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The World Bank**

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**IMPLEMENTATION COMPLETION AND RESULTS REPORT  
(IBRD-74010)**

**ON AN**

**ADAPTABLE PROGRAM LOAN**

**IN THE AMOUNT OF US\$48.0 MILLION**

**TO**

**THE REPUBLIC OF ECUADOR**

**FOR A**

**RURAL AND SMALL TOWNS WATER SUPPLY AND SANITATION PROJECT (PRAGUAS)  
IN SUPPORT TO THE SECOND PHASE OF THE RURAL AND SMALL TOWNS  
WATER SUPPLY AND SANITATION PROGRAM**

September 21, 2009

Sustainable Development Department  
Bolivia, Ecuador, Peru and Venezuela Country Management Unit  
Latin America and the Caribbean Region

## CURRENCY EQUIVALENTS

Currency Unit = US Dollar

FISCAL YEAR  
January 1 – December 31

## ABBREVIATIONS AND ACRONYMS

AME	Ecuadorian Association of Municipalities ( <i>Asociación de Municipios del Ecuador</i> )
APL	Adaptable Program Loan
BdE	Bank of the State of Ecuador
CAS	Country Assistance Strategy
CDF	Design and Supervision Consulting Firm ( <i>Consultoría de Diseño y Fiscalización</i> )
CIS	Social Intermediation Consulting Firm ( <i>Consultoría de Intervención Social</i> )
CMU	Country Management Unit (at the World Bank)
CODAE	Ecuadorian Council for Afro-Ecuadorian Development <i>Coordinadora de Desarrollo Afro-Ecuatoriano</i>
CODENPE	Ecuadorian Council for Nationalities and Indigenous Peoples ( <i>Coordinadora de Nacionalidades y Pueblos del Ecuador</i> )
CONAM	National Council for Modernization ( <i>Consejo Nacional de Modernización</i> )
DRA	Demand-Responsive Approach
ECAD	Delegation Support Consulting Firm ( <i>Consultorías de apoyo a la Delegación</i> )
EIRR	Economic Internal Rate of Return
EMS	Municipal Sanitation Unit ( <i>Equipo Municipal de Saneamiento</i> )
EPAS	Provincial Water and Sanitation Unit of MIDUVI ( <i>Equipo Provincial de Agua y Saneamiento del MIDUVI</i> )
FISE	Ecuadorian Social Investment Fund ( <i>Fondo Ecuatoriano de Inversión Social</i> )
FMS	Financial Management Specialist
GOE	Government of Ecuador
IAA	Implementing Assistance Agency
ICE	Special Consumption Tax ( <i>Impuesto sobre Consumos Especiales</i> )
IEOS	Ecuadorian Institute for Sanitary Works ( <i>Instituto Ecuatoriano de Obras Sanitarias</i> )
IMIS	Integrated Management Information System
Junta	Water User Board ( <i>Junta de Agua Potable y Saneamiento</i> )
LOREyT	Ecuadorian Fiscal Responsibility Law ( <i>Ley Orgánica de Responsabilidad</i> )
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
MEF	Ministry of Economy and Finance ( <i>Ministerio de Economía y Finanzas</i> )
MIDUVI	Ministry of Urban Development and Housing ( <i>Ministerio de Desarrollo Urbano y Vivienda</i> )
NGO	Non-Governmental Organization
NPV	Net Present Value
OM	Operation Manual
O&M	Operation and Maintenance
PAHO	Pan-American Health Organization
PDO	Project Development Objective
PMU	Project Management Unit
PS	Private Sector
RWSS	Rural Water Supply and Sanitation
SAPSyRS	Subsecretariat for Water Supply, Sanitation and Solid Waste ( <i>Sub-secretaría de Agua Potable, Saneamiento y Residuos Sólidos</i> )
SSA	Subsecretariat of Environmental Sanitation ( <i>Sub-secretaría de Saneamiento Ambiental</i> )
SIG	Management Information System ( <i>Sistema de Información Gerencial</i> )
SINSOC	Social Impact Information System ( <i>Sistema de Información de Impacto Social</i> )
SISASAR	Integrated Water, Sanitation, Sewerage and Solid Waste Monitoring System ( <i>Sistema de Información</i> )

*para los Sectores de Agua, Saneamiento y Residuos Sólidos)*

TA	Technical Assistance
TTL	Task Team Leader
UBS	Basic Sanitation Unit comprising shower, sink and toilet ( <i>Unidad Básica de Saneamiento</i> )
UNDP	United Nations Development Program
VIP	Ventilated Improved Pit Latrine
WSS	Water Supply and Sanitation
WUA	Water User's Association ( <i>Junta de Agua Potable y Saneamiento</i> )

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# ECUADOR

## RURAL AND SMALL TOWNS WATER SUPPLY AND SANITATION PROJECT (PRAGUAS)

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Map

<b>A. Basic Information</b>			
Country:	Ecuador	Project Name:	Rural and Small Towns Water Supply and Sanitation Project II (PRAGUAS)
Project ID:	P095555	L/C/TF Number(s):	IBRD-74010
ICR Date:	06/22/2009	ICR Type:	Core ICR
Lending Instrument:	APL	Borrower:	REPUBLIC OF ECUADOR
Original Total Commitment:	USD 48.0M	Disbursed Amount:	USD 7.6M
<b>Environmental Category: B</b>			
<b>Implementing Agencies:</b> Sub-Secretary of Water, Sanitation and Solid Waste (SAPSyRS)			
<b>Cofinanciers and Other External Partners:</b>			

<b>B. Key Dates</b>				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	11/21/2005	Effectiveness:		12/29/2006
Appraisal:	03/20/2006	Restructuring(s):		12/10/2008
Approval:	07/25/2006	Mid-term Review:	12/01/2008	
		Closing:	02/28/2011	03/31/2009

<b>C. Ratings Summary</b>	
<b>C.1 Performance Rating by ICR</b>	
Outcomes:	Highly Unsatisfactory
Risk to Development Outcome:	High
Bank Performance:	Moderately Satisfactory
Borrower Performance:	Moderately Unsatisfactory

<b>C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)</b>			
Bank	Ratings	Borrower	Ratings
Quality at Entry:	Satisfactory	Government:	See Overall Borrower Performance
Quality of Supervision:	Moderately Satisfactory	Implementing Agency/Agencies:	See Overall Borrower Performance
<b>Overall Bank Performance:</b>	Moderately Satisfactory	<b>Overall Borrower Performance:</b>	Moderately Unsatisfactory

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

<b>D. Sector and Theme Codes</b>		
	<b>Original</b>	<b>Actual</b>
<b>Sector Code (as % of total Bank financing)</b>		
Central government administration	13	18
Sanitation	26	36
Solid waste management	8	
Sub-national government administration	9	13
Water supply	44	33
<b>Theme Code (as % of total Bank financing)</b>		
Access to urban services and housing	14	10
Municipal governance and institution building	29	13
Other human development	14	
Rural services and infrastructure	29	77
Small and medium enterprise support	14	

<b>E. Bank Staff</b>		
<b>Positions</b>	<b>At ICR</b>	<b>At Approval</b>
Vice President:	Pamela Cox	Pamela Cox
Country Director:	Carlos Felipe Jaramillo	Marcelo Giugale
Sector Manager:	Guang Zhe Chen	John Henry Stein
Project Team Leader:	Maria Angelica Sotomayor Araujo David Michaud	Franz R. Drees-Gross Maria Angelica Sotomayor Araujo
ICR Team Leader:	Maria Angelica Sotomayor Araujo David Michaud	
ICR Primary Author:	Ricardo Mairena Ramirez	

## F. Results Framework Analysis

### Project Development Objectives (from Project Appraisal Document)

The development objective for phase II of the APL program ("the project") is to (i) provide sustainable access to WSS services for approximately 285,000 new rural beneficiaries and to promote their effective use; (ii) provide improved and sustainable WSS services to approximately 205,000 beneficiaries in cantonal capitals; (iii) promote sustainable solid waste services in cantonal capitals; and (iv) improve overall sector performance by the national government by promoting performance-based investment financing for the urban WSS sector.

### Revised Project Development Objectives (as approved by original approving authority)

#### (a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
<b>Indicator 1 :</b>	Number of additional people with sustainable access to improved water supply services in rural areas			
Value quantitative or Qualitative)	0	200,000		Not measured
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	Cannot be measured in terms of sustainable access since no ex-post survey was conducted. Number of additional people with access to improved water supply services is 31,403.			
<b>Indicator 2 :</b>	Number of additional people with sustainable access to improved sanitation services in rural areas			
Value quantitative or Qualitative)	0	85,000		Not measured
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	Cannot be measured in terms of sustainable access since no ex-post survey was conducted. Number of additional people with access to improved sanitation services is 44,562.			
<b>Indicator 3 :</b>	Number of additional people with sustainable access to improved water supply services in cantonal capitals			
Value quantitative or Qualitative)	0	165,000		Not measured
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	Was not measured. Most activities linked to this indicator were canceled.			

<b>Indicator 4 :</b>	Number of additional people with sustainable access to improved sewerage services in cantonal capitals			
Value quantitative or Qualitative)	0	40,000		0
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 5 :</b>	Percent increase in rates of target population groups washing their hands with soap at key times			
Value quantitative or Qualitative)	TBD	TBD 60%		0%
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 6 :</b>	Number of additional people with sustainable access to improved solid waste services in cantonal capitals			
Value quantitative or Qualitative)	0	100,000		0
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 7 :</b>	100% of ICE resources assigned by MEF for WSS investments according to the agreed distribution formula			
Value quantitative or Qualitative)	0	100%		0%
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			

**(b) Intermediate Outcome Indicator(s)**

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
<b>Indicator 1 :</b>	Component 1 Annual audits track the extent to which ICE expenditures can be traced to the financing of WSS investments			
Value (quantitative)	0	100%		0



or Qualitative)				
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	Activities linked to this indicator were cancelled.			
<b>Indicator 2 :</b>	Component 1 SAPSyRS (i) produces sector benchmarking reports, (ii) agrees on a uniform sector policy with other national government actors, and (iii) produces sector plans			
Value (quantitative or Qualitative)	0	100%		0
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 3 :</b>	Subcomponent 2 A Number of new water boards that are operating their water and/or sanitation facilities by collecting a cost-recovery based tariff			
Value (quantitative or Qualitative)	0	300		Not measured
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	Was not measured. Most activities linked to this indicator were canceled.			
<b>Indicator 4 :</b>	Subcomponent 2 A Number of municipalities providing TA to rural communities to plan/manage water and/or sanitation investments			
Value (quantitative or Qualitative)	0	20		Not measured
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	Was not measured. Most activities linked to this indicator were canceled.			
<b>Indicator 5 :</b>	Subcomponent 2A Number of municipalities that monitor progress for achieving targets			
Value (quantitative or Qualitative)	0	20		Not measured
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	Was not measured. Most activities linked to this indicator were canceled.			
<b>Indicator 6 :</b>	Subcomponent 2B Number of additional people with access to improved water supply services in rural areas			
Value (quantitative)	0	285,000		31,403

or Qualitative)				
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	11% . Most activities linked to this indicator were canceled.			
<b>Indicator 7 :</b>	Subcomponent 2B Number of additional people with access to improved sanitation services in rural areas			
Value (quantitative or Qualitative)	0	70,000		44,562
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	64% . Many activities linked to this indicator were canceled.			
<b>Indicator 8 :</b>	Subcomponent 2B Number of additional people with access to sewerage services in rural areas			
Value (quantitative or Qualitative)	0	50,000		0
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 9 :</b>	Subcomponent 2C Number of new regional water associations providing effective support to existing water boards			
Value (quantitative or Qualitative)	0	3		0
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 10 :</b>	Subcomponent 2D Number and proportion of target audience members reporting hand washing message exposure, and source			
Value (quantitative or Qualitative)	0	75%		0
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 11 :</b>	Subcomponent 2D Number and proportion of target audience members recalling hand washing messages correctly			
Value (quantitative or Qualitative)	0	60%		0

Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 12 :</b>	Subcomponent 3A Number of cantonal capitals that adopt autonomous management models for water supply service and/or sewer service provision			
Value (quantitative or Qualitative)	0	20		0
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 13 :</b>	Subcomponent 3A Number of cantonal capitals that adopt financially viable models for water supply service and/or sewer service provision with operators collecting tariffs			
Value (quantitative or Qualitative)	0	20		0
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 14 :</b>	Subcomponent 3A Number of cantonal capitals that adopt improved institutional and financial arrangements for solid waste management			
Value (quantitative or Qualitative)	0	10		0
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 15 :</b>	Subcomponent 3B Number of additional people with access to improved water supply services in cantonal capitals			
Value (quantitative or Qualitative)	0	60,000		0
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 16 :</b>	Subcomponent 3B Number of additional people with access to improved sewerage services in cantonal capitals			
Value (quantitative)	0	65,000		0

or Qualitative)				
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 17 :</b>	Subcomponent 3B Number of additional people with access to rehabilitated water supply services in cantonal capitals			
Value (quantitative or Qualitative)	0	200,000		Not measured
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	Was not measured. Most activities linked to this indicator were canceled.			
<b>Indicator 18 :</b>	Subcomponent 3C Number of additional people with access to improved solid waste services in cantonal capitals			
Value (quantitative or Qualitative)	0	100,000		0
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . Activities linked to this indicator were cancelled.			
<b>Indicator 19 :</b>	Component 4 Project monitoring structure and tools (IMIS, M&E) provides regular feedback on project implementation quality			
Value (quantitative or Qualitative)	0	100%		0%
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . IMIS and M&E were eliminated from the PMU structure.			
<b>Indicator 20 :</b>	Component 4 Percentage of households satisfied with project interventions			
Value (quantitative or Qualitative)	0	75%		Not measured
Date achieved	07/25/2006	02/28/2011		03/31/2009
Comments (incl. % achievement)	0% . No ex-post survey was conducted.			

