involved, including BANOBRAS and multiple state agencies. The main strengths and weaknesses in the project's design are summarized below. Section 2.4 addresses safeguard issues at both the preparation and implementation stages.

Assessment of Quality at Entry – QAE	
Strengths	<ul style="list-style-type: none"> ▪ Relevancy: The project was highly relevant, as it provided support to a state-level strategy for decentralized infrastructure development that was consistent with Mexico's overall decentralization strategy. The project also reflected the circumstances, priorities and capacities of the SoG and it supported its State Development Plan (<i>‘Plan Estatal de Desarrollo’</i>)—a long-term plan prepared on the basis of a far reaching consultation process. ▪ Consistency with CAS objectives: The 2005-2008 Country Assistance Strategy (CAS) discussed by the Board in April 15, 2004 identified decentralized development and working with sub-national governments as a priority. The CAS specifically pointed to the importance of capacity building, institutional strengthening, and community participation to improve the effectiveness of the decentralization process and the efficiency of sub-national expenditures, as well as of the use of country systems in financial management, procurement and other systems. This operation directly supported these priorities. ▪ Scaling-up potential: The operation was envisioned as the first step toward a broader World Bank program of state-level financial support through BANOBRAS. As noted earlier, decentralization of infrastructure planning and implementation from the federal to the state level was promoted in the 2005-2008 CAS. In addition, the CAS noted that the non-additionality of IBRD funding together with the ‘hassle factors’ associated to the Bank's lending (i.e., procurement rules, audits, and safeguard requirements) had made sectoral agencies reluctant to take Bank-financed loans. The Mexico Decentralized Infrastructure Program was originally designed to respond to these challenges by utilizing country fiduciary and safeguard systems, and engaging with state-level governments on a more programmatic basis with BANOBRAS. ▪ Sound state selection: The choice of the SoG to be the first state to participate in the program was a sound one. The SoG exhibited all the necessary conditions for success, including: creditworthiness, responsible fiscal management, sound sectors strategies in key sectors, and strong political support. ▪ Solid sector-work foundation: Project preparation built upon the sound sector work conducted by the Bank as part of the 2002 state-level Public Expenditure Review focusing on Guanajuato, which included one chapter on transport, water, and housing. The PER was well-done, and presented a sound diagnosis of the sectors included in the operation.
Weaknesses	<ul style="list-style-type: none"> ▪ Competing program and project focus: The focus on developing the broader World Bank-

BANOBRAS Program is obvious in the PAD, where the program aspects share equal attention with the specific Guanajuato project. This resulted in a complex and difficult to understand PAD, and probably contributed to the quality at entry problems for the project.

- **Overly ambitious scope:** The project included three infrastructure sectors, as well as several state-wide systems, including financial administration, procurement, public investments management, as well as participation and safeguards practices and procedures. The exceedingly ambitious scope of the project hindered the ability of the Bank's preparation and supervision teams to tackle each of these areas with the necessary depth. It also taxed the state's implementation capacity.
- **Weak M&E system:** As explained in further detail in Section 2.3, the project's design lacked a sound Project Result Framework (PRF) to systematically measure the impact of the project. The PRF included in the PAD focused mainly on the output-based benchmarks that were adopted for disbursements and did not include a robust set of outcome indicators to capture the project's overall impact at the sector level. Although a more developed PRF was included in the Loan Agreement, this weakness persisted throughout the life of the operation.
- **Operational complexity:** The project's operational aspects were complex with a four layer structure: i) multiple implementing agencies, ii) SoG's SFA as the state's coordinating body, iii) BANOBRAS, and iv) the World Bank. Procurement, financial management, and disbursement actions and approvals often needed to work their way up and down the four-layer ladder. The innovations described below, added an extra element of complexity. The operation's operational complexity imposed a substantial burden on the State as a whole and the individual participating agencies, which had no previous experience in working with the Bank.
- **Sector-wide approach (SWAp):** The program adopted a SWAp approach in the water and transport sectors. SWAps require an in-depth understanding of the sector, intensive policy dialogue with client, and a clear vision of sector development. In retrospect, it is now evident that, at the time of appraisal, the level of strategic coherence varied considerably among the two sectors. The state's water sector strategy was clearly defined by CEAG, with the operation providing support to its implementation. The transport sector, however, did not have an equally clear strategy, particularly with respect to the emphasis on maintenance and rehabilitation vis-à-vis the construction of new roads. The strategic focus did not sharpen during implementation, calling into question whether the transport component truly adopted a SWAp-type approach. On the positive side, the SWAp approach helped ensure that newly adopted safeguard procedures and systems were fully mainstreamed into these two sectors.
- **Output-based disbursements - OBDs:** Early on in the early preparation phase, the Bank task team advocated for the use of OBDs, which rely on national procurement procedures, as a way of streamlining project implementation and preparing the ground for the wholesale WB-BANOBRAS lending program. OBDs, theoretically, reflect key elements of the strategy being supported in each sector, thus, providing a flexible disbursement framework that emphasized outputs (i.e., service delivery) rather than inputs (i.e., works, goods and services). However, the OBD framework was cumbersome, failed to fully reflect sector strategic objectives, and resulted in a number of unintended consequences (see Section 2.3). In addition, the Bank regulations that were effective at the time prevented the implementation of the OBD framework, resulting in a hybrid approach that led to awkward administrative procedures (see Section 2.4).
- **Lack of a low-income housing sector strategy:** The intervention within the low-income housing sector was much more modest than in the other two sectors, including only support for institutional strengthening and low-income housing programs, with a total financing equivalent to less than 7 percent of the overall loan amount. However, even taking into consideration the relative smaller scale of the intervention, the Bank preparation team failed to fully identify: i) the institutional weakness of the state housing agency IVEG; ii) the severe inconsistencies in the existing legal framework that did not allow IVEG to grant explicit subsidies to the poor, which were central to the strategy supported under the project; iii) the lack of commitment to reform on the part of IVEG's authorities; and iv) the low priority assigned to the reform of the low-income housing sector by SoG authorities. These weaknesses at entry eventually hindered the implementation of this component and eventually required the project's restructuring.

2.2 Implementation

Project implementation was up to a slow start, with 12 months elapsing between the loan's Board approval and its effectiveness. Delays were partly the result of the complex approval procedures for the BANOBRAS-SoG subsidiary loan agreement. Once in motion, there were no significant external factors that affected project implementation. The relative stable political and macroeconomic environment that prevailed during the 2005-2008 was conducive to the project's implementation. Even in the face of the 2008-2009 world recession, state authorities maintained

their commitment to the sector strategies supported under the project and maintained adequate levels of funding. The project benefited from the sustained support of the state's authorities, even after a change in administration that took place in 2006. The initial design weakness, however, made implementation overly complex and required sustained efforts on the part of the Bank, BANOBRAS and SOG to overcome them.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

Monitoring and Evaluation (M&E)
Monitoring and Evaluation (M&E) Design
<p>The design of the operation's M&E system exhibited significant weaknesses, which eventually hindered its effectiveness to monitor and assess the project's intended impact.</p> <ul style="list-style-type: none"> ▪ Project Result Framework – PRF: As mentioned earlier, there were two different PRFs. <ul style="list-style-type: none"> ✓ PAD's PRF: The output-based benchmarks that were identified for disbursement purposes (OBDIs) were also designated as the project's main Outcome Indicators (OIs). These benchmarks were inadequate, as although there were some overlap between the two sets of indicators, there were also some important results not captured by the OBDIs. ✓ Loan Agreement's PRF: The PRF in the LA's side letter is different from the one in the PAD. It represents a considerable improvement relative to it, as it introduced OIs for each of the sectors. However, several weaknesses still remained, including: i) some of the outcome indicators lacked an operational definition, particularly those for low-income housing and cross-sector aspects); ii) specific target values and baselines were not defined; iii) intermediate indicators include both outcome and output indicators. <u>The PAD was not retrofitted to reflect the revised PRF and other subsequent modifications</u>, thus there are significant inconsistencies between the various project documents and the PAD became largely irrelevant. ▪ OBD Indicators: The PAD did not present a clear rationale of the OBDIs identified for the various sectors and most of them seemed to lack a meaningful definition. As in the case of the PRF, the OBD framework was further refined during the months preceding the signing of the Loan Agreement, which included a revised OBD framework.
Monitoring and Evaluation (M&E) Implementation
<ul style="list-style-type: none"> ▪ PRF: Monitoring of project outcomes was, at best, erratic. This was the result of the weaknesses in the original PRF as well as the complex implementation of the project, with multiple aspects competing for the attention of the supervision team. There were several initiatives within the individual sectors to modify the outcome indicators for the sector, but they were not implemented. During the Mid-Term Review the need to formally revise the PRF was identified and programmed for an anticipated project restructuring. Although some of the revised OIs were modified in the ISRs, they were never formally revised.³ Given that the project's restructuring took place toward the end of the life of the project, the decision was made to maintain the original PRF and to complement it with in-depth <i>ex-post</i> sector evaluations to be conducted by the SoG as part of the ICR preparation. ▪ OBD Indicators: Project's outputs were adequately monitored by the OBDIs. Not surprisingly, OBDIs became confused with OIs, inadvertently shifting attention away from the institutional and policy reforms supported under the project to focus mainly on outputs. The SoG understood that, by achieving their disbursement targets, they were reaching the Bank's understanding of the sector goals. The OBD framework was best utilized in the water and sanitation sector, as the OBDIs and unitary prices included in the Loan Agreement reflected the sector's strategic objectives of increasing residential coverage, increasing sewage treatment capacity, and enhancing efficiency of water operators. However, weaknesses and a general lack of understanding persisted in the housing and transport sector. In the case of the low-income housing component, OBDIs were based on the number of subsidies granted by IVEG, however, such disbursement category was not included in the Loan

³ ISRR No. 9 (June 2008) modifies the operational definition of the outcome indicator defined for water and sanitation. Specifically, the outcome indicator was 'increased use of water and sanitation by consumers.' As originally defined, it was measured by the volume of water sold in municipal capitals. The new definition—i.e., percentage of urban and rural population with water supply and sanitation services—constituted an improvement as it focused more precisely on expanded access to service in both rural and urban areas.

Agreement.

Monitoring and Evaluation (M&E) Utilization

- **PRF:** OIs were most useful in the transport sector, as the corresponding outcome indicator—i.e., the percentage of the state’s paved road network in good or fair condition—captured PDO performance for the sector in relation to conservation efforts. It was systematically monitored through the life of the project, serving as an effective pulse-taking tool for monitoring conservation efforts in an efficient and effective manner.
- **OBD Indicators:** The OBDs proved useful as a basic pulse-taking tool to assess progress toward implementation. In the case of the water in particular, they also served to introduce a sound set of incentives, as the choice of outputs and unitary prices was align to the sector’s strategic objectives of enhancing efficiency of water operators and expanding residential access and the capacity of treatment plants.

2.4 Safeguard and Fiduciary Compliance

The project adopted the country/state systems to assess, minimize and mitigate the environmental or social risks of each sub-component in the sector strategies. Although the safeguards-related legal and institutional frameworks and capacities in the various sectors were evaluated as part of the project’s appraisal, some weaknesses went undetected at the time and had to be addressed during implementation. The record of compliance with safeguards and fiduciary frameworks during the life of the project can be summarized as follows:

Safeguard and Fiduciary Compliance

Environmental and Social Safeguards

- **Country System Concept:** The adoption of country systems for safeguards was perhaps the most controversial aspect of the program design, giving rise to criticisms and special scrutiny from local and international non-government organizations. The intention was to facilitate a wholesale lending approach through the IBRD-BANOBRAS Program, and to use the Project to help build the social and environmental capacity of Guanajuato state agencies while at the same time materially meeting Bank safeguard policies. The Project was considered in a pilot in the use of Country Safeguard Systems within the Bank.
- **PAD Presentation:** The key instrument to guide the Program was the Environmental and Social Management Framework (ESMF) which is summarized in the PAD Annex 10 Part 1. The ESMF was to be applied to all participating states to determine the procedures for ensuring compliance with the World Bank’s safeguard policies. This generic ESMF was then applied to Guanajuato as the first pilot in the program. Part 2 of PAD Annex 10 contains the specific application of the ESMF to the Guanajuato project, and concludes that “SoG has a strong record of positive experiences in terms of demonstrating adequate implementation and enforcement of GoM laws; in many cases demonstrating beyond-compliance performance.” The PAD identified areas where there are discrepancies between the GoM legal framework and World Bank safeguard policy requirements, and identified actions for addressing these gaps by strengthening state agencies. The Bank would require prior review and approval of any necessary environmental, indigenous peoples, or resettlement assessments or plans (EA, RAP, IPDPs and TORS) for the highest risk subprojects--as defined by a rigorous screening methodology, and also undertake post-review of less risky projects.
- **Operational Manual:** The general structure of the ESMF was reproduced with more detail in the Operational Manual, which was the key document for the state agencies. Annex 2 of the Operational Manual contained the detailed “Environmental and Social Management Manual” (referred to as MAGAS per its Spanish acronym) which laid out the principles and procedures for dealing with safeguard issues. The institutional arrangements for implementing the MAGAS are clearly described: the Ecology Institute of the State of Guanajuato (IEEG) was responsible for overall leadership of the program, and SDSH for social management. All subprojects under the program were to be screened, categorized, and reviewed by a special committee referred to as Environmental and Social Subcommittee (SAS-Subcomité Ambiental and Social for its acronym in Spanish) headed by IIEG, with participation by SDSH, SOP, CEAG, and IVEG. With respect to resettlement issues, the OM was weak in the following aspects: i) there was no resettlement policy framework; ii) the OM focuses on physical displacement and does not address land acquisition; and iii) there were no clear reporting mechanisms for land acquisition. These

omissions in the MAGAS would later cause confusion and complicate supervision.

- **Environmental Management Implementation** The MAGAS proved to be a powerful instrument for guiding environmental management under the project and ensuring compliance with OP 4.01. With the exception of OP4.12, no other Bank safeguard policy was triggered. The SAS generally functioned well, projects were screened appropriately, and EAs were prepared and reviewed by the Bank as required. SAS was instrumental not only in ensuring compliance with MAGAS provisions, but also in fostering the adoption of more unified criteria across state agencies and cross-fertilization. The establishment of Environmental and Social Units (ESU) and mainstreaming of environmental and social safeguard procedures within each of the sector agencies is among the project's most significant outcomes. During the course of the project SAS screened approximately 548 projects, of which 18 required full-scale EAs which were reviewed by the Bank team. The Bank provided intense supervision and training on environmental management throughout the project, both through SAS and within the implementing agencies. Strengthening of the state environmental management system is among the project's most significant outcomes.
- **Land Acquisition and Resettlement:** The experience with resettlement and land acquisition (OP 4.12) was less straight forward. The responsibilities of the state agencies with respect to land acquisition and were not well defined in the MAGAS. SDSH did not play the leadership role in the SAS on social issues as originally envisioned. SOP was the only state agency involved in involuntary land acquisition, and was slow in incorporating social management into its activities. For Bank financed subprojects there was very limited physical resettlement, although there was significant small scale and partial land acquisition. In 2009, SOP provided a detailed account of all land acquisition activities financed with Bank funds. The report was prepared under the supervision of the Bank team and confirmed that all land was directly sold to SOP with no expropriation, and no problems were identified.⁴ In 2010 SOP conducted a comprehensive review and adopted new practices for the social management of its land acquisition and resettlement activities. The project played an important role in improving land acquisition and resettlement practices in SOP.

Financial Management – FM

- **Local currency lending:** The Bank entered into a currency swap on behalf of BANOBRAS, disbursing the loan proceeds in Mexican pesos to BANOBRAS, which, in turn, on-lent to Guanajuato. The repayment obligation for both BANOBRAS and the SoG is in Mexican pesos. Like all currency swaps, the transaction to eliminate currency risk resulted in a higher overall interest rate, which was passed on to BANOBRAS and then to SoG. In addition, currency fluctuations combined with rigidities in the loan agreement between the SoG and BANOBRAS and the corresponding approval by the SoG legislature⁵ required the cancellation of US\$2.8 million of the original loan agreement. Potentially, the original documents—state resolution and BANOBRAS-SOG lending agreement—could have been more flexibly

⁴ Only the subprojects in the road transport sector, which were implemented by the SOP, required involuntary land acquisition. The SOP implemented a total of 132 subprojects supported by FESI during the period 2005-2009, of which 128 subprojects were civil works and, of these, only eight required right of way acquisition (RAA) by the SOP. The eight subprojects requiring RRA affected a total of 174 lots, of which all but three lots were only partially affected, and there was no expropriation—all land was sold directly to SOP. Only two dwellings were affected, which were rebuilt on the residual land of the affected property. The 8 subprojects did not affect any structures used for business purposes (Zevallos, 2009).

⁵ In 2004, the SoG's congress passed a resolution authorizing a US\$108 million loan, in the equivalent amount of Mexican pesos, from the IBRD through BANOBRAS. In 2005, the SoG's legislature authorized a loan of Mx\$1,184,414,400 from BANOBRAS. Due to the devaluation of the Mexican currency in 2008, BANOBRAS requested a loan cancellation of US\$2,830,266, as it had already disbursed the full amount in pesos to Guanajuato. Although the front-end and commitment fees had been paid for the entire loan amount, SoG did not have access to the cancelled funds when it requested additional financing in 2009. It should be noted that BANOBRAS paid the front end fee and commitment charges for USD\$108 million World Bank loan, while SoG only paid the front end fees and commitment charges for the amount of the credit with BANOBRAS MXN \$1,184 million. According to the SoG, a new resolution from the SoG's legislature as well as a modification of the Guanajuato-BANOBRAS loan agreement would have been required to use the cancelled US\$2.8 million.

designed to minimize complications involved in exchange fluctuations and to allow the SoG to use the full US\$108 million in Bank financing.

- **Output-Based Disbursement Advances:** As originally envisioned, state agencies would utilize national procurement procedures and the Bank would disburse against the achievement of agreed-upon OBD outcomes. However, during later stages of project preparation, the task team became aware that the Bank did not have an OBD policy in place and that such disbursement mechanism would not be allowed under the bank procurement procedures. (Only in 2007 did the Bank formally adopt an OBD policy.) A late-stage compromise was therefore reached whereby the World Bank would make advance payments against specific outputs, and the eligible expenses would subsequently be verified with individual contracts procured in accordance with Bank procedures. The SoG was responsible for reconciling disbursements against both eligible expenses and the output-based disbursement indicators (OBDIs) that were defined in the Loan Agreement. This uneasy and inelegant compromise generated a whole set of complications, including cumbersome administrative procedures that put an unnecessary burden on executing agencies and both banks.
- **Financial management:** During the project's implementation, there were no significant issues related to financial management. The rating for Financial Management was satisfactory throughout the life of the project.

Procurement

- **National NCB Procurement Procedures:** NCB works and goods contracts were procured using Mexico's federal law and the Standard Bidding Documents agreed upon by the federal government and the Bank. This introduced an important element of country systems into the procurement process.
- **Procurement experience:** During the project's implementation, there were no significant issues related to procurement, except for the later inclusion of water operators and municipalities as executing agencies under the loan's first amendment. The rating for Procurement was satisfactory or moderately satisfactory throughout the life of the project.

Compliance with LA Covenants

There were no non-standard covenants in the LA.

2.5 Post-completion Operation/Next Phase

At the state level, the project's completion is not expected to have any particular budgetary impact on individual sectors given the non-additionality nature of the operation's financing at the sector level. Each sector, however, will face its own particular challenges in the post-completion phase. SOP will need to increase its budget allocation for periodic maintenance and continue to develop its capacity to use the HDM4 model as a planning tool. The municipal water utilities face challenges in sustaining the operation and maintenance of the new wastewater treatment plants, and CEAG will need to continue to promote management innovations and financing support for water quality improvements and groundwater management. COVEG faces the most challenging task in developing and implementing a new policy for low-income housing in Guanajuato.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

The project's objectives continue to be consistent with those of the State, as they support the State's long term development plan. They are also consistent with those of the federal government, as the decentralized approach to infrastructure management and development is still high in the national agenda. Its focus also remains aligned to the priorities of the Bank's Country Strategic Partnership 2008-2013 for Mexico, not only with regard to enhancing coverage, quality, and cost efficiency of basic services and infrastructure, strengthening the capacity of subnational government but also to ensuring environmental sustainability. In this area, the project's experience in the implementation of environmental safeguard procedures and systems at the state level, and the expansion in coverage of municipal wastewater treatment offer a potential model that could be replicated in other states.

3.2 Achievement of Project Development Objectives

PDO – Improve the provision and performance of infrastructure services (i.e., transport, water and sanitation, and low-income housing) in the State of Guanajuato.

Overall PDO achievement is considered to be satisfactory, although it varies among the various sectors, ranging from highly satisfactory in the water and sanitation sector to moderately unsatisfactory in the low-income housing sector. Performance in each sector can be summarized as follows:

a) Transport Sector

PDO achievement in the transport sector is deemed moderately satisfactory. At the start of the project SOP, like many public works agencies, was focused on new road construction with limited capacity for pavement management. SOP technical and institutional capacity improved substantially under the project in terms of pavement management and environmental and social safeguards, amply exceeding original expectations.

