Report Number: ICRR0021025

# 1. Project Data

Project ID P106703	•	Project Name BR SP Water Reagua		
Country Brazil	<b>Practic</b> Water	Practice Area(Lead) Water		
L/C/TF Number(s) IBRD-78700	Closing Date (Original) 30-Nov-2015		Total Project Cost (USD) 107,493,000.00	
Bank Approval Date 04-May-2010	Closing 30-May			
	IBRD/II	DA (USD)	Grants (USD)	
Original Commitment	64,496,000.00		0.00	
	37,555,075.18			
Revised Commitment	37,5	555,075.18	0.00	
Revised Commitment Actual		555,075.18 555,075.18		
			0.00	

# 2. Project Objectives and Components

## a. Objectives

The Project Development Objective as stated in the Loan Agreement (Schedule 1, page 5) was: "To increase clean water availability in the Critical Watersheds."

The PDO as stated in the Project Appraisal Document (PAD, page 6) was similar. "To increase clean water availability in the critical watersheds in the State of Sao Paulo."

The PAD (page 6) defines "clean water" as either additional potable water available for consumption or additional treated wastewater discharged to a water body in conformity with environmental legislation.

b. Were the project objectives/key associated outcome targets revised during implementation?
Yes

Did the Board approve the revised objectives/key associated outcome targets? Yes

**Date of Board Approval** 28-Nov-2015

c. Will a split evaluation be undertaken?
No

## d. Components

There were three components. A fourth component, described below, was not completed.

One: Increase Water Availability. (Appraisal estimate US\$30.68 million. Revised estimate after restructuring US\$31.67 million. Actual cost at closure US\$33.00 million). This component aimed at financing activities for increasing the availability of water in the selected watersheds of the state. There were three sub-components: (i) activities aimed at reducing water losses, including inter-alia through determining baseline water losses, sectorizing into district metered areas, installing pressure controls and macro and micro metering, developing technical cadaster, controlling leaks and improving the quality of repairs and managing networks and infrastructure: (ii) activities aimed at improving water consumption efficiency in selected public schools through, diagnosis of water consumption practices, identifying potential for reducing water consumption, installing water-saving appliances (such as faucets and toilets) and awareness campaigns aimed at economizing water consumption: and, (iii) activities aimed at providing incentives for using treated water in agricultural, industrial and other uses, building additional treatment facilities and networks for transporting treated wastewater to end users and building transport networks to the reservoir.

**Two. Enhance water quality** (Appraisal estimate US\$64.80 million. Revised estimate after restructuring US\$27.68 million. Actual cost at closure US\$8.33 million). This component aimed at financing activities for improving the quality of water in the selected watersheds. There were three sub-components: (i) building new wastewater connections to new/existing networks such as through building service lines and connecting households to networks: (ii) installing wastewater transport systems (wastewater pipes) and, (iii) upgrading existing wastewater treatment plants and constructing new wastewater treatment plants. Component one and two activities were to be 100% financed through a Results Based Scheme or Output-Based Disbursements (OBD) method. (Under this method, disbursements to incumbent water service providers (state or municipal owned) are contingent on their meeting agreed targets that were to be independently-verified by Verification Agents (VAs).

Three: Project Management and Development of Institutional and Technical Capabilities. (Appraisal estimate US\$8.64 million. Revised estimate after restructuring US\$5.75 million. Actual cost at closure US\$5.91 million). This component aimed at strengthening the institutional and technical capabilities of the water and sanitation sectors. Activities included: (i) financing an Impact Evaluation Study on the impact of the OBD financing method *vis-à-vis* the traditional input based financing method on the construction time

period, costs and sustainability:(ii) capacity building of the water service providers: (iii) providing project management support including and providing experts for verification of outputs and Project and Performance Agreement (PPA) indicators.

An additional component was added through the project restructuring on November 2015.

**Four: Emergency Works for Water Supply.** (Restructuring estimate U\$\$30.65 million. Actual cost at closure U\$\$0.00 million). The ICR (page 4) reports that extremely low rainfall during 2013-2015 led to a severe water supply crisis in the Metropolitan Region of Sao Paulo. The reservoir system that supplied the metropolis was at risk of depletion, with potential dire economic and social consequences. This component aimed at minimizing the impact of the drought on the state's water sources. Planned activities included: (i) Construction of environmental sanitation works to minimize the impact of the crisis on the main sources of water supply for the region; upgrading/constructing wastewater collection networks, transport system and treatment plants: and (ii) a water demand management program including measures to increase the rational use of water in low-income housing complexes in key neighborhoods of the region. Activities in this component were not implemented at project closure.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates Project Cost. (Appraisal estimate including total baseline cost, costs associated with physical contingencies and Front-end IBRD fee) was US\$107.49 million. Revised estimate after restructuring US\$95.91 million. Actual cost (there were no contingencies during implementation) US\$47.40 million). Actual cost was lower than expected due to a combination of factors including reduced project scope, non-completion of some activities and significant appreciation of the US\$ vis-à-vis the Real during project implementation.