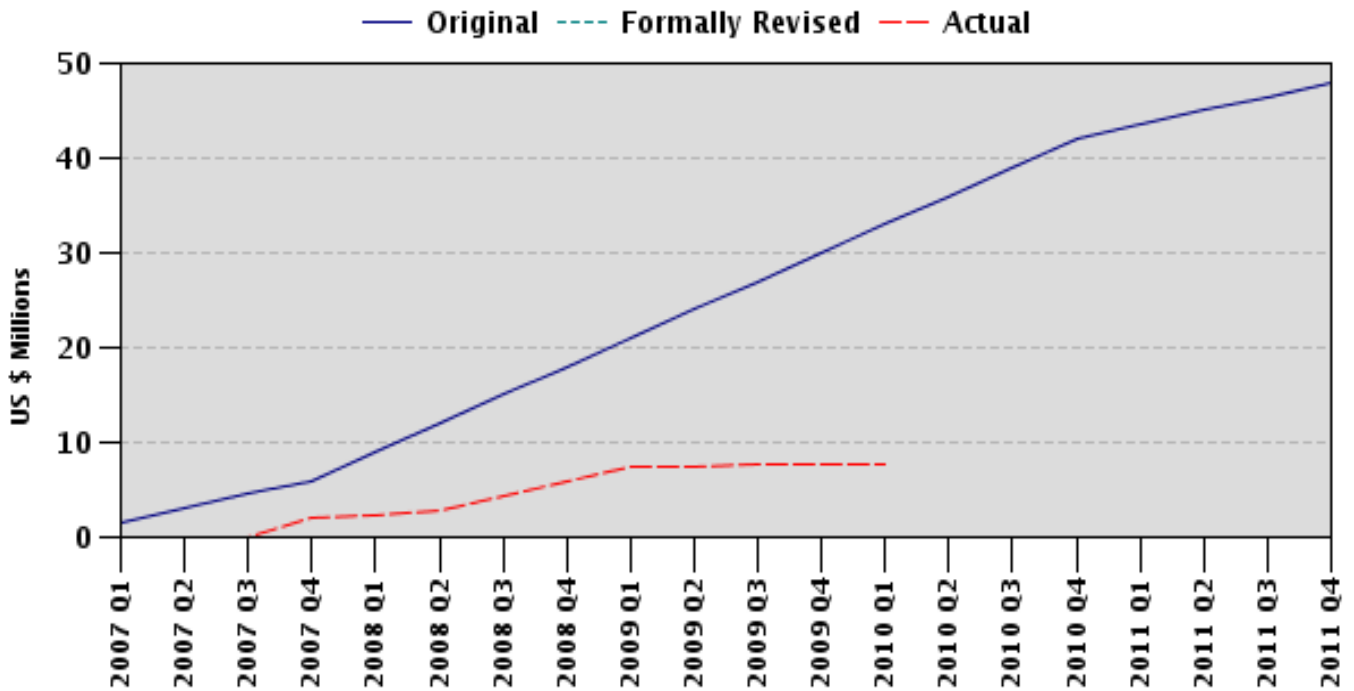
## G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	11/09/2006	Satisfactory	Satisfactory	0.00
2	05/24/2007	Satisfactory	Satisfactory	2.00
3	12/15/2007	Moderately Satisfactory	Moderately Satisfactory	2.88
4	04/04/2008	Unsatisfactory	Unsatisfactory	4.47
5	10/23/2008	Highly Unsatisfactory	Highly Unsatisfactory	7.32
6	03/18/2009	Highly Unsatisfactory	Highly Unsatisfactory	7.62
7	06/02/2009	Highly Unsatisfactory	Highly Unsatisfactory	7.62

## H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		DO	IP		
12/10/2008		HU	HU	7.32	Closing date advanced.

## I. Disbursement Profile



# 1. Project Context, Development Objectives and Design:

## 1.1 Context at Appraisal:

### *Country Background*

1. Continuous changes characterized Ecuador during the preparation and implementation of the PRAGUAS I and PRAGUAS II projects. Real GDP growth averaged 4.7 percent per year in 2000-2006, compared to 1.7 percent annually in the 1990s. Annual economic growth increased to a high of 8 percent in 2004, then fell to 2.6 percent in 2007 and 2.5 percent in 2008. High oil prices and improvements in tax collection permitted significant increases in Government spending in 2008, but fell again in 2009, leading to budget constraints.

2. During PRAGUAS I implementation and PRAGUAS II preparation, no president finalized his mandate; Ministers (including the line Minister for the project) changed regularly, and the Vice-Minister for Water changed even more often. Although the various administrations generally promoted consistent policies, there was an important turnover in staff and public institutions were weakened by constant and sometimes arbitrary rotation and re-assignments of technical staff.

3. In January 2007, President Correa took office after winning the November 2006 election. Under President Correa, a Constituent Assembly prepared a new Constitution that was approved in a referendum in late September 2008. President Correa was reelected in early 2009 under the new Constitution, and his two administrations have been characterized by increased stability in key public office positions, including in the PRAGUAS line ministry.

### *Sector Background*

4. Ecuador's water and sanitation (WSS) sector is characterized by (i) low coverage levels (particularly in rural areas); (ii) low service quality and efficiency; (iii) limited cost recovery through tariff and a high level of dependence on financial transfers from national and sub-national governments; and (vi) an incomplete legal and regulatory framework that failed to provide incentives for improved sector performance and lead to overlapping responsibilities both within the national government and between different levels of government.

5. Coverage: In 2001, water supply coverage stood at 82 percent in urban and 39 percent in rural areas while sanitation coverage reached 73 percent of urban and 29 percent of rural households<sup>1</sup>. In addition, water supply coverage varied greatly by income, reaching about 90 percent for the top three income deciles in urban areas compared to levels of only about 60 percent for the bottom three income deciles<sup>2</sup>.

6. Service quality and efficiency: In many small and medium size cities, water supply services were intermittent and water pressure was well below standard, particularly in poor

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<sup>1</sup> "Plan Nacional de Desarrollo del Sector de Agua Potable y Saneamiento Básico". G. Yepes, B. Gómez and E. Carbajal, October, 2002.

<sup>2</sup> "Desigualdades en el acceso, uso y gasto con el agua potable en América Latina y el Caribe". Ecuador, Technical Report Series No.5, Panamerican Health Organization, Washington DC, February, 2001.

outlying areas. Many municipal water companies in medium size cities had between 5 and 14 employees per 1000 connections, a number well in excess of regional best practice (below 3 employees per 1000 water connections).

7. Limited cost recovery through tariffs: A study commissioned by the government under the first stage of the PRAGUAS APL, concluded that nationwide, tariffs covered only about two thirds of system operation and maintenance costs in 2001. National and sub-national (provincial and municipal) subsidies were required to cover the operation and maintenance (O&M) gap and finance coverage expansion.

8. Incomplete legal and regulatory framework: While Ecuador had a National Water and Sanitation Policy (*Política Nacional de Agua y Saneamiento*, under Executive Decree No. 2766 of July 30, 2002), it was vague and avoided a clear position on issues such as WSS investment subsidies and their allocation. Many national and sub-national actors provided financing for urban and rural water supply investments under different terms and with little regard for the policy setting role, legally vested in the Sub-Secretariat of Water Supply, Sanitation and Solid Waste (SAPSyRS) of the Ministry of Urban Development, Housing and Territorial Development (MIDUVI). In addition, there was neither a regulator of WSS services nor a clear definition of roles and responsibilities between various national and sub-national actors.

#### *Rationale for Bank involvement*

9. The Bank's Rural and Small Towns Water Supply and Sanitation Project (APL-1/PRAGUAS I) was the government's primary vehicle for addressing the sector's main challenges from 2001 to 2006.

- In terms of coverage, PRAGUAS I provided new water supply systems for 252,000 people and on-site sanitation for 127,000 people, approximately 5 and 3 percent, respectively, of Ecuador's total rural population of 4.7 million. As technical designs for systems to increase WSS services to over 600,000 people had been prepared, coverage expansion was expected to increase rapidly under the new project (APL-2/PRAGUAS II).
- To address service quality, efficiency and cost recovery issues, PRAGUAS I provided technical assistance and financial incentives to municipalities interested in delegating their municipally-run WSS services to autonomous operators. Out of 219 municipalities nationwide, 32 were in the process of delegating and 14 had completed the transition, well in excess of the APL-1 target of 5 municipalities as established by the Bank and the Government of Ecuador (GOE) in 2000. An initial evaluation showed that the initial group of municipalities who delegated their WSS services, had increased their operational efficiency and raised their tariffs to cover at least O&M costs<sup>3</sup>.
- The GOE took an important step towards improving the incentive framework for WSS investments by adopting an Executive Decree<sup>4</sup> to distribute earmarked government transfers to municipalities for WSS investments under a special tax on telephone calls (*Impuesto*

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<sup>3</sup> *Delegating Water and Sanitation Services to Autonomous Operators*, Water and Sanitation Program (WSP) Field Note, February, 2005.

<sup>4</sup> *Decreto Ejecutivo* No. 2562, passed on February 21, 2005)

*sobre Consumos Especiales*, ICE), based on the WSS operator’s performance, service model, and municipal poverty indicators.

10. The Bank’s experience in rural water supply in Ecuador under APL-1, as well as in other South American countries such as Peru and Paraguay under similar projects<sup>5</sup>, provided a solid basis to support Ecuador with the second stage of its Rural and Small Towns Water Supply and Sanitation Program (APL-2/PRAGUAS II).

*Higher level objectives to which the Project contributed*

11. The APL-2/PRAGUAS II was intended to support Ecuador’s 2003-2007 Country Assistance Strategy (CAS)<sup>6</sup>, which stated that a “concerted fight against poverty, through coordinated advances on the economic and social fronts” would require “improved basic infrastructure”. To this end, the CAS aimed to “strengthen governance by helping the Authorities build an accountable and efficient government whose services are accessible for all Ecuadorians”. The project (APL-2/PRAGUAS II) also supported progress towards the drinking water and sanitation targets contained in Millennium Development Goal No.7 (“Ensure Environmental Sustainability”).

*1.2 Original Project Development Objectives and Key Indicators:*

*Program Development Objective*

12. The project development objective for APL-2/PRAGUAS II was to: (i) provide sustainable access to WSS services for approximately 285,000 new rural beneficiaries and to promote their effective use; (ii) provide improved and sustainable WSS services to approximately 205,000 beneficiaries in cantonal capitals; (iii) promote sustainable solid waste services in cantonal capitals; and (iv) improve overall sector performance by the national government by promoting performance-based investment financing for the urban WSS sector.

*Key Indicators*

Project Development Objective	Project Outcome Indicators
(i) Provide sustainable access to WSS services for approximately 285,000 new rural beneficiaries and to promote their effective use.	<ul style="list-style-type: none"> <li>• The total number of additional people with sustainable access to improved water supply services in rural areas.</li> <li>• The total number of additional people with sustainable access to improved sanitation in rural areas.</li> <li>• Percentage increase in rates of target population groups washing their hands with soap at key times.</li> </ul>
(ii) Provide improved and sustainable WSS services to approximately 205,000 beneficiaries in cantonal capitals	<ul style="list-style-type: none"> <li>• The total number of additional people with sustainable access to improved water supply services in cantonal capitals.</li> <li>• The total number of additional people with sustainable access to improved sanitation in cantonal capitals</li> </ul>

<sup>5</sup> Peru National Rural Water Supply and Sanitation Project – PRONASAR (P065256); and Paraguay Fourth Rural Water and Sanitation Project (P039983).

<sup>6</sup> Approved by the Board on May 27, 2003.



(iii) Promote sustainable solid waste services in cantonal capitals.	<ul style="list-style-type: none"> <li>The total number of additional people with sustainable access to improved solid waste services in cantonal capitals.</li> </ul>
(iv) Improve overall sector performance by promoting performance-based investment financing for the urban WSS sector.	<ul style="list-style-type: none"> <li>100 percent of ICE resources assigned by MEF for WSS investments will be distributed according to the agreed distribution formula.</li> </ul>

*1.3 Revised PDO and Key Indicators, and reasons/justification:*

13. PDO and key indicators were not revised during the implementation phase. Attempts at project restructuring following the cancelation of a significant share of the loan did not materialize and the project was eventually cancelled ahead of time.