Although some progress has been made, SOP continues to exhibit an attenuating bias towards new works construction versus periodic maintenance activities. The economic analyses conducted at the preparation and ICR stages indicate that road maintenance generally has large economic returns, and should be a SOP priority. Periodic maintenance, which is the key to improving the road network, continuously increased over the course of the project. However, it appears that it was insufficient to demonstrably decrease the percentage of roads in poor conditions (14%). The overall assessment is that the condition of the network remained constant and is generally in good condition, in fact among the best among the Mexican states. Guanajuato is also the only state in Mexico that has a fully functional HDM4 system.

Although the transport component did not achieve its primary objective: increasing the percentage of roads in good or fair condition, the project promoted an increase in maintenance activities and provides SOP with the tools and knowledge for improving pavement management. In addition, the SoG was successful in rehabilitating 692 km of rural roads which has a strong poverty impact. Specific achievements can be summarized as follows:

PDO achievement in the transport sector

PDO – To improve the provision and performance of the road infrastructure in the State of Guanajuato

Expanded coverage

Increase in the state's paved road network – *Not a project indicator*

- The state's paved road network increased from 2,642 km in 2004 to 2,844 in 2008—equivalent to 7.6 percent increase.
- Although the expansion of the paved road network was not included in the PRF defined under the loan agreement, the PAD identifies specific—albeit inconsistent—targets: 600 km (pg. 8) and 300 km (pg. 32) of new roads. Actual increase was less than these targets—i.e., 201 km between 2004 and 2008.
- Most of the new construction has focused on urban improvements, such as bridges and by-passes.

Quality of service

Condition of the state network of paved roads – *Constant*

- The table below shows the condition of the state road network from 2005 through 2009. The condition of the state road network remained relatively stable with the percentage of roads in poor condition ranging from 9-14 percent throughout the life of the project. The overall road network is in reasonably

good condition. As a comparison, in 2010 in the United States the percentage of roads in poor, fair, and good condition was estimated at 10%, 35%, and 55% respectively, with wide variations between the states.⁶

	2005	2006	2007	2008	2009
Km in HDM4 System	2,300	2,354	2,372	2,437	2,437
Condition-Based on IRI					
Good < 3.0 IRI	32%	44%	37%	45%	42%
Fair: 3.0 - 4.5 IRI	54%	48%	49%	44%	44%
Poor > 4.5 IRI	14%	9%	14%	12%	14%

- As a result of the project, SOP now has the technical capacity and tools to adequately manage the maintenance of its paved network.
- Conditions of the state's paved network failed to improve due to the relative lower importance given to conservation activities vis-à-vis the construction of new roads in SOP's annual budgets. Between 2006 and 2009, conservation activities were allocated between 10 to 14 percent of SOP budget, although estimates based on the HMD4 model indicated that more than twice such budget was required to significantly improve the condition of the state's paved road network.
- Periodic maintenance, which is the key to improving the road network, continuously increased from 31 km in 2005 to 259 km in 2009. However, the total length of the network that received periodic maintenance was only 425 km, which is well below the target of 800 km at appraisal stage. Targets for small-scale routine maintenance (2,250 kms per year) and large-scale rehabilitation (31.8 kms during the project) were achieved.

Rehabilitation and construction of rural roads – *Achieved*

- A total of 692 km of rural roads were rehabilitated between 2005 and 2008, equivalent to roughly 114 percent of the original target of 608 km. Improved rural access has a strong poverty alleviation impact, given the higher concentration of poverty in rural areas. Rural road rehabilitation is undertaken through the Secretariat of Social and Human Development (SDSH) and not SOP.

Sounder environmental and social practices

Environmental and social safeguards – *Achieved*

- The substantial improvement of impact and social impact management within SOP was another important achievement under this component. Prior to the implementation of the project, only those transport projects receiving federal funding were subject to environmental impact assessment; and none were subject to social impact assessment. Under the project, an Environmental Coordination Unit (which oversees both environmental and social aspects) was permanently established within SOP, a Best Practices Manual of Environmental and Social Practices was developed and published, and SOP staff was trained. After the project, all SOP road projects are subject to environmental and social safeguards at various stages of the project cycle, according to the agency-wide procedures outlined in the Environmental and Social Management Manual that was published in 2009. SOP mobilized rather late on social issues related to land acquisition, despite repeated requests from the Bank. By the end of the project, however, SOP provided a full accounting of all land acquisition activities related to Bank financed contracts, and undertook a study on how to refine social management activities associated with land acquisition.

b) Water and Sanitation Sector

PDO achievement in the water and sanitation sector is deemed highly satisfactory: coverage of water and sanitation services has increased substantially over the life of the project; efficiency measures have continued; and enhanced environmental and social practices have been adopted. Project financing was highly instrumental in supporting the institutional strengthening

⁶ See Road Work Ahead (2010) by U.S. PIRG Education Fund, pg. 39.

components of CEAG's state-wide integrated water development plan. Specific achievements can be summarized as follows:

PDO achievement in water and sanitation

PDO – To improve the provision and performance of water and sanitation services in the State of Guanajuato
Expanded coverage
<p>Expanded water services – <i>Achieved</i></p> <ul style="list-style-type: none"> ▪ Access to water was expanded during the life of the project in both urban and rural areas. ▪ In urban areas, 115,523 people were provided with water connections during the life of the project, with the percentage of urban population with water connections increasing from 95.6 to 97 percent between 2005 and 2009. This is higher than the national coverage of 94.3 percent for water services in urban areas in 2008 (CONAGUA, 2008). ▪ In rural areas, 38,127 people were provided with access to a water source during the life of the project, with the percentage of rural population having access to a water source increasing from 84.2 to 84.8 percent between 2005 and 2009. This is higher than the national coverage of 76.8 percent for water services in rural areas in 2008 (CONAGUA, 2008).
<p>Expanded sanitation services – <i>Achieved</i></p> <ul style="list-style-type: none"> ▪ Access to sanitation services was expanded during the life of the project in both urban and rural areas. ▪ In urban areas, 135,507 people were provided with sanitation connections during the life of the project, with the percentage of urban population with sewage connections increasing from 96.8 to 98.8 percent between 2005 and 2009. This is slightly higher than the national coverage of 93.9 percent for sanitation services in urban areas in 2008 (CONAGUA, 2008). ▪ In rural areas, 40,219 people were provided with access to sanitation during the life of the project, with the percentage of rural population with access to sanitation increasing from 62 to 63.2 percent between 2005 and 2009. This is significantly than the national coverage of 61.8 percent for sanitation services in rural areas in 2008
<p>Annual volume of organic waste removed - <i>Achieved</i></p> <ul style="list-style-type: none"> ▪ The actual outcome was largely in line with the anticipated target, as in 2009 municipal treatment plants removed 12,717 kg of organic load compared to a target of 12,750 kg/year. Moreover, actual performance is expected to improve in the medium term, as only four of the nine additional treatment plants are currently operational. The five remaining plans are expected to remove an additional 9,271 kg of organic load once they are operational, exceeding the original target by over 60 percent. ▪ Guanajuato is among Mexico's top states in wastewater treatment coverage, averaging 68 percent in municipal capitals in 2008—i.e., almost twice the national average of 35 percent (CONAGUA, 2010).
Enhanced efficiency
<p>Improvement in physical efficiency – <i>Not a project indicator</i></p> <ul style="list-style-type: none"> ▪ Physical efficiency is defined as the ratio between water billed and water produced, and indicates the level of unaccounted-for water (UFW). This measure captures both physical losses, and commercial losses due to inefficient billing or illegal connections. Between 2005 and 2008, physical efficiency increased from 56.1 to 59.8 percent (i.e. indicating decreases in UFW from 43.9 percent to 40.2 percent) among the 46 municipalities in the state. Although this improvement is encouraging, UFW levels are still relatively high considering the degree of water scarcity and high cost of water production due to groundwater pumping costs in Guanajuato.
<p>Improvement in the revenue/production ratio of water operators - <i>Achieved</i></p> <ul style="list-style-type: none"> ▪ The revenue/production ratio is a measure of efficiency that is defined as the revenue collected per cubic meter of water produced. Between 2005 and 2008, the revenue/production for the 36 municipalities with more than 20,000 inhabitants increased by 44 percent—i.e., from Mx\$3.49/m³ to Mx\$5.03/m³. This increase indicates improvements in physical and commercial management, as well as higher tariff levels in many municipalities.
<p>Enhanced commercial management – <i>Not a project indicator</i></p> <ul style="list-style-type: none"> ▪ The ratio between payments in arrears/revenues decreased by 5.12 for the 36 municipalities with more than 20,000 inhabitants—from 17.7 percent to 12.6 percent between 2004 and 2006. ▪ The number of users in arrears also decreased by 7,203 during the same period—equivalent to a 4.7 percent reduction. ▪ Although the water billed increased by almost a third, from 129.6 to 171.5 million m³ between 2005 and 2008, the water produced in urban areas remained largely constant at 285 million m³ during the same period.

Improvement in the working ratio – *Not a project indicator*

- The working ratio is a measure of cost recovery that is defined as the ratio of total annual operational expenses to total annual pretax collections from billing and subsidies. Over the life of the project, the working ratio increased from roughly 0.91 in 2004 to 0.94 in 2008 for the 36 municipalities with more than 20,000 inhabitants. The increase in the working ratio indicates a negative trend, in which annual revenues are increasing at a slower pace than operating expenses despite substantial increases in electricity rates. The relatively high working ratio indicates that utilities are barely covering their operational costs, unable to cover investments costs, and remain in a financially precarious situation.

Increase in the unitary production cost of water – *Not a project indicator*

- The unitary production cost of water among the 46 municipalities in the state increased during the life of the project, from Mx\$5.2/m³ to Mx\$5.8/m³ between 2005 and 2008. Groundwater pumping costs are a major factor in the production of water, and increasing energy costs have a significant impact on the utility's financial situation.

Water resources management and planning

Improved water resources planning and management – *Not a project indicator*

- CEAG formulated a State Water Plan for the period 2006-2030 which provides the long-term framework for both water resources management and investments in hydraulic infrastructure, and water supply and sanitation.
- CEAG promoted "Water Culture Campaigns" that focused on viewing water and as important resource and also supported the formation of local groundwater management associations (*Quotas*) formed primarily by farmers.

Sounder environmental and social practices

Implementation of environmental and social safeguards: *Achieved*

The substantial improvement of impact and social impact management within CEAG was another important achievement under this component. Specific achievements include:

- CEAG's newly adopted Internal Procedures makes it now compulsory to conduct impact assessment studies for new physical investments in the water sector (e.g., alternative water sources, aquifer recovery).
- The new Internal Procedures also established the functions of the (newly created) General Directorate of Social Affairs, which is responsible for promoting citizen participation in relation to water issues, including reforestation and environmental recovery initiatives, and to attend to social conflicts around water and sanitation services.
- A Best Practices Manual for Environmental Management of Physical Investments in the Water and Sanitation was also developed and adopted under the project. This Manual provides consistent criteria for environmental management at different stages of the project cycle for the various institutional actors.
- Extensive training in environmental and social management was provided under the project.

c) Low-income Housing

PDO achievement in the low-income housing component is deemed moderately unsatisfactory. Some improvements were achieved during the life of the project. The most significant one was the approval of a new housing legislation in 2008, which replaced the existing State Housing Institute (IVEG) with a State Housing Commission (COVEG) and laid the grounds for a more robust policy framework. In addition, there were some improvements in administrative efficiency, including portfolio management, loan origination practices and customer service. Sounder environmental and social practices were also put in place. However, these improvements have failed to translate into expanded access to housing among the poor, as IVEG/COVEG's performance has deteriorated in terms of both output and targeting. Addressing the agency' financial fragility would still require substantial institutional and financial reengineering.

Disbursements under this component were almost nil between 2005 and 2008. The low-income housing component was restructured in 2008 due to its poor performance. It was retained at the request of the SoG to permit the Bank's continuous engagement in the ongoing policy dialogue around the new housing law and to demonstrate that the state was implementing some sound state housing programs targeted to the poor—i.e., a new sites-and-services program (*Lotes con*

Servicio) under COVEG and the ‘Piso Firme’ Program under the SDSH. Overall, the restructuring can be considered successful. The new Housing Law constitutes an improvement in the policy framework. Also, the revised targets, which were designed to ensure that IVEG/COVEG’s performance did not deteriorate any further, were achieved in terms of outputs. However, the financial innovations envisioned under the new sites-and-services program did not materialize. The assessment is based on the performance after the restructuring, as disbursements associated with the low-income housing component primarily took place during 2008 and 2009.

Specific achievements can be summarized as follows:

PDO achievement in low-income housing

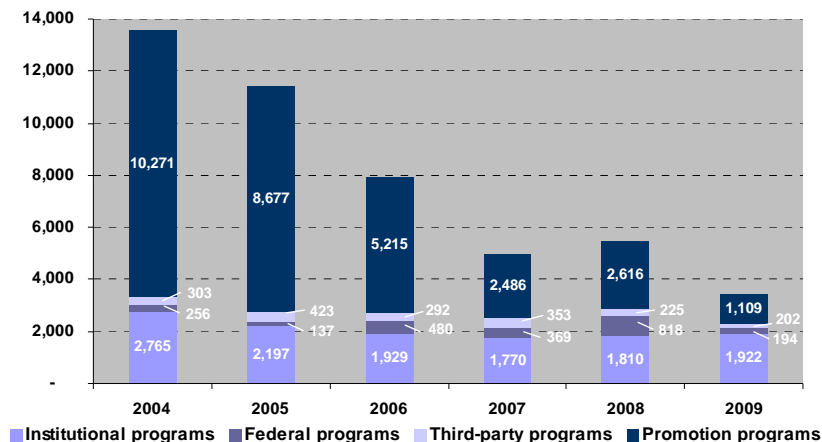
PDO – To improve the provision and performance of low-income housing services in the State of Guanajuato

Expanded production of low-income housing

Increased number of loans/subsidies- *Not achieved*

- IVEG/COVEG’s production decreased substantially over the life of the project. Its overall production—including own-source financing as well as federal and third-party funds—decreased from 13,595 housing solutions in 2004 to only 3,427 in 2009—i.e., equivalent to a 75 percent reduction (see Figure 2). The reduction in the number of loans/subsidies could, of course, be interpreted positively to the extent that it reflects a change in strategy to avoid crowding out private financing for segments of the population that do not require subsidies. In this case, however, it merely reflects the rapid deterioration of IVEG/COVEG’s financial position.

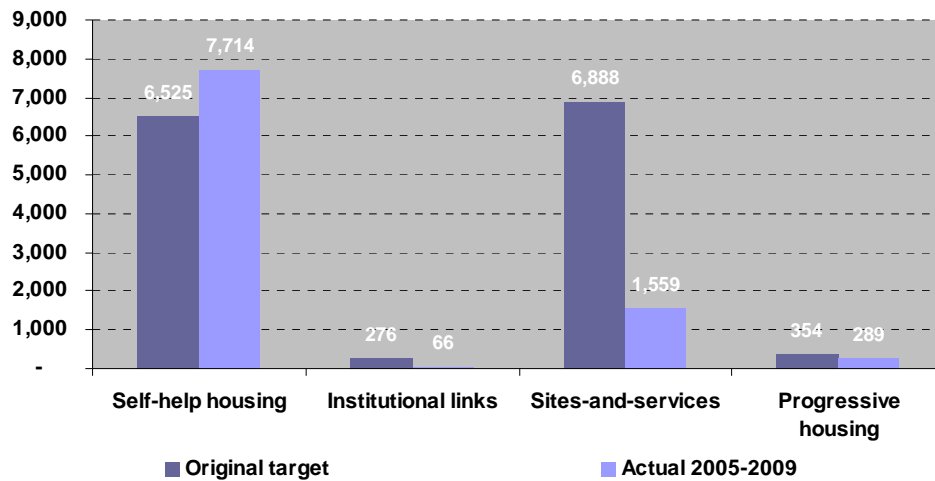
Figure 2. IVEG/COVEG’s overall production from own-source financing and other sources 2004-2009



Source: FESI - Performance Assessment of the Low-Income Component (Méndez, 2009)

- Outputs in the low-income housing programs targeted to households earning four or less minimum wages that were included under the project—i.e., self-help housing, institutional links (*Enganches Institucionales*), sites-and-services, and progressive housing—decreased from 2,765 in 2004 to 1,922 in 2009—i.e., equivalent to a 30 percent reduction. The drastic reduction in IVEG/COVEG’s output is the result of the institution’s poor financial and administrative practices, which became fully evident after the state stopped the annual transfers of funds for subsidized loans from 2003 onward.
- Actual outputs of individual low-income housing programs were well below the original target. Overall, the 2005-2009 outputs of IVEG’s housing programs included a total of 9,628 loans and housing units, compared to the 14,043 outputs originally envisioned—i.e., equivalent to 69 percent achievement. While the target was exceeded in the case of the self-help housing program, those for the progressive housing, sites-and-services, and institutional links programs were not met, with a level of achievement at 82 percent, 24 percent, and 23 percent, respectively (see Figure 3). As discussed below, only a fraction of these loans and housing units were reaching low-income households.

Figure 3. Actual outputs vs. original targets for selected low-income housing programs 2004-2009



Source: FESI - Performance Assessment of the Low-Income Component (Méndez, 2009)

- Targets revised during the 2008 restructuring were met. They were designed to ensure that IVEG/COVEG's performance did not deteriorate further during 2008 and 2009, as they reflected the already modest outputs corresponding to 2007. The downward trend was, in fact, reversed during 2008 and 2009, with annual outputs increasing by 2 percent and 9 percent with respect to 2007, when IVEG's outputs in terms of low-income housing loans/subsidies was at its worse (see trend for institutional programs on Figure 2).
- Additional targets introduced at restructuring were also met or exceeded in terms of outputs. However, the enhanced financial mechanisms that were anticipated for the sites-and-services program have not yet materialized.
 - ✓ The actual number of sites-and-services lots developed under the 'Lotes Con Servicio' Program exceeded the target defined at restructuring by 10 percent. Of the 769 lots that were developed, 187 have been already distributed among households with less than five times the minimum wage. Unfortunately, no financial intermediaries have so far participated in the financing of these lots as it was originally envisioned, partly as result of the shrinking in credit due to financial crisis in 2008. Instead, financing has been a mixed of federal and state subsidies, together with a loan from COVEG that includes a substantial implicit subsidies. Thus, although the physical targets were met, their financing reveals that some of the structural deficiencies in COVEG's financial practices remain unchanged.
 - ✓ The 'Piso Firme' Program was incorporated at restructuring at the request of the incoming state authorities. It provides concrete floors up to a maximum of 50 m2 for low-income households with dirt road. The target defined at restructuring was exceeded by 4 percent. The contribution of the project to the implementation of the 'Piso Firme' Program is rather small, as its amounts to only 4,685 of the 80,000 actions that were implemented under the program, which was administered by SDSH—i.e., equivalent to only 6 percent of the total output. The Piso Firme component was added to the Project to highlight the innovative work the SoG was undertaking to provide housing solutions to the poorest of the poor.

Enhanced effectiveness

Enhanced targeting – *Not achieved*

- Targeting of IVEG/COVEG's low-income housing programs deteriorated during the life of the loan, with the percentage of loans granted to low-income households (i.e., those with an income less than 4 times the minimum wage) decreasing from 79 percent in 2004 to 42 percent for 2006-2007—i.e., equivalent to almost a 50 percent reduction.
- Targeting improved slightly after the restructuring, as roughly 54 percent of the outputs under COVEG's low-income housing programs were granted to low-income households during 2008 and 2009.

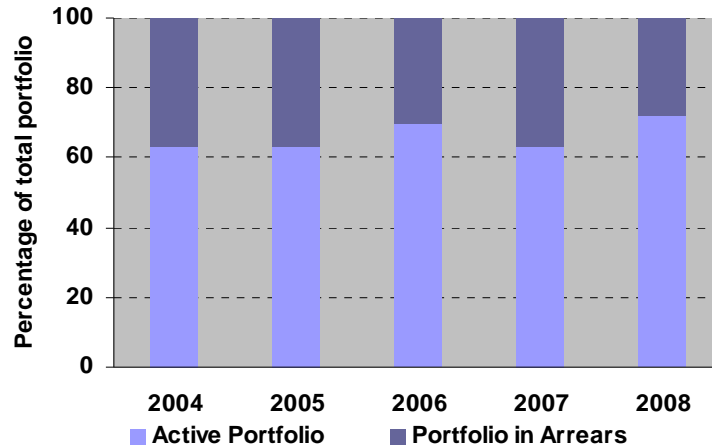
Enhanced efficiency

Improved portfolio management – *Not a project indicator*

- The proportion of the non-performing loans with respect to IVEG/COVEG's total portfolio decreased from

37.1 percent to 27.9 percent between 2004 and 2008—equivalent to a 25 percent reduction (see Figure 4).

