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PROJECT PERFORMANCE ASSESSMENT REPORT TRINIDAD AND TOBAGO WATER SECTOR INSTITUTIONAL STRENGTHENING PROJECT (LOAN 3784-TT)

April 21, 2003

Sector and Thematic Evaluation Group Operations Evaluation Department

CURRENCY EQUIVALENTS (ANNUAL AVERAGES)

Currency Unit = Trinidad and Tobago Dollar (TT\$)

1995	US\$1.00	TT\$5.90
1996	US\$1.00	TT\$5.95
1997	US\$1.00	TT\$6.25
1998	US\$1.00	TT\$6.25
1999	US\$1.00	TT\$6.20
2000	US\$1.00	TT\$6.20

ABBREVIATIONS AND ACRONYMS

APL Adaptable Program Lending

DFCP Drainage and Flood Control Project (proposed to follow WSIS)

ICR Implementation Completion Report
IMSC Inter-Ministerial Steering Committee
IOA Interim Operating Agreement

LTA Interim Operating Agreem
LTA Long-term Arrangement

MoP Memorandum of the President of the World Bank (proposing a project for

approval by the Board of Executive Directors)

MoWT Ministry of Works and Transport OED Operations Evaluation Department

PAD Project Appraisal Document (staff description of the project as negotiated)

PIU Project Implementation Unit

PPAR Project Performance Assessment Report

PUC Public Utilities Commission (replaced by RIC in 1994)

RIC Regulated Industries Commission

SAR Staff Appraisal Report (a predecessor of the PAD)

TA Technical Assistance

TTWS Trinidad and Tobago Water Services Ltd.

UFW Unaccounted for Water

WASA Water and Sewerage Authority

WR Working Ratio (Total Operating Expenses divided by Total Revenues)

WRA Water Resources Agency

WSIS Water Sector Institutional Strengthening Project

WSRP Water Sector Rehabilitation Project (proposed to follow WSIS)

FISCAL YEAR

Government: October 1—September 30

Director-General, Operations Evaluation : Mr. Gregory Ingram
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GREGORY K. INGRAM Office of the Director-General Operations Evaluation

April 21, 2003

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Performance Assessment Report on Trinidad and Tobago Water Sector Institutional Strengthening Project (Loan 3784-TT)

The loan of US\$25 million for the Trinidad and Tobago Water Sector Institutional Strengthening Project (Loan 3784-TT) was approved in August 1994. It closed in June 1999 after a one-year extension and an undisbursed balance of about US\$0.9 million was subsequently cancelled. The operation failed to achieve most of its objectives and the expected follow-up investment support was abandoned. The project was intended to be the start of a rescue operation for failing water services leading to institutional reforms and expansion investments. It followed the Bank's earlier assistance to public utility reform and investment.

A Structural Adjustment Loan approved in 1990 focused on trade reform, improving the efficiency of the water and electricity utilities, and progressive reduction of the public sector by divestment of selected state-owned enterprises (a start was made with telecommunications and power generation). However, despite reforms introduced in 1992 and 1993, water and sanitation services provided by the Water and Sanitation Authority (WASA) continued to decline (with heavy decapitalization of facilities in a stressed economy) and WASA was near collapse. The government had sought Bank assistance to implement a strategy of three overlapping phases: (a) a Short-Term Stabilization Program for WASA; (b) a Rehabilitation Program to deal with the most pressing technical and maintenance problems; and (c) a Medium-Term Investment Program for high-priority expansion of works and facilities for the water sector. This report assesses the outcome of a fast-track response by the Bank to provide assistance for the first phase to avoid the collapse of water services and to prepare for rehabilitation and institutional change to ensure services for the future. An innovative approach to privatization through a two-stage process aided by private sector management was the main instrument. The strategy and project also provided assistance for high-priority strengthening of drainage and flood control measures.

While the project objectives were, and remain, highly relevant to Trinidad's needs, the outcome of the project was **unsatisfactory** as there were serious implementation problems leading to shortfalls in plans. Sustainability is **unlikely** and institutional development impact is **negligible**. Both Bank and borrower performance are rated **unsatisfactory**. These ratings accord with those in a generally excellent ICR.