**Project Financing**. The project was financed by an IBRD loan of US\$64.69 million. Amount disbursed at closure US\$37.74 million. The project preparation was supported by a US\$180,000 Grant for designing OBD schemes for the water and sanitation sectors by the Global Partnership on Output-Based Aid (GPOBA).

**Borrower Contribution**. Appraisal estimate US\$42.99 million. Revised estimate after restructuring US\$31.41 million. Their financial contribution was less by US\$9.66 than planned. The information provided by the team indicated that sanitation investments financed by the project received input-based financing support, since no utility would have committed to such investments otherwise.

**Dates**. These changes were made through the project restructuring on November 28, 2015. (i) Target for the key PDO indicator (availability of clean water) was revised upwards. Two new indicators were introduced with targets namely, the number of direct project beneficiaries and the percentage of female beneficiaries: (ii) Activities associated with reuse of treated wastewater, technical assistance activities to municipalities and regional service providers and funding an impact evaluation study were dropped (The last activity was dropped in view of the difficulties associated with finding a control group): (iii) Funds were reallocated between components: (iv) The results framework was modified: and, (v) the closing date was extended by 18 months from November 30, 2015 to May 30, 2015.

**Split rating.** Given that the targets for the PDO were scaled up and there was no change in the PDO following the project restructuring, a split rating was not conducted for this review.

## 3. Relevance of Objectives & Design

# a. Relevance of Objectives

95% of the population of the state of Sao Paulo lived in urban areas and before appraisal, the state faced water supply problems, despite relatively high coverage rates. This was due to a combination of factors including, the low availability of raw water, growing demand and inadequate facilities for wastewater collection and treatment. Half of the potable water in the state was imported from neighboring river systems and the remainder came from watersheds in the state, which were in a critical condition with the demand and availability ratio exceeding 50% (according to the state law, watersheds were deemed to be in critical condition when the relationship between demand and availability exceeded 50%). The problem of water scarcity was exacerbated by factors such as deteriorating water quality due to the pollution of rivers. Given that the scarcity of potable water and inadequate facilities for wastewater collection and treatment were more common in the poor neighborhoods in general and slums in particular (according to estimates 54% of the poor in the state were in areas of critical water deficit and 59% lacked proper sanitation), the PDO was highly relevant in the country context.

The PDO was consistent with the State Government's Water and Sanitation strategy. The strategy identified the need for maintaining universal access to potable water and sanitation, promoting sustainable use of water resources through wastewater treatment and rational use of water, implementing an integrated Water Supply and Sanitation (WSS) Strategy and assisting municipalities in planning and expanding the sources of financing for the WSS sector.

The PDO was well-aligned with the Bank strategy for Brazil. At appraisal, the Country Partnership Strategy (CPS) for the 2008-2011 period underscored the importance of the water sector for equitable and inclusive growth and highlighted the importance of addressing water scarcity and environmental degradation issues for sustainable growth. The PDO was consistent with two of the four objectives of the CPS for the 2012-2015 period namely, increasing the efficiency of public and private investments, expanding and improving the quality of public services for low-income households. The PDO continues to be relevant to the Bank's current Country Partnership Framework (CPF) for the 2018-2023 period. The third priority area of the CPF focuses on the inclusive and sustainable development objective, through increasing urban resilience and providing sustainable and inclusive urban services.

Rating High Revised Rating
Not Rated/Not Applicable

## b. Relevance of Design

The statement of the PDO was clear and the causal links between project activities, the outputs and their outcomes were logical. The intended outcomes were measurable. Component one activities aimed at reducing real water losses, improving water consumption efficiency in public schools through awareness campaigns and activities providing incentives for using treated water could be expected to increase the availability of water. Component two activities such as building new wastewater connections, installing

wastewater transport systems and upgrading wastewater treatment plans were aimed at improving water quality. These activities together with component three activities aimed at strengthening the institutional capacities of the water and sanitation sectors were likely to contribute to the PDO of increasing the availability of clean water availability in the state. The design incorporated an Output-based Disbursement (OBD) scheme under which disbursements were tied to independently verified outputs. Such a mechanism of linking project funds could in principle shift the financial and operational service delivery risks to service providers and thereby contribute to the sustainability of outcomes.