*1.4 Main Beneficiaries:*

14. According to the PDO, the main beneficiaries were populations living in rural areas and small towns in municipalities that were to gain access to improved WSS services. The Project was targeted to eligible municipalities (the 174 municipalities with a population of 50,000 or less according to the 2001 census). It aimed to reach communities by targeting municipalities with low service coverage rates and high community demand for improved services. The Project was expected to provide sustainable access to WSS services for approximately 285,000 new beneficiaries in rural areas and 205,000 beneficiaries in the capitals of eligible municipalities. In rural areas the Project would invest in infrastructure to provide access to improved water supply to 200,000 people and to provide access to improved sanitation to 85,000 people. In small cantonal capitals, the Project was intended to benefit 165,000 inhabitants with access to improved water supply and 40,000 with access to improved sanitation. In addition, PRAGUAS II was designed to support sustainable access to improved solid waste services to 100,000 people living in cantonal capitals.

*1.5 Original Components (as approved):*

<b>Component</b>	<b>Description</b>
<u>Component 1:</u> <i>Water and Sanitation Sector Reform and Institutional Strengthening</i>	Focused on strengthening institutional capacity of SAPSyRS and other key sector actors through: (i) training of personnel, (ii) operating the sector information system; (iii) sector planning and policy development; (iv) institutional strengthening of municipalities, operators and water boards; (v) creating, accrediting and strengthening of an environmental unit; (vi) financing a study to determine appropriate standards for sewage discharges and to reform environmental norms; (vii) developing guidelines for water, sanitation and solid waste investments; (viii) strengthening capacity of municipalities to manage environmental impacts; (ix) upgrading physical working environment of SAPSyRS; and (x) strengthening MEF ability to target ICE resources earmarked for the WSS sector more effectively and develop coherent overall financial policies for the WSS sector.

<p><u>Component 2:</u> <i>Water Supply and Sanitation in Rural Areas</i></p>	<p>Focused on expanding coverage of WSS services with an integral approach, including: (i) promoting community development, hygiene education, designs and supervision of WSS projects; (ii) investment in rural WSS infrastructure; (iii) strengthening existing water and sanitation user boards (<i>juntas</i>); and (iv) implementing a national hand-washing initiative.</p>
<p><u>Component 3:</u> <i>Promotion of New Management Models for Water, Sanitation and Solid Waste in Cantonal Capitals</i></p>	<p>Focused on promoting the delegation of municipal WSS services to autonomous service providers in cantonal capitals through three sub-components: (i) technical assistance for the delegation of water and sewerage and the sustainability of solid waste services in cantonal capitals; (ii) water and sanitation investments in cantonal capitals using incentive payments in eligible municipalities that have successfully delegated their WS and/or sanitation services to autonomous operators; (iii) solid waste investments in cantonal capitals to promote effective solid waste management using an incentive payment policy.</p>
<p><u>Component 4:</u> <i>Project Administration</i></p>	<p>Focused on financing: (i) the cost of salary, travel and general operating costs of the PMU, (ii) the cost of a strategic communication program; (iii) monitoring and evaluation (M&amp;E) activities; and (iv) audits and other project management activities.</p>

*1.6 Revised Components:*

15. There was no formal revision of components during project implementation. However, following a decision of the GOE in January 2008 to cancel 36M USD (out of a total loan amount of 48M USD), it became clear to all parties involved that many of the project’s components and subcomponents could not be implemented in the form and to the extent originally planned. Despite the changes and several attempts by the World Bank team, the GOE did not seek a formal restructuring of the loan.

16. Sections 2 and 3 of this Implementation Completion Report present the Bank team’s understanding on why there was no formal restructuring, as well as the level of implementation achieved under the various components and subcomponents.

*1.7 Other significant changes:*

*Note: Annex 10 includes a detailed timeline of the project implementation.*

17. The PRAGUAS II project became effective shortly before the Correa Administration came to power. The Bank’s Country Management Unit (CMU) held informal consultations with the incoming administration, which confirmed that the PRAGUAS II project should go ahead (four other projects were canceled shortly after the new administration took office, while the PRAGUAS II project remained in the portfolio until recently). Soon after effectiveness however, it became clear that the new administration had concerns with some of the project’s activities, such as the organization of a national hand-washing campaign or the provision of technical assistance for policy discussions. In addition, around November 2007, serious concerns emerged with the design of key project components, including the contracting of a few large companies to implement most of components 2 and 3.

18. In January 2008, the GOE decided to cancel 36M USD out of the total loan amount of 48M USD, without formally specifying which components or disbursement categories would be maintained. The remaining 12M USD were to be used to complete on-going activities and commitments, under what the Bank understood would be a generally unchanged implementation model.

19. In subsequent months, the implementing agency and the Bank agreed on a procurement plan reflecting the much reduced scope as well as some changes in the implementation modality for rural WSS works. In this procurement plan, the Bank and the government (SAPSyRS) agreed that:

- Most of the activities under component 1 (policy) would not be completed, except for some renovations of offices and a limited solid waste study.
- Under the rural WSS component (component 2), sanitation sub-projects for which designs were ready would be completed with individual consultants to carry out the necessary social and technical interventions. Water sub-projects for which designs were ready would be implemented once local consulting companies with the responsibility of carrying out technical and social activities were hired.
- Most of the activities under component 3 (small town investments) would not be implemented, except for a few activities that were already committed.

20. In the end though, this revised Procurement Plan was not fully implemented and the Government decided further unilateral changes to the implementation scheme, including the replacement in the summer of 2008 of local consulting companies with individual consultants to carry out technical and social activities on water sub-projects under component 2.

## **2. Key Factors Affecting Implementation and Outcomes**

### *2.1 Project Preparation, Design, and Quality at Entry:*

21. At the time of Project preparation, the GOE was interested in addressing important issues such as service coverage, quality of service and efficiency and cost recovery to improve long term sustainability. The Project represented the second phase of a three stage APL. PRAGUAS II was designed based on the experience of the first phase and experiences from projects in Ecuador and other countries in the region. The design considered risk factors and appropriate measures to mitigate all major risks. It included a participatory framework for stakeholders and direct beneficiaries to the decision-making process.

#### *A. Lessons Learned and reflected in the project design*

##### *A.1 Ex-post Evaluation of the First Phase Project*

22. An ex-post evaluation of a sample of 36 water supply systems and 23 sanitation systems was carried out after PRAGUAS I and complemented by a survey of 1,752 households. The lessons learned helped in the design of the second phase of PRAGUAS.

### A.1.1. Rural Areas

- PRAGUAS II was designed to provide long term technical assistance, training and operational and management services to existing *Juntas* through the creation of *Associations of Juntas* at the provincial level to promote sustainability.
- The inclusion of Municipal Sanitation Units (EMS) improved the technical capacity of the municipal teams.
- The financial scheme of PRAGUAS I proved socially acceptable. Ex-post evaluation results indicated municipal and community satisfaction with the established request for contributions. Therefore, PRAGUAS II continued its tripartite financial policy: PRAGUAS 50 percent, municipality 20 percent, and community 30 percent (10 percent in cash and 20 percent in kind).
- Monitoring and evaluation of completed projects and those under construction in PRAGUAS I was weak, in part because of the fragmentation of responsibility over a great number of individual consultants doing the technical and social interventions. It was intended that the monitoring and evaluation systems would be improved under PRAGUAS II as they would include user friendly information systems allowing the use of baseline and diagnostic data to monitor the social plan by consultants, municipalities, water boards and communities. The Management Information System (*Sistema de Información Gerencial, SIG*) and Social Impact Information System (*Sistema de Información de Impacto Social, SINSOC*) would be upgraded and integrated under PRAGUAS II into an Integrated Management Information System (IMIS) to ensure better monitoring of inputs, outputs and outcomes. This type of M&E would be supplemented by an impact evaluation carried out for a sample of projects and control communities. The program's impact evaluations would be based on baseline surveys developed under PRAGUAS I and ex-post surveys to be carried out at different points in time during implementation.
- The on-site sanitation alternative of basic sanitation units (UBS), comprising a toilet, sink and shower, was a great success in communities assessed, as it had significantly contributed to the improvement of living conditions and self-esteem of users. PRAGUAS II was designed to finance mostly UBS under its sanitation activities.
- An enabling social context existed for promotion of hand-washing with soap. Findings from the ex-post evaluation demonstrated a high level of awareness of hand-washing as a socially approved practice. A hand-washing component was incorporated into the second phase of PRAGUAS.
- Under PRAGUAS I, procurement processes and contract administration by local municipalities for essential community organization, engineering designs and construction of water supply and sanitation systems by the local private sector, was found to be cumbersome and time-consuming. For the second phase of PRAGUAS, all designs, supervision and community development/training services would be contracted at a national level through large engineering design and supervision firms (*Consultorías de Diseño y Fiscalización, CDF*) and NGOs/Social Consulting firms (*Consultorías de Intervención*

*Social, CIS*) . This was intended to limit procurement carried out by municipalities for the rural component to goods and works and maintain municipal procurement of investments.

#### *A.1.2. Municipal Capitals*

- The combination of technical assistance and financial incentives for service delegation were effective in creating autonomous operators in a large number of municipalities. However, the range of models actually rolled out was quite limited. For PRAGUAS II a revision of the financial incentive framework for the delegation of cantonal WSS services to more autonomous models was conducted. PRAGUAS II would provide delegation assistance to larger municipalities and technical assistance to new operators, and use larger, more experienced consulting companies to provide TA on a broader range of models.
- PRAGUAS II would incorporate the development of a communication strategy to garner consumer support for sustainable tariff levels and models to ensure the sustainability of infrastructure investments and public services.

#### *B. Risks and mitigation*

23. During the design stage, several critical risks were identified along with mitigation measures to be taken to protect Project implementation and its outcome.

24. **Risk:** Political instability at the ministerial and sub-secretary level affect project implementation.

Mitigating measures: The Project would be executed by a Project Management Unit (PMU) staffed by consultants with long term contracts hired through a competitive process carried out by a special management firm.

25. **Risk:** Institutional issues resulting from rivalry between SAPSyRS and the PMU.

Mitigating measures: Several sub-components (such as solid waste management) were managed by SAPSyRS staff assigned to the PMU where they would work under the responsibility of the PMU Coordinator. A training plan for SAPSyRS staff as well as physical upgrades to the work environment in the SAPSyRS was also expected to smooth interaction between PMU and SAPSyRS staff.

26. **Risk:** Municipalities do not contribute counterpart funds.

Mitigating measures: The Project introduced a financial policy linked to the financial performance of each municipality and its compliance with the Ecuadorian Fiscal Responsibility Law (*Ley Orgánica de Responsabilidad y Transparencia, LOREyT*).

27. **Risk:** Municipalities are not willing to delegate services.

Mitigating measures: The communication strategy targeted different decision makers at the municipal level to ensure grassroots support for the Project in a more systematic way. Larger investment incentives in PRAGUAS II as well as the option of investing in both sewerage and

expansion of water services was expected to enhance municipal interest in delegating service provision.

28. **Risk:** Inherent financial management risk due to decentralized implementation set-up, counterpart funding requirements for municipalities and communities and overall political and budget uncertainties.

Mitigating measures: Participating municipalities would receive financial management support from large social consulting firms recruited at the national level as well as PRAGUAS/PMU staff. Project staff was to be recruited under multi-annual contracts to reduce turn-over.

### *C. Adequacy of participatory processes*

29. The Project design considered participatory processes as the central element in Project implementation as it incorporated stakeholders and beneficiaries in the decision-making process and in the construction, community development and local capacity building activities. Activities were planned to be executed systematically in a sub project cycle that considered the participation of communities, municipalities and the central Government.

30. Based on experience with PRAGUAS I, participatory processes were carefully designed for different stages of the Project cycle, including promotion and community selection; community demand verification; preparation of technical, economic, social and environmental profiles; participation agreements between MIDUVI, municipalities and communities; community organization; technical studies and designs; training for municipal staff; community water user boards (*juntas*); and communities.

31. PRAGUAS I and PRAGUAS II were both built around the principles of Demand Responsive Approach (DRA) whereby the beneficiaries of the project are active protagonists in its development, construction and operation. A detailed project cycle was elaborated to ensure adequate participation during each step of the project. Technical assistance and social support were provided to the participating municipalities and communities to make informed decisions on applying for Project support, technical and financial options and service levels available.

32. An important strategy of PRAGUAS II was the use of large consulting firms (called CDF for technical work, and CIS for social intervention), which would provide continuous close support to municipalities and communities to guarantee their active and knowledgeable participation.

### *2.2 Implementation:*

33. PRAGUAS II was designed for an implementation period of 4 years; but actual implementation lasted only 2 years due to the Government's decision to cancel part of the loan and the Bank's subsequent suggestion to advance the closing date.

34. The following factors affected Project implementation:

*a. Change in the political context and new administration priorities.* The implementation of PRAGUAS I and the design and preparation of the second phase were done by previous administrations that prioritized active participation of the communities and upfront social intervention to ensure local empowerment and capacity building, and eventually greater sustainability. This led to a project cycle that was relatively long and complex. In contrast, the new administration strongly emphasized the importance of achieving rapid and visible impacts and gave less importance to local empowerment and participation.

*b. Lack of effective dialogue between PMU, ministerial authorities and the Bank team.* Because of a history of frequent political turnover in Ecuador, the project design called for a strong and relatively insulated PMU for implementation. The technical staff of the PMU was contracted for a long-term period, following a rigorous evaluation process conducted in part by an independent personnel recruiting firm, with exception of the general coordinator. This model, which had served PRAGUAS I well, meant that most senior staff – which were appointed before project effectiveness – could not be easily removed or changed once the Correa administration came in. There were disagreements between the new administration and the PMU over the project's approach, conceptual design and implementation strategy.