The overall disappointing performance reflects mainly over-ambitious objectives for such a short implementation period and a government change at the outset which exposed incomplete commitment to the project strategy and which exacerbated design and preparation shortfalls. In particular the arrangements for private sector management and preparation for private operation of water services were not supported broadly enough such that were unresolved tensions for much of the project between the government, WASA's board, the Bank, and the private management company, and WASA remains a public sector utility. There have been some service improvements (a small increase in customers supplied, water production, improved metering and

billing) but some serious shortfalls remain (reliability of supply, minimal sewerage treatment, over-manning, and financial viability). The Bank and government did not go ahead with financing for the three follow-up operations that were planned to build on this initial support, as lending to Trinidad and Tobago contracted sharply in the late 1990s.

The main findings point especially to this project having been an ideal candidate for the Bank's new instrument (Adaptable Program Lending - APL), had it not preceded that instrument's introduction in 1997. Findings relate to hasty project preparation in response to the danger of WASA's collapse; confused project documents; that the interim operating agreement was flawed (as are well described in the ICR), and more so once the government changed; that political undercurrents of the water sector situation were not adequately explored or understood by the Bank which led to the contract deficiencies; and that the Bank's role in the project was fraught with uncertainty, high staff turnover and missteps which resulted in it muddling through to a thoroughly unsatisfactory conclusion.

The experience of this project confirms a number of OED lessons:

- (i) <u>Responding to emergencies</u>: assistance in a conventional project format should be limited to the immediate emergency, while a series of Adjustable Program Loans may be a better instrument for longer term needs;
- (ii) <u>Political factors</u>: thorough political risk analysis and, in the process, enlistment of broad political support for sensitive changes such as privatization and utility tariff modification, is essential if there is any chance of government changing and of this leading to a change in policy;
- (iii) Management contracts: (a) to avoid actual or apparent conflicts of interest, contractors who bid on the preparation of a privatization arrangement should be excluded from bidding on supply and construction contracts, or on the privatization itself, and (b) there must be a careful mix of incentives and penalties, with checks and balances, in management contracts to ensure performance by the contractor without suspicion of impropriety, and
- (iv) <u>Bank project documentation</u>: a greater degree of consistency in project documents is needed to improve understanding and agreement, especially in the statement of objectives and project description.

Attachment

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

About this Report

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

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

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

About the OED Rating System

The time-tested evaluation methods used by OED are suited to the broad range of the World Bank's work. The methods offer both rigor and a necessary level of flexibility to adapt to lending instrument, project design, or sectoral approach. OED evaluators all apply the same basic method to arrive at their project ratings. Following is the definition and rating scale used for each evaluation criterion (more information is available on the OED website: http://worldbank.org/oed/eta-mainpage.html).

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

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

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

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

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

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

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

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

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Principal Ratings

	ICR*	ES*	PPAR
Outcome	Unsatisfactory	Marginally Unsatisfactory	Unsatisfactory
Sustainability	Unlikely	Unlikely	Unlikely
Institutional Development Impact	Negligible	Modest	Negligible
Bank Performance	Unsatisfactory	Unsatisfactory	Unsatisfactory
Borrower Performance	Unsatisfactory	Unsatisfactory	Unsatisfactory

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

Key Staff Responsible

Project stage	Task Manager	Division Chief/ Sector Director	Country Director
Appraisal	R. Venkateswaran	Eugene McCarthy	Yoshiaki Abe
Completion	Jyoti Shukla	Danny Leipziger	Orsalia Kalantzopoulos

Preface

This is the Performance Assessment Report (PAR) for the Water Sector Institutional Strengthening Project in Trinidad and Tobago, for which Loan 3784-TT in the amount of US\$25 million was approved on August 2, 1994, and made effective on November 21, 1994. The loan was closed on June 30, 1999, one year after the original closing date, and about US\$0.9 million was cancelled.