There were however several shortcomings in design. There was a limited state of readiness at preparation with respect to the modalities of the OBD scheme. For instance, the key legal contractual agreement - the Project and Performance Agreement (PPA)- with the service providers had not yet been developed at appraisal and during preparation, no conclusion was reached regarding the results-based template. Other critical technical tools and procedures pertinent to project implementation, such as the hiring of a Verification Agent and PPA template had not been resolved at preparation. The lack of readiness of these key technical tools significantly undermined project implementation. It is unclear whether utilizing the results-based approach were appropriate for supporting the capital intensive activities such as waste water treatment facilities, that were envisioned under the project.

The original timeframe of the project was overly ambitious, particularly given the limited state of readiness of the legal and contractual agreement at preparation.

It is not clear if the technical support was tailored to the needs of the selected river basins.

Rating Modest Revised Rating
Not Rated/Not Applicable

# 4. Achievement of Objectives (Efficacy)

# Objective 1

Objective

To increase clean water availability in the Critical Watersheds.

#### Rationale

Outputs (ICR, pages 28-34 and Datasheet).

- Infrastructure for, pressure management, sectorizing into district metered areas and active leakage control was installed in the selected watersheds of the state, as targeted.
- Environmental education and activities associated with works (such as installing water saving appliances) in the selected public schools were completed, as targeted.
- Wastewater pumping station and wastewater pipes were installed and works associated with creating new active connections and building wastewater treatment plants were completed, as targeted.
- The volume of recovered water per year due to reduced water losses increased to 43,713,975 cubic

meters at project closure. This exceeded both the original and revised targets of 9,275,156 and 30,572,331 cubic meters, respectively.

- Water consumption per year in the selected public schools decreased to 335,080 cubic meters at project closure. This exceeded both the original and revised targets of 98,915 and 147,338 cubic meters, respectively.
- Activities associated with reuse of wastewater in selected areas were not completed as targeted.
- No wastewater treated in the treatment plant was returned to the basin in accordance with environmental legislation as per the revised target of 700,800 cubic meters.
- There was no indication of reduced water consumption per year in housing units of social interest as per the revised target.
- The impact evaluation study on the results-based approach vis-à-vis the traditional input method was not completed, in view of the technical difficulties associated with finding a control group (areas which did not receive project intervention).
- 330 new active connections to the collection network of participating services provider were provided at project closure. This was short of both the original and revised targets of 4,748 and 2,346 new connections respectively.
- The volume of wastewater that was transported and treated in a wastewater treatment plant at project closure was 3,078,633 cubic meter as per the revised target.
- · Eight water utilities were supported by the project as targeted.

#### Outcomes.

- 47,127,718 cubic meters of water were recovered from the selected watersheds of the state at project closure. This exceeded both the original and revised targets of 30,106,311 and 47,127,718 cubic meters respectively.
- The number of beneficiaries (people living in the vicinity of the five most critical watersheds in the state, with water demand/availability ratio of above 80%) of the project at closure was 97,373 (of which 51% were women). This was considerably short of the target of 289,686.

Rating Modest

## 5. Efficiency

**Economic Analysis**. A cost-benefit analysis was conducted both at appraisal for a representative sample of six proposed subprojects and at closure for a total of 23 subprojects associated with increasing water

availability in the selected watersheds (component one activity). This component accounted for 29% of the total cost at appraisal and 30% of the actual cost at closure. Economic benefits of the project were assumed to derive from savings in costs of water rationing due to improvements in reliability of water supply and savings in operating costs due to efficiencies. The average ex post Internal Rate of Return (EIRR) for a sample of typical sub projects was 65% as compared to the ex ante EIRR of 28%.

Operational and Administrative inefficiencies. There were administrative and operational shortcomings associated with meeting the required conditions for implementing the Output-based Disbursement (OBD) scheme. Project implementation began about two years after effectiveness, due to a combination of factors: delays in preparing the Project Performance Agreement (PPA) contract template: The Verification Agent (VA) was hired about two years after Bank approval on August 2012 (while the loan covenant stipulated that VA be hired no later than four months after project effectiveness). This delay meant that no payment for results to the service providers could be made until the VA had been hired. The lack of readiness of these key tools significantly affected project implementation in the initial years.