Figure 4. IVEG/COVEG portfolio in arrears vs. total portfolio 2004-2009



Source: FESI - Performance Assessment of the Low-Income Component (Méndez, 2009)

- The percentage of non-performing loans with four or more installments in arrears decreased from 67 percent in 2004 to 9 percent in 2007—i.e., equivalent to roughly an 85 percent reduction.
- Unidentified payments decreased from Mx\$30 million in 2004 to Mx\$13 million in 2008—i.e., equivalent to roughly a 55 percent reduction.
- IVEG/COVEG's financial statements were externally reviewed for the first time in 2009.
- These improvements came as a result of a portfolio review and the depuration of IVEG/COVEG's databases, improved loan origination practices, the incorporation of new technologies, staff training and other actions that were supported under the project.
- There is still, however, considerable room for further improvement of COVEG's administrative efficiency, including targeting of subsidies, loan origination practices, cost recovery, and portfolio management.
- Customer service also improved substantially as result of the implementation of a one-stop service model (*'Ventanilla única'*) supported under the project.

Enhanced policy framework

Development and implementation of a long-term low-income housing strategy: *Partially achieved*

- Substantial progress was done toward the development of a low-income housing strategy. Its basic tenets are embedded in the new Housing Law that was approved in 2008, including: the promotion of private sector participation in low-income housing; aligning targeting strategies at the state and federal levels and explicitly recognizing COVEG's ability to grant subsidies to the poor; and establishing the state's housing information system.
- However, improvements in the policy framework have not yet been implemented. There is still much room for the improvement of COVEG's financial management, including making subsidies more transparent and promoting private sector participation.

Sounder environmental and social practices

Implementation of environmental and social safeguards: *Achieved*

Environmental and social impact management within IVEG/COVG has improved substantially as a result of the project. Specific achievements include:

- An Environmental and Social Unit (ESU) was established in 2009 and permanently inserted into COVEG's organizational structure in 2010.
- A Manual of Environmental and Social Best Practices for the Housing Sector published in 2010. The incorporation of environmental and social management procedures into COVEG's Internal Procedures is still pending.
- ESU staff received substantial training in environmental and social management.

d) Cross-Sector Institutional Strengthening

This component supported overall project PDO achievement by strengthening the state-wide environmental management system, improving procurement efficiency through establishment of a standardized e-procurement system, and promoting public participation and transparency. Efforts to improve state-wide strategic planning were less successful. The overall achievement rating for this component is deemed satisfactory. Specific achievements are summarized in detail in Annex 2.

e) Project Overall Achievement

The level of achievement varies among individual components, as follows: i) moderately satisfactory for Component A – Transport; ii) highly satisfactory for Component B – Water and Sanitation; iii) moderately unsatisfactory for Component C and E– Low-income Housing; and iv) satisfactory for Component D – Institutional Strengthening. The overall project achievement rating is considered satisfactory.

3.3 Efficiency

Efficiency
Economic Efficiency
<p>An economic analysis was conducted for the activities financed by Bank funds in the transport and water sectors, which represent 92 percent of the total loan amount. The economic analysis was not performed for the low-income sector given that: i) there were substantial hidden subsidies in the loans being granted by the state's housing authority that prevented from determining a clear cost structure, and; ii) the low-income sector represented roughly 4 percent of the total loan amount.</p> <p>The transport economic analysis consisted of using the HDM4 model to calculate the economic rate of return for 133 kms of roads that were subject to periodic maintenance (patching and overlays) or rehabilitation under the project. The 133 kms of road section were selected to be representative of the total of 425 kms of periodic maintenance financed under the project. The calculated economic rate of return was 97%, which shows the investments in road maintenance have an extremely high rate of return, and the activities financed under the project were economically viable. The main shortcoming of the overall transport program is that SOP did not invest enough, from a sector perspective, in periodic maintenance—the target value was 800 km. In addition to road maintenance activities, the project financed the construction/rehabilitation of approximately 21 bridges/overpasses. Due to time and resource constraints, the ICR did not conduct an economic analysis of these investments, but in general investments removing transportation bottlenecks, such as bridges, generally have high rates of return.</p> <p>The economic evaluation for the water component consisted of estimating the health and welfare benefits of an expansion in water supply and sanitation services, and yielded an estimated an economic rate of return of 25%. Unlike the transport investments, it is generally much more difficult to accurately estimate benefits of expanded water and sanitation services, so the 25% rate of return for the water component should interpreted as an indicative result. More importantly, it is the responsibility of the government to ensure adequate water and sanitation services. Water supply coverage in Guanajuato is 97% in urban areas and 85% in rural areas; the corresponding figures for sanitation are 99% and 63%. CEAG consistently adopted a the least cost approach for improving and expanding water and sanitation services, by working with municipal operators to develop strategic investment plans that prioritized investments to ensure efficient investments.</p> <p>Based on the partial economic evaluation of the project and the rapid implementation of the transport and water components, the overall efficiency is considered substantial.</p>
Financial Rate of Return
The project's financial rate of return was not estimated at appraisal.

3.4 Justification of Overall Outcome Rating

Overall Outcome Rating

Rating: Satisfactory

The operation has effectively supported the development and/or implementation of key sector strategies in the SoG. Achievements are particularly noteworthy in the case of the water and sanitation sector, where the project provided support to the state-wide development plan of the state's water agency: coverage of water and sanitation services was expanded substantially in urban and rural areas, commercial and physical efficiency was enhanced among water operators that implemented institutional strengthening plans under the program, and overall technical and institutional capacity was enhanced in both CEAG and municipal water operators.

Sector performance also improved in the transportation sector, in which the network of the state's paved roads increased and SOP also increased its periodic maintenance activities—although not at a pace sufficient to demonstrably decrease the percentage of roads in poor condition. The road network in Guanajuato, however, is in reasonably good shape with only 14% of the roads considered in poor condition—among the highest in Mexico. SOP's technical capacity in the area of pavement management and planning also improved substantially under the project, and Guanajuato is the first state in Mexico to have a functional HDM4 model.

Achievements in the low-income housing sector are modest. While the policy framework is now much more robust after the passage of a new housing law in 2008, the performance state's housing agency COVEG deteriorated substantially over the life of the project in terms of both coverage and targeting. While there were some modest improvements in portfolio management and loan origination practices, major reforms are still needed in the housing sector, particularly in terms of making subsidies explicit and enhancing their targeting.

The implementation and mainstreaming of environmental and social safeguard procedures in the three participating sector agencies—i.e., CEAG, SOP and COVEG—as well as the strengthening of the state's environmental agency IEEG and the state-wide environmental management framework, also figures prominently among the operation's main achievements. Introduction of a state-wide e-procurement system helped to improve efficiency and promote transparency.

The overall rating for the project is a combination of relevance (high), achievement (satisfactory), and efficiency (substantial), and is deemed to be satisfactory. Based upon the achievement variable for each component, financing percentages, and using the scale listed below, the overall achievement rating is calculated as 4.7, which is closer to Satisfactory than Moderately Satisfactory.

ICR Scale Per Guidelines

Highly Unsatisfactory	Unsatisfactory	Moderately Unsatisfactory	Moderately Satisfactory	Satisfactory	Highly Satisfactory
1	2	3	4	5	6

	Rating		Loan		Weighted
		Value	Amount	%	Rating Value
Roads	MS	4	59.2	56.2%	2.2
Water and sanitation	HS	6	38.2	36.3%	2.2
Low-income housing	MU	3	4.3	4.1%	0.1
Institutional Development	S	5	3.6	3.4%	0.2
Overall	S		105.2	100.0%	4.7

As stressed at the ICR workshop, the Project's greatest impact is related to institutional development. There

were important advances with respect to strengthening the state's public administration system, particularly with respect to environmental and social management, and procurement. In many Bank-financed projects, infrastructure may be constructed, but progress on institutional development is often less advanced. In this Project, institutional development was significant and remarkable, particularly given the initial design complications and demanding coordination requirements. The institutional development achievements reinforce the overall rating of Satisfactory and reflect the view that, in this case, the overall Project impact is greater than the mere sum of the component parts.

3.5 Overarching Themes, Other Outcomes and Impacts

Overarching Themes, Other Outcomes and Impacts

a) Poverty impacts, gender aspects, and social development

Poverty impacts: The operation adopted an indirect targeting approach in the transport and water and sanitation sectors, and direct targeting of low-income beneficiaries in the case of housing.

- **Roads:** Improved rural access has a strong poverty alleviation impact, given the higher concentration of poverty in rural areas. In 2000, 67 percent of the rural population was below the poverty line compared to 33 percent for the urban population.

- **Water and sanitation:** Those living in poor neighborhoods are the likely beneficiaries of expanded access to water and sanitation in urban areas.

By expanding access to water and sanitation services in rural areas, the project is also likely to have had a strong poverty alleviation impact. Access to water and sanitation services in rural areas is roughly half that of urban areas—i.e., only 42 percent of the rural population has access to water supply and 35 percent has access to sanitation services, while 78 percent of the urban population has water and sanitation connections. Roughly one-fourth of expanded access to water and sanitation services during the life of the project was in rural areas. Although this percentage is below the rural share of the state's population—33 percent in 2000—the stronger emphasis on urban services can be justified on efficiency basis (i.e., lower unitary costs in water services), public health concerns, and the sheer numbers of poor urban dwellers. It is also worth noting that access to water and sanitation services in rural areas is higher in the SoG than for the country as a whole—i.e., 84.8 vs. 76.8 percent for access to water and 63.2 vs. 61.8 percent for access to sanitation.

- **Low-income housing:** In the short and medium term, the project had little impact in improving access to housing among the poor, as there were no increases in COVEG's production of low-income housing and its targeting to low-income beneficiaries did not improve. The enhanced policy framework and administrative practices supported under the project set the ground for potential improvements in the long run.

The 'Piso Firme' program implemented by the SDSH has multiple proved benefits, including major health improvement among the beneficiary population, children in particular. However, it is difficult to attribute these benefits to the project given its small share of the overall program output.

Gender aspects: The operation can be expected to have had a particular impact on women and children, to the extent that these groups are often responsible for water collection in the absence of a water connection.

Social development: The operation provided support to the state's efforts to enhance transparency, participation, and access to information. These efforts were crucial in addressing the concerns of some NGOs regarding the adoption of country systems. Specific actions in this area included:

- Intense consultation with civil society through consultation processes that involved more than 30 NGOs, academicians, and representatives from government-organized consultative bodies. These consultations were very successful in eliciting community input on the consultations strategy around FESI, access to information strategy and the ESMF.
- The implementation of a web portal that provided public access to information related to the project identified in conjunction with civil organizations.
- The SDSH undertook an ambitious survey to measure the customer's satisfaction services provided by state agencies. Data from this study will be used as the baseline for comparison with future surveys.

(b) Institutional change and strengthening

The project had a substantial impact on capacity building and institutional strengthening, including:

- **Roads:** The implementation of the HMD4 multi-year pavement management model was an important achievement under this component. While the initial development of the state's HDM4 system was initially contracted out to the University of Guanajuato, the HDM4 system is being managed and operated within SOP by technical staff that has been trained and permanently hired for that purpose. Annual budget requests for conservation activities are now based on the HMD4 model. SOP has assigned the budgetary resources needed to continue to strength HMD4 model and its coverage. By 2008, 84 percent of the total state's paved road network was included in the model.

- Water and sanitation: The operation provided support to CEAG's efforts to enhance efficiency among water operators, with roughly a third of them implementing institutional strengthening plans aimed at enhancing the physical, commercial, and overall efficiency. The operation also supported actions aimed at enhancing the management of water resources, including: developing an integrated water management system, improving the efficiency in measurement of hydrologic cycles, and fostering more participative forms of water management. For example, CEAG has supported the creation of Water and Sanitation Committees that have an important say in water management issues. Likewise, to address rural communities' water and sanitation needs in a sustainable manner, CEAG has provided technical and social support to the creation of Rural Water Boards, which are community organizations in charge of the system. Finally, CEAG itself was significantly strengthened under the operation, in areas such as staff training, cross-fertilization activities, tariff design, and the development of a water and sanitation information systems. It also helped build up capacity in municipalities and municipal water operators.
- Low-income housing: The project contributed to the policy discussion that eventually led to the approval of the new housing law in 2008, emphasizing the need to improve the agency's targeting and define a transparent subsidy strategy. The operation was also instrumental in supporting improvements in portfolio management.
- Safeguards: As mentioned earlier, the operation had a substantial impact in mainstreaming environmental and social safeguard procedures in SOP and CEAG, as well as COVEG. Likewise, the operation supported the institutional strengthening of the state environmental agency (*Instituto de Ecología del Estado de Guanajuato – IEEG*), helping to enhance environmental safeguards procedures and implement them in a consistent manner at the state level.
- Transversal systems: The operation also provided support to the further development of the state's e-procurement system, public investment evaluation and prioritization, and multi-year planning. In these areas, however, the Bank's support was mainly financial, with limited TA.

c) Pilot Project To Test New Bank Procedures and Mechanisms for Sub-national Lending

The following key new approaches were tested under the project, and their results are summarized as follows:

- Currency SWAP: Before the project, Bank dollar funds for subnational loans would be transferred to the Federal Government (through FOAEM), which would then convert to pesos and on-lend to BANOBRAS at significantly higher rate. BANOBRAS would then add on a commission to the sub-national entity. The end result was a much higher cost of financing for the sub-national entity making Bank loans uncompetitive. The currency SWAP, the first in Mexico, helped address this issue.
- Output Based Disbursement: The original project concept called for the state to use its own procurement procedures and Bank disbursement would be based on outputs. This proved infeasible under Bank policies, and therefore an alternative mechanism was developed whereby the Bank provided advances based on outputs, but the State still needed to follow Bank procurement procedures and reconcile advances with eligible expenses. To some extent, this facilitated financial management for BANOBRAS and SoG, which did not have to quickly document eligible expenses. The disbursement indicators used for advances were not very useful for measuring sector performance.
- Country Safeguard Systems: The approach for environmental management developed under the project proved to be highly successful in strengthening the state environmental management system while meeting the requirements of the Bank's safeguard policies. With respect to land acquisition, the decision was made to avoid using Bank finance for projects which involved household resettlement, and limit financing to road projects with only partial land acquisition. SOP implemented the land acquisition in compliance with Mexican law and without any identified problems, and improved its social management practices. It is unclear whether the country system approach would have been able to deal with complex resettlement activities and still meet the letter and spirit of the Bank's resettlement policy (OP 4.12).
- Sector-Wide Assistance Programs(s): As noted in this ICR, this approach was successfully applied to the water component, but was less successful for the transport and housing components—mainly because of original project design flaws.

Pilot Project for a World Bank-BANOBRAS national program to support Mexican States

- The Guanajuato project was the first and only project under the World Bank-BANOBRAS' Program, and the approach has not been replicated in other states. Although there are many potential reasons for the lack of additional projects, two factors are particularly important: i) World Bank-BANOBRAS financing has not been particularly attractive or competitive given other funding options; and ii) the added complexity of working with two large and bureaucratic institutions such as the World Bank and BANOBRAS. The mechanisms discussed in point c above, were generally not adequate to streamline implementation and avoid additional client transaction costs.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

A stakeholder workshop was held on June 15-16, 2010 and the agenda and list of participants is presented in Annex 6. Approximately 50 people attended the two-day event, including high level representatives from BANOBRAS and the SoG, as well as representatives from each of the participating state agencies.

Each of the World Bank sector specialists presented the ICR findings from a sectoral perspective, and the Bank ICR consultant (Cecila Zanetta) presented the overall assessment. The SoG played an important role in the evaluation process by contracting its own consultants to prepare an analysis of each sector, as well as an overall Project evaluation. The SoG consultants responsible for the overall evaluation (*Grupo Espacio Siete*) also presented their results at the workshop.

The general consensus was that the Project was highly successful, particularly with respect to institutional development. BANOBRAS, the SoG, and the sector agencies strongly felt that the most important legacy and accomplishment of the project was strengthening the state's public administration system, particularly with respect to environmental and social management, procurement, policy formulation, and planning. In addition, the SoG was able to overcome the initial design complications—engineered primarily by the World Bank and BANOBRAS, and transition to a new State administration in 2006, while at the same time consistently improving Project performance. The SoG evaluation consultant, Grupo Espacio Siete, indicated that they will evaluate the Project as a clear success with many advances and lessons learned.

During discussions it was pointed out that specific roles for the World Bank and BANOBRAS were not clearly defined up-front and this generated some confusion and false expectations during implementation, particularly with respect to the level of sectoral technical assistance that BANOBRAS could provide. Based upon the workshop discussions, both BANOBRAS and SoG presented the final versions of their comments on June 18, 2010 which are presented in Annex 7.

4. Assessment of Risk to Development Outcome

Factors Affecting the Sustainability of the Project's Achievements

Rating: Moderate

The achievements of the project are likely to be sustained in the medium and long terms. Several factors contribute to their sustainability, while other factors introduce some level of uncertainty, including:

- **Transport – Moderate risk**
Achievements in institutional strengthening in network management utilizing the HMD4 model and environmental and social safeguards procedures are likely to be maintained. These areas are staffed with well qualified, permanent SOP personnel. Achievements in terms of ensuring adequate levels of maintenance of the state's paved network are more uncertain, as SOP authorities tend to under-allocate resources for conservation activities, periodic maintenance and rehabilitation in particular.
- **Water and sanitation – Moderate risk**
Achievements in the water and sanitation component are likely to be maintained, as they are clearly aligned to CEAG's own vision of the sector, as reflected in the agency's state-wide hydraulic plan for 2006-2012 (i.e., *Plan Estatal Hidráulico de Guanajuato 2006-2012*) and are fully consistent with the Water Law enacted in 2000. The main barrier to further enhancing institutional capacity of both CEAG's and municipal water operators is the agency's limited access to discretionary funds that could be used for institutional strengthening activities. At the local level, although municipal water companies have generally improved their operational and financial performance during the project, many of them still remain in a precarious financial condition and have significant scope to improve performance. The additional responsibility of collecting, transferring, treating and disposing of municipal wastewater will impose additional burdens that will require enhanced performance.
- **Low-income housing – High to substantial**

Although progress was made toward the development of a low-income housing strategy, particularly in terms of the approval the new housing law, its actual implementation in the short and medium terms is unlikely. Substantial reengineering of COVEG's financial and administrative practices is still pending and COVEG authorities have not yet demonstrated a strong commitment toward the adoption and implementation of a transparent subsidy strategy.

- **State-Level Institutional strengthening – Low to moderate risk**
Enhanced transparency in terms of access to public information as well as consultation mechanisms is likely to be sustained during the current administration, as it is largely the result of the state authorities' own commitment to the principles of good governance. The same is true for efforts to enhance financial administration, e-procurement, and multi-year planning efforts, which have strong ownership of the corresponding agencies.
- **Environmental and social safeguards – Moderate risk**
Achievements in terms of environmental and social safeguard procedures in SOP, CEAG and COVEG are likely to be maintained, as the Environmental and Social Units (ESUs) have been permanently inserted into their organizational structure and procedures have been mainstreamed. In the case of environmental aspects, IEEG is likely to continue to play an enhanced role in ensuring sector-wide compliance with existing state and federal environmental regulations. There is, however, more uncertainty that a state-wide approach would be continued in the case of social safeguards, as supporting legislation is less robust, particularly at the state level, and the SDSH is less likely to play a proactive role in this area.

5. Assessment of Bank and Borrower Performance

Bank's Performance

a. Bank's Performance in Ensuring Quality at Entry

Rating: Moderately Unsatisfactory

- The performance of the Bank in assisting the Borrower in identifying, preparing and appraising the operation is deemed *moderately unsatisfactory*. The project's design was highly innovative—perhaps in excess—and its scope was overly ambitious, thus resulting in design weaknesses that translated into a highly complex implementation process. Although the preparation effort built upon the solid sector work provided by the 2002 Public Expenditures Review, the Project Appraisal Document (PAD) did not succeed in identifying some of the key sector issues and risks, particularly in low-income housing. The PAD and Operational Manual did not provide clear guidance on land acquisition issues which would later complicate supervision. Likewise, there were inconsistencies within the PAD and the Loan Agreement in terms of the Results Framework, which, together complicated project monitoring and supervision. Finally, some of the original project innovations, such as output based disbursement and use of country safeguard systems, were not fully aligned with Bank policies and needed to be tweaked during project preparation. The decision to promote an innovative project that pushed the boundaries of Bank-wide policies was supported by regional LAC management and was not the sole initiative of the task team.
- Considering the high visibility of the project as a pilot experience in the utilization of country systems and its potential replication in other Mexican states, a tighter quality control at entry was warranted.

b. Quality of Supervision

Rating: Satisfactory

- The project was well supervised, with regular field missions and in-depth supervision reports. Sector managers followed project implementation closely, as reflected by their detailed comments in ISRs and PSRs. A wide array of specialists was included in the supervision missions, contributing valuable expertise and TA on environmental and social safeguards, communications and civil engagement, financial management, and procurement. A strong emphasis on safeguards was sustained throughout the life of the project and, whenever potential weaknesses were detected, they were addressed swiftly and in depth. The Bank made a sustained effort to develop an information framework that would ensure transparency and to engage the civil society in consultation processes, including NGOs that were critical of the project.
- The project's supervision was expensive. Given the project's high visibility as a pilot experience in the implementation of country systems, management agreed that the supervision team had to give priority to the supervision needs over budgetary considerations.
- Despite the substantial allocation of supervision resources, including quality Bank staff, the project's supervision remained a challenge as a result of several factors, including: i) original weaknesses in the project's design, which eventually translated into implementation obstacles; ii) the broad scope of the

project, which involved three infrastructure sectors as well as several state-wide systems; iii) the exceptional depth of supervision needs that resulted from the adoption of a SWAp approach and the utilization of country systems; and iv) the added operational complexity that resulted from having multiple executing agencies and a financial intermediary. The latter is particularly important if the Bank is to continue to work with BANOBRAS.