This report is based on the Implementation Completion Report (ICR, Report No. 20057) prepared by the Latin America and the Caribbean Region, issued on January 31, 2000, the Memorandum and Recommendation of the President, loan documents, project files, and discussions with Bank staff. An Operations Evaluation Department (OED) mission visited Trinidad and Tobago in April 2002 to discuss the effectiveness of the Bank's assistance with the government, project implementing agencies, private sector agencies, and other stakeholders. The cooperation and assistance of government officials, management, and staff of WASA, stakeholders, and other interested parties are gratefully acknowledged.

This PAR assesses the outcome of an attempt by the Bank to provide assistance to a public water supply utility that was struggling to survive and to continue to provide services to its customers. An innovative approach to privatization through a two-stage process aided by management agents was the main instrument. The assessment took place more than seven years after the loan was approved and three years after loan closing, by which time results of the initiative were evident.

Following standard OED procedures, this draft PAR will be sent to the borrower for comments before it is finalized. All comments will be taken into account in the final version and will be included as an attachment to the PAR. In accordance with the Bank's disclosure policy, the final report will be available to the public following submission to the World Bank's Board of Executive Directors.

1. Background

- Trinidad and Tobago consists of the largest island (Trinidad) in the southern Caribbean, plus Tobago to its northeast. The population of 1.3 million is concentrated in the northeast of Trinidad in the capital, Port of Spain, and in two conurbation corridors eastward and southward from the capital to the towns of Arima and San Fernando respectively. Based on petrochemicals exploited since 1908, the economy is the most industrialized in the Caribbean and average incomes are in the upper middle-income range. The economy experienced boom years while oil prices were high during the 1970s, but too little of the boom had lasting domestic impact. In the period of financial stringency following the boom, as average incomes about halved during the 1980s, the water and sanitation sector infrastructure deteriorated as investment declined and routine repairs and maintenance were neglected. By the early 1990s service had fallen to low levels, performance of the public Water and Sewerage Authority (WASA) was poor, and low service charges and collection rates made WASA's operations financially unsustainable.
- 1.2 The Bank's assistance strategy in the early 1990s gave priority to rehabilitation of public infrastructure, reforms and institutional strengthening to increase public investment, increasing the effectiveness of the public sector, private sector development, and improving human resources. A Structural Adjustment Loan approved in 1990 focused on trade reform, improving the efficiency of the water and electricity utilities, and progressive reduction of the public sector by divestment of selected state-owned enterprises (a start was made with telecommunications and power generation). However, despite reforms introduced in 1992 and 1993 water and sanitation services continued to decline until WASA was near collapse.
- 1.3 To resolve the emergency and provide expanded future services the government sought Bank assistance to implement a strategy of three overlapping phases: a **Short-Term Stabilization Program for WASA**; a **Rehabilitation Program** for the water sector and flood control to handle the most pressing technical and maintenance problems, and a **Medium-Term Investment Program** for high-priority expansion of works and facilities for the water sector, and drainage and flood control.

2. The Project

Design

2.1 The Water Sector Institutional Strengthening Project (WSIS) was described as a "fast-track" project to execute the first (stabilization) phase of the government's strategy, prepare for the introduction of a private sector equity partner to operate the water sector system, and to complete preparation of two major projects (the ICR notes that they were already under preparation) that would follow in the rehabilitation and investment phases. These were a Water Sector Rehabilitation Project (WSRP) and a Drainage and Flood Control Project (DFCP). The WSIS project was prepared, appraised, and negotiated in just five months to forestall the

¹. Between 1982 and 1992, when the economy was in difficulty because of lower oil revenues, it has been estimated that WASA's decapitalization totaled TT\$525 million, or half of total facility replacement costs, despite large government subsidies.

imminent collapse of WASA.² Beyond avoiding the immediate risk of service failure, the government's longer-term objectives were to secure better quality water and wastewater services, at lower cost, and without public subsidies. A privatization strategy was chosen to achieve this as described in the Memorandum of the President (MoP) in proposing support for the project:

"The main thrust.... is to seek a private sector partner who would take a substantial equity interest in production, treatment and distribution of water and the provision of sewerage services. The government recognizes that given the present financial and physical condition of WASA, the attainment of this goal is likely to be a two-stage process. The first, involves bringing in an experienced private sector operator under contract to manage WASA's water and waste water operations; the second phase will be a move to equity partnership once the basic rehabilitation of WASA has been completed and the legal and regulatory framework designed and implemented." (para. 8)

The implementation schedule of the strategy was highly ambitious—it was expected to be completed in only 41 months (from August 1994 through 1997). The sequencing of activities under the three phases was also ambitious (but none too clear in the documents) as implementing the second and third phases was to begin soon after the project started and was contingent upon project actions.³ The WASA rehabilitation part of the second phase was to start as soon as a private sector manager had been chosen, while the drainage and flood control part of the second phase was expected to be completed "mainly in 1995," and the drainage and flood control investments, under the third phase, were to start in 1996.