The administrative limitations were however exacerbated by several unfavorable exogenous factors outside the project's control, in the latter years of the project. These included, significant appreciation of the US\$ vis- $\dot{a}$ -vis the real (43% increase from April 2009 to May 2017), financial crisis in both the operators and state and the unprecedented drought from 2014-2016 which delayed activities pertaining to sanitation investments (as the service providers were focused on activities associated with increasing water supply). The combination of these exogenous factors contributed to the cancellation of several activities (such as the capacity building and training activities and non-completion of some investments in the capital intensive water and sanitation sectors).

# Efficiency Rating Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 □Not Applicable
ICR Estimate		0	0 □Not Applicable

<sup>\*</sup> Refers to percent of total project cost for which ERR/FRR was calculated.

#### 6. Outcome

Relevance of the PDO to the State of Sao Paulo government strategy and the Bank strategy for Brazil was rated as High. Relevance of design was rated as Modest in view of the limited state of project readiness pertaining to the modalities of the Output-Based Disbursements Scheme. Efficacy of the single objective - to increase clean

water availability in the critical watersheds- was rated as Modest, given that many of the activities pertaining to capital-intensive water sanitation investments were not implemented. Efficiency was rated as Substantial.

Outcome Rating
 Moderately Unsatisfactory

### 7. Rationale for Risk to Development Outcome Rating

**Technical risk.** The activity associated with controlling water losses represented almost 96% of the total project cost at closure. The technical risk is rated as Modest, given that the results-based approach included a sustainability period to ensure that the results achieved were sustainable and that some of the water and sanitation providers that implemented the sub-component activities have been ranked amongst the most efficient in the State of Sao Paulo.

**Financial Risk.** As discussed in section 11b, there is the financial risk given that there were issues associated with legal and technical documents that were also acceptable to the eligible service providers during implementation.

a. Risk to Development Outcome Rating Modest

#### 8. Assessment of Bank Performance

## a. Quality-at-Entry

This project was the first Water Supply and Sanitation project adopting an Output-Based Disbursement (OBD) scheme. The project was based on lessons from a prior Bank financed project (Water Quality and Pollution Control Project). Lessons incorporated at design included, utilizing a water basin approach to address area-wide issues, activities aimed at addressing the institutional and environmental objectives through integrated water management and decentralizing responsibility for investments to the water supply and sanitation service providers to increase accountability. The design also incorporated lessons from projects which used OBD schemes: (i) Mexico Decentralization Infrastructure Reform and Development Loan project). Unlike in the latter project where reference unit costs were not pre-defined and hence needed to be revised during implementation, reference unit cost in the current project was based on engineering models that had been subject to review and benchmarking by expert independent consultants and this cost was to be reassessed during the Mid-Term Review to ensure that they were in line with actual cost. (ii) Brazil's experience with OBD under a federal program for wastewater treatment plants (Water Basin pollution Control Program) on estimating reference unit costs, selecting technical specifications and measuring water quality standards and performance indicators. Several risks were identified including risks associated with implementing the complex and time-demanding output-based financing mechanism in

activities in which these mechanisms had not been tried before. Mitigation measures were adopted including extensive consultation between the service providers and the State Secretariat for Water Supply, Sanitation and Solid Waste and a support grant from the Global Partnership On Output-Based Aid (GPOBA) for identifying the applicable designs for OBD schemes. Appropriate arrangements were made at appraisal for M&E (discussed in Section 10) and for safeguards and fiduciary compliance (discussed in section 11). As indicated in section 3b, there were limited state of readiness at preparation, given that key requirements for implementing OBA were not ready when the project became effective. The delays associated with preparing technical contracts of these tools and the long gap between the Call for Proposal (CFP) and the first CFP launch contributed to the lack of interest on the part of service providers.

The original implementation timeframe (four years) was unrealistic, given that most of the modalities required for implementing the OBD scheme (such as the Project-Partnership Agreement (PPA), the PPA template and the hiring of Verification Agents) were not ready at preparation.

The project design underestimated the risks associated with using the OBD scheme for capital-intensive investments in the wastewater sector and sewerage systems and the time required for complying with regulations relating to technical and environmental rules for capital intensive investments.