These differences led the Minister to unilaterally revoke the agreement governing the staffing of the PMU in November-December 2007 and to dismiss high-level staff of the PMU shortly thereafter. The decision to dismiss key PMU staff reduced its operational and management capacity, created a lack of coordination and negatively affected sub-project implementation. From January 2008 onwards, the PMU operated with only limited staff and was characterized by high staff turnover in a number of key positions (project coordinator, social director). In the months before project closing, the PMU consisted only of an administrative coordinator and some low-level technical and administrative staff.

*c. Slow implementation and changes to the project cycle.* Implementation progress was slow in the early stages of the project. The project cycle established initial phases previous to the implementation of WSS works, including: (i) marketing the innovative concepts and convincing community members and municipality authorities to accept them, (ii) conducting processes for selecting municipalities and projects to be developed, (iii) preparing or revising designs, (iv) preparing work plans at the local levels, (v) signing formal arrangements for participation, and (vi) raising funds from beneficiary communities and municipalities as counterpart contributions for project works. Most of these activities were to be conducted by a few large consulting companies or NGOs, as this would make implementation easier and would create fewer procurement delays, but initially it meant that the PMU had to carry out several large procurement processes before implementation could begin. Although the procurement processes were underway even before effectiveness, differences between the PMU, the Ministry and the Bank on the soundness of the approach meant that delays materialized, and by the time the GoE decided to cancel most of the loan none of the companies had been contracted even though some of the contracts were negotiated.

Following the partial cancelation of the loan, the Government rejected the agreement previously reached with the Bank to hire consulting firms and instead decided to hire individual consultants. In addition, MIDUVI eventually decided to proceed with the construction works without the

prior hiring of social consultants. This situation resulted in: (a) work overload in procurement, contract supervision and administrative payment processes; (b) lack of coordination between works, supervision and social support activities; (c) less effective technical and social interventions to support the implementation of water and/or basic sanitation projects; and (d) construction of works without the necessary social or technical intervention in some cases.

*d. Delay in payments to contractors and consultants.* Time consuming payment processes and delays in payment to contractors and consultants were factors that negatively affected the construction of works, technical assistance, supervision and social support to the projects. Delays were significant in part due to the partial dismantling of the PMU. Advance payments for contractors and consultants were made with average delays of 3 months and regular payments had delays from 3 to 5 months from the date of their approval. These delays came on top of the delays typical of RWSS projects in agricultural areas where community labor contribution are often available only during parts of the year. These factors extended the construction time of works.

Another factor affecting contract payments in the final phase (after October 2008) was the Bank's decision to carefully review disbursement requests from Ecuador, given the Government's intention to accelerate project closing to December 2008, and following the publication of the conclusions from the Debt Commission Report that declared all external debt in Ecuador illegitimate. At that moment, there was uncertainty with regards to the capacity of the implementing agency to justify the eligibility and provide supporting documentation of certain expenses under the project<sup>7</sup>. In this context, the Bank's cautious assessment of further disbursement requests in the fall of 2008 was an attempt to protect both the Government of Ecuador and the Bank against unnecessary disbursement advances to the project's special account, which would have had to be reimbursed by the Borrower to the Bank at project closing<sup>8</sup>. A revised disbursement letter limiting the types of disbursements available to reimbursements and direct payments was communicated to the Government in January 2009. This situation created a liquidity issue for the PMU, which had to obtain national budget funds in the order of more than USD 1M to bridge the gap.

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

*(a) M&E Design:* Project design for M&E considered an extensive and innovative set of tools developed under PRAGUAS I: (a) *Management Information System - SIG* (physical and financial processes), (b) *Social Impact Information System - SINSOC* (baseline and diagnostic data and ex-post social information), and (c) *Integrated Water and Sanitation, Sewerage and Solid Waste Monitoring - SISASAR* (technical, socio-economic and administrative data of investments on delegated service providers). The first two systems were to be upgraded and

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<sup>7</sup> The process of establishing eligibility of expenses and documenting the use of loan proceeds was made more complex by the fact that the execution of Components 2 and 3 – the most significant in terms of spending – was decentralized. In the absence of a strong PMU, the Bank feared effective control mechanisms could not be maintained, or the information could not be obtained from municipalities in a timely manner.

<sup>8</sup> At the time of closing of the ICR, the Special Account still holds about 164,000 USD of undocumented expenses which will have to be reimbursed by the Government to the Bank unless they are documented by the end of the Grace Period on September 30, 2009.



integrated under PRAGUAS II into an *Integrated Management Information System* - IMIS to ensure a better integration of monitoring inputs, outputs and outcomes.

Tracking key operational and process monitoring indicators were to be primarily based on inputs, outputs and intermediate outcomes recorded in the IMIS and through participatory rapid appraisals, focus group discussions and sample consumer satisfaction surveys of beneficiaries through the associations of water boards (*juntas*) and EPAS to ensure direct feedback. M&E would be supplemented by an impact evaluation for a sample of projects and control communities, based on baseline surveys developed under PRAGUAS I as well as ex-post surveys carried out during mid-term and final reviews of PRAGUAS II. Management of the M&E system would be carried out by the PMU (for IMIS system) and SAPSyRS (for SISASAR). These teams would be responsible for upgrading the systems, daily oversight, operation and maintenance of databases and generation of periodic reports.

(b) *M&E Implementation:* During implementation, information management systems were not upgraded and tools previously developed under PRAGUAS I were not used. There was generally a lack of information and specifically a lack of information on projects and contracts. Collecting data from the field was an issue because of the reduced staffing of the PMU and the absence of contracted consultants in the regions. Overall project monitoring was weak. No baseline, mid-term or ex-post survey was completed.

(c) *M&E utilization:* Because of the lack of information and the early closing of the project, appropriate data were not evaluated and used to inform decision-making and resource allocation.

#### 2.4 *Safeguard and Fiduciary Compliance:*

35. There were no significant deviations or waivers from Bank safeguards, fiduciary policies and procedures during the implementation of the Project, although, as mentioned above, financial management procedures were sometimes found not to adhere to good practices and the Bank made a number of recommendations that were not systematically implemented.

36. Given the presence of Indigenous and Afro-Ecuadorian peoples in the project area, and in compliance with Operational Policy 4.10, the GOE included an Indigenous and Afro-Ecuadorian Peoples Plan (IPP) in the project design after due agreement with the *Consejo Nacional de Nacionalidades y Pueblos Indígenas del Ecuador* (CODENPE) and the *Coordinadora de Desarrollo Afro-Ecuatoriano* (CODAE). Cooperation Agreements between SAPSyRS and both entities were signed during the first quarter of project implementation. However, staff turnover within the UGP did not allow continuity and results.

37. Regarding Fiduciary Compliance, overall project financial management performance has been rated as moderately unsatisfactory due to moderate shortcomings related to: high turnover of key financial management staff; delays in submission of interim financial reports and audits; lack of quantification of communities' contributions in financial reports; lack of a systematized monitoring process of transfers made to municipalities; and delays obtaining timely support documentation. All of these issues have jeopardized the capacity of the project to provide timely and reliable information required to manage and monitor implementation.

## *2.5 Post-completion Operation/Next Phase:*

38. No post-completion operation or a next phase of PRAGUAS is foreseen with Bank resources, as the last Country Assistance Strategy with Ecuador lapsed in FY07 and the prospects of developing a new one in the near future are still unclear. The Government continues to invest in rural water and sanitation activities, in part with resources from the IDB-managed Spanish Water Fund.

39. In parallel the Government has indicated to the Bank that its new policy is to avoid borrowing for so-called “social” projects, focusing instead on projects that can generate the income needed to repay the loan.

## **3. Assessment of Outcomes**

### *3.1 Relevance of Objectives, Design and Implementation:*

40. In the absence of a new sector strategy or policy, Project objectives appear to continue to be relevant to the country’s development priorities. National needs for improving water and sanitation services remain large. The country requires increasing water supply and sanitation coverage, especially in rural areas, to improve the quality of services as well as long term sustainability with and adequate cost recovery through tariffs in small towns. All of the above require new institutions and/or strengthening of the existing ones to ensure that they work under an adequate legal and regulatory framework.

41. Interest shown by participating rural communities confirms their willingness and commitment to collaborate in the implementation of sub-projects to gain access to improved WSS services. During the short period of implementation, local governments (municipalities) also demonstrated their interest in participating as partners or stakeholders to make sub-WSS projects viable both in rural areas and cantonal capitals. Although the social component was weak in several subprojects due to the absence of social consultants, communities and local governments were usually eager to participate in every step of the project cycle.

### *3.2 Achievement of Project Development Objectives:*

42. The Project was unsuccessful in achieving its objectives. The most significant factors for not achieving the Project objectives were (i) the cancellation of several project components at the Government’s request; (ii) the failure to restructure the project despite several attempts by the supervision team; (iii) the decision by the Government to complete only the on-going subprojects with simple implementation schemes. As a result, the project had a partial implementation with an outcome far from achieving the PDO.

43. The following project sub-components were canceled:

<b>Component</b>	<b>Sub-component</b>	<b>Status</b>
<u>Component 1:</u> <i>Water and Sanitation Sector Reform and Institutional Strengthening</i>	All activities related to sector reform and institutional strengthening were cancelled with the exception of the working environment upgrade of MIDUVI.	Canceled before implementation started
<u>Component 2:</u> <i>Water Supply and Sanitation in Rural Areas</i>	2C-Strengthening of existing WSS user boards 2D-National Hand-washing Initiative	Canceled before implementation started
<u>Component 3:</u> <i>Promotion of New Management Models for Water, Sanitation and Solid Waste in Cantonal Capitals</i>	3A-Technical assistance for delegation of WSS services and the sustainability of solid waste services in cantonal capitals. 3C-Solid waste investments in cantonal capitals	Canceled before implementation started

44. The following sub-components were partially implemented:

<b>Component</b>	<b>Sub-component</b>	<b>Status</b>
<u>Component 2:</u> <i>Water Supply and Sanitation in Rural Areas</i>	2A-Promotion, community development, hygiene education, design and supervision. 2B-Rural water supply and basic sanitation investments	The social intervention strategy was partially executed The investments were partially executed
<u>Component 3:</u> <i>Promotion of New Management Models for Water, Sanitation and Solid Waste in Cantonal Capitals</i>	3B-Water supply and sanitation in cantonal capitals.	Partially executed
<u>Component 4:</u> <i>Project Administration</i>		Partially executed

45. Project objectives and results of the implementation:

- (i) *Provide sustainable access to WSS services to approximately 285,000 new rural beneficiaries and to promote their effective use.*

46. Measuring this objective requires a baseline and ex-post surveys, in particular because of the PAD's definition of "sustainable" access. These surveys were never completed; therefore, this ICR cannot provide reliable information on the actual completion of this objective. Nevertheless, the project directly benefited 31,400 people with access to improved rural water supply services and 44,500 people with access to basic sanitation for a total of 75,900 beneficiaries. This figure represents 26.7 percent of the target population for this objective.

47. The lack of effectiveness in social intervention during implementation affected the effectiveness of services and their sustainability. Components such as the strengthening of existing WSS user boards and the WSS sector reform and institutional strengthening (particularly municipalities), were key for long term technical assistance and support to rural services, but were canceled.

48. Independent technical reviews, organized by the Bank, of dozens of sub-projects concluded during a period covering the last 9 months of implementation uncovered deficient technical supervision, poorly finished works and insufficient or inexistent empowerment and capacity of the beneficiary communities. All of these factors might affect negatively the sustainability of the investments.

(ii) *Provide improved and sustainable WSS services to approximately 205,000 beneficiaries in cantonal capitals.*

49. Component 3 was largely canceled. PRAGUAS II developed rehabilitation and efficiency improvements of water supply and sanitation systems in only 3 cantonal capitals. The total population of these cities is 220,000 inhabitants, but the share of the population directly affected by the project's activities is unclear in the absence of close technical involvement by the PMU. These municipalities had participated in a similar component under PRAGUAS I and were therefore eligible to receive incentive payments to be used for water and sanitation investments; such investment was to be complemented by technical assistance (TA). The original project design considered provision of TA through specialized consulting firms (*Empresas Consultoras de Apoyo a la Delegación de los Servicios - ECADS*). Although the procurement process was initiated, these firms were not hired and technical assistance for service delegation was limited. The lack of external support to municipalities and service providers could undermine long term sustainability of the improvements in service provision.

(iii) *Promote sustainable solid waste services in cantonal capitals.*

50. Due to the cancellation of sub-component 3C (*Solid waste investments in cantonal capitals*), municipal solid waste services were not improved, and therefore, this objective was not achieved.