Objectives

- 2.2 Some unraveling of the project descriptions in the project documents was required to arrive at an evaluable framework. The project's main objective of record as stated in the MoP was implementing the Short Term Stabilization Program by:
 - providing essential technical and material resources (during six months of transition to private sector management) to prevent WASA's collapse;
 - preparing and implementing **private sector management** of WASA, including preparing for transfer of WASA to a private operator; and
 - preparing and implementing an **integrated water resources management** strategy.

It was also to:

• **design the second (rehabilitation) and third (investment) phases** for water supply and waste-water facilities, and for drainage and flood control (which were to begin during the project period).

However, the statement of objectives and project description is organized quite differently in the Loan Agreement, which must have caused some confusion. This issue is discussed in more detail

². Requiring only 13.6 staff weeks of inputs (this is the number on record but it seems extraordinarily low). The quick preparation and few resources used must have contributed to design, process and documentation issues discussed later.

³. Moreover, more "fast-track" processing of Bank loans for the follow-up projects would have been required if the schedule was to be maintained.

in Annex C.⁴ For assessment purposes the project objectives have therefore been clarified (Box 1) by drawing from the strategy outline and project descriptions in the various project documents.

Box 1: Project Objectives (Clarified for Assessment)

- **1. Water Supply Sector:** maintaining services and introducing reforms to ensure adequate, reliable, and efficient water sector services via two means.
 - **A. Supplies and equipment**—providing emergency equipment and supplies to avoid service interruption
 - B. Interim Operating Agreement (IOA) to provide private sector management for three years
 - i. Preparing for WASA transfer to a private sector operator—to follow the IOA
 - ii. Preparation and implementation of an integrated water resources management strategy
 - iii. Project preparation—designing a WASA rehabilitation and expansion program
- **2. Drainage and Flood Control:** initiating rehabilitation and enhanced maintenance of drainage and flood control facilities via two means.
 - **A. Strengthening** the drainage and flood control organization of the Ministry of Works and Transport (MoWT)
 - **B.** Project preparation
- 2.2 The key feature coming through the many details of the WASA program's objectives was government's decision to replace ineffectual public sector management of WASA with private management, but to accomplish this in two stages: first by awarding an interim short term management contract (to manage the immediate high priority investments, training and studies, and prepare for the privatization process by tender), and second through transfer of WASA's facilities and operations on a long term basis to the winning bidder.

Costs and Financing

2.3 Project costs are available only by the three broad components listed in the MoP as in Table 1, with more details in Annex B, Table 1. These do not correspond well with the objectives.

Table 1: Project Costs (US\$ million)

Parts of the Project	Appraisal Estimate	Actual (ICR)	Actual/Appraisal Percentage
Reorganization of Water Sector Management	5.4	4.3	79
Private Sector Reorientation of Water Services	19.8	27.7	140
Drainage and Flood Control Institutional Support and Project Preparation Assistance	<u>7.8</u>	<u>3.9</u>	<u>50</u>
Grand Total Cost	<u>33.1</u>	<u>36.2</u>	<u>109</u>

⁴. The ICR commented (in a degree of understatement) that the project objectives could have been stated more consistently across different project documents, but did not itself present a fully adequate revision. This report explores the point further in Annex C because inadequate statements of objectives and project descriptions are a frequent issue in project documents and must complicate implementation and Bank/Borrower dialogues. Annex C also contains for reference details of project components as listed in the Loan Agreement, but this does not add clarity to the project description as it follows the MoP's project objectives structure with more confusion added by different order and labeling of items.