- Senior TTLs were always assigned to the project. There was, however, a high rotation due to retirements and promotions with four TTLs over the course of project. Incoming TTLs were faced with an unusually steep learning curve as a result of the complexity of the project. Moreover, TTLs had multiple roles, as they were responsible for highly demanding coordination functions and, at certain periods, for the supervision of one sector as well. There was strong continuity from the Bank's staff sector specialists, with no changes in the transportation and housing experts, and only one change for the water and environmental sectors. The task team's social team varied considerably during implementation, which contributed to supervision complications rooted in unclear requirements for land acquisition in the Operational Manual.
- There were substantial delays in the project's restructuring, which was identified at MTR (Oct. 2006) but was not completed until mid-2008. During the project's restructuring, the low-income housing sector was retained despite its poor performance at the request of the SoG to permit the Bank's continuous engagement in the policy dialogue and to demonstrate that the state was implementing some sound state housing programs targeted to the poor—i.e., the sites-and-services program under COVEG and the 'Piso Firme' Program under the SDSH.
- The Bank task team was successful in obtaining the needed cross-support, not only for areas that are transversal within the Bank (i.e., environmental safeguards) but also from other networks. Specifically, the project assigned substantial resources to PREM support in the areas of civil consultation mechanisms and access to information.
- Project ratings may have been too optimistic at times—for example, the PDO performance remained Satisfactory despite the unsatisfactory performance of the housing component during part of 2006 and 2007. The fact that this component represented less than 7 percent of the loan amount and performance in the other sectors was satisfactory or better may have justified the overall Satisfactory rating.

c. Justification of Rating for Overall Bank's Performance

Rating: Moderately Satisfactory

- Overall, the Bank's performance is considered *moderately satisfactory*. Despite the considerable efforts made by the supervision team and the support provided by management, the complexity and the weakness of the original design complicated supervision and implementation by the implementing agencies.

Borrower's Performance

BANOBRAS

Rating: Moderately Satisfactory

- BANOBRAS was the main borrower and acted as a financial intermediary. The original project design called for BANOBRAS to play the lead project supervision role with support from the Bank supervision team. This expectation was probably unrealistic, and goes well beyond normal BANOBRAS practice as a financial intermediary. BANOBRAS also participated in the project design and thus also is allocated some of the responsibility for the quality at entry problems. BANOBRAS provided high quality and indispensable financial management and procurement support for the project, but did not provide significant technical assistance on institutional development, planning, and safeguard issues as envisioned in the Operations Manual. BANOBRAS played an important role in promoting the importance of safeguard issues in the Project, and supporting safeguard recommendations from the Bank task team. BANOBRAS also had a dual supervision layer consisting of the BANOBRAS state delegation and the the headquarter office which aggravated an already complex institutional arrangement. It should be noted that BANOBRAS dedicated more resources and attention to the project than a normal project, but the requirements were also much greater. If the Bank continues to work with the Mexican states via BANOBRAS, it is critical to better define *ex-ante* the responsibilities of the two banks in terms of supervision.

Sub-Borrower's Performance

a. Government's Performance

Rating: Highly Satisfactory

- State authorities of both administrations exhibited a remarkable commitment, providing strong political support and the resources needed for the implementation of the project. The sustained level of support was a key factor in the project's successful implementation.

- The excellent performance of the State's Secretariat of Finance and Administration (SFA), which was responsible for coordinating the project at the state level, was critical to the successful implementation of the project. It succeeded in coordinating the efforts of the multiple executing agencies and conducting communications with the Banks. It also fulfilled other responsibilities, including: daily project management; all administrative project requirements; the preparation of annual procurement plans (PACs) as well as the implementation of its own sub-component. The SFA allocated the needed institutional resources needed to support its coordination functions, including a robust project administration system. Moreover, the project received the close attention from top SFA authorities throughout the entire implementation period, who showed a remarkable willingness to cooperate with the Banks and to accommodate their multiple requirements. Without their steadfast support as well as a genuinely cooperative attitude, the project would have been jeopardized.
- The State government, through SFA, also undertook an extensive project evaluation exercise which consisted of an analysis of each sector, combined with a global project evaluation. The data from these evaluations formed the foundation for the Bank's ICR.

b. Implementing Agencies' Performance

Rating: Satisfactory

- Performance was uneven across the various agencies, generally in line with the overall level of achievement at the sector level. Specifically:
 - ✓ CEAG's performance was highly satisfactory, with the agency bringing to the project a clear strategic vision for the sector, a consistent implementation strategy, and the technical and institutional resources needed to implement it.
 - ✓ SOP's performance was satisfactory. It showed a strong commitment toward enhancing environmental and social practices and applying them to all road investments. Likewise, it claimed full ownership of the HDM4 planning model and developed the technical capacity to fully capitalize on this tool.
 - ✓ IVEG/COVEG's performance was the weakest of all three sectors as a result of several factors, including lack of ownership, poor timing (the institution was in flux, amidst a reform process), and institutional weaknesses.
 - ✓ The IEEG played a strong leadership role in environmental issues. The SDSH, which was responsible for providing leadership in social issues, was less proactive. However, it had a stellar performance in the implementation of the '*Piso Firme*' Program as well as consultation processes.
- It is important to underscore the willingness of SFA, CEAG, IVEG/COVEG, and SOP to undertake in-depth *ex-post* evaluations as part of the ICR preparation. These evaluations required substantial resources, both in terms of staff time and financial resources on the part of the SoG and each of the state agencies. They have proved invaluable in complementing the project's weak PRF and, therefore, allowing a more complete ICR evaluation.

c. Justification of Rating for Overall Sub-Borrower's Performance

Rating: Satisfactory

- Overall, the Sub-Borrower's performance is deemed *satisfactory* for the reasons stated above.

6. Lessons Learned

Lessons Learned from the Implementation of Mexico's Decentralized Infrastructure Project

Lessons of wide general application

- **Direct IBRD-support for infrastructure at the sub-national level in Mexico is both feasible and important.** The generally strong performance of the SoG agencies in the Project indicates that at least some Mexican states have the capacity to successfully implement Bank-financed projects. The original premise of the overall program design is valid—infrastructure support to the states is both important and feasible; thus, the Bank should continue to pursue the sub-national infrastructure agenda in Mexico, providing technical support and financing to state and municipal governments. However, a new paradigm for delivering this type of support needs to be formulated to be more efficient.
- **Multi-sector SWAp operations may not be practical.** They require significant effort to design and supervise, and potentially dilute the Bank's ability to provide good policy advice and technical assistance. Moreover, SWAps require an in-depth understanding of the sector and a team of Bank specialists to engage in policy issues within each sector, which was generally missing in the Project due to resource constraints.
- **OBD may not work well with SWAp operations:** OBD provides a useful tool for facilitating implementation of well-defined limited projects, as local procurement procedures deemed acceptable to

the Bank can be used and there is a focus on outcomes. When an OBD approach is used for large-scale sector-wide operations it is more difficult to find output indicators that both meet the requirements of the Bank's OBD policy and are useful for measuring broad sector performance.

- **Adopting country systems is a high-risk high-reward proposition:** Adopting country systems for environmental and social safeguards was a risky venture, which brought substantial questioning and scrutiny on the part of international and local non-government organizations (NGOs). This approach, however, paid off and enhanced environmental and social management practices within both individual agencies and the state as a whole figure prominently among the legacies of the project. This success, however, was contingent upon the strong commitment on the part of the state's authorities as well as Bank's task team to ensure that the implementation of country systems was up to par with the Bank's own standards. In addition, there were significant effort from the Bank and the SoG to seek community input and disclose information.
- **Country Systems and Resettlement.** SOP demonstrated the ability to successfully implement land acquisition in accordance with Mexican regulations and practice. The Project helped SOP create more efficient and equitable procedures for land acquisition and physical resettlement, but still within the context of Mexican law. Based on this pilot experience in Guanajuato, it is clear that there would be significant challenges in using country systems to meet both the letter and spirit of OP 4.12 for large-scale physical resettlement, which did not occur under the project.
- **Environmental Management at two levels.** The Project underscored the importance of not only improving sector environmental management (transport, water, and housing) but also working with the environmental agency responsible for regulating the sectors. The Project leaves the state with a legacy of good practice at the sector and state level—both are necessary to sustain the environmental management system.
- **Distinguishing form from substance.** This operation received an extraordinary amount of attention by Bank management and the Board because of its proclaimed innovations. Most of these innovations (OBD, SWAp, National Program, Country Systems) were internal Bank preoccupations barely understood by the client at the state and municipal level. In substance, the Project was an infrastructure and institutional development project, where Bank procedures were utilized for specific investments but there was also attention and effort directed to improving certain aspects of overall sector performance and building state capacity as well.

Project-specific lessons

At World Bank/BANOBRAS Level:

- **It is important to balance the program- and the project-specific dimensions.** In the case of this operation, the challenges of designing a program to be replicated in other Mexican states detracted attention from state- and sector-specific issues during preparation and contributed to a confusing and inconsistent PAD. Likewise, the state was at times not fully included in the communications between the Bank and BANOBRAS.
- **A robust Project Result Framework should be defined during preparation and appraisal.** The lack of a robust PRF was clearly one of the weaknesses of this operation, which could never be fully overcome. Disbursement indicators brought additional confusion, as they were interpreted as outcome indicators by state actors. In addition, there was a fundamental disconnect between the PRF in the PAD and the PRF associated with the Loan Agreement and Operational Manual. Although the Bank's mechanisms to ensure Quality at Entry (QAE) have undoubtedly improved since this operation was approved, it is important to continue to emphasize the importance of developing a sound PRF as part of preparation activities.
- **SWAp-type projects that included multiple sectors require special supervision resources.** These projects are, of course, more costly to supervise given that they require a larger supervision team with a wider array of expertise. They also require a different role for the TTL, with emphasis on organizational, communicational and management aspects rather than, or in addition to, sector-specific expertise.
- **Political cycles are an important variable.** The operation was originally envisioned to coincide with the 2000-2006 *sexenio*. However, the extensive preparation and approval times introduced substantial delays, extending implementation well into the following *sexenio*. Fortunately, in the case of Guanajuato, the incoming administration continued provide strong political support to the project, but changes in administration clearly pose a risk on projects such as this that are so dependent on top political.
- **When utilizing local currency lending mechanisms, it is important to consider using legal documents that are flexible enough to permit full disbursement of the loan proceeds regardless of currency fluctuations.** Potentially, the legal documents—i.e., the BANOBRAS-SoG loan agreement and the corresponding decree enacted by the SoG legislature—could have been more flexibly designed to minimize complications involved in exchange fluctuations and to allow the SoG to use all the Bank loan proceeds. It would be necessary existing national procedures and policies to see if and how this

could be accomplished.

At Guanajuato State Level:

- **More political support for road maintenance:** SOP is under-investing in periodic maintenance of the state road network. Investments in periodic maintenance should be more of a priority for SOP and the state government due their high levels of economic return. This is common problem among public works agency and usually requires a higher level political commitment and supervision to ensure that periodic maintenance is a priority.
- **Continued investments in water sector institutional development:** CEAG has demonstrated commendable leadership in managing the state's water resources, and helping to improve water and sanitation services provided by local water companies. The project provided the necessary additional funds for institutional development of CEAG and local water companies. It is important that the SoG continue to provide sufficient funding for institutional development activities in the water sector.
- **Continued focus on water company sustainability** Although the performance of municipal water companies has improved under the project, many are still in a precarious financial condition and subject to local political interference. The additional responsibility of wastewater treatment will put additional strain on the water companies, and make it even more important to improve their operational performance and financial condition.
- **SoG support for COVEG:** COVEG is still in crisis, and the SoG will need to pay considerable attention to defining the policies and providing the financial resources to meet the needs of the low-income housing sector. In particular, the current approach of requiring COVEG to be both financially autonomous and sustainable, while at the same time serving needs of the poor may not be practical.
- **Maintain and continuously improve environmental and social management:** SoG and its implementing agencies (SOP, CEAG, COVEG, and IIEG) have made considerable progress in enhancing their environmental and social management systems. After the completion of the project, it will be important for SoG to ensure that these gains are consolidated and sustained. Most importantly, SOP should strive to continuously improve its land acquisition and resettlement policies and procedures.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

Annex 7 provides the full transcript of comments provided by both BANOBRAS and the SoG. The following is a summarized translation of the comments.

(a) BANOBRAS

ICR Evaluation: It is important to consider an integrated form of evaluation rather than just focus on specific sector objectives. In particular, it is useful to consider the financial and operational elements which made the project a success. Some notable aspects include: i) efficient financial management; ii) currency SWAP and reduction in overall lending to the state; iii) quality and impact of works financed under the project; iv) disbursement efficiency and the flexibility to meet the liquidity requirements of the SoG; v) compliance with Project norms and requirements; vi) the technical assistance provided by the Banks; vii) the capacity of SoG, World Bank, and SoG to implement the project innovations; viii) improvements in state administration, particularly environmental and social management; and ix) capacity of the state agencies to sustain the investments and innovations in the project. When these aspects are taken into account, the overall project outcome should be upgraded

Project Design: The project was designed to meet the specific needs of the Guanajuato and in response to the decentralization process underway in Mexico at the time. The project was designed in close collaboration with the state, which helped contribute to its success. An important challenge was the need to harmonize the vision and operating schemes between BANOBRAS and the World Bank during project implementation.

Achievement of Project Objectives: The transport component is considered satisfactory and the water component demonstrated a notable performance. The housing component needed to be restructured to include the *Lotes con Servicio* program and IVEG was transformed into COVEG. A notable achievement was the creation of specific environment and social units for each agency.

Supervision: BANOBRAS committed more attention and resources for this project than a normal loan operation. The activities that required the most attention were: general supervision, capacity building and technical assistance, supervision missions, and coordination efforts. These activities help to build the capacity of the state agencies and municipalities involved in the project. The World Bank assisted in project integration, in technical assistance and cross-sector issues, and providing international experts for each of the sectors in the project.

Project Execution: From the beginning of project, the state government worked cooperatively with both banks and was key to achieving project objectives and overcome problems. The project was a new experience for BANOBRAS. Some of the key innovations include: i) implementation of a SWAP operation; ii) utilization of an output based disbursement mechanism which, among other aspects, facilitated liquidity and simplified verification of eligible expenses.

Sector Wide Approach (SWAp): The SWAp approach provided a focus that went beyond infrastructure financing and provide additional added value added to the state. Value added was provided in terms of improving processes, incorporating best practice, capacity building, and social and environmental management.

Lessons Learned:

- The SWAp approach is very valuable for this type of program
- Projects should be designed to coincide with political administrations; fortunately in Guanajuato the change in state government did not negatively impact the project.
- Ensure more efficient supervision missions

The project helped to build institutional capacity within the implementing agencies, whereas in many World Bank-finance projects agencies had to establish specialized units just to deal with Bank procedures and requirements.

Evaluation of Bank Performance: The relationship between BANOBRAS and the Bank were always cordial and cooperative. One of the biggest challenges was coordinating the large and specialized World Bank mission teams, which resulted in very busy supervision missions and insufficient time. Another problem stemmed from the confusion over whether loans to low-income families under the housing component were an eligible expense--the PAD stated it was an eligible expense while it was not defined as such in the loan agreement.

Suggestions for Future Operations:

- Operational Flexibility: The specific and complex requirements, particularly with respect to Bank procedures and safeguards, act as a disincentive to participate in Bank-financed projects.
- Perfect System of Advanced Payments: The modified output-based advance disbursement was an effective mechanism for channeling funds. BANOBRAS and the World Bank should continue to use and perfect this mechanism.
- Safeguards: Based on the experience of this project, BANOBRAS is interested in working with the World Bank on this subject.

- **Currency Conversion/SWAP:** This facilitated the transfer of resources to Guanajuato in an efficient and rapid manner. This scheme should be used in other cases where appropriate.
- **Strengthen Country Systems:** The use of country systems (procurement, financial management, safeguards, etc.) should be further developed in World Bank-BANOBRAS financed projects.
- **Better Knowledge of Sub-National Loans:** The World Bank should enhance its understanding of the processes employed by BANOBRAS, *Secretaria de Hacienda y Credito Publico* (SHCP) for subnational lending. Likewise, BANOBRAS should endeavor to understand Bank loan procedures better. This would help create more synergies between the two organizations.

(b) Guanajuato State Government

ICR Evaluation: The Project Results Framework (RFP) was formulated during the preparation phase, and the World Bank has rated the overall quality at entry as Moderately Satisfactory. Therefore, it is important to recognize that the RFP may not have fully developed and it may not be appropriate to utilize the RFP as the only basis for evaluating project outcome. It is very important also to consider improvements in overall public administration and the overall positive externalities generated by the project. Specific observations are the following:

Project Design: The project design was very complicated, with multiple state agencies, the World Bank, and BANOBRAS. The challenge in implementing the project, in particular the need for the state agencies to understand and apply Bank safeguard and procurement policies, was underestimated. A simpler and more focused project could have been considered during the design phase.

Project Objectives: It was not actually necessary to adopt broad sectoral objectives under the project, but rather more concrete variables for each sector would have been adequate. This was realized during implementation and the project objectives were scaled down and made more focused during implementation.

Implementation: The process of communication and coordination between state agencies-state government-BANOBRAS local and central offices-World Bank, was complicated and time consuming, often leading to delays in implementation and processing. In addition to the change in state administration, there were also changes in key staff on the government side. In addition, there were significant changes in the Bank team over time, with consequent changes in approach and criteria.

Development Objectives: The development of good management practices at the state level, as well infrastructure development in the three sectors, was achieved. Of particular importance was the incorporation of environmental and social aspects in infrastructure construction.

BANOBRAS Performance: Although BANOBRAS helped resolve some procurement issues, it could have provided more assistance. The role of BANOBRAS in general, and in particular at the local office, was to act as intermediaries. The specialists from the World Bank interacted more on substantive issues with the State. As a lesson learned, it is proposed to either provide more authority to the local BANOBRAS office or to completely eliminate its role during project design. In a similar manner, BANOBRAS should provide more high level support from its central office.

Performance of the World Bank: The Bank team focused on solving implementation problems in an expeditious manner, although in some cases the team did not fully understand the specific conditions in Guanajuato. In addition, there was constant turnover in the Bank team, including at the team leader position, which caused the state agencies to have the perception that the Bank did not consider the project a priority.

Suggestions for Future Operations: The concept of a multiple SWAp should be reconsidered, as it is too difficult to coordinate multiple sectors at the same time. In addition, the borrower (BANOBRA) should play a more active role during implementation or simply serve as conduit for repayment. The lines of communication should be structured to be more agile and not delay implementation. Finally, the project should be designed to be implemented by one administration only, and there should be a stable World Bank team.

(b) Co-financiers

N.A.

(c) Other partners and stakeholders

N.A.

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in US\$ Million equivalent)

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate ¹ (USD million)	% of Appraisal
1. Component A - Roads	59.0	59.15	100%
2. Component B – Water and Sanitation	38.0	38.15	100%
3. Component C – Low-Income Housing	7.0	3.32	47% ⁽²⁾
4. Component D – Technical Assistance	1.5	3.55	237%
5. Component F – ‘Piso Firme’ Program	n.a.	1.00	
6. Unallocated funds	2.5	0	0%
Grand Total	108.0	105.17	97.4%

Notes:

⁽¹⁾ Amounts indicated in the ‘Client Connections’ as of 7 May 2010.

⁽²⁾ The actual costs of the Low-income Housing component included both Components D and F.

(b) Financing

Source of Funds	Type of Co-financing	Appraisal Estimate (US\$ million)	Actual/Latest Estimate * (US\$ million)	Percentage of Appraisal
State of Guanajuato		192.0		
International Bank for Reconstruction and Development	Loan	108.0	105.17	97.4%

* **Note:** A total of US\$2.83 million of the original loan amount were cancelled.