(iv) *Improve overall sector performance by promoting performance-based investments financing by the national government for the urban WSS sector.*

51. Component 1 of the project considered some activities that would strengthen MEF's ability to target approximately US\$75 million annually in telephone taxes (*Impuesto sobre Consumos Especiales*, ICE) earmarked for the WSS sector more efficiently to develop coherent overall financial policies. In addition, Component 3 would partially finance water supply, sanitation and solid waste investments using incentive payments in eligible municipalities which had delegated municipal services to autonomous operators. Component 2 considered WSS investments in rural areas, with the participation of municipalities, beneficiary communities and the project, each contributing a share of the investment cost according to the Project's financial policy. These activities were designed to promote the development of sector financial policies oriented to performance-based financing investments. However, the cancellation of most of Component 1 of the project and the limited implementation of Component 2 significantly reduced the project's influence on WSS sector performance.

### 3.3 *Efficiency:*

52. . Given the lack of information available, partly because the envisioned monitoring and evaluation system was never in place, and partly because assumptions made at appraisal did not materialized due to the earlier closing and reduced scope of the project, the analysis of the efficiency of the project is based on information from 103 contracts: 27 for water supply systems, 45 for basic sanitation units a flush latrine with basin and shower (UBSs), and 31 for both services, all of which were partly financed with loan proceeds.

53. Out of the 103 contracts analyzed, 90 (87 percent) were signed for an amount below the investment cost ceiling agreed during project preparation following an economic evaluation: all 45 of sanitation, 19 of water supply, and 26 of both services. On average, the 103 contracts had a value of 30% less than the maximum reference value. Among the 58 contracts that included water supply connections, there are 16 (28 percent) for less than 50 connections, which was the agreed minimum number of connections per contract. The average unit cost of water supply connections was US\$466, 33 percent below the US\$700 investment ceiling. And the average unit cost of BSUs was US\$314, 30 percent below the US\$450 investment ceiling. For more detailed information please see Annex 3.

### 3.4 *Justification of Overall Outcome Rating:*

Rating: **Highly Unsatisfactory**

54. The project is rated as highly unsatisfactory, essentially because its overall outcome is measured against the project's original Results' Framework since no formal restructuring took place. As a result, the PDO was not achieved. Furthermore, while the project was highly relevant to the administration which prepared it, its design and overarching focus on sustainability did not necessarily coincide with the priorities of the new administration that was left to implement it.

55. The few activities implemented under the project generally did not follow the original design, did not represent good practices and did not integrate lessons learned during the first phase of the APL. There were clear deficiencies in the technical quality of the works constructed and there are doubts as to the sustainability of the investments financed.

### 3.5 *Overarching Themes, Other Outcomes and Impacts:*

#### (a) *Poverty Impacts, Gender Aspects, and Social Development*

56. Although the project was expected to have significant impacts on poverty and gender development, the reduction of social intervention limited those impacts and no ex-post evaluation was conducted to measure them.

#### (b) *Institutional Change/Strengthening:*

57. Component 1 considered activities to promote sector reform and institutional strengthening by focusing on: (i) strengthening the capacity of SAPSyRS through training and the development of technical norms; (ii) upgrading the sector information system (SISASAR)

developed as part of APL-1; (iii) sector planning and policy development; and (iv) strengthening the capacity of other key sector actors (municipalities, service providers and water user associations) to assume their roles in the sector. The cancelation of this component restrained institutional strengthening to improve long term capacity.

(c) *Other Unintended Outcomes and Impacts (positive and negative)*

58. No other unintended outcomes and impacts were identified.

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

59. Not applicable.

#### **4. Assessment of Risk to Development Outcome**

*Rating: High*

60. The risk to development outcome is considered high because of the following factors at the national, municipal and community level:

- **National:** *Risk of weak political support.* The Government announced a new WSS investment program but the policies and strategies to be applied under this new operation are unclear. Government policy on WSS sector development is unknown; however, the emphasis is on showing rapid results rather than following sometimes lengthy participatory approaches, an approach that might lead to lower quality and sustainability of works.
- **Municipal:** *Risk of lack of involvement of municipalities.* The implementation experience of Phase I and II of PRAGUAS/APL showed a clear municipal interest in participating under the project's financial policy. Municipalities and communities demonstrated that demand-response and performance based approaches can deliver sustainable results on a national scale. There is a risk of decreasing municipal involvement, however, if sector policies change, for example: (i) if a government policy of full subsidies without municipal co-financing for investments is adopted; or (ii) if WSS investments are made directly through central government institutions without municipal participation.
- **Community:** *Risk of communities not sustaining the assets.* Long term technical assistance, training and operational and management services to existing juntas (water user boards) are required to ensure sustainability. MIDUVI does not have the institutional set up to provide technical assistance to rural communities. PRAGUAS focused on strengthening municipalities and creating water board user associations to make these the technical assistance mechanism close to communities. This component was canceled; therefore, the risk of not having an institutional mechanism to provide long-term assistance (technical, administrative and social) to water board user associations remains high.

## 5. Assessment of Bank and Borrower Performance

### 5.1 Bank

*(a) Bank Performance in Ensuring Quality at Entry :*

Rating: **Satisfactory**

61. Bank performance during design and appraisal phase up to project approval was satisfactory. The Project design was consistent with the CAS and was carefully prepared considering the experience and lessons learned during the previous phase and relevant regional experience.

62. An ex-post evaluation of the first Phase of the project shed light on areas with room for improvement and confirmed the adequacy of other areas and parameters of the project. Based on those findings, the project team incorporated lessons learned and changes that were expected to increase efficiency, control and quality of outputs. Some of the key changes included: (i) simplification of procurement. Under PRAGUAS II, designs, supervision and community development/training services would be contracted at the national level through large engineering and social consulting firms, CDF and CIS. This modification would limit procurement undertaken by municipalities; (ii) improved on the job training of water boards and community members; (iii) tightened specifications for several system components to make works more cost effective and; sustainable; (iv) improved M&E systems with user-friendly information systems that would allow for the utilization of baseline and diagnostic data for monitoring of the social plan by consultants, municipalities, water boards and communities; (v) adoption of capacity-building activities to strengthen the emphasis on the promotion of healthy hygiene habits and the use of sanitary facilities; (vi) strengthened financial incentive framework for the delegation of cantonal WSS services to achieve more autonomous models to improve service provision; and (vii) development of an extensive and innovative set of M&E indicators for the project. In total there were 7 indicators for the PDO and 20 intermediate outcome indicators to monitor implementation progress.

63. The project included the design of a rigorous evaluation to assess impacts on beneficiary households and communities over time. A specially designed baseline survey would be carried out for sample and control communities. Follow-up surveys would be carried out for households in sample and control communities at the mid-term review and at the end of PRAGUAS II.

64. The capacity of MIDUVI/PMU to implement procurement actions for the project was evaluated as well as the overall project risk for procurement. Several specific actions were agreed between the Bank and the Government to mitigate risks, including provisions in the loan agreement for procurement to update the register of contractors and consultants every six months and submission to the Bank of revised bidding documents, and formats for evaluation. The overall risk for procurement was assessed as average based on the existing procurement team in the PMU for PRAGUAS I.

65. A financial management assessment was conducted during the preparation phase. The assessment concluded that, under the management of PMU/PRAGUAS, the Project would maintain financial management arrangements compatible with Bank requirements. It also identified several inherent and control risks related to the project that resulted in substantial risks. Nonetheless, after the application of mitigation measures, the residual risk was assessed as moderate. A financial management action plan was designated to address these issues, and it identified a minimum set of actions required to ensure that proper financial management arrangements were in place, including: (i) recruitment of the financial management coordinator, accountant and treasurer as external consultants; (ii) provision of stability to project staff during Project implementation; (iii) close and constant monitoring at the municipal level; and (iv) assurance that local counterpart funds were available for Project implementation and others.

66. The Project design was thorough and the Bank took into account the adequacy of relevant aspects such as social, technical, financial, economic, environmental, institutional and fiduciary aspects.

*(b) Quality of Supervision* (including of fiduciary and safeguards policies):

Rating: **Moderately Satisfactory**

67. The approach of the supervision team can be divided into two phases. Between the board approval, effectiveness and the decision of the Government to cancel most of the loan (July 2006 to January 2008), the Bank team was focused on supporting and guiding the PMU in implementing the project as originally designed. Rather than waiting for the incoming administration in January 2007, the team pushed the project through effectiveness, and approved the recruitment of most key staff (with the exception of the PMU Coordinator). This decision would probably have been the right one if the new administration had been similar to previous ones, with frequent ministerial turnover and similar policy principles, as expected at that time. However, the Correa administration that came to power in January 2007 turned out to be very stable and to follow different policies. After the new administration took office, although some minor adjustments were discussed, the team failed to recognize the increasing disconnect between the content of the Bank – PMU discussions and the intentions of the Ministerial authorities, and continued to work mostly with the PMU (where most of the staff, but for the PMU Coordinator, had been appointed by the previous administration).

68. In the phase following the Government's decision to cancel most of the loan (January 2008 – March 2009), the Bank team adjusted its mode of supervision and began to actively involve the Ministerial authorities in the entire decision-making process. It regularly consulted with management, raising its preoccupation with the technical soundness of some of the activities financed by the project, which however had to be balanced with the Bank's overall interest in maintaining a working relationship with the administration. To account for growing concerns on the Bank side over sustainability and fiduciary issues, the team organized more frequent supervision missions, together with independent technical reviews of works under construction and extensive field visits. Despite a very delicate overall engagement with Ecuador, the team was able to maintain a reasonably good relationship with its counterparts at all levels and bring the project to closure in a non-conflictive manner.



69. The team also advised the Borrower on repeated occasions of the importance to carry out a formal restructuring of the project in order to reflect changes in the scope, design and loan amount. However, the Borrower was not convinced that the corresponding process (which would have included Board Approval, since the PDO and its indicators would have changed) was worth the effort, given that its strategy was to cancel most of the loan and complete and close the rest as quickly as possible.

70. Over the entire course of supervision, sufficient budget and adequate staff resources were allocated, and the project was closely and adequately supervised. The Bank Team was highly stable, with only one change of TTL over the entire implementation of PRAGUAS I and II, and several of the key staff remaining in the Bank team for more than 10 years. Aide-memoires were prepared regularly and the project's performance in terms of achievements of development objectives and implementation was rated realistically in the Implementation Status Reports.

71. The review of procurement of consultants, goods and works was done in accordance with the provisions stipulated in the Loan Agreement and the Bank's Guidelines for Procurement of Goods and Works by borrowers and the Guidelines for selection and Contracting of Consultants by borrowers.

72. A social development specialist was included in the Bank team throughout the life of the project to ensure that the project design and supervision included oversight of social participatory schemes, and access of indigenous groups as project beneficiaries and stakeholders.

*(c) Justification of Rating for Overall Bank Performance:*

Rating: **Moderately Satisfactory**

73. Based on the Bank performance during the lending phase as well as supervision, the overall Bank performance is rated moderately satisfactory.

## **5.2 Borrower Performance**

Rating: **Moderately Unsatisfactory**

74. During project preparation, the government performance was *highly satisfactory*. The project was prepared in a relatively short time span, following sound technical principles, reflecting a number of lessons learned during the PRAGUAS I project. The project was a logical step for a sector that had been in modernization over the previous 7 years, in part thanks to the support of the first phase of the APL. As part of project preparation, the GOE conducted in-depth ex-post evaluations of PRAGUAS I projects, initiated the preparation of key Terms of Reference, and obtained all the necessary authorizations to declare the project effective in a relatively short time (6 months, much less than the average in Ecuador at the time).

75. During project implementation, particularly during the last year, Government performance was *unsatisfactory*. The Government failed to recognize the growing disconnect

between the technical work carried out by the PMU and its own policies and strategies. The decision to dismiss high and intermediate level staff of the PMU that had been hired through independent, competitive processes and the subsequent weaknesses due to the high turnover in key personnel and the lack of key staff to perform project planning and implementation activities, severely affected implementation after December 2007. The revised procurement plan was not carried out as planned. The Government failed to act after independent supervision revealed significant technical and social weaknesses in the on-going sub-projects in June and October 2008, and did not implement the agreed action plan.

76. Although cooperation agreements had been signed by SAPSyRS and the Indigenous and Afro-Ecuadorian councils (CODENPE and CODAE), the PMU failed to follow-up on these collaboration agreements to synchronize demands of subprojects originating in indigenous groups, where CODENPE and CODAE would assist the communities in meeting the eligibility criteria to participate in PRAGUAS (i.e. community organization, financial contribution –up to 10%). Moreover, an Action Plan that had been agreed between PRAGUAS and the Directorate of Intercultural Bilingual Education (DINEIB) at the Ministry of Education, for the production of bilingual materials in Kichwa and Shuar on Hygiene and management of water and sanitation systems, was not implemented.

## **6. Lessons Learned**

- The impact of political transitions on project implementation can be significant, in particular when the new administration disagrees with significant aspects of project objectives and design. The Bank teams must be alert to changes in administration priorities and consider a restructuring of the project early on to make the necessary adjustments if common ground can be found on sound technical principles. This is particularly true in the case of APLs or projects prepared by one administration but implemented by another. In addition, rushing through initial implementation (including the contracting of key PMU staff) shortly before an administration change, despite allowing for more expedite implementation, poses risks especially when it can be expected that the incoming administration might have different priorities from the one preparing the project. Finally, the Bank should not shy away from sustaining high-level, frank discussions with incoming administrations on the scope and technical principles of on-going or new projects, and consider a mutually agreed cancelation as an acceptable option if no agreement can be found.
- Insulating the implementing team from staff turnover could have positive results in the case of highly unstable political environments, but also negative consequences, especially when the political context changes and the PMU staff no longer has the trust of the new political authorities. In such case, it is important to recognize that the Bank's counterpart is not the PMU but the Government's implementing agency (in this case MIDUVI) and the Bank team must exert special care in identifying possible discrepancies between both.
- In the case of a deteriorating project implementation, it is important for the Bank team not to alienate the Borrower's goodwill towards the project. Tradeoffs must be made

between the need to maintain or improve the quality of project implementation, and the need to maintain working relationships with the Client so as to reduce the risk of having to close a project without the support and engagement of the Client.