2.4 The Bank provided a Project Preparation Facility of US\$400,000 that was refunded from the loan. The PHRD grant was for the establishment of the PIU in the Ministry of Works and Transport for the drainage and flood control component. Actual project costs were \$36.2 million, an increase of 9 percent over appraisal estimates, Table 2.

Table 2: Financing (US\$ million)

	Appraisal	Actual
Bank	25.0	24.1
PHRD Japan Grant	0.1	0.1
Government	8.0	12.0
Total	33.1	36.2

3. Implementation

- 3.1 Three project implementation units were established before the project was approved, in the Ministry of Public Utilities (responsible for WASA activities), in WASA itself, and in MoWT. Terms of reference for consultants and staff training requirements were also prepared ahead of approval. A detailed timetable for implementation was drawn up and it was agreed that the government and the Bank would review progress annually. During negotiations the government had agreed to several time-bound actions. One was a subsidiary agreement for transfer of funds for WASA's Emergency Operational Fund (to fund the stabilization program) and for technical assistance for project preparation and privatization (which was conditional on WASA reducing its arrears to trade creditors). A second was the introduction of a regulatory framework for the water sector and associated legislation. A third was a plan for water tariff review toward implementing the government's policy for cost recovery by utility services.
- 3.2 The project was not implemented as planned and delays and implementation problems contributed to sometimes poor relations between the government, WASA, the management contractor, and the Bank. The loan was extended for a year, despite poor performance, to allow the Bank to contribute through the last year of the interim private management contract when the government was finalizing its strategy for the long-term private operation of WASA.
- 3.3 The project suffered from a series of crippling implementation problems that could not be fully resolved.
 - Just after the IOA was signed the government changed in an election and a new WASA board was appointed. The new board and government were less enthusiastic about the project arrangements and suspicious about the propriety of the contract negotiated by the previous government—review of the contract had been an item in the winning party's election platform. Ministerial intervention was needed to resolve the issue, but at the expense of a six-month delay while the contract was reviewed and eventually approved with only one change. Even so the working relationships continued to be difficult from then on, colored by distrust on both sides as a result of basic flaws in the IOA arrangements (as discussed further below), and the IOA management team was unable to manage WASA operations directly.

- There were performance shortfalls by the private operator. The WASA board had misgivings about the performance and suitability of some IOA team members and most of the first IOA team was replaced after a year. The foreign managers had difficulty adapting to the local customs, style, and practices, and WASA staff and board members felt that their operational proposals and methods were not sufficiently attuned to local cultural norms and capabilities. The attempted introduction of British management systems is believed by WASA staff to have been impractical and a more selective approach was needed in Trinidad conditions. There were also problems with a proprietary maintenance management system (STORMS) that was not totally handed over to WASA (and so required continued contractor inputs), and the expertise required was beyond WASA's capabilities.
- The Bank for its part did not provide consistent leadership as the task manager changed five times over the five years of the project relationship. Each new task manager brought a different perspective to the project and their supervision task, which the Trinidad staff saw as repeated moving of the project goalposts. Changes in WASA management also contributed to implementation problems and delays. The government's ICR mentions policy changes and other problems that affected implementation adversely but the Bank's ICR does not respond to these issues.
- The confused project documents (no doubt exacerbated by staff changes on both sides) contributed to misunderstandings over what was meant to be done under the project, for example, over the financing of water meters, which were essential to improved bill collection.
- The complementary investment loan from the Bank, which was expected after the IOA had run for a year, did not come on stream, although substantial resources were employed in preparing for it.⁵ Among other repercussions, the postponement of the investment program reduced the momentum of the project's reform activities.⁶

4. Results

4.1 The project was only partially implemented and the major objectives could not be achieved. WASA remains a publicly managed utility, but with some private sector participation in infrastructure repairs and maintenance and in some corporate functions. WASA management sees these areas of private sector activity as a viable alternative to the project's wholesale privatization strategy, but the ultimate proof lies in improved coverage and performance indicators, which have improved slightly or stagnated (see below). Implementation shortfalls are demonstrated by performance against 34 indicators of actions and outputs reported in the ICR

⁵. The government's ICR puts its wasted