Annex 2. Outputs by Component

Component A – Implementation of the Road Transport Sector Strategy Model	
<p>Description: This component provided support to the state’s three-year sector strategy to improve overall performance of the road transport sector. It focused on: i) the institutional strengthening of the Public Works Secretariat (<i>Secretaría de Obras Públicas – SOP</i>); ii) expanding the state’s managed paved network; iii) improving bridges and eliminating of bottlenecks; iv) supporting pre-investment studies for construction of toll roads; and v) improving and expanding the rural road network.</p> <p>Level of achievement: Moderately <u>Satisfactory</u></p>	
Strengths	<ul style="list-style-type: none"> ▪ Routine maintenance of the state paved road network exhibited adequate levels during the life of the project. ▪ Deteriorated road segments were rehabilitated in line with the original target. ▪ A total of 202 km of new paved roads were added to the state network between 2004 and 2008. ▪ SOP’s technical and institutional capacity in the area of pavement management and planning has improved substantially. The HDM4 model is been managed and operated in-house. It is utilize to identify annual budgetary needs for conservation activities and to allocate actual budgetary resources. ▪ Sound environmental and social safeguard procedures have been permanently adopted and are applied to all SOP road projects.
Pending challenges	<ul style="list-style-type: none"> ▪ Conditions of the state’s paved road maintenance remained essentially stable during the Project, with the percentage of paved roads in good and fair condition fluctuating around 86%. The percentage of roads in poor condition could be reduced through further maintenance and rehabilitation. ▪ SOP’s annual budgets reflect a relatively stronger emphasis on construction of new roads vis-à-vis conservation activities. ▪ Periodic maintenance was significantly lower than anticipated. The lack of adequate periodic maintenance will eventually lead to an accelerated deterioration of the state road network, adding unnecessarily to conservation costs.
<p>Achievement of Intermediate Results defined in the Loan Agreement’s PRF for this component</p> <ul style="list-style-type: none"> ▪ Multi-year HDM4-based planning system in place for road management. Achieved. In 2008, a total of 2,437 km of paved were included in the state’s HDM4 system and road condition quantified in terms of roughness. The original target was amply exceeded, as an additional 273 km were added into the state’s HDM4 system compared to the original target of 169 km—i.e., roughly 62% than originally anticipated. It is important to note that, between 2004 and 2009, the coverage of the HDM4 system increased from 82% to 86% of the total state’s paved road network, as the kilometers of paved road incorporated into the system exceeded those of new paved roads. SOP’s annual work program for conservation activities is derived using the HDM4 model. ▪ Number of staff trained in transport planning. Achieved. The state’s HDM4 system was initially managed and operated by the University of Guanajuato on a contract basis. The HDM4 system is now managed and operated within SOP by technical staff that has been trained and permanently hired for that purpose. ▪ SOP staff trained for oversight of environmental and social issues Achieved. Prior to the implementation of the project, only those transport projects receiving federal funding were subject to environmental impact assessment; none were subject to social impact assessment. Under the project, an Environmental Coordination Unit (which oversees both environmental and social aspects) was permanently established within SOP. After the project, <u>all</u> SOP projects are subject to environmental and social safeguards according to the agency-wide procedures outlined in the Environmental and Social Management Manual that was published in 2009. A total of 185 staff received trained in environmental and social impact. ▪ A total of 2,250 km of the state road network receive routine maintenance each year. Achieved. Actual achievements are equivalent to roughly 104% of the original target. Routine maintenance increased during the life of the project, from 2,166 km in 2004 to an annual average of 2,350 km between 2005 and 2009. Overall, the rate of increase in routine maintenance has kept up with that of the paved road network in general, with 82% and 85% of the state’s paved road network receiving routine maintenance in 2004 and 2009, respectively. ▪ A total of 800 km of the state road network receive periodic maintenance during the life of the project. Not achieved. Actual achievements are equivalent to roughly 53% of the original target, as only 425 km received periodic maintenance between 2005 and 2009. However, a positive trend can be observed, with the number of kilometer that received periodic maintenance increasing consistently throughout the 	

<p>life of the project, from 31.8 km in 2005 to 259 in 2009, respectively.</p> <ul style="list-style-type: none"> A total of 18.8 km are rehabilitated to a roughness level of less than IRI=3 during the life of the project. Achieved: Actual achievements exceeded the original target, as a total of 31 km were rehabilitated over the life of the project compared to the 18.8 km target. Rehabilitation and construction of rural roads, with 608 km of improved rural access. Achieved: Actual achievements are equivalent to roughly 114% of the original target, with a total of 701 km of improved rural access. The improved rural access has a strong poverty alleviation impact, given the higher concentration of poverty in rural areas. 	
Component B – Implementation of the Water Supply and Sanitation Sector Strategy	
<p>Description: This component addressed the problems identified by the SoG in its water and sanitation service provision. It focused on: i) improving water resources management; ii) increasing coverage of water supply and sanitation; and iii) the institutional strengthening of the State Water Commission (<i>Comisión Estatal del Agua de Guanajuato</i> - CEAG) and developing support mechanism to operators.</p> <p>Level of achievement: <u>Highly Satisfactory</u></p>	
<p>Strengths</p>	<ul style="list-style-type: none"> CEAG is one of Mexico's strongest water agencies. Coverage of water and sanitation services in both urban and rural areas has expanded during the life of the project and is above the national coverage. Wastewater treatment capacity increased substantially during the life of the project, positioning Guanajuato among Mexico's top states in wastewater treatment coverage. Physical and commercial efficiency improved substantially among water operators that implemented institutional strengthening plans during the life of the project. CEAS's has developed and is implementing a long-term integrated water management strategy, which includes, among others, developing an integrated water management system, improving the efficiency in measurement of hydrologic cycles, and fostering more participative forms of water management. CEAG's own institutional and technical capacity was strengthened under the project, in areas such as staff training, cross-fertilization activities, tariff design, and the development of a water and sanitation information systems. Sound environmental and social safeguard procedures have been permanently adopted and are applied to all new water investments.
<p>Pending challenges</p>	<ul style="list-style-type: none"> Unitary water production prices increased between 2005 and 2008 and are above the national average. Despite improvements in efficiency among water operators that implemented institutional strengthening plans, they are still barely covering their operational costs, unable to cover investments costs, and remain in a financially precarious situation. Likewise, although improvements in physical efficiency among these operators are encouraging, levels of unaccounted-for water (UFW) are still relatively high considering the degree of water scarcity and high cost of water production due to groundwater pumping costs in Guanajuato. There is a considerable level of uncertainty in CEAG's budgetary allocations, which limits its ability to implement institutional strengthening activities both in-house and among water operators and community-based water management bodies in an effective manner.
<p>Achievement of Intermediate Results defined in the Loan Agreement's PRF for this component</p> <ul style="list-style-type: none"> Increased productivity of water operators that serve more than 20,000 inhabitants as measured by the revenue/production ratio. Partially achieved: Actual achievements exceeded original targets by roughly 45%, as 81 annual increments greater than 10% in the revenue/production were achieved among the 24 water operators that received efficiency-related investments under the project between 2004 and 2006. Seven of these achieved two increments, while one of them achieved three increments during this period. Overall, the revenue/production for the 36 municipalities with more than 20,000 inhabitants increased by 44 percent between 2005 and 2008—from Mx\$3.49/m³ to Mx\$5.03/m³. Number of water operators with institutional development plans. Achieved: No specific target was achieved. Eleven water operators in the state implemented institutional strengthening plans aimed at enhancing the physical, commercial, and overall efficiency. These plans included actions such macro- and micro-measurements, consumption determination, changes to internal regulations, and adoption of performance indicators. 	

- Mechanisms in place for operators to access knowledge and share best practices.
Achieved: Art. 29 of CEAG's Internal Procedures assigns CEAG the responsibility to promote, systematize, and disseminate research on new water technologies and to build link institutional with academic and research institutions. In addition, Art. 37 calls for CEAG to coordinate and promote cross-fertilization among water operators in the state
- CEAG staff trained for oversight of environmental and social issues, including: i) Environmental and Social Impact Unit in place; ii) Manuals with procedures on environmental and social guidelines; and iii) EAG staff trained in environmental and social impact.
Achieved: Actual achievements amply exceed original expectations. CEAG's newly adopted Internal Procedures makes it compulsory to conduct impact assessment studies for new physical investments in the water sector (e.g., alternative water sources, aquifer recovery). In addition, Art. 36 establishes the functions of the General Directorate of Social Affairs, which is responsible for promoting citizen participation in relation to water issues, including reforestation and environmental recovery initiatives, and to attend to social conflicts around water and sanitation services. A Best Practices Manual for Environmental Management of Physical Investments in the Water and Sanitation was also developed and adopted under the project. This Manual provides consistent criteria for environmental management at different stages of the project cycle for the various institutional actors. Extensive training in environmental and social management was provided under the project.
- Number of additional rural inhabitants with access to water supply and sanitation services.
Achieved: The original target was not disaggregated by rural and urban population. It was amply exceeded, as coverage of water and sanitation services were extended to a total of 330,000 users, incl. over 250,000 users in urban areas and 78,346 users in rural areas.⁷ Rural beneficiaries were distributed in 28 out of the 46 municipalities in the state, including some with the highest incidence of poverty.
 - ✓ In urban areas, 115,523 people were provided with water connections during the life of the project, with the percentage of urban population with water connections increasing from 95.6 to 97 percent between 2005 and 2009. This is higher than the national coverage of 94.3 percent for water services in urban areas in 2008.
 - ✓ In rural areas, 38,127 people were provided with access to a water source during the life of the project, with the percentage of rural population having access to a water source increasing from 84.2 to 84.8 percent between 2005 and 2009. This is higher than the national coverage of 76.8 percent for water services in rural areas in 2008.
 - ✓ In urban areas, 135,507 people were provided with sanitation connections during the life of the project, with the percentage of urban population with sewage connections increasing from 96.8 to 98.8 percent between 2005 and 2009. This is higher than the national coverage of 93.9 percent for sanitation services in urban areas in 2008.
 - ✓ In rural areas, 40,219 people were provided with access to sanitation during the life of the project, with the percentage of rural population with access to sanitation increasing from 62 to 63.2 percent between 2005 and 2009. This is significantly than the national coverage of 61.8 percent for sanitation services in rural areas in 2008.
- Increased effectiveness of municipal treatment plants in terms of the annual volume of organic waste removed (i.e., kilos/year).
Achieved: The actual outcome of 12,717 kg of organic load removed was largely in line with the anticipated target of 12,500 kg. Moreover, actual performance is expected to improve in the medium term, as only four of the eight additional treatment plants are currently operational. The five remaining plans are expected to remove an additional 9,271 kg of organic load once they are operational, exceeding the original target by over 60%.

Component C – Implementation of the Low-Income Housing Strategy

Description: This component addressed the problems faced by the SoG in low-income housing provision. It focused on: i) the institutional strengthening of the state housing agency (*Instituto de Vivienda del Estado de Guanajuato* - IVEG); ii) expanding land reserve acquisition; iii) increasing housing access to the poor; and iv) increasing the supply of low-income housing via developers.

Level of achievement: Moderately Unsatisfactory

⁷ This indicator, of course, overestimates the number of people that benefited from the project, as some of the beneficiaries received both water and sanitation.

Strengths	<ul style="list-style-type: none"> ▪ A more robust policy framework was adopted with the passage of new housing legislation in 2008. ▪ IVEG/COVEG’s administrative efficiency has improved slightly, as reflected by a 25% reduction of the proportion of the portfolio in arrears and other improvements in portfolio management and loan origination practices, and customer service. ▪ These improvements came as a result of a portfolio review and the depuration of IVEG/COVEG’s databases, improved loan origination practices, the incorporation of new technologies, staff training and other actions that were supported under the project. ▪ Sounder environmental and social practices were put in place.
Pending challenges	<ul style="list-style-type: none"> ▪ The improvements described above have failed to translate into expanded access to housing among the poor, as IVEG/COVEG’s performance has deteriorated in terms of both output and targeting. ▪ Addressing the agency’ financial fragility would still require substantial institutional and financial reengineering. ▪ There is considerable room for further improvement of COVEG’s administrative efficiency, including targeting of subsidies, loan origination practices, cost recovery, and portfolio management.

Specific outcomes defined in the Loan Agreement’s PRF for this component

- The State implements low-income housing program using clear eligibility criteria, supported by transparent subsidy instruments.
Not achieved: Substantial progress was done toward the development of a low-income housing strategy. Its basic tenets are embedded in the new Housing Law that was approved in 2008, including: the promotion of private sector participation in low-income housing; aligning targeting strategies at the state and federal levels and explicitly recognizing COVEG’s ability to grant subsidies; and establishing the state’s housing information system. However, the more robust policy framework has failed to translate into the implementation of sound low-income housing strategy. Substantial reengineering of COVEG’s financial strategy, including making subsidies transparent, is still pending.
- The State defines and implements a subsidy strategy.
Not achieved: Some progress was done toward estimating the indirect subsidies that were embedded in IVEG/COVEG’s loans. However, COVEG still lacks a transparent and efficient subsidy strategy. As originally envisioned, financial intermediaries were to participate in the financing of the sites-and-services ‘*Esta es tu Casa*’ Program included under the project’s restructuring. Unfortunately, their participation did not materialized and, instead, financing has been a mixed of federal and state subsidies, together with a loan from COVEG that includes substantial implicit subsidies. Thus, COVEG’s structural deficiencies in financial practices remain unchanged.
In addition, targeting of IVEG/COVEG’s low-income housing programs deteriorated during the life of the loan, with the percentage of loans granted to low-income households (i.e., those with an income less than 4 times the minimum wage) decreasing from 79% in 2004 to 42% for 2006-2007—i.e., equivalent to almost a 50% reduction. (Data is not available for the entire time period). Targeting improved slightly after the restructuring, with roughly 52% of COVEG’s low-income housing programs being granted to low-income hhlds (see Table 1).

Table 1. IVEG/COVEG's production outputs – 2004-2009

	2004	2005	2006	2007	2008	2009	2009/2004
Institutional programs							
							%
Self-help rural housing	1,002	733	697	652	927	927	0.93
Self-help institutional housing	1,545	656	790	876	710	746	0.48
Institutional links	16	18	39	8	1	-	0.00
Sites-and-services	116	647	324	214	152	222	1.91
Progressive housing	86	143	79	20	20	27	0.31
Sub-total	2,765	2,197	1,929	1,770	1,810	1,922	0.70
Low-income targeting							
Number	2178	n.a.	1435	122	n.a.	993	0.46
Percentage - %	0.79	n.a.	0.74	0.07	n.a.	0.52	0.66
Federal programs							
Sub-total	256	137	480	369	818	194	0.76
Third-party programs							
Sub-total	303	423	292	353	225	202	0.67
Promotion programs							
Sub-total	10,271	8,677	5,215	2,486	2,616	1,109	0.11
Total	13,595	11,434	7,916	4,978	5,469	3,427	0.25

Source: FESI - Performance Assessment of the Low-Income Component (Mendez, 2009)

- IVEG/COVEG staff trained for oversight of environmental management.
Achieved: The permanent establishment of the ESU within COVEG's organizational structure is a major accomplishment under the project. Some of the specific achievements in this area include: i) an ESU was created in 2009 and permanently inserted into COVEG's organizational structure in 2010; ii) IVEG/COVEG applied the Environmental and Social Worksheet (*Ficha Ambiental y Social*) to the six sites-and-services development projects and submitted it to the Environmental and Social Subcommittee; iii) Manual of Environmental and Social Best Practices for the Housing Sector was published in 2010; and iv) ESU staff implemented actions to foster the integration of sites-and-services beneficiaries. The incorporation of environmental and social management procedures into COVEG's Internal Procedures is still pending.
- Increased access to housing for the poor as measured by the number of loans provided under selected IVEG's housing programs.
Original targets not achieved: IVEG/COVEG's performance in terms of outputs deteriorated significantly over the life of the project. The 2005-2009 outputs of IVEG/COVEG's housing programs included a total of 9,628 loans and housing units, compared to the 14,043 outputs originally envisioned—i.e., equivalent to 69 percent achievement of the original target (see Table 2). IVEG/COVEG's drastic reduction in output was the result of the termination annual state funding from 2003 onward, combined the institution's unsustainable financial practices.

Table 2. Actual outputs vs. original targets for selected low-income housing programs 2004-2009

Low-income housing program	Actual	Original Targets	
	2005-2009	Number	%
Self-help housing	7,714	6,525	118%
Institutional links	66	276	24%
Sites-and-services	1,559	6,888	23%
Progressive housing	289	354	82%
All	9,628	14,043	69%

Revised targets achieved as a whole: As a whole, the target revised during restructuring for selected IVEG/COVEG low-income housing programs was met. They were designed to ensure that IVEG/COVEG's performance did not deteriorate further during 2008 and 2009. In fact, annual outputs in these housing programs increased slightly during 2008 and 2009, reverting the downward trend. Specifically, both in 2008 and 2009 the overall output of these selected programs was 1,810 and 1,922 units programs exceeded the revised target of 1,557 units. While the target for self-help housing, which was the largest one, was amply exceeded, those for the remaining programs were below anticipated levels (see Table 3).

**Table 3. Actual outputs vs. revised targets for selected low-income housing programs
2008-2009**

Low-income housing program	Actual			Revised Targets	
	2008	2009	Avg. 2008-09	Number	%
Self-help housing	1,637	1,673	1,655	1212	137%
Institutional links	1	-	1	18	3%
Sites-and-services	152	222	187	251	75%
Progressive housing	20	27	24	76	31%
All	1,810	1,922	1,866	1,557	120%

Additional targets partially achieved: In terms of the additional targets introduced at restructuring were also met or exceeded in terms of outputs. However, the enhanced financial mechanisms that were anticipated for the sites-and-services program have not yet materialized.

- ✓ The actual number of sites-and-services lots developed under the '*Esta es tu Casa*' Program exceeded the target defined at restructuring by 10 percent. Of the 769 lots that were developed, 187 have been already distributed among households with less than five times the minimum wage. Unfortunately, no financial intermediaries have so far participated in the financing of these lots, as it was originally envisioned. Instead, financing has been a mixed of federal and state subsidies, together with a loan from COVEG that includes a substantial implicit subsidies. Thus, although the physical targets were met, their financing reveals that some of the structural deficiencies in COVEG's financial practices remain unchanged.
- ✓ The '*Piso Firme*' Program was incorporated at restructuring at the request of the incoming state authorities. It provides concrete floors up to a maximum of 50 m2 for low-income households with dirt road. The target defined at restructuring was exceeded by 4 percent. However, the contribution of the project to the implementation of the '*Piso Firme*' Program is negligible, as its amounts to only 4,685 of the 80,000 actions that were implemented under the program, which was administered by the Secretariat of Human and Social Development - SDSH—i.e., equivalent to only 6 percent of the total output.

Component D - Technical Assistance to Cross-Sector Areas

Description: This Technical Assistance (TA) component was aimed at strengthening cross-sectoral capabilities within the state to achieve full compliance with the Program's Operating Regulations. It focused on: i) strengthening of the mechanisms to screen, prioritize and monitor public investments; ii) strengthening of the existing consultation, participation and disclosure mechanisms; iii) enhancing the capacity of relevant state agencies and practices in the safeguard areas; iv) strengthening of procurement policies and practices; and; v) optimization of the existing financial management and audit systems and processes.

Level of achievement: Satisfactory

Strengths	<ul style="list-style-type: none"> ▪ Environmental and social safeguard procedures were significantly strengthened within participating agencies, which now have ESUs permanently inserted into their organizational structure. They have also mainstreamed procedures beyond the scope and duration of the project. ▪ Environmental and social safeguard procedures were also significantly strengthened at the sector level. The implementation of a cross-sectoral committee to carry out the ESMF under the project served to enhance consistency of criteria and procedures to be used throughout the state. Likewise, the strengthening of the state's environmental agency - IEEG has been an important step in improving environmental practices at the state level, beyond the life of the project. ▪ The operation also provided support to the further development of the state's e-procurement system, public investment evaluation and prioritization, and multi-year planning. In these areas, however, the Bank's support was mainly financial, with limited TA. ▪ The operation provided support to the state's efforts to enhance transparency, participation, and access to information. These efforts were crucial in addressing the concerns of some NGOs regarding the adoption of country systems
Pending challenges	<ul style="list-style-type: none"> ▪ The sustainability of these achievements will depend, to a large extent, on the continuous commitment of state authorities. Much of the progress made so far is

	the result of strong ownership of the current administration.
<p>Achievement of Intermediate Results defined in the Loan Agreement's PRF for this component</p> <ul style="list-style-type: none"> <p>▪ Strengthening and mainstreaming of the use of economic, environmental and social analysis in the planning cycle. Achieved: Between 2005 and 2009, the IEEF assessed and classified a total of 516 subprojects financed under the project in accordance according to the guidelines under the agreed ESMF. In addition, the IEEG assessed and classified under the same ESMF a total of 298 subprojects in water and sanitation, roads and housing that were not financed under the project. This is the result of the mainstreaming of environmental and social safeguards within SOP, CEAG, and COVEG, regardless of the source of financing. Procurement practices within individual agencies were also strengthened under the project, with all executing agencies (which included some municipal water operators) receiving training in procurement.</p> <p>▪ Adoption of systematic participation processes and access to information mechanisms around FESI, and by participating agencies at the sectoral and investment-specific levels. Achieved: The operation provided support to the state's efforts to enhance transparency, participation, and access to information. These efforts were crucial in addressing the concerns of some NGOs regarding the adoption of country systems. Specific actions in this area included:</p> <ul style="list-style-type: none"> ✓ Intense consultation with civil society through consultation processes that involved more than 30 NGOs, academicians, and representatives from government-organized consultative bodies. These consultations were very successful in eliciting community input on the consultations strategy around FESI, access to information strategy and the ESMF. ✓ The implementation of a web portal that provided public access to information related to the project identified in conjunction with civil organizations. ✓ The SDSH undertook an ambitious survey to measure the customer's satisfaction services provided by state agencies. Data from this study will be used as the baseline for comparison with future surveys. <p>▪ Systematic implementation of Environmental and Social Monitoring Framework (ESMF) by IEEG and sector agencies. Achieved: The project's ESMF was implemented as originally envisioned. The cross-sector Environmental and Social Sub-committee met in 31 occasions during the life of the project and reviewed a total of 548 subprojects being financed under the project. It is important to note, however, that IVEG/COVEG began compliance with the ESMF later than the other two sectors—from 2007 onward.</p> <p>▪ Improved procurement policies and practices in at least two of the participating agencies. Achieved: The new system was implemented in July 2009. During 2009, 26% of all state contracts were processed through the new procurement system. In 2010, all state contracts are being processed through the system.</p> <p>▪ Uniform procurement information system operational and online. Achieved: Same as above.</p> <p>▪ Standardized and improved Financial Management (FM) systems and processes in place. Achieved: Implementation of FM under the project was satisfactory, with robust FMRs and monitoring systems in place.</p> 	
<p>Component E – Implementing the 'Piso Firme' Program</p>	
<p>Description: This component provided support to the implementation of the 'Piso Firme' Program being implemented by the State Secretariat of Social and Human Development (<i>Secretaría de Desarrollo Social y Humano</i> – SDSH). This activity supported the same low-income housing objective as Component C.</p> <p>Level of achievement: <u>Satisfactory</u></p>	
<p>Strengths</p>	<ul style="list-style-type: none"> ▪ This program, which was implemented by the SDSH, provided support to 80,000 low-income households through the provision of building materials to replace up to 50 m² of dirt floors for cement floors. Of these, 4,685 were supported under this operation. ▪ The 'Piso Firme' program has multiple proved benefits, including major health improvement among the beneficiary population, children in particular. ▪ As a result of the implementation of this program, the percentage of dwellings with dirt floor amounts to only 2.5% in the SoG, compared to a national average of 6% (<i>Encuesta Ingreso Gasto de los Hogares</i> - ENIGH 2008).
<p>Pending challenges</p>	<ul style="list-style-type: none"> ▪ None.