Quality-at-Entry Rating Moderately Unsatisfactory

#### b. Quality of supervision

Supervision missions were held regularly (with 13 Implementation Status Reports (ISRs) filed over a seven year period). The missions were supplemented by additional teleconferences. The support provided by the technical supervision teams' institutional and technical innovations helped in overcoming the legal and contractual issues confronted during implementation. The teams also collaborated with the implementing agency during the water crisis faced by the state. (Borrower's ICR, page 25). Given the delays in the initial years of project implementation, it is unclear as to why the project was restructured only on November 30, 2015, the originally scheduled closing date for the project. Greater support in the implementation phase with respect to higher reference unit costs could have helped implementation of activities under the project. The ICR (page 10) notes that activities addressing reduction and control of real water losses, besides having project sources of financing also had financing from the Sao Paulo State's water resources funds. The supervision team could have provided solutions for key aspects that delayed project implementation, such as the lack of an inflation correction mechanism for the OBD scheme.

The planned timeframe of 18 months to implement the newly created component aimed at constructing emergency works for water supply sources, was over-optimistic. This was particularly so, given that this activity required counterpart funding, which was undermined in the wake of the fiscal and financial crisis and that eventually this activity could not be completed.

Quality of Supervision Rating Moderately Unsatisfactory

## **Overall Bank Performance Rating**

Moderately Unsatisfactory

#### 9. Assessment of Borrower Performance

#### a. Government Performance

The Government commitment was strong at preparation as demonstrated by the hiring of well-regarded technical knowledge experts for conceiving the results-based approach in Brazil. Despite the difficulties associated with getting funding from project funds in the first two years of project implementation when the project funds were not yet available, the government provided the needed financial support (ICR, page 22).

There were delays in complying with legal covenants associated with entering into Project Performance Agreement's (PPAs) with the service providers and with having in place Verification Agents within four months of project effectiveness.

The lack of counterpart funding particularly during the latter years contributed to the non-completion of the activity that was added to the project during restructuring (component four activity).

## **Government Performance Rating**

**Moderately Unsatisfactory** 

## b. Implementing Agency Performance

The State Secretariat for Water Supply, Sanitation and Energy (SSE) was overall in charge of implementing the project and the Project Management Unit (PMU) established in the SSE was in charge of day-to-day management of the project.

It is not clear if the results-based approach was clearly understood by the implementing agency.

The projections on funds disbursements developed by the team were repeatedly rejected.

# Implementing Agency Performance Rating

Moderately Unsatisfactory

#### **Overall Borrower Performance Rating**

Moderately Unsatisfactory

### 10. M&E Design, Implementation, & Utilization

#### a. M&E Design

The one key outcome indicator: The cumulative number of cubic meters of clean water made available due to activities associated with reducing real water losses, promoting the rational use of water in public schools and reusing treated water - was appropriate for monitoring project performance. The intermediate indicators were aligned with the project components.

The Project Management Unit (PMU) was responsible for consolidating data at the project level. Providing baseline data was an eligibility condition for the service providers participating in the project and the Verification Agents were to assist the State Secretariat for Water Supply, Sanitation and Sold Waste in verifying that agreed outputs were produced in accordance with the performance contracts. The design also envisioned an Impact Evaluation Study aimed at comparing the benefits of the Output-Based Disbursement System with the traditional input input-based financing system.

## b. M&E Implementation

The target for the PDO indicator - the total number of cubic meters of clean water made available - was revised upwards following project restructuring. This was appropriate in view of the expected outcomes from ongoing activities. Two new indicators were added with targets - the number of direct project beneficiaries and the number of female beneficiaries from the project.

#### c. M&E Utilization

The M&E system was utilized as a tool to monitor project performance and to guide managerial and operational decisions. The combined contributions from the management firm and the Verification Agents contributed to a smooth monitoring of the project gods throughout implementation.

The Impact Evaluation Study aimed at comparing the OBDs with traditional input-based systems envisaged at appraisal, had to be dropped due to the technical difficulties associated with technical specifications embedded in the study, including finding a control group that received no project intervention..

M&E Quality Rating Modest

#### 11. Other Issues

#### a. Safeguards

The project was classified as a "Category B" for environmental purposes: Other than Environmental Assessment (OP/BP 4.01), three safeguard policies were triggered: Natural Habitats (OP/BP 4.04), Physical Cultural Resources (OP?BP 4.11) and Involuntary Resettlement (OP/BP 4.12).