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

### *(a) Borrower/implementing agencies:*

77. In its comments to the draft ICR, the Government of Ecuador presents in some details its own assessment of the project and raises the following issues:

- *Assessment of Recipient Performance:* The Borrower's comments state that the Recipient provided the "personnel, funding and the infrastructure required so that the PMU could efficiently carry out all work requirements and undertakings made." The Borrower proceeds to mention that one of the reasons for significant staffing problems with the PMU is linked to the Bank's requirement to have PMU staff selected through an independent, competitive process and given long-term contracts. A complete discussion of this issue is included in the ICR's paragraphs 34(b) and 67. While the team does not necessarily concur with the Borrower's assessment, this point was included in the lessons learnt.
- *Assessment of Bank performance:* the Borrower generally praises the Bank's performance but raises the issue of the Bank's temporary withholding of loan proceeds in October 2008 and mentions the Government had to provide short-notice emergency funding to make up. The team does not question this fact; the ICR provides a complete description of the context that led to this decision in paragraph 34(d).

78. The Borrower does not take a firm position on the project's overall performance, noting instead that its own evaluation of the project is still on-going.

### *(b) Co-financiers:*

79. Not applicable.

### *(c) Other partners and stakeholders (e.g. NGOs/private sector/civil society):*

80. Not applicable.

## ANNEXES

### Annex 1. Project Costs and Financing

#### (a) Project Cost by Component (in USD Million equivalent)

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Water and Sanitation Sector Reform and Institutional Strengthening	1.60	0.39	24.38
Rural Water Supply and Sanitation	30.70	5.29	17.23
Promotion of New Management Models for Water, Sanitation and Solid Waste	24.80	0.64	2.58
Project Administration	3.20	1.14	35.63
<b>Total Baseline Cost</b>	60.30	7.46	12.37
Physical Contingencies	8.10	N.A	N.A
Price Contingencies	8.10	N.A.	N.A
<b>Total Project Costs</b>	76.50	7.46	9.75
Front-end fee PPF	0.00	0.00	0.00
Front-end fee IBRD	0.12	0.12	100.00
<b>Total Financing Required</b>	76.62	7.58	9.89

#### (b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Borrower	N.A.	0.62	1.09	176%
International Bank for Reconstruction and Development	N.A.	48.00	7.74	16%
Municipalities of Borrowing Country	N.A.	28.00	1.73	6%
<b>Total Financing</b>	N.A.	76.62	10.56	14%

## Annex 2. Outputs by Component

### *Component 1: Water and Sanitation Sector Reform and Institutional Strengthening*

1. Activities in this component were focused on strengthening institutional capacity of SAPSyRS and other sector actors; however, these activities were delayed since implementation concentrated on components 2 and 3, related to the construction and rehabilitation of water and sanitation infrastructure in rural and cantonal capitals. The only output in this component was the physical upgrading of the office environment of SAPSyRS, MIDUVI.

### *Component 2: Water and Sanitation in Rural Areas*

2. Subprojects of water and sanitation in rural areas were to be implemented following a demand-based approach. The project cycle included social promotion activities, community development, hygiene education, and the design, construction and supervision of civil works. A comparison between PAD estimates and actual subproject outputs are shown in the following table.

Description	Baseline	YR1	YR2	YR3	YR4
<b>Rural Water Supply</b>					
<b>PAD</b> - Number of additional people with access to improved water supply services in rural areas	0		100,000		285,000
<b>Actual</b> - Number of additional people with access to improved water supply services in rural areas	0		31,403		
<b>Rural Sanitation</b>					
<b>PAD</b> - Number of additional people with access to improved sanitation services in rural areas	0		30,000		70,000
<b>Actual</b> - Number of additional people with access to improved sanitation services in rural areas	0		44,562		

3. It should be noted that the actual figures are lower than the values expected at the end of the project (Project Outcome). This is due to the partial cancelation of two thirds of the loan and the early ending of the program. The increment of people with access to improved water supply corresponds to 11% of the original objective, and the increment of people with access to sanitation corresponds to 64% of the original objective considered at appraisal.

4. During the implementation phase, 104 projects of water supply and sanitation and 179 projects of sanitation only, were implemented through 119 construction contracts.

5. The lack of effectiveness in social intermediation during implementation affected effectiveness of services and their sustainability; therefore, figures shown in the table refers to access to improved water supply or sanitation services, without considering their sustainability, as defined at appraisal.

6. The quality of outputs was analyzed during supervision missions in 2008 and 2009. Field visits revealed that construction quality of water supply systems was good. Water supply systems were built according to design specifications; their construction materials and workmanship were acceptable. It was found that construction projects suffered from a lack of social intervention to

prepare the community for the construction work. On the other hand, rural sanitation infrastructure presented construction deficiencies. In some cases these deficiencies were due to a lack of supervision and in other cases were due to a lack of social intervention, lack of information, and lack of coordination between municipalities and communities.

*Component 3: Promotion of New Management Models for Water, Sanitation and Solid Waste in Cantonal Capitals*

7. This component was largely canceled. The Program implemented rehabilitation and efficiency improvements of water supply and sanitation systems in three cantonal capitals: Tulcan, Riobamba y Cayambe. The actual number of people directly affected by project-funded activities cannot be determined due to the absence of a strict TA program with these municipalities, including regular monitoring of key service quality indicators. However, the detail of the activities financed under the component follows:

1. Tulcan (61,115 urban population). Distribution network replacement in Rafael Arellano street. Improvement of water tanks. Replacement of feeding line for the water treatment plant. Purchase of laboratory equipment.
2. Riobamba (174,538 urban population). New chlorination system. Creation of District Metering Areas. Installation of meters.
3. Cayambe (35,993 urban pop.). Installation of macro-meters.

### **Annex 3. Economic and Financial Analysis**

1. Given the limited access to information it is not possible to conduct a rigorous ex-post evaluation as was done at the closing of the previous phase of PRAGUAS, partly because the envisioned monitoring and evaluation system was never in place, and partly because assumptions made at appraisal did not materialized given the earlier closing and reduced scope of the project.
2. At appraisal the strategy for implementing the rural investment component built on the experiences from the first phase. The project required communities to initiate participation in project activities and to validate their commitment and need for the project via a cash contribution towards the expected capital cost. The self-selected project communities (from those poor communities already identified as eligible) would choose their preferred level of service from a menu of options. However, the project design was expected to incorporate eligibility criteria to screen proposed technical solutions to maximize the likelihood of the interventions being economically feasible. The project aimed to maximize overall benefits for each specific subproject, including those related to health impacts by promoting better hygiene practices specifically handwashing with soap; leaving the responsibility for O&M costs to the beneficiaries who will also pay a 30 percent cash and labor contribution to capital costs for project implementation.
3. Agreement to project rules regarding cost recovery was a prerequisite for community participation, increasing the odds of sustainable investments. In particular, the project rules required that user charges cover operation and maintenance expenses and the replacement of electro-mechanic equipments, and that those communities confirm and demonstrate their willingness to adopt such charges. Communities were also expected to accept the responsibility for service provision through a water board (*junta*) as a condition for participation in the Project. To increase the likelihood that the systems build by PRAGUAS II were and remain economically feasible, a new component to deliver post-construction support to the *juntas* was added, and sub-project performance was going to be more closely monitored and information collected on a continuous basis, to increase the useful life of the systems.
4. Additional benefits were expected from the on-site sanitation component, although these were not quantified at appraisal. Rather least-cost analysis of the alternatives and cost-effectiveness criteria were agreed to be used for investment decisions. The strategy included strong social promotion and demand generation activities of user investments in sanitation, limited subsidies, targeted coverage levels of at least 60 percent of households per community to achieve increased health impacts, and promoting a wider range of lower cost options. Those were expected to bring additional benefits to the communities.
5. Given the lack of information available, the analysis presented in this annex is based on information from 103 contracts<sup>9</sup>: 27 for water supply systems, 45 for basic sanitation units a flush latrine with basin and shower (BSUs), and 31 for both services, all of which were partly financed with loan proceeds.

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<sup>9</sup> Information on contracts was collected by a consultant hired by the Bank in August 2009 after it became evident that the PMU was not in condition anymore to provide reliable cost and scope information on the contracts carried out under the project. It was not possible to obtain access to 100% of the contracts signed under the loan.

6. During project preparation, investment ceilings were defined for each type of intervention: US\$700 for each new water connection, and US\$450 per UBS. It also included ceilings for rehabilitation that ranged from US\$250 to US\$700 for each water supply connection, and US\$300 per BSUs. These ceilings were based in parts on an economic analysis.

7. Out of the 103 contracts analyzed, 90 (87 percent) were signed for an amount below the maximum investment cost: all 45 of sanitation, 19 of water supply, and 26 of both services. On average, the 103 contracts had a value of 30% less than the maximum reference value. Among the 58 contracts that included water supply connections, there are 16 (28 percent) for less than 50 connections, which was the agreed minimum number of connections per contract. The average unit cost of water supply connections was US\$466, 33 percent below the US\$700 investment ceiling. And the average unit cost of BSUs was US\$314, 30 percent below the US\$450 investment ceiling. The results are presented in Figures 1 and 2.

Figure 1. Unit costs for Water supply systems financed under PRAGUAS II

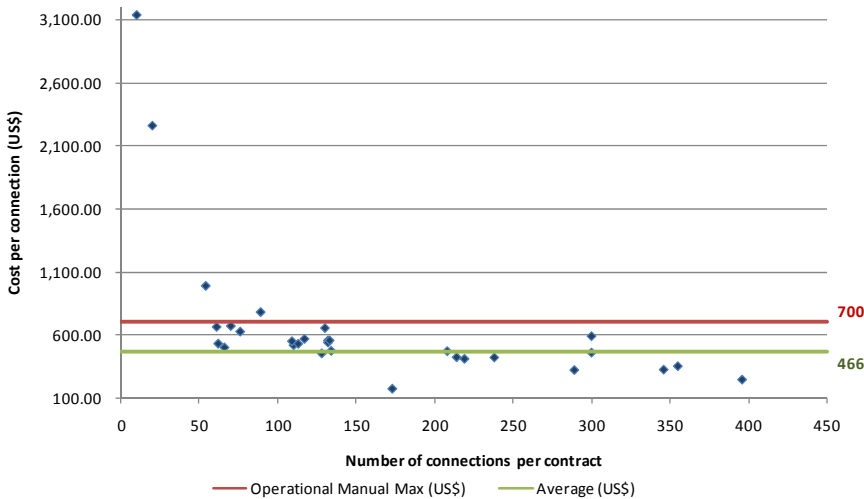
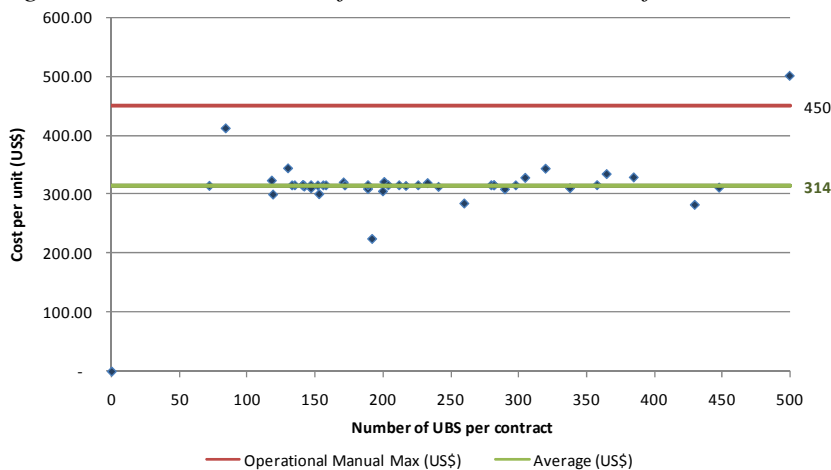