Specific Intermediate Results defined under the 2008 restructuring for this component

- Number of beneficiaries from the '*Piso Firme*' Program.
Achieved: The '*Piso Firme*' Program was incorporated at restructuring at the request of the incoming state authorities. It provides concrete floors up to a maximum of 50 m2 for low-income households with dirt road. Its target (i.e., 4,485 households) was exceeded by 4%, as 4,685 actions were financed under this component. However, the contribution of the project to the implementation of the '*Piso Firme*' Program within the scope of the project is negligible, as its amounts to only 4,685 of the 80,000 actions that were implemented under the program, which was administered by the Secretariat of Human and Social Development - SDSH—i.e., equivalent to only 6% of the total output.

Annex 3. Economic and Financial Analysis

a. Economic Analysis

An economic analysis was conducted for the transport and water and sanitation sector, which represent 92 percent of the total loan amount. The transport economic analysis was undertaken by a World Bank specialist, Rodrigo Archondo-Callao, based upon information provided by SOP. The water and sanitation economic analysis was undertaken by Grupo Espacio Siete (SoG) consultants and is also presented in their report. The economic analysis was not performed for the low-income sector given that: i) there were substantial hidden subsidies in the loans being granted by the state's housing authority that prevented from determining a clear cost structure, and; ii) the low-income sector represented roughly 4 percent of the total disbursements.

Component A. Roads

Ex-ante Economic Evaluation: At appraisal, the road sections to be rehabilitated during the duration of the project with Bank financing have not been identified; therefore, a representative economic evaluation of the project was done at appraisal, using the Highway Development and Management Model (HDM-4), analyzing representative road classes, characterized to be in poor condition (average roughness of 5.5 IRI) and with different traffic levels. The table below presents the four road classes, totaling 500 km, evaluated with HDM-4, considering the same traffic distribution of the overall network.

Table 1. Road rehabilitation classes

Road Rehabilitation Classes		
Traffic	Length (km)	Percent (%)
< 1,000 AADT	120	24
1,000-2,500 AADT	200	40
2,500-4,000 AADT	100	20
>4,000 AADT	80	16
Total	500	100

The ex-ante economic evaluation considered a 'without project' alternative that includes routine maintenance, patching and reconstruction when the roughness reaches 8.0 IRI, and a 'with project' alternative that includes the rehabilitation work done at the beginning of the evaluation period followed by a maintenance policy that includes routine maintenance, patching and overlays when the roughness reaches 3.5 IRI. The ex-ante economic evaluation indicated that the Net Present Value (NPV) of the rehabilitation program is in the order of US\$99.4 million with an overall internal rate of return (IRR) of 61 percent. The table below presents the economic evaluation results.

Table 2. Ex-ante Economic Evaluation Results

Ex-ante Economic Evaluation Results				
Traffic	Length (km)	Investment (US\$ million)	NPV (US\$ million)	IRR (%)
< 1000 AADT	120	18.0	1.1	18
1000-2500 AADT	200	30.0	17.1	37
2500-4000 AADT	100	15.0	26.1	81
> 4000 AADT	80	12.0	55.1	162
Total	500	75.0	99.4	61

Ex-Post Economic Evaluation: The ex-post economic evaluation analyzed the 15 road sections that received periodic maintenance or were rehabilitated under the project, totaling 133.2 km. Net benefits were analyzed using the HDM-4 model, which simulates highway life cycle and vehicle operation conditions and costs for multiple road design and maintenance alternatives. The discount rate was set to 12 percent, the evaluation period to 20 years, and the annual traffic growth rate to 3 percent considering that the GDP has grown in Mexico by around 3.4 percent per year in recent years. The maintenance and rehabilitation costs were estimated in financial and economic terms (net of taxes), economic costs being on average 87 percent of financial costs. The following table presents typical unit road user costs (vehicle operating costs and passenger time costs) in Mexico, at different roughness levels, in US\$ per vehicle-km.

Table 3. Unit Road User Costs

Unit Road User Costs (US\$/vehicle-km)					
Roughness (IRI)	Car	Bus	Medium Truck	Heavy Truck	Articulated Truck
2	0.129	1.064	0.515	0.689	1.020
3	0.129	1.074	0.518	0.693	1.027
4	0.133	1.170	0.543	0.723	1.083
5	0.137	1.276	0.570	0.756	1.148
6	0.142	1.393	0.602	0.794	1.224
7	0.149	1.529	0.638	0.840	1.314
8	0.157	1.681	0.680	0.897	1.414

The table below presents the fifteen road sections basic characteristic. All roads are asphalt concrete roads in fair to poor condition with an average roughness of 4.04 IRI, m/km, and average deflection of 0.86 mm. The Libramiento Sur De Celaya, Celaya - San Miguel De Allende, Boulevard Euquerio Guerrero and Leon - San Francisco Del Rincon roads are four lane roads, while the rest are two lane roads.

Table 4. Road Sections Basic Characteristics

Road Sections Basic Characteristics					
Road Section Name	Length (km)	Lanes (#)	Surface Type	Roughness (IRI, m/km)	Deflection (mm)
Libramiento Sur De Acambaro	10.6	2	AC	3.58	1.228
Tarimoro-Apaseo El Alto	24.8	2	AC	4.02	1.082
Libramiento Sur De Celaya	2.2	4	AC	4.54	1.170
Celaya-San Miguel De Allende	2.0	4	AC	4.19	1.121
Doctor Mora-Cieneguilla	10.0	2	AC	5.05	0.704
Dolores Hidalgo-Adjuntas Del Rio	3.3	2	AC	4.57	0.560
Dolores Hidalgo-Rio Laja	3.7	2	AC	3.33	0.518
Boulevard Euquerio Guerrero	3.7	4	AC	3.78	0.340
Yerbabuena-Puentecillas	4.0	2	AC	4.58	0.624
Huanimaro E.C. (Irapuato-Abasolo)	28.9	2	AC	4.25	0.930
Leon-San Francisco Del Rincon	9.5	4	AC	3.15	0.560
Salamanca-La Ordeña	10.9	2	AC	3.89	0.690
San Luis De La Paz-San Jose Iturbide	12.5	2	AC	3.53	0.840
Vialidad Lateral Norte-Puente Silao 1	3.5	2	AC	5.25	0.800
Boulevard General Motors	3.5	2	AC	3.91	0.619
Total	133.2			4.04	0.860

AC = Asphalt Concrete

The table below presents the road sections Average Annual Daily Traffic (AADT) in 2007. The average AADT is 4,500 vehicles per day and the average traffic composition is 94.6 percent cars, 1.4 percent buses and 4.0 percent trucks. The Libramiento Sur De Celaya road section has a high percentage of truck because it is an important toll road. The average AADT of the road classes evaluated at appraisal is 2,430 vehicles per day that is almost half the traffic on the actual project road sections.

Table 5. Road Sections 2007 Average Annual Daily Traffic (AADT)

Road Section Name	Traffic (AADT)	Cars (%)	Buses (%)	Medium	Heavy	Articulated
				Truck (%)	Truck (%)	Truck (%)
Libramiento Sur De Acambaro	3,405	94.8%	1.1%	1.4%	1.0%	1.8%
Tarimoro-Apaseo El Alto	2,040	92.6%	1.8%	2.0%	1.7%	1.9%
Libramiento Sur De Celaya	5,039	63.2%	7.8%	6.2%	3.0%	20.0%
Celaya-San Miguel De Allende	8,502	89.9%	2.5%	1.7%	1.2%	4.9%
Doctor Mora-Cieneguilla	789	98.1%	0.4%	1.0%	0.6%	0.0%
Dolores Hidalgo-Adjuntas Del Rio	1,200	98.7%	0.2%	0.7%	0.5%	0.0%
Dolores Hidalgo-Rio Laja	2,721	91.5%	2.4%	2.2%	1.2%	2.9%
Boulevard Euquerio Guerrero	22,891	98.6%	0.4%	0.6%	0.3%	0.2%
Yerbabuena-Puentecillas	7,878	97.7%	0.4%	1.0%	0.8%	0.2%
Huanimaro E.C. (Irapuato-Abasolo)	5,329	97.3%	0.5%	1.0%	0.5%	0.8%
Leon-San Francisco Del Rincon	7,662	89.6%	5.6%	0.5%	0.2%	4.2%
Salamanca-La Ordeña	2,666	96.3%	0.5%	1.6%	1.0%	0.7%
San Luis De La Paz-San Jose Iturbide	3,038	97.2%	0.7%	1.0%	1.0%	0.2%
Vialidad Lateral Norte-Puente Silao 1	8,028	90.8%	1.3%	2.0%	1.6%	4.4%
Boulevard General Motors	6,923	95.0%	0.6%	1.4%	1.0%	2.1%
Total	4,500	94.6%	1.4%	1.4%	0.9%	1.7%

The following table presents the road sections road works class and the financial investment costs. Periodic maintenance works includes overlay or reseal works and rehabilitation works includes reconstruction, partial reconstruction or mill and replace works. The average cost of the periodic maintenance works is US\$2.41 per m2 and the average cost of the rehabilitation works is US\$16.1 per m2. At appraisal, the unit cost of a 25mm reseal was estimated to be US\$3.2 per m2 and the unit cost of reconstruction was estimated to be US\$20.8 per m2. Therefore, the actual costs are lower than the ones estimated at appraisal.

Table 6. Road Works Class and Financial Costs

Road Works Class and Financial Costs				
Road Section Name	Road Work Class	Cost (US\$ Million)	Cost (US\$/km)	Cost * (US\$/m2)
Libramiento Sur De Acambaro	Periodic Maintenance	0.241	22,770	3.16
Tarimoro-Apaseo El Alto	Periodic Maintenance	0.331	13,325	1.85
Libramiento Sur De Celaya	Rehabilitation	1.077	489,377	33.98
Celaya-San Miguel De Allende	Rehabilitation	0.366	183,123	12.72
Doctor Mora-Cieneguilla	Periodic Maintenance	0.116	11,551	1.60
Dolores Hidalgo-Adjuntas Del Rio	Rehabilitation	0.204	61,682	8.57
Dolores Hidalgo-Rio Laja	Rehabilitation	0.244	66,016	9.17
Boulevard Euquerio Guerrero	Periodic Maintenance	0.128	34,557	2.40
Yerbabuena-Puentecillas	Periodic Maintenance	0.088	22,012	3.06
Huanimaro E.C. (Irapuato-Abasolo)	Periodic Maintenance	0.413	14,281	1.98
Leon-San Francisco Del Rincon	Periodic Maintenance	0.299	31,495	2.19
Salamanca-La Ordeña	Periodic Maintenance	0.165	15,134	2.10
San Luis De La Paz-San Jose Iturbide	Periodic Maintenance	0.109	8,691	1.21
Vialidad Lateral Norte-Puente Silao 1	Periodic Maintenance	0.086	24,629	3.42
Boulevard General Motors	Periodic Maintenance	0.087	24,932	3.46
Total		3.954	29,693	4.12

* Cost per m2 based on 7.2 m carriageway width.

The ex-post economic evaluation considers a 'without project' alternative that includes routine maintenance, patching and reconstruction when the roughness reaches 8.0 IRI, and a 'with project' alternative that includes the road work done followed by a maintenance policy that includes routine maintenance, patching and overlays when the roughness reaches 3.5 IRI. The table below presents the ex-post economic evaluation results, which shows that the NPV of the program for the investments included in this analysis amounts to US\$9.9 million, the NPV per investment ratio is 2.50 and the overall EIRR is 97 percent. Thus, the program has a robust economic justification as expected for periodic maintenance and rehabilitation works on roads with high traffic volume and relatively low construction unit costs. The ex-post economic indicators are higher than the ones estimated at appraisal because the actual road works costs are lower than the ones estimated at appraisal and the average traffic on the project roads is higher than the traffic values adopted at appraisal.

Table 7. Ex-Post Economic Evaluation Results

Ex-Post Economic Evaluation Results			
Road Section Name	NPV (US\$ Million)	NPV per Investment (#)	EIRR (%)
Libramiento Sur De Acambaro	0.7	3.11	104%
Tarimoro-Apaseo El Alto	1.4	4.31	119%
Libramiento Sur De Celaya	0.1	0.12	15%
Celaya-San Miguel De Allende	0.3	0.69	46%
Doctor Mora-Cieneguilla	0.2	1.64	50%
Dolores Hidalgo-Adjuntas Del Rio	0.0	0.10	14%
Dolores Hidalgo-Rio Laja	0.3	1.22	38%
Boulevard Euquerio Guerrero	1.2	9.45	> 150%
Yerbabuena-Puentecillas	0.2	2.64	> 150%
Huanimaro E.C. (Irapuato- Abasolo)	2.4	5.78	> 150%
Leon-San Francisco Del Rincon	1.6	5.32	128%
Salamanca-La Ordeña	0.3	1.74	50%
San Luis De La Paz-San Jose Iturbide	0.4	3.96	76%
Vialidad Lateral Norte-Puente Silao 1	0.5	5.85	> 150%
Boulevard General Motors	0.2	2.08	114%
Total	9.9	2.50	97%

Component B. Water and Sanitation

Households that lack access to drinking water are forced to collect or purchase water from other sources, which not only limits the supply for water available for cooking, personal hygiene and household cleaning but also increases the risk of water contamination. Likewise, results from recent field studies (Chacón, 2007) have shown that lack of access to sanitation and improper use of latrines, especially during the rainy season, increase health risks due to the proliferation of insects and parasites that lead to gastrointestinal diseases. The lack of safe water safety has a very high economic impact relative to other factors, including direct costs associated with health treatment of water-borne diseases and indirect costs associated to lost days of work. Moreover, economic costs associated to lack of access to water and sanitation have a disproportional negative effect on lower income groups due to their increase vulnerability to water-borne diseases. The following factors were taken into consideration for the economic analysis of the water and sanitation component:

Table 8. Factors taken into consideration for economic analysis of Component B – Water and sanitation

Economic Analysis of Component B – Water and Sanitation Services	
Estimated costs	
Investment costs	A total of Mx\$1.1 billion over four years
Annual disinfecting costs per family (based on the utilization of sodium hypochlorite and 40 liters per family)	Avg. of Mx\$62,800 per year
Annual operation and maintenance costs	Avg. of Mx\$1.4 billion per year
Estimated Benefits	
Unitary treatment cost per health event due to water-borne gastrointestinal diseases	Mx\$1,475
Average number of beneficiaries per year of Component B	109,792
Average number of health events attributed to water-borne gastrointestinal diseases each year among beneficiaries under Component B	329,376
Average number of adults of productive age that are affected by water-borne gastrointestinal diseases each year among beneficiaries under Component B (i.e., 47 percent of affected population)	154,807
Average number of working adults affected by water-borne gastrointestinal diseases each year among beneficiary adults (i.e., 30 percent of affected adults)	46,442
Average number of lost man days of work due to health event related to water-borne gastrointestinal disease	5 days
Minimum daily wage in Guanajuato	Mx\$54.47
Other assumptions	
Life span of water and sanitation infrastructure	25 years
Discount rate	12%

Costs

- *Investment cost*
 - ✓ A total investment of Mx\$1.1 billion over four years (2005 to 2009).
- *Operation and maintenance costs*
 - ✓ Annual disinfecting costs per family based on the utilization of sodium hypochlorite and 40 liters per family (Escalas Cañellas, 2006).
 - ✓ Annual operation and maintenance costs of Mx\$1.4 billion per year, including energy costs related to pumping and personnel costs (data provided by the CEAG in March 2010).

Benefits

- *Health care costs*
 - ✓ The incidence of several gastrointestinal infections attributable to contaminated water and food was taken into consideration for the economic analysis, including intestinal parasites, typhoid fever, hepatitis, intestinal infections caused by other organisms, other intestinal infections caused by protozoa, paratyphoid and shigellosis. Data for the State of Guanajuato corresponding to the period between 2005 and 2008 was obtained from the Mexican Secretariat of Health's *Morbidity Yearbooks* 1984-2008.
 - ✓ The incidence of these illnesses was subsequently adjusted by the estimated water-borne transmission rate.
 - ✓ The socio-economic characteristics of the beneficiary population were also taken into consideration, as the economic costs of water-borne diseases is not uniformly distributed and, instead, tend to concentrate among lower-income segments of the population. In Mexico, it is estimated that households living in extreme poverty are 2.5 to 3 times more likely to be affected by water-borne illnesses than households in higher income strata. Likewise, population living in extreme poverty has, on average, four times more children than the segment of the population with the highest income segment (SEDESOL, 2004).

- ✓ Unitary treatment cost per health event due to water-borne gastrointestinal diseases are estimated at Mx\$1,475 (Muñiz Pereyra, 2006). It is estimated that 85 percent of these costs relate to consultations and patient treatment and the remaining 15 percent to hospitalization costs.
- *Lost work*
 - ✓ It is estimated that approximately 47 percent of all individuals affected by water-borne illnesses between 2005 and 2008 were adults of productive age. Among those, 30 percent were employed and the remaining 70 percent were dependents.
 - ✓ Socio-epidemiological studies in Mexico indicate that water-borne illnesses result in an average absence from work of one week (Martínez, 2004).
 - ✓ Based on the average income for the State of Guanajuato, a work day lost is equivalent to Mx\$54.47.