Environment Assessment, Natural Habitats and Physical Cultural Resources. Negative environmental impacts from the execution of works were expected to be temporary and relatively insignificant (PAD, page 101). Safeguards associated with natural habitats was triggered as the activities associated with wastewater collection and treatment could affect the Permanent Preservation Areas (APPs) protected by the Brazilian Forest Code (Federal law 4.771/65) (PAD, page 24). The PAD (page 24) notes that Brazil had well-developed legislative and normative framework under the oversight of the National Institute for Protection of Historical and Archeological Sites (IPHAN in Portuguese) for managing physical cultural property. An Environmental Safeguards Framework (EMP) defining criteria and procedures the water and sanitation

providers needed to observe was prepared and publicly disclosed as required at appraisal (PAD, page 24). No additional safeguards were triggered for the activity added during implementation. The ICR (page 12) notes that during implementation there was compliance with safeguards. Regarding environmental assessment, the procedures described in the construction manual were followed and a screening of the activities financed by the project indicated no impacts on natural habitats and physical cultural resources.

**Involuntary Resettlement**. The PAD (page 25) reports that activities that could trigger Resettlement Policy were not eligible for Project financing. However, given the possibility that land acquisition may be required for constructing wastewater pumping stations and treatment plants, a Resettlement Policy framework (RPF) was prepared at appraisal to address resettlement issues, if deemed necessary during implementation. The ICR does not report any resettlement issues during implementation.

# b. Fiduciary Compliance

**Financial Management**. An assessment of the implementing agency's capacity to address financial management issues conducted at appraisal, concluded that the agency was staffed by experienced and competent professionals who were familiar with the Bank financial management procedures and requirements (PAD, page 69). The financial management risk was rated as Moderate at appraisal (PAD, page 77). The ICR (page 13) notes that audit reports were for the most part received in a timely fashion (with the exception of the 2014 and 2016 reports) and most audit reports had unqualified/unmodified audit opinions (with the exception of the 2015 report). The ICR notes that there were no ineligible expenses.

**Procurement**. An assessment of the implementing agency's capacity to address procurement issues concluded that the agency staff had the required experience in addressing procurement issues (PAD, page 81). The ICR (page 13) reports that during project preparation, both the Bank and government teams faced difficulties in agreeing upon appropriate legal and technical documents that were also acceptable to the eligible service providers. The ICR (page 13) reports that although there were issues associated with the lack of experience of the project team, these were rectified during implementation. There was no case of misprocurement.

c. Unintended impacts	(Positive	or Negative)
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d. Other

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## 12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Unsatisfactory	Moderately Unsatisfactory	
Risk to Development Outcome	Modest	Modest	
Bank Performance	Moderately Unsatisfactory	Moderately Unsatisfactory	
Borrower Performance	Moderately Unsatisfactory	Moderately Unsatisfactory	
Quality of ICR		Substantial	

#### Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

#### 13. Lessons

The ICR draws the following main lessons from the experience of implementing this project, with some modification of language.

- (1) Results based Schemes might require substantial effort during preparation. This project demonstrated that such financing schemes could entail legal aspects (such as the Project Performance Agreements with the service providers in this project) which require a long and complex judicial approval process. Therefore, such projects require complete development of the set of legal frameworks at the preparation stage. The delays in the initial years in completing these legislative requirements essentially undermined the realization of outcomes during implementation.
- (2) Project time frame, particularly in the case of capital-intensive projects incorporating designs such as a results-based approach, needs to be realistic. This is particularly so with respect to activities such as constructing capital-intensive Waste Water Treatment Plants which require compliance with environmental legislation. The experience with this project showed that while the approach was relatively successful in financing non-intensive capital investment activities (such as control of water losses and rational water use), it was less so with respect to supporting capital-intensive activities (such as construction of waste water treatment facilities).
- (3) Results based approach needs verification capacity and technical assistance to potential organizational beneficiaries. The experience of this project showed that the implementation of a results based operation requires the support of a technical assistance component to assist the providers in preparing proposals.

#### 14. Assessment Recommended?

No

# 15. Comments on Quality of ICR

The ICR is reasonably well written and provides a concise and candid description of the problems that were encountered in implementing the results based strategy (particularly with respect to preparation of the legislative framework, delays between the initial call for proposals and the first launch of construction and delays with hiring the verification agents).

The ICR lacks clarity and details on the modalities of a results-based approach. The description of issues pertaining to the discrepancy between project commitments and disbursement projections is quite brief and confusing. However, in reporting on the Mid-Term Review (MTR), the ICR notes efforts to improve performance of Project Performance Agreements (PPAs) but candidly admits that these efforts brought about only "marginal acceleration" of payments (ICR, page 30).

a. Quality of ICR Rating Substantial