Figure 2. Investment costs for sanitation solutions financed under PRAGUAS II





## Annex 4. Bank Lending and Implementation Support/Supervision Processes

### (a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
<b>Lending</b>			
Michele Bruni	Consultant	EXTCD	Communications Specialist
Franz R. Drees-Gross	Sector Leader	LCSSD	TTL
Valeriano F. Garcia	Consultant	ECSPE	Fiscal policy and economics
Gustavo Guerra-Garcia	Consultant	LCSHE	
Daniel A. Hoornweg	Lead Urban Specialist	FEU	Solid Waste specialist
Ana Lucia Jimenez Nieto	Financial Management Specialist	LCSFM	
Patricia Mc Kenzie	Lead Financial Management Spec	LCSFM	
Marcelo Amador Osorio	Consultant	LCSPT	Procurement Specialist
Eduardo A. Perez	Sr Water & Sanitation Spec.	ETWWP	
Juan D. Quintero	Sr Environmental Engineer.	EASRE	
Franz Jose Rojas Ortuste	Consultant	LCSUW	Small towns management
Maria Angelica Sotomayor Araujo	Senior Economist	LCSUW	Co-TTL
Alejandro Marcos Tapia	Energy Spec.	LCSEG	
Maria Carmen Tene Sarango	Consultant	LCSUW	Indigenous peoples Specialist
Ximena B. Traa-Valarezo	E T Consultant	LCSSO	Social Specialist
Caroline van den Berg	Senior Economist	ETWWA	Results framework M&E
<b>Supervision/ICR</b>			
Michele Bruni	Consultant	EXTCD	Communications Specialist
Alvaro Campy Orozco	Consultant	LCSUW	Engineer
Franz R. Drees-Gross	Sector Leader	LCSSD	TTL until July 2007
Maria Lucy Giraldo	Senior Procurement Specialist	LCSPT	
Daniel A. Hoornweg	Lead Urban Specialist	FEU	Solid waste component
Rosario de los Angeles Jacome Mena	E T Consultant	ETWAN	
Lene Odum Jensen	Operations Analyst	ETWWP	Hand washing specialist
Ana Lucia Jimenez Nieto	Financial Management Specialist	LCSFM	
Ricardo Mairena Ramirez	Consultant	LCSUW	ICR Primary Author
David Michaud	Water & Sanitation Specialist	LCSUW	Co-TTL from July 2007
Marcelo Amador Osorio	Consultant	LCSPT	Procurement Specialist
Charles W. Peterson	Sr Environmental Specialist.	ENVCF	Solid Waste Component
Catarina Isabel Portelo	Sr Counsel	LEGLA	
Franz Jose Rojas Ortuste	Consultant	LCSUW	Small towns management
Luis M. Schwarz	Senior Finance Officer	LOAFC	
Maria Angelica Sotomayor Araujo	Senior Economist	LCSUW	Co-TTL, TTL from July 2007
Alejandro Marcos Tapia	Energy Specialist.	LCSEG	
Maria Carmen Tene Sarango	Consultant	LCSUW	Indigenous peoples specialist
Ximena B. Traa-Valarezo	E T Consultant	LCSSO	Social Specialist
Ignacio M. Urrutia Duarte	Junior Professional Associate	LCSUW	
Caroline van den Berg	Senior Economist	ETWWA	M&E

**(b) Staff Time and Cost**

<b>Stage of Project Cycle</b>	<b>Staff Time and Cost (Bank Budget Only)</b>	
	<b>No. of staff weeks</b>	<b>USD Thousands (including travel and consultant costs)</b>
<b>Lending</b>		
FY06	27	221.35
FY07	9	54.07
FY08	2	5.96
<b>Total:</b>	38	281.38
<b>Supervision/ICR</b>		
FY07	37	193.95
FY08	26	148.85
FY09	26	156.26
FY10	1	6.46
<b>Total:</b>	90	505.52

**Annex 5. Beneficiary Survey Results (if any)**

**Not Applicable**

**Annex 6. Stakeholder Workshop Report and Results (if any)**

**Not Applicable**

## **Annex 7. Summary of Borrower’s ICR and/or Comments on Draft ICR**

*(Translated from Spanish)*

### **BACKGROUND**

1. The former IEOS was one of the most relevant of the State’s executing agencies, and achieved important successes in terms of water and sanitation coverage; it helped lead to national average drinking water coverage increases from 20 percent to 60.5 percent from 1961 to 1999, and increases in sanitary sewerage coverage rates from 14 percent to 51.5 percent in the same period. With the entry into force of the Law on State Modernization, the former IEOS began a process of transferring the water supply systems to the municipalities and communities so that they could assume responsibility for their operation, maintenance, and administration, thereby initiating one of the first steps taken toward decentralization. However, following the dissolution of the IEOS, the service-providing entities failed to develop adequate programs for satisfying demand in either quantitative or qualitative terms.

2. Both the people and the central and local government authorities have recognized that the main problems are those associated with the supply of and demand for services; imbalances in the provision of those services; and the unsatisfactory management of entities in the Sector.<sup>10</sup>

3. **Supply of and demand for services.** According to end-2001 data, the country had four million inhabitants without adequate drinking water services, five million without adequate sanitation services, and six million—in urban areas—without adequate solid waste disposal. Moreover, water service was intermittent in almost half of urban centers, losses still amounted to 65 percent of total production, while surface water went untreated in 30 percent of urban centers, and waste water untreated in 92 percent, and solid waste discharged into streams and rivers.

4. **Imbalances in the provision of services.** The transfers and loans to the Sector failed to contribute effectively to improving the situation of the poorest because they were turned over without clearly defined and documented objectives, nor did they lead to good service on the part of those receiving them. The forms and channels used for these transfers and loans also have the negative effect of reducing the “incentives” in the sense of efficiently operating services, with municipalities establishing tariffs making cost recovery possible. The subsidies granted service-providing entities through the tariff structure (crossed subsidies) also fail to favor the poorest, as the form in which they are designed and applied ultimately favors the largest consumers of water, generally higher-income households. The vast majority of lower-income people in rural and periurban areas receive lower quality services, and have to spend a significant proportion of their household income in order to pay for them (a higher proportion than so allocated by households with better service).

5. Problems with entrepreneurial management in the Sector. The organizational approach used for the Sector in our country is oriented toward decentralization of service-rendering to the municipality and community level. However, this decentralization is incomplete as there is no appropriate regulation of the quality and price of services, nor is there an adequate information

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<sup>10</sup> Taken from the Sectoral Development Plan of the SAPSyRS.

system that might enable service-rendering entities, governmental authorities, and users to compare the quality and price of services received.

6. The tariffs cover only part of the costs. The difference between such costs and tariff revenues is financed by resources from national and municipal transfers and by taxes specifically earmarked for investment in the Sector. In addition, infrastructure operation and maintenance is deficient owing to the shortage of financial resources for addressing these needs, a problem leading to a shortening of the useful economic life of the infrastructure.

7. This set of problems, as well as the scenario brought about by the promulgation of the Law on State Modernization and its Regulations, of the Law on the Promotion of Investment and Citizen Participation, and the Law on Municipal Governance, opened the possibility for flexibility in the market structure. This included the use of existing central government and sectional organizations, establishing alternatives for the provision of services through new organizational modalities and alliances; the PRAGUAS Program was designed as a means of supporting actions relating to modernization of the Sector and of endeavoring to reverse the prevailing conditions described above.

### **ACTIONS UNDERTAKEN UNDER PRAGUAS I (Reform and Institutional Strengthening Component)**

(a) Under PRAGUAS I, the SAPSyRS promulgated the **NATIONAL DRINKING WATER AND SANITATION POLICY** (2002). The general objective of this Policy was to interconnect the efforts of the Government and society with a view to improving the living conditions of Ecuadorians. The formulation of this State Policy constituted an opportunity again to promote the concept of environmental sanitation through interconnected efforts to improve, among other things, the provision of water, sanitary sewerage, and the collection, treatment, and proper disposal of solid wastes.

(b) To operationalize this Policy and remain in synch with the Millennium Development Goals (MDGs) of reducing the proportion of persons without sustainable access to water and sanitation services by half by 2016, the SAPSyRS formulated the **SECTORAL DEVELOPMENT PLAN**. It posited that increased coverage and efficiency in the Sector will only be possible with the development of key strategies, and called for strong political, economic, technical, and social support from all Ecuadorians. These strategies were oriented toward changing the status quo, replacing it by a virtuous circle resulting in continuing improvement in service quality and coverage.

(c) Another important document generated by the SAPSyRS as part of the Reform and Institutional Strengthening Component of PRAGUAS I, as a support for the activities of service operators, is the **GUIDE FOR THE PREPARATION OF TARIFFS FOR DRINKING WATER AND SANITATION SERVICES**, a document that analyzes the subsidies, explains the structure that a tariff must have, and shows the way to calculate and apply a tariff.

(d) One key element of the strategies laid down in the Sectoral Development Plan is the reallocation of the transfers and loans to the Sector, inasmuch as the State should have urgent

measures for ensuring that the subsidies do in fact go to the poorest (redistributive effect) and contribute to the administrative and financial strengthening of the service providers (development effect), bearing in mind that those subsidies and loans which are unregulated should be abolished.

In an effort to embark on this dynamic, in 2004 the SAPSyRS, with support from the PRAGUAS Program and the Ministry of Economy and Finance, established the **REDISTRIBUTION MECHANISM FOR THE SPECIAL CONSUMPTION TAX**. Two-thirds of the collection of this tax would be turned over as a State subsidy for improving drinking water coverage. The success obtained, especially in terms of water distribution, was significant, in that this sizable subsidy is effectively reaching all sectional enterprises or entities responsible for performing the drinking water delivery service (see *Registro Oficial* [official gazette] No.463 of November 17, 2004).

(e) PRAGUAS I also included preparation of the **PRELIMINARY DRAFT ORGANIC LAW ON THE PROVISION OF WATER AND SANITATION SERVICES**. Its aim is to establish the basic rules governing the efficient delivery of the public services of providing drinking water and sewerage throughout the national territory, in both urban and rural areas. The provisions of this law ensure compliance with the primordial duties assigned to the Ecuadorian State in the Political Constitution of the Republic (prior to the one promulgated in 2008).

One section of this draft law posited the necessity for organizing and operating a municipal control body, which would be a deconcentrated agency of the municipal administration that would enjoy both operational and financial autonomy, as well as decision-making independence in the pursuit of its mission, and would be connected to the municipality through the municipal council. Its profile would be exclusively technical.

(f) Creation of the **Sectoral Information System on Drinking Water, Sanitation, and Solid Waste (SISASAR)**. The principal objectives of this information system were to: diagnose the main problems in the sector, be they technical/operational, administrative, economic/financial, commercial, or management-related, at any time; compare the quality and cost performance of the services in the various municipalities or service-providing entities; and plan and effectively channel economic resources, through the implementation of technical assistance programs, and the preparation and updating of technical guides and management guides, as well as rules and procedures for tariff systems.

(g) **Staff training and strengthening of the SAPSyRS**. In this area it was possible to structure and back several work teams, such as the teams for Technical Assistance (Management Models), Integrated Solid Waste Management, and Investment Incentives, with participation from the Information System Team.

In addition to the self-training activities performed by these teams and the (provincial) EPAS, toward the very end of PRAGUAS Phase I the SAPSyRS was able to provide training to approximately 60 staff in courses on Project Formulation and Evaluation; Regulation, Concessions, and New Management Models; the Sectional Approach; and Information Systems. Thirty-five percent of the participants were officials from the provincial directorates.

## **ACTIONS PLANNED FOR PHASE II OF THE PRAGUAS PROGRAM**

8. Effectively, as indicated in the World Bank report, it is planned to continue in Phase II, based on the lessons learned in Phase I, with the following activities:

- (a) **Advance the Draft Law for the Provision of Drinking Water and Sanitation Services**; achieve its promulgation and work on its **Regulations**.
- (b) Working in tandem with the Ministry of Economy and Finance, develop a **Financial and Resource Management Program for Water and Sanitation** to bring order to investments, making it possible for service providers to count on the financial resources needed to satisfy demand, particularly on the part of the poorest; incentivize the strengthening of service providers so that they operate efficiently and recover their costs; and motivate consumers to conserve the water resource. In addition, work on the strategies for intervention in and contributions to the organizations and institutions in the Sector, achieving a public-private alliance that looks forward strategically and is expressed annually in a Country Agenda for Water and Sanitation. Do the foregoing within the framework of the National Policy on Drinking Water and Sanitation and with a view to implementing the Sectoral Development Plan.
- (c) Apply the **tariff guide**, as one of the major tools for achieving the sustainability of services.
- (d) Promote the use of the Sectoral Information System (**SISASAR**).
- (e) Create the **Technical and Quality Standards System for the Drinking Water and Sanitation Sector**, which in a systematic and integrated manner develops technical standards consistent with the requirements of the Sector so as to support and promote harmonious and competitive development in conditions marked by efficiency and economy.
- (f) **Establishment and strengthening of the work teams**, moving forward with those in the two subsectors that are relatively new in terms of institutional know-how, namely integrated solid waste management and environmental management.
- (g) **Continue training** SAPSyRS staff, at both the central and provincial levels, so as to promote the efficient provision of products and services and meet the challenge of leadership.

## **EVALUATION OF PROJECT OBJECTIVES: DESIGNS AND IMPLEMENTATION**

9. The designs carried out under PRAGUAS I were revised and updated by consultants hired by the Program, and served as the basis for the implementation of Phase II, as related to the contracting for drinking water and sanitation systems.



10. Solutions will be provided in this phase approximately as follows:
  - 9,500 in Sanitation
  - 6,400 in Drinking Water.
11. Operations will be evaluated during the current year by staff from the Subsecretariat for Drinking Water, Sanitation, and Solid Waste, so as to assess the experience of the Drinking Water Boards responsible for system operation and maintenance.
12. In this regard, it bears noting that the Program is being implemented in 12 provinces at the national level as well as in 35 cantons.
13. The Incentive Component is being implemented in four provinces (of four cantons each) in the Sierra, which were audited by the enterprises concerned.
14. At this writing, the works are almost completed, with only some contracted in the drinking water area not yet finished.
15. Auditing of the drinking water system was outsourced by MIDUVI through the Subsecretariat of Drinking Water, Sanitation, and Solid Waste, under the supervision of staff from the latter.