Table 9. Economic analysis for Component B – Water and sanitation

Economic Analysis for Component B - Water and Sanitation (Mx\$ million)							
Year t	Costs C_t	Benefits B_t	Net benefits $B_t - C_t$	Discount rate		Discount Factor $(1+r)^t$	NPV
1	1,413.1	491.1	-922.01	0.12	1.12	0.89	-823.22
2	1,718.5	1,159.7	-558.82	0.12	1.12	0.80	-445.49
3	1,543.4	1,563.0	19.60	0.12	1.12	0.71	13.95
4	1,793.9	2,058.7	264.80	0.12	1.12	0.64	168.29
5	1,674.4	2,058.7	384.29	0.12	1.12	0.57	218.06
6	1,402.4	2,058.7	656.37	0.12	1.12	0.51	332.54
7	1,402.4	2,058.7	656.37	0.12	1.12	0.45	296.91
8	1,402.4	2,058.7	656.37	0.12	1.12	0.40	265.10
9	1,402.4	2,058.7	656.37	0.12	1.12	0.36	236.69
10	1,402.4	2,058.7	656.37	0.12	1.12	0.32	211.33
11	1,402.4	2,058.7	656.37	0.12	1.12	0.29	188.69
12	1,402.4	2,058.7	656.37	0.12	1.12	0.26	168.47
13	1,402.4	2,058.7	656.37	0.12	1.12	0.23	150.42
14	1,402.4	2,058.7	656.37	0.12	1.12	0.20	134.31
15	1,402.4	2,058.7	656.37	0.12	1.12	0.18	119.92
16	1,402.4	2,058.7	656.37	0.12	1.12	0.16	107.07
17	1,402.4	2,058.7	656.37	0.12	1.12	0.15	95.60
18	1,402.4	2,058.7	656.37	0.12	1.12	0.13	85.35
19	1,402.4	2,058.7	656.37	0.12	1.12	0.12	76.21
20	1,402.4	2,058.7	656.37	0.12	1.12	0.10	68.04
21	1,402.4	2,058.7	656.37	0.12	1.12	0.09	60.75
22	1,402.4	2,058.7	656.37	0.12	1.12	0.08	54.24
23	1,402.4	2,058.7	656.37	0.12	1.12	0.07	48.43
24	1,402.4	2,058.7	656.37	0.12	1.12	0.07	43.24
25	1,402.4	2,058.7	656.37	0.12	1.12	0.06	38.61
Net Present Value (Mx\$ million)							1,913.51
Internal Economic Rate of Return - IERR (%)							0.25

Results

The economic analysis for Component B – Water and Sanitation rendered a positive Net Present Value of Mx\$1.9 billion over a 25-year span (equivalent to US\$149.8 million) and an Internal Economic Rate of Return (IERR) of 25 percent. These results indicate that the investments under this component were economically sound.

b. Financial Analysis

The financial rate of return was not estimated at appraisal.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit
Lending		
Krishna Challa	Sector Leader	LCSFP
John Henry Stein	Sector Manager	LCSFW
Jose Luis Irigoyen	Sector Manager	LCSFT
Mariangeles Sabella	Counsel	LEGLA
Bernard Becq	Manager	LCOPR
Lea D.Braslavsky	Lead Procurement Spec.	LCOPR
Maria Angelica Sotomayor	Economist	LCSFW
Gustavo Saltiel	Senior Water Engineer	LCSFW
Oscar Alvarado	Senior W & S Spec.	SASE1
Emmanuel A. James	Sr. Financial Analyst	LCSFT
Daniel Boyce	Sr. Financial Management Spec.	LCOAA
Victor Ordonez	Financial Management Spec.	LCOAA
Charles DiLeva	Lead Counsel	LEGEN
Juan David Quintero	Lead Environmental Spec.	LCSEN
Maria Elena Castro	Sr. Social Scientist	LCSEO
L.Panneer Selvam	Sr. Environmental Spec.	ESDQC
Jean Roger Mercier	Lead Specialist	ESDQC
Ernesto Sanchez-Triana	Sr. Environmental Engineer	LCSEN
Ann Jeannette Glauber	Consultant	LCSEN
Justin Jacinto	Junior Professional Associate	LCSEN
Paul Bermingham	Director	OPCFM
Jeff Ruster	Lead Financial Analyst	IEF
Fernando Rojas	Lead Public Sector Management Spec.	LCSPS
Supervision / ICR		
Julieta Helena Abad-Oholeguy	Consultant	LCSTR
Issam A. Abousleiman	Lead Financial Officer/Head of	BDM
Juan Carlos Alvarez	Sr Counsel	LEGES
Rosa Elena Bellido	Language Program Assistant	LCSUW
Daniel J. Boyce	Country Program Coordinator	SACNA
Alessandra Campanaro	Infrastructure Finance Special	LCSUW
Alan G. Carroll	Country Operations Adviser	LCC3C
Karla Chaman	Sr Communications Officer	EXTCD - HIS
Elena Correa	Senior Social Development Spec	SDV
Mauricio Cuellar	Sr Transport. Spec.	LCSTR
Ann Jeannette Glauber	Sr Environmental Spec.	LCSEN
Mary Lisbeth Gonzalez	Senior Social Development Spec	LCSSO
Dmitri Gourfinkel	Financial Management Analyst	LCSFM
Emmanuel A. James	Lead Transport Specialist	AFTTR
Efraim Jimenez	Consultant	EAPCO
Karina M. Kashiwamoto	Language Program Assistant	LCC1C
Reidar Kvam	Regional Safeguards Adviser	LCSDE
Jose M. Martinez	Senior Procurement Specialist	LCSPT
Nicole Andrea Maywah	Consultant	ECSSD
David Michaud	Sr Water & Sanitation Spec.	LCSUW
Angelica Nunez del Campo	Sr Urban Spec.	LCSUW
Victor Manuel Ordonez Conde	Financial Management Specialis	CTRLP
Diana Ortiz Zuluaga	Consultant	AFTUW

Francisco Javier Osorio Zago	Consultant	LCC1C
Harikrishnan Panneer Selvam		DECDG
Gabriel Penaloza	Procurement Analyst	LCSPT
Catarina Isabel Portelo	Sr Counsel	LEGLA
Felix Prieto Arbelaez	Senior Procurement Specialist	LCSPT
Juan D. Quintero	Sr Environmental Engr.	EASER
Gustavo Saltiel	Sector Leader	LCSSD
Jennifer J. Sara	Sector Leader	LCSSD
Roberto Adrian Senderowitsch	Country Manager	LCCDO
Manuel Antonio Vargas Madrigal	Sr Financial Management Specialist	OPCFM
Miguel Vargas-Ramirez	Sr Water & Sanitation Spec.	LCSUW
Anna Wellenstein	Country Program Coordinator	SACIA
Jose Vicente Zevallos	Senior Social Development Spec	LCSSO
Maria Cecilia Zanetta	Consultant – ICR preparation	

(b) Staff Time and Cost

	Preparation			Supervision			Cumulative Year Expenses
	Labor	Travel	Other	Labor	Travel	Other	
FY 03	139,014.45	52,609.14	13,994.28				
FY 04	169,562.28	54,714.58	42,590.19				
FY 05	120,715.54	36,446.58	37,625.43				
FY 06	178,328.09	72,106.84	35,163.43				
FY 07				173,331.70	95,185.37	40,984.91	
FY 08				91,018.85	51,151.77	21,763.27	
FY 09				98,313.42	32,352.88	39,286.01	
FY 10				125,675.15	29,298.88	25,993.28	
TOTAL	607,620.36	215,877.14	129,373.33	488,339.12	207,988.90	128,027.47	1,777,226.32

Total Preparation: US\$ 952,871
Total Supervision: US\$ 824,355
Total Project: US\$1,77,226

Annex 5. Beneficiary Survey Results
N.A.

Annex 6. Stakeholder Workshop Report and Results

A stakeholder workshop for the project took place on June 15-16, 2010. The summary comments are presented in Section 3.6 of the main text. Annex 7: Borrower comments, contains detailed comments by BANOBRAS and the State of Guanajuato which were taken into account in the final version of the ICR. The agenda and list of participants is presented below.

a) Workshop Agenda:

Martes 15-Jun-10

HORA (local)	Sector	TEMAS A TRATAR	PARTICIPANTES
10:10 a 11:30	CARRETERO	<u>Evaluación Componente Transporte y Carreteras:</u> <ul style="list-style-type: none"> Presentación por parte del Banco Mundial de la evaluación del Componente A. Carreteras. Comentarios de Banco Mundial, BANOBRAS y SOP. 	BM BANOBRAS SFA SOP CONSULTORES
11:30 a 13:00	AGUA	<u>Evaluación Componente Agua y Saneamiento:</u> <ul style="list-style-type: none"> Presentación por parte del Banco Mundial de la evaluación del Componente B. Agua y Saneamiento. Comentarios de Banco Mundial, BANOBRAS y CEAG. 	BM BANOBRAS SFA CEAG CONSULTORES
13:00 a 14:30	VIVIENDA	<u>Evaluación Componente Vivienda bajos ingresos:</u> <ul style="list-style-type: none"> Presentación por parte del Banco Mundial de la evaluación del Componente C. Vivienda. Comentarios de Banco Mundial, BANOBRAS y COVEG. 	BM BANOBRAS SFA COVEG CONSULTORES

Miércoles 16-Jun-10

HORA (local)	Sector	TEMAS A TRATAR	PARTICIPANTES
11:00 a 12:00	TODOS	<u>Evaluación del Programa:</u> <ul style="list-style-type: none"> Presentación ICR de Banco Mundial (40 min). Comentarios finales. 	BM BANOBRAS SFA DEPENDENCIAS CONSULTORES
12:00 a 13:30	TODOS	<u>Evaluación del Programa:</u> <ul style="list-style-type: none"> Comentarios de la Consultoría Global del Informe de Evaluación Global del Programa. Comentarios Generales de BANOBRAS y Gob. Guanajuato Comentarios Finales Gob. Guanajuato, BANOBRAS y Banco Mundial. Clausura de la Misión de Cierre del Programa. 	BM BANOBRAS SFA DEPENDENCIAS CONSULTORES
14:00 a 16:00		Almuerzo con el Secretario y el Subsecretario de Finanzas y Administración del Gobierno de Guanajuato.	BM BANOBRAS SFA

b) List of ICR Workshop Participants

Nombre	CARGO	Dependencia	Nombre	CARGO	Dependencia
Gustavo Adolfo González Estrada	Secretario de Finanzas y Administración	SFA	Genaro Carreño Muro	Secretario de Obra Pública	SOP
Enrique Castro Villalobos	Subsecretario de Finanzas	SFA	Carlos Romero Villegas	Subsecretario de Programación	SOP
Miguel Augusto Gutiérrez Hernández	Secretario Particular	SFA	Martha Patricia Quintana Olmos	Directora General de Programación	SOP
Javier Luna López	Coordinador de Asesores	SFA	Víctor Pablo Vélez Moreno	Coordinador de Conservación	SOP
Luis Daniel Flores Ibarra	Asistente	SFA	Ma. Guadalupe Blancarte Garnica	Coordinadora Ambiental	SOP
Belén del Rocío Espinoza Aguirre	Coordinadora FESI	SFA	Miguel Ángel Arias Aguirre	Jefe de departamento	SOP
Hugo Arturo Pérez Guzmán	Director de Deuda Pública	SFA	José Stefanoni Ramírez	Jefe de departamento SAP	SOP
Lorena Medina Meave	Jefe de departamento	SFA	Angélica Casillas Martínez	Secretaria Ejecutiva	CEAG
Sara Margarita Velázquez Morales	Coordinadora de proyectos	SFA	José Manuel García Rentería	Director de Programación	CEAG
Liliana Reyes Castrejón	Gerente Asistencia Técnica	BANOBRAS	Israel Sánchez Espino	Sistema Financiero del Agua	CEAG
Emilio Héctor Sotelo García	Subgerente Asistencia Técnica	BANOBRAS	Adrián Peña Miranda	Director General	COVEG
Salomón Herrejón López	Subgerente Seguimiento de Proyectos	BANOBRAS	Edgar Hugo Dorsey	Director Planeación	COVEG
Leopoldo Ortíz Martínez	Delegado Estatal	BANOBRAS	Enrique Octavio González Gutiérrez	Director de Área	COVEG
Ernesto Minor Legarrea	Subdelegado Estatal	BANOBRAS	Salvador Narvaez Juárez	Asesor FESI	COVEG
Armida Valdés Campos	Especialista técnico	BANOBRAS	Enrique kato Miranda	Director General	IEEG
Miguel Ángel Meza Muñoz	Especialista técnico	BANOBRAS	Antonio Domínguez Rodríguez	Jefe de Departamento Ambiental	IEEG
Greg Browder	Gerente del proyecto	Banco Mundial	Luis M. Quiroz Echegaray	Coordinador General	COPI
Mauricio Cuellar	Especialista en Transporte	Banco Mundial	Oswaldo García Mandujano	Coordinador de Proyectos de Inversión	COPI
Angélica Núñez	Especialista Vivienda	Banco Mundial	Silvia Zamorano	Dirección de Evaluación	SDSH
Cecilia Zanetta	Consultora Banco Mundial	Banco Mundial	Jaime Elizarraraz García	Consultor	Salveli
Patricia Acevedo	Asistente del proyecto	Banco Mundial	Maricela Méndez Montoya	Consultora	Grupo Espacio Siete
			Israel Núñez Birrueta	Consultor	Grupo Espacio Siete

Annex 7. BANOBRAS Comments on ICR and Project

a) **Comments By BANOBRAS, Received on June 18, 2010—After ICR Workshop**

PRÉSTAMO 7230-ME DEL BIRF

PROGRAMA DE FINANCIAMIENTO A ESTRATEGIAS SECTORIALES INTEGRALES

Evaluación del Prestatario

1. Antecedentes

El préstamo 7230-ME del BIRF por USD 108 millones, en el que BANOBRAS actuó como prestatario y ejecutor, fue firmado el 9 de marzo de 2005 y canalizado a su vez al Gobierno del Estado de Guanajuato que actuó como Estado Participante, mediante contrato de crédito firmado el 20 de mayo de 2005. A lo largo de cuatro años de implementación, entre 2005 y 2009, el financiamiento otorgado por los Bancos contribuyó al diseño e implementación de estrategias sectoriales para atender las necesidades de infraestructura en los sectores de: Transporte y Carreteras, Agua y Saneamiento y Vivienda de Bajos Ingresos, así como asistencia técnica, fortalecimiento institucional, y la implementación de salvaguardas ambientales y sociales en el estado de Guanajuato.

El diseño del Programa se realizó en respuesta a las necesidades de las entidades federativas tras el proceso de descentralización iniciado en México desde 1990. A solicitud del Gobierno del Estado de Guanajuato, el Banco Mundial reunió un equipo de especialistas que diseñaron esta operación *ad hoc* para responder a las necesidades del estado de Guanajuato. El diseño del programa incorporó importantes innovaciones en sus aspectos financieros, operativos y técnicos.

En materia financiera, bajo el programa, se activó por primera vez un mecanismo que permitió el desembolso de los recursos del Banco Mundial en moneda nacional. Este mecanismo recurrió al mercado financiero para efectuar la conversión de moneda. Asimismo, destaca el hecho de que en una operación de BANOBRAS con el Banco Mundial, se puso a disposición del Gobierno del Estado de Guanajuato, acreditado de BANOBRAS, un mecanismo de desembolso por anticipos que, a diferencia de las formas tradicionales de desembolso del Banco Mundial, aportó la liquidez necesaria para financiar el Programa, situación que sin duda contribuyó significativamente para alcanzar las metas y objetivos planteados.

En sus aspectos técnicos, destaca notablemente la decisión del Gobierno del Estado de Guanajuato para alentar su transformación mediante numerosas actividades de asistencia técnica dirigidas a las áreas de gobierno que participaron en el programa. En estas actividades participaron una gran cantidad de funcionarios y técnicos en todos los niveles, lo que sin duda, permitió una gran penetración de la propuesta de cambio para el incremento de la capacidad de gestión de esas áreas.

Esta iniciativa del Gobierno Estatal fue atendida mediante el diseño y preparación del programa y con la participación directa del Banco Mundial en la canalización de asistencia técnica, elementos que resultaron en el fortalecimiento institucional de diversas áreas del gobierno, en la mejora en la calidad de la atención a las demandas ciudadanas en la entidad y en la mejora de la gestión de gobierno en los aspectos ambientales y sociales en la dotación, conservación y mantenimiento de la infraestructura pública y los servicios públicos.

Las innovaciones del programa, representaron un reto importante durante la ejecución del programa que llevó a ambos bancos a incrementar el uso de sus capacidades para homologar visiones, procesos y esquemas operativos que permitieran un adecuado apoyo al Estado de Guanajuato.

2. Evaluación del prestatario - General

Para BANOBRAS es de suma importancia considerar una evaluación más integral que además de calificar las metas sectoriales, incluya todos los elementos financieros y operativos que hicieron posible alcanzar las metas y objetivos del programa.

Adicionalmente, en el proceso de mejora continua de los productos de BANOBRAS y de la relación con el Banco Mundial, es de suma importancia conocer el punto de vista y la evaluación del Gobierno del Estado de Guanajuato en diversos aspectos en la ejecución del programa.

La retroalimentación de nuestro acreditado permitirá a ambos bancos perfeccionar los mecanismos e innovaciones que se probaron por primera vez en México, así como también mejorar los diversos ámbitos de participación en materia financiera, de asistencia técnica y fortalecimiento institucional.

Consecuentemente proponemos a ese organismo multilateral que la evaluación del programa pueda integrar más ampliamente diversos elementos, tomando en consideración la opinión del Gobierno del Estado de Guanajuato, más allá de considerar sólo las metas físicas relativas al incremento, conservación y modernización de la infraestructura. Entre los elementos a ser evaluados como parte integrante del programa, se pueden considerar los siguientes:

- La eficiencia financiera de los recursos (estructura de fondeo, costo, plazos y forma de pago).
- La agilidad de las conversiones de moneda y sus impactos financieros.
- La calidad e impactos en la ejecución del Programa en el cumplimiento de los acuerdos contractuales.
- La eficiencia de los desembolsos, respecto a las necesidades de liquidez del estado (eficiencia y operatividad, menores tiempos de respuesta, el porcentaje del anticipo).
- El cumplimiento de la normatividad del programa (beneficios obtenidos, obstáculos generados).
- La forma en la que se percibió la eficacia de la asistencia técnica brindada por los bancos (recursos comprometidos, penetración, impactos sectoriales).

- La capacidad de los Bancos y del Gobierno del estado de Guanajuato para instrumentar las innovaciones del Programa.
- La transformación de las áreas de gobierno en sus capacidades de gestión, el valor agregado que les implicó el programa (aquí destacan la incorporación de los aspectos ambientales y sociales).
- El incremento en la capacidad de las instituciones sectoriales para mantener la sostenibilidad de las inversiones y las innovaciones generadas por el programa.

En general, percibimos que, en las áreas antes citadas, se alcanzaron importantes logros que no están suficientemente ponderados en la evaluación actual. En particular, destacan los cambios institucionales y la incorporación en las estructuras de gobierno de áreas dedicadas específicamente a promover una adecuada gestión ambiental y social en el diseño, construcción, mantenimiento y operación de la infraestructura pública.

El tomar en cuenta los factores descritos, seguramente puede tener repercusiones en una mejor calificación de evaluación del Programa, una operación que BANOBRAS considera muy exitosa, que dio a nuestro acreditado un valor agregado en materia de gestión gubernamental sin precedentes. Este programa deja numerosas lecciones aprendidas que son un valioso marco de referencia para otras administraciones locales.

3. Evaluación del prestatario - Específica

No obstante que, se dieron algunas diferencias entre el documento de evaluación inicial (PAD), elaborado por el Banco Mundial en la etapa de preparación del Programa, y el Contrato de Préstamo, y que dichas diferencias son atribuibles al diseño de un programa innovador, los objetivos generales y las metas específicas a las que se pretendía llegar en cada sector fueron alcanzadas en su mayor parte y de manera satisfactoria. Buena parte del éxito de esta operación tiene sus fundamentos en que fue preparada especialmente para el Estado de Guanajuato desde su concepción:

En la experiencia de BANOBRAS, la institución a menudo enfrenta retos para adecuar las condiciones y objetivos inicialmente preconcebidos en diversos proyectos con el Banco Mundial, de manera que se ajusten a las necesidades y objetivos de los beneficiarios finales (estados y municipios) de sus programas. Los resultados deben ser tomados en cuenta para establecer una base sobre la cual fomentar la evolución entre la relación de ambos bancos.

- *Objetivos Propuestos*

La Componente de Transporte y Carreteras tuvo un avance satisfactorio a lo largo del Programa, entre sus logros destacan: el aumento en la red carretera del estado, rehabilitación y construcción de caminos rurales, la implementación del sistema de control de calidad HDM-4 del Banco Mundial para mejoras en la condición de los pavimentos carreteros, la inclusión de criterios para el mantenimiento rutinario y periódico de la red carretera del estado, así como fortalecimiento institucional y asistencia técnica para la implementación de un sistema de administración de pavimentos que incorpora los criterios de calidad HDM-4 del Banco Mundial.

La Componente de Agua y Saneamiento tuvo un desempeño notable, superando las expectativas de resultados originalmente planteados en la etapa de diseño. Entre sus logros más destacados se encuentra el aumento en la cobertura de servicios de agua y

drenaje en zonas rurales y urbanas del estado; mejoras en el servicio de cobranza y facturación; incremento en la eficiencia de Organismos Operadores de Agua; eficiencia operacional alcanzada por las plantas de tratamiento de aguas negras financiadas con el Programa; y mejor manejo y planeación de la gestión del agua por parte de CEAG, que refuerzan su compromiso con una cultura del cuidado y uso responsable del agua.

La Componente de Vivienda fue la única que requirió una revisión de sus objetivos para reorientar las expectativas originalmente planteadas, ya que la estrategia dirigida a fomentar préstamos y subsidios a la vivienda de bajos ingresos no pudo ser implementada, debido principalmente a las debilidades institucionales de la Agencia Ejecutora, en este caso el IVEG, por lo que se contó con la flexibilidad de los Bancos y el Gobierno de Guanajuato para incorporar otra estrategia e innovaciones que permitieran atender al segmento de bajos ingresos de manera más eficiente. Al final del Programa, el IVEG fortaleció su estructura institucional creando la COVEG, la cual quedó a cargo del Programa de Lotes con Servicios para familias de bajos ingresos, el cual se espera genere beneficios en el mediano plazo, incentive una mayor participación del sector privado y facilite el acceso al financiamiento para vivienda de este segmento de la población en Guanajuato.

Los Temas Transversales fueron implementados transectorialmente (cross-sector) con el fin de favorecer el intercambio de información y las lecciones aprendidas en cada sector en beneficio de las agencias participantes y figuran entre los principales logros del Programa, a pesar de los retos de coordinación que representó la revisión de diversos sectores, cada uno con temas transversales como adquisiciones, fortalecimiento institucional, el tema ambiental y el social.

Asistencia Técnica y Fortalecimiento Institucional: Asesoría y financiamiento a estudios para mejorar la calidad de los servicios, fortalecer la estructura institucional, la gestión administrativa, sistemas y encuestas de satisfacción de los usuarios de los servicios públicos.

Salvaguardas Ambientales y Sociales: El más relevante fue el tema ambiental y social que permitió incorporar unidades ambientales dentro de la estructura institucional de las Dependencias participantes, las cuales cuentan con manuales de buenas prácticas ambientales y sociales para cada dependencia, cuyos estándares de aplicación se encuentran por encima de la legislación nacional y que actualmente forman parte de la praxis institucional de la dependencias para todos sus proyectos y no únicamente para los financiados por el Programa.

- *Seguimiento y supervisión*

Este préstamo planteó a BANOBRAS la necesidad de un mayor nivel de involucramiento operativo respecto de su actividad crediticia normal. Las actividades que requirieron más atención fueron: un seguimiento continuo del Programa, capacitación, asistencia técnica personal y caso por caso, misiones de seguimiento al estado y diversos esfuerzos de coordinación. Dichas actividades permitieron a BANOBRAS favorecer la construcción de capacidades de la entidad y de los municipios participantes, así como cumplir con sus metas y objetivos institucionales orientados a contribuir al fortalecimiento institucional y al otorgamiento de asistencia técnica en acciones relacionadas con infraestructura y servicios públicos.

La supervisión de temas ambientales permitió a BANOBRAS desarrollar capacidades en la materia, de la mano con el Estado de Guanajuato, con la preparación del Manual de Gestión Ambiental y Social del Programa (MAGAS), el seguimiento de las fichas ambientales y el desarrollo y seguimiento de los aspectos sociales del Programa, que pudieron ser atendidos de manera satisfactoria en gran parte gracias a la exhaustiva asistencia técnica del Banco Mundial en este tema, y la excelente disposición del Estado de incorporar las políticas sociales del Banco Mundial establecidas para este programa con la directiva OP 4.12.

El trabajo conjunto de BANOBRAS y del Banco Mundial durante la ejecución del Programa fue clave para orientar las acciones necesarias para el logro de los objetivos propuestos, para este fin, el Banco Mundial facilitó la integración, en las actividades de asistencia técnica y en los temas transversales, de reconocidos expertos a nivel internacional para cada uno de los sectores del Programa.

- *Experiencia de Ejecución*

Desde la preparación y a lo largo de todo el Programa, el Gobierno del Estado de Guanajuato mostró una gran disposición para trabajar con ambos bancos, con el fin de cumplir y alcanzar los objetivos del Programa. Esta actitud fue un elemento clave para el éxito de un programa con múltiples retos operativos y complejidades técnicas y normativas, lo cual implicó superar diversos retos que se fueron presentando durante la ejecución relacionados con cambios en procesos administrativos a través del *learning by doing*, así como el cumplimiento de las políticas y salvaguardas del Banco Mundial en materia de gestión financiera, adquisiciones, gestión ambiental y social.

El Programa representó una experiencia novedosa para BANOBRAS respecto a la implementación de un programa piloto preparado *ad hoc* por el Banco Mundial para un estado de la República, el cual, estuvo sujeto a un buen número de innovaciones por parte de los Bancos y las Agencias Ejecutoras. Entre ellos destacan:

- La implementación de perspectivas sectoriales (SWAP) en línea con los proyectos planteados en el Plan de Desarrollo del Estado,
- El mecanismo de desembolso por comprobación de gastos (OBD) que se caracteriza por:
 1. Permitir a los acreditados suficiente liquidez para implementar de manera más rápida y eficiente los recursos del préstamo.
 2. Representa una forma flexible para comprobar gastos elegibles de financiamiento del Programa mediante la supervisión y seguimiento de los Bancos.
 3. Permiten tener un seguimiento transparente del origen y destino de los gastos del Programa.
- Incorporación de aspectos ambientales y sociales en cada componente.
- Finalmente, las innovaciones que al interior de cada sector realizaron las Agencia Ejecutoras, para el logro y, en algunos casos, la superación de las metas previstas originalmente.

4. Evaluación del Alcance del Cumplimiento de los Objetivos.

El adoptar una perspectiva sectorial (SWAP) en el Programa, permitió tener un enfoque más ambicioso, que fue mucho más allá de otorgar financiamiento para infraestructura. El cumplimiento satisfactorio de los objetivos del Programa lo demuestra, en el sentido de

que una perspectiva sectorial brindó al Gobierno de Guanajuato mayor valor agregado respecto a las metas y los objetivos de desarrollo de largo plazo para cada sector específico, especialmente cuando el diseño del Programa se enfocó en la plataforma de recursos y adelantos con los que contaba el estado de Guanajuato antes de implementar el Programa, con el fin de explorar diversas áreas de oportunidad que reportaran un progreso significativo. Entre las áreas de oportunidad que se abarcaron en el Programa se encuentran: a) mejora de procesos, b) incorporación de mejores prácticas, c) capacitación y eficiencias en servicio, d) innovación y desarrollo de capacidades, e) adelantos en materia ambiental y social, entre otros.

5. Evaluación del Desempeño del Prestatario durante la preparación y ejecución del proyecto

- *Lecciones aprendidas*
 - La perspectiva sectorial (SWAP) es una perspectiva adecuada para este tipo de Programas, por los logros alcanzados conforme a indicadores para cada sector y por sus beneficios agregados en el diseño de estrategias sectoriales, sin embargo, entre la lecciones que nos brinda la experiencia de este Programa, identificamos que cuando el enfoque sectorial se ofrece a varios sectores, resulta en costos muy altos durante la preparación, seguimiento y ejecución de cada uno de los sectores. Derivado de la experiencia de este Programa, un enfoque sectorial concentrado en sólo uno o dos sectores sería mucho más eficiente y recomendable.
 - La implementación por etapas tanto de los temas sectoriales como de algunos de los temas transversales podrían generar mayores resultados y una mejor planeación del Programa.
 - Es recomendable que proyectos de gran visión, como lo fue este Programa, consideren realizar el ciclo del proyecto (diseño-ejecución-evaluación-cierre) acotado a la duración del periodo de gobierno del Gobierno contratante. Lo anterior, debido a que puede representar un riesgo potencial realizar este tipo de proyectos durante las transiciones de administraciones distintas en el Gobierno, como resultado de procesos electorales. El caso de Guanajuato fue una excepción muy afortunada, pues el Gobierno entrante mantuvo un alto nivel de compromiso con los objetivos del Programa en beneficio de la comunidad guanajuatense.
 - Asegurar esquemas operativos más eficientes y flexibles en las Misiones de seguimiento y en los Temas transversales, con el fin de evitar reuniones multitudinarias que agoten los recursos humanos del acreditado para revisar el desarrollo y avances de objetivos.

En general, los proyectos del Banco Mundial se caracterizan por tener requerimientos operativos específicos y muy detallados, lo cual a menudo se traduce en la creación de unidades administrativas específicas dentro de las estructuras de gobierno dedicadas exclusivamente a implementar los proyectos financiados con recursos del BIRF. Sin embargo, en el caso del Gobierno del Estado de Guanajuato y sus Dependencias, los conocimientos, manuales, capacitación, procedimientos y políticas que generó el Programa se incorporaron a la práctica institucional general, y hoy en día se implementan para todos los proyectos de las Dependencias y no únicamente los financiados con recursos del Banco Mundial para el Programa, por lo que el alcance de los logros del Programa no se limita únicamente a los proyectos

financiados con recursos del Banco Mundial, sino también a los diversos proyectos que las Dependencias ejecutoras realizan en apego a la experiencia y conocimientos aprendidos durante el Programa.

6. Evaluación del desempeño del Banco durante la preparación y ejecución.

- *Efectividad de las relaciones con el prestatario*

Las relaciones entre BANOBRAS y el Banco Mundial fueron cordiales en todo momento, orientadas a la mejor cooperación y trabajo conjunto.

Entre los retos más importantes a superar durante la implementación del Programa, destacamos las funciones de coordinación de ambos bancos respecto a los diversos especialistas que el Banco Mundial facilitó para supervisar el Programa, quienes trabajaban con nutridos grupos de las Agencias Ejecutoras, lo cual convertía a las misiones en eventos multitudinarios con tiempo restringido para revisar y comentar con las agencias todas sus dudas, lo cual, a su vez representaba retos importantes para su seguimiento y supervisión. De lo anterior, se capitalizaron la mayor parte de los beneficios en cuanto a la amplia experiencia de los especialistas y las recomendaciones que contribuyeron ampliamente a que el Programa alcanzara sus objetivos y metas.

Otro de los retos más significativos fue conciliar las diferencias identificadas en los objetivos planteados durante la etapa de diseño del Programa, con los objetivos plasmados en el Contrato de Préstamo, los cuales prevalecieron durante la ejecución del Programa. En el caso particular de vivienda, el Contrato de Préstamo no reconocía como elegibles los préstamos de vivienda, los cuales estaban contemplados en la descripción del Programa y en el Informe de Evaluación Inicial (PAD). Lo anterior, debido a que las limitaciones jurídicas del Contrato no permitieron reconocer los gastos del Gobierno del Estado para préstamos de vivienda para esa componente. En su momento esto representó una restricción en la ejecución de la Componente. Afortunadamente, los Bancos se mantuvieron flexibles y junto con el estado se logró la reestructura de esa componente. Sin embargo, es importante subrayar que el trabajo conjunto entre BANOBRAS y Banco Mundial desde la preparación hasta el cierre de los proyectos es fundamental para evitar este tipo de circunstancias en futuras operaciones.

- *Lecciones aprendidas*

El Programa requirió flexibilidad por parte de los Bancos para adaptar de mejor manera los objetivos del Programa con la realidad que enfrenta un estado particular, tomando en cuenta sus fortalezas y limitaciones en la ejecución, por lo que fue posible redefinir los objetivos originales que no pudieron realizarse, pero que pudieron ser sujetos de replanteamiento, dado el interés y los esfuerzos del Gobierno de Guanajuato, con el fin de producir logros en cada sector.

7. Descripción de los arreglos propuestos para una futura operación.

- **Flexibilidad operativa.-** En la experiencia de BANOBRAS con proyectos del Banco Mundial, uno de los factores que previenen la participación de otras entidades federativas de México en proyectos financiados por el Banco es la complejidad técnica y la carga operativa que implican al ejecutar un proyecto, atendiendo todas las normativas y salvaguardas del Banco Mundial. Lo anterior, puede resultar en una

mayor carga operativa por cuenta de los estados lo cual podría desincentivarlos a participar en este tipo de financiamiento y podría, eventualmente, convertirse en un elemento de mayor peso en las decisiones de una entidad federativa para tomar un proyecto con BANOBRAS-Banco Mundial, independientemente del costo financiero que representa.

- Perfeccionar el esquema de desembolsos por anticipos.- El esquema de desembolsos (OBD) ha demostrado ser un mecanismo muy efectivo para canalizar los recursos de BANOBRAS y el Banco Mundial a los acreditados, por lo que se buscaría continuar con este mecanismo y perfeccionarlo.
- Aspectos Ambientales y Sociales.- Luego de la experiencia de este Préstamo, que permitió avances sustanciales en materia social y ambiental, BANOBRAS está muy interesado en continuar incorporando este tema en futuras operaciones, tomando como línea de base los resultados y experiencias de este Préstamo, que se han convertido en un importante valor agregado de los proyectos que BANOBRAS y el Banco Mundial pueden promover en conjunto en nuestro país.
- Conversión Automática.- Este préstamo permitió la conversión automática a pesos mexicanos de los desembolsos, lo cual facilitó la transferencia de recursos al acreditado de manera rápida y eficiente. Se buscará continuar con este esquema y explorar opciones en las que para algunos préstamos sea factible el desembolso tanto en moneda nacional como en dólares americanos.
- Fortalecer el esquema de Country Systems. En México y en el trabajo con BANOBRAS, el esquema de Country Systems es viable en diversas áreas, convendría profundizar estos avances y aprovechar las sinergias creadas en el trabajo conjunto, de manera que sea posible reducir la carga operativa, simplificar y flexibilizar mecanismos de revisión y supervisión, así como validar el papel de BANOBRAS como garante en la supervisión de estas áreas, tomando en consideración que en los años que llevamos de trabajar juntos, jamás se ha presentado ninguna incidencia. Lo anterior permitiría que nuestra relación de trabajo evolucione del modelo tradicional al reforzamiento de capacidades institucionales de BANOBRAS en áreas de probada eficiencia y compromiso en nuestras operaciones conjuntas, resultado de años de trabajo conjunto entre ambas instituciones.
- Acompañamiento continuo de la Banca de Desarrollo y en los casos que competen a BANOBRAS involucrar a la institución durante todo el ciclo del proyecto, desde el diseño y preparación, hasta el cierre, lo cual contribuirá al desarrollo de mejores esquemas de coordinación, retroalimentación y complementación institucional en proyectos conjuntos.
- Mayor comprensión de los procesos de BANOBRAS, de la Secretaría de Hacienda y Crédito Público (SHCP) y del proceso de otorgamiento del crédito subnacional en las operaciones que realizamos en conjunto, así como de los procesos del Banco Mundial, en aras de un mayor conocimiento de los procedimientos que por ley las instituciones realizan para el otorgamiento de financiamiento y la autorización de esquemas operativos innovadores que nos permitan unir sinergias para efficientar y agilizar nuestros procesos de otorgamiento de crédito.

b) **Comments By State of Guanajuato, Received on June 18, 2010—After ICR Workshop**

Con respecto a la calificación otorgada por Banco Mundial en su documento del *Implementation Competition Report* (ICR) a los sectores e instituciones participantes en el proyecto FESI, la coordinación del programa en el Gobierno del Estado de Guanajuato emite los siguientes comentarios al respecto, para ser considerados por el equipo de evaluación de Banco Mundial:

- La evaluación toma como referencia indicadores de resultados establecidos en el marco lógico. Este marco lógico fue diseñado en la etapa de preparación del programa y Banco Mundial se ha autoevaluado en esta primera etapa como Moderadamente Insatisfactorio.
- Al considerar que el diseño del proyecto no fue correctamente formulado, en la etapa de evaluación habría que considerar que los indicadores mediante los cuales se quiere comparar el antes y después de FESI en el Estado de Guanajuato, no pueden ser objetivos ni suponer que abarcan todos los aspectos que comprendieron el desarrollo del proyecto FESI.
- Derivado de lo anterior, se recomienda que en este proyecto en particular Banco Mundial no utilice la metodología de evaluación de la misma forma como se utiliza para cualquier otro programa, dado que se estaría arrastrando con los errores iniciales del diseño del proyecto hasta su etapa de evaluación.

Aunado a lo anterior, se propone considerar también las externalidades positivas para el Gobierno del Estado de la implementación de FESI. Que si bien no se consideraron como objetivos del proyecto, sí valdría la pena tomarlas en cuenta porque se refieren a la mejora de la administración pública estatal. La evaluación del programa de Financiamiento a Estrategias Sectoriales Integrales, desde el punto de vista del sub-prestatario, es decir, del Gobierno del Estado de Guanajuato, en particular la Secretaría de Finanzas y Administración en donde se designó la coordinación del Programa, es el siguiente:

1.- Con respecto al diseño del proyecto. Cualquier programa en el que intervengan siete dependencias y/o entidades⁸ dentro de cualquier nivel de gobierno, además de dos o más áreas dentro de éstas, requiere de un gran esfuerzo de coordinación de todas las agencias participantes, en este caso de Banco Mundial, de BANOBRAS y de la coordinación del programa del Gobierno del Estado. En este sentido, el diseño del programa FESI no consideró esta posible complicación, y no se previó un mejor mecanismo de coordinación y seguimiento que permitiera una operación más sencilla y mejor articulada. De la misma manera, Banco Mundial tuvo una visión bastante optimista en cuanto a las políticas de salvaguardas y licitación que llevaba a cabo el Gobierno del Estado, de manera que no se consideró el tiempo que se requirió para el aprendizaje de las normas totalmente diferentes del programa.

⁸ Secretaría de Obra Pública (SOP), Comisión Estatal del Agua (CEAG), Comisión de Vivienda del Estado de Guanajuato (COVEG), Instituto de Ecología (IEEG), Secretaría de Desarrollo Social y Humano (SDSH), Coordinación General de Programación y Gestión de la Inversión Pública (COPI), y Secretaría de Finanzas y Administración (SFA). Durante algún tiempo también participó la Unidad de Acceso a la Información.

2.- Objetivos propuestos. Con respecto al objetivo final del programa, éste pudo haber sido alcanzado sin la necesidad de aplicar un punto de vista sectorial; por ejemplo, apoyar el desarrollo de infraestructura de un sector a la vez. Pareciera que implementar un punto de vista sectorial tendría como finalidad disminuir variables de impacto, como pobreza, salud, educación, etc., y como objetivo último, que el Estado alcance un mayor nivel de desarrollo. En este sentido, el objetivo inicial fue modificado con la finalidad de alcanzar resultados menos ambiciosos, tal como sucedió.

3.- Ejecución. El problema con el mecanismo de comunicación dependencia/entidad de Gobierno del Estado – coordinación del programa (SFA) – Delegación Estatal de BANOBRAS – Oficinas centrales de BANOBRAS – Banco Mundial y viceversa, fue que se derivaron retrasos en la ejecución de las obras y por ende, retrasos en la disposición del préstamo. Esto también conllevó a que el Estado de Guanajuato tuviera que pagar una comisión por saldos nos dispuestos al prestatario, en esta caso BANOBRAS. Por otra parte, es imprescindible que la duración del proyecto, considerando posibles extensiones, no traspase la duración de una administración. Varios de los retrasos en la ejecución de FESI fueron derivados del cambio de funcionarios dentro de las dependencias del Gobierno del Estado, pero también dentro del propio Banco Mundial, cuya diferencia de criterios entre sí confundía a los ejecutores.

4.- Cumplimiento de los objetivos. La implementación de mejores prácticas de gestión en el Gobierno del Estado, así como el desarrollo de mayor infraestructura en los tres sectores del programa, fueron logrados gracias a FESI. Un logro primordial fue la incorporación de aspectos ambientales y sociales a la construcción de obras de cualquier índole dentro del Estado.

5.- Desempeño del prestatario. Durante la ejecución del programa, aún y cuando sólo se contaba con un funcionario en BANOBRAS para resolver las cuestiones de licitación y adquisición de bienes, su servicio fue vasto, pero no suficiente. En la práctica, el papel de BANOBRAS en general, y de la Delegación en particular, fue de oficialía de partes. Cuando la Delegación contó con un funcionario dedicado exclusivamente a la implementación del programa, los trámites fueron más ágiles, pero no tenía facultades de autorizar gestiones. Los especialistas sectoriales de Banco Mundial fueron quienes trabajaron de la mano con los funcionarios de Gobierno del Estado en todo el desarrollo del programa. De la misma manera, durante la reestructura y modificación del Manual de Operaciones, la coordinación, en conjunto con Banco Mundial fueron quienes aportaron las soluciones a los problemas que se presentaron durante la vida del proyecto. Como lección aprendida, se propone dar un papel más importante a la función de la Delegación Estatal, suprimiendo la participación de las oficinas centrales, o bien, eliminar la intervención de la primera desde el diseño del proyecto. De la misma manera, BANOBRAS deberá atender y acompañar de manera más cercana al sub prestatario y contar con la participación de funcionarios de mayor nivel de las oficinas centrales.

6.- Desempeño de Banco Mundial. En cuanto a la atención de los funcionarios de Banco Mundial al Estado de Guanajuato, la coordinación opina que la mayoría de las veces fue próxima y enfocada a resolver los problemas de implementación de manera expedita. No obstante, los funcionarios del Banco debieran estar más concientes de las circunstancias económicas, administrativas y políticas imperantes del sub prestatario, ya que en algunas ocasiones las propuestas realizadas no se lograban consolidar por el desconocimiento de las condiciones intrínsecas del Estado. Lo anterior aunado a la constante rotación de los especialistas, así como del líder del proyecto, causaron la percepción por parte de los ejecutores de una desatención de Banco Mundial y desdén al programa.

7.- Cambios propuestos para una futura operación (si es el caso). El concepto de *SWAP* deberá ser revisado a profundidad, ya que esta experiencia demuestra que los mecanismos de coordinación y ejecución se complican en demasía cuando se trata de implementar un proyecto en varios sectores a la vez. La función del prestatario durante la ejecución del programa deberá tener un papel más activo para con el sub prestatario, o bien, ser limitado a receptor de los pagos del préstamo. De la misma manera, los mecanismos de comunicación deberán estar estructurados de manera más ágil y cercana, para que no sean un factor de demora en la ejecución del mismo. El programa se deberá implementar durante la duración de una sola administración, y los funcionarios de Banco Mundial deberán ser los mismos durante toda la duración del proyecto. De esta manera, se garantiza que el tiempo de aprendizaje de todos los participantes del programa sea el mínimo necesario.

Annex 8. List of Supporting Documents

Key Project Documents:

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LAC Region Power Point Presentation to World Bank Board: *Mexico Decentralized Infrastructure Reform and Development Loan Progress Report*, July 18, 2006. Filed in IRIS.