**Borrower's performance during the project as it evolved and was implemented, with special emphasis on the lessons learned that can be applied in the future.**

1. A few months after Mr. Rafael Correa D. took office as President of the Republic, the National Government decided to terminate Loan 7401-EC with the World Bank owing to a State policy that will make it possible for works with social projects to be financed exclusively with government resources. The execution of the Phase II portion totaling US\$7,621,820.26 was consistent with agreements reached in a timely manner with municipalities and communities.

2. Despite this, the National Government was supportive at all times, through the provision of personnel, funding and the infrastructure required so that the PMU could efficiently carry out all work requirements and undertakings made.

3. The primary problem identified by the National Government with regard to the delayed PMU activities in 2007 was the fact that the PMU had a number of consultants engaged in various areas but did not see the fruits of their labors. This is the case with various positions, such as the Planning Coordinator, the Monitoring and Evaluation Coordinator, and the Legal Advisor, for example.

4. The World Bank's requirement that long-term contracts be entered into with the consultants hired, using poorly drafted contracts containing no clause that would make it possible to terminate them unilaterally, caused serious harm to the Ecuadorian State owing to appeals by the former PRAGUAS PMU consultants.

5. Even when, in October 2008, the Bank illegitimately withheld resources from the Program, the National Government covered its needs using government funding so that the works would not be brought to a halt and that it would be possible to settle the fees due to the consultants engaged by the PMU.

6. At the same time, and taking account of the strong points of and experience gained under the PRAGUAS, the National Government launched a new program on Drinking Water, Sanitation, and Solid Waste for Rural Areas. In this program, national consultants and professionals were trained so as to have a specialized human resource group capable of addressing efficiently the requirements that will have to be covered in the sector over the next 20 years.

**Evaluation of Bank performance, including the effectiveness of relations between the borrower and the Bank, with special emphasis on lessons learned**

7. The National Government extends its thanks to the Bank and Bank staff in charge of the project for all the assistance they provided to ensure its success. Surely over the **10 years** of PRAGUAS Phase I and Phase II execution, valuable lessons were learned about how to approach the provision of water and sanitation services in rural areas and the issues on which the National Government is now decisively taking action with a view to improving the quality of life of people living in rural areas. Some of these lessons are:

- The importance of community participation in the form of unskilled labor, empowering same as regards the works and their care and maintenance.
- The prior social work that should be carried out in order to ensure successful implementation of such works.
- The need for adequate legislation and a legal framework that enables the State to take effective action to address the serious coverage problems that the country has in this sector.
- The need for ongoing training of local professionals so as to have stakeholders with the capacity to implement works effectively.

**Proposed arrangements to ensure the future sustainability of the project, and to design with the Bank the performance indicators to be used to monitor the future operation and its development impact**

**With regard to the new Rural Program**

8. In keeping with provisions handed down by the authorities (SAPSyRS/MIDUVI administration, January 2007 to May 2009) work was carried out to formulate a new Program for the rural area, known as the Water and Sanitation Partnership Program. It incorporates ideas, concepts, and strategies from PRAGUAS and from other Programs carried out by the SAPSyRS in the past.

9. The Program itself has the following components: Rural Investment (studies, designs, and construction); Health Education; Water Quality Monitoring; and Strengthening of Community Operators (JAAPS).

10. The financing of this Program had initially been provided by budget allocations and the SAPSyRS. Along the way, new funding sources have been incorporated, such as those described below:

- Spanish Water Fund for Latin America and the Caribbean (current status: preapproved, with final approval anticipated for October 2009). Amount of project: US\$40,000,000. Nonreimbursable resources US\$32,000,000, national counterpart US\$8,000,000 (it has been agreed to value the installed capacity, studies, and designs). The IDB will perform the operation monitoring activities. Project duration: 4 years.
- Debt cancellation resources from the Spanish Government. Amount: US\$5,715,736 (nonreimbursable), plus US\$1,000,000 (national counterpart). Project total: US\$6,715,736. Beneficiary provinces: Esmeraldas, Sucumbíos, and Carchi. The grant resources will be available in September 2009, although the project has already started using government resources from the counterpart. Project duration: 2 years.
- Institutional cooperation agreement between the MIDUVI and PETROPRODUCCION for the development of approximately 300 water and sanitation projects aimed at developing the rural area in the northeastern provinces of the country. Amount of contribution from PETROPRODUCCION, approximately US\$6,000,000. Project duration: 3 years. This project will enter into force in 2010.

- Spanish Government resources for meeting the Millennium Development Goals. Amount: US\$5,000,000 (nonreimbursable). Work area: Provinces of Esmeraldas, Los Ríos, Manabí, and Bolívar. SENAGUA, UNDP, SAPSyRS/MIDUVI alliance. Resources administered by the UNDP. Project duration: 3 years. This project is already under way.
- National Strategy for the Eradication of Child Malnutrition (INTI). Effort involving commitments by all the social ministries. Area of intervention (Cantons): Alausí, Colta, and Guamote in Chimborazo Province; Guaranda, Chillanes, and San Miguel de Bolívar cantons in Bolívar Province; and Sigchos and Pujilí cantons in Cotopaxi Province. This project is already under way, and has a duration of 4 years. No specific amount has been determined.

## CONCLUSIONS

11. It is fair to say that the PRAGUAS Program was conceived as a program focused above all on "Sectoral and Institutional Reforms," with the two phases of the Program being interrelated with a view to achieving the outcomes sought through modernization measures and activities, and especially to ensure that these reforms be sustainable over time.

12. However, as is generally known, the current government reached the decision that programs and works that are social in nature should be financed with the resources of the Ecuadorian State, it being recognized that this was the reason why MIDUVI authorities chose to terminate the loan and make modifications in the design of the Program, abandoning the component that was its strongest pillar, with the resulting outcomes, the indicators for which are shown in the World Bank report. Practically all the steps made in terms of sectoral reform have come to a halt. Moreover, with the birth of PROMADEC, with a highly subsidy-oriented policy, there was a break with the partnership strategy, and with contributions between institutions as a savings measure and as a way to involve all stakeholders in the problems of the Sector.

13. In principle, the absence of a LAW ON THE PROVISION OF DRINKING WATER AND SEWERAGE SERVICES made it impossible for Ecuador to have integrated development planning for those services, which contemplates always achieving objectives in the area of coverage and quality; establishing a basic normative system of institutional responsibilities, making it possible to comply with essential principles, and favoring the creation of conditions that ensure access to a basic level of services by the people; determining mandatory minimum conditions with regard to organization, institutional performance, and the quality of the services provided as a result of the substantial and growing provision of services; defining a basic arrangement for economic and financial support of services, including tariff principles that sustainably ensure the efficient rendering of services and the equitable compensation for same on the part of the user population; obtaining, through decentralization in favor of the sectional entities, the building of a self-sufficient service-providing system, with entrepreneurial operation and with operational and financial autonomy; establishing basic guidelines for the adoption and operation of regulation and control approaches for the efficient services that are simultaneously independent of any political interference; and permitting effective participation and social control with respect to the planning and management of drinking water and sanitation services.

14. Special attention should also be paid to the topic of the INSTITUTIONAL STRENGTHENING OF THE SAPSyRS, which must assume and exercise leadership. To this end it must strengthen and focus its skills, enhance the flexibility of its internal structure, build multidisciplinary work teams with a high response capacity in terms of effectiveness and efficiency, with professional ethics, motivation, and a desire to serve through action. This implies a mastery of knowledge, trends, techniques, powers, and expertise, all within a framework of political will to address changes and correct existing weaknesses such as policy overlap. Indeed, one is responsive to the National Drinking Water Policy and the other in principle contradicts its leadership role, continuing to promote transfers to sectional governments without establishing a minimum set of preconditions, and resulting in continued resource losses.

**Annex 8. Comments of Co-financiers and Other Partners/Stakeholders**

**Not Applicable**

## **Annex 9. List of Supporting Documents**

1. Various Aide-Memoire for Preparation and Supervision Missions PRAGUAS II.
2. Various Implementation Status and Results Report For Investment Project Ecuador APL2 PRAGUAS II (Project ID: P095555 Loan/Credit No. IBRD74010).
3. Implementation Completion and Results Report for Investment Project Ecuador APL1 PRAGUAS I (Project ID: P049924 Loan/Credit No. IBRD70350).
4. Consultant Reports. Evaluation of the Water and Sanitation Works of the PRAGUAS II Project. Consultant Alvaro Campy Orozco. June, 2008; October, 2008; and January, 2009.
5. Report. Social Management and Safeguards mission. Ximena Traa-Valarezo. February, 2009.
6. Technical Report No.036. Works Progress Charts No.2. Construction of Sanitation Works in the Communities Las Maravillas, San Antonio, El Viento, Los Naranjos, and Los Corrales. Municipality of the Canton Tosagua, Province of Manabí. October, 2008.
7. Operational Manual. Rural and Small Towns Water Supply and Sanitation Project (PRAGUAS). Ministry of Urban Development and Housing. Subsecretariat of Water, Sanitation, and Solid Waste. 2007.
8. Project Appraisal Document on a Proposed Adaptable Program Loan (APL-2) to the Republic of Ecuador For the Second Rural and Small Towns Water Supply and Sanitation Project (PRAGUAS II). PAD. The World Bank. Report No.36579-EC. June, 2006.
9. Project Information Document Appraisal Stage (PID). The World Bank. Report No. AB2343. 2006.

## Annex 10. Timeline of Events for Project Implementation Period

Date	Project chronology	Context chronology
<b>2006</b>		
July	25: Board Approval of PRAGUAS II	
September	22-28: Supervision mission	
September-October	Key staff of PMU is hired.	
November		26: Elections at national Level. Rafael Correa wins.
December	1: Financing agreement signed 29: Effectiveness of PRAGUAS II	CMU conducts informal consultations with incoming administration, confirms PRAGUAS II should go ahead. Three other projects are canceled.
<b>2007</b>		
January	16-22: Supervision mission.	15: Correa administration is sworn in. MIDUVI Minister is Maria de los Angeles Duarte. Vice-Minister is Ginger Mendoza
February	5: New PMU coordinator is named. GoE pays commitment fee for PRAGUAS II.	
April		26: WB representative is declared <i>persona non grata</i>
June	8-17: Supervision mission. Project is satisfactory but progress on key procurement processes is somewhat slow.	
July	1 <sup>st</sup> : long-time TTL Franz Drees leaves, Co-TTL Maria Angelica Sotomayor assumes TTL role (both had been in PRAGUAS team for close to 10 years).	
November	5-11: Supervision mission. Progress on key procurement processes continues to be very slow; GoE indicates disagreement with outcome of at least one procurement process. 28: Ministerial Agreement governing and insulating PMU is repelled, replaced with a new one granting more direct power to Minister.	
December	24-28: Most of senior PMU staff is fired.	
<b>2008</b>		
January	9-11: Supervision mission. GoE informs the Bank of its intention to cancel most of the loan except outstanding commitments.	
February	20: 36M USD (out of 48M USD) are canceled from the loan.	



<b>Date</b>	<b>Project chronology</b>	<b>Context chronology</b>
May	1 <sup>st</sup> : Agreement on new procurement plan for implementation of remaining 12M USD. May 25-Jun 5: Supervision mission, preceded by 2-week field visit of independent supervisor / consultant financed by Bank. Shortcomings identified in sanitation works, social intervention. Action Plan to fix shortcomings and improve implementation agreed with the Sub-secretary.	
June	3: PMU coordinator (in place since Jan. 2007) is fired; replaced on June 5.	
August	18: PMU coordinator (in place since June 2008) is fired, not replaced.	
October	Sept 29-Oct 9: Supervision mission, preceded by 2-week field visit of independent supervisor / consultant financed by Bank. Shortcomings identified during previous mission continue, the agreed Action Plan was not implemented.  Bank pauses disbursements.	Content of Illegitimate Debt report is leaked.
December	10: Closing date of loan is advanced from 2011 to March 30, 2009.  12: FM Supervision mission.	
<b>2009</b>		
January	14: Bank emits new Disbursement Letter, resumes limited disbursements. 25-31: Social Supervision mission carried out by Social Development Specialist, including extensive field visits. Shortcomings identified during previous mission continue.	
February	2-3 Fiduciary supervision mission, including field visits to Municipalities.	3: MIDUVI Minister resigns. 11: New Minister, Walter Solís, is appointed.
March	24-25: closing mission. 31: Project closes. Minister agrees to maintain key fiduciary staff in place for grace period	
April		MIDUVI Vice-Minister resigns.
May		18: Hernando Subía Álava is named MIDUVI Vice-Minister.
July	31: Initial final date for the Grace Period. Per Government's request the Bank granted an extension of the Grace period	
August	11: Contract of key fiduciary staff expires 5-10: Technical visit by WB-funded consultant to gather information on cost efficiency	
September	30: Grace period ends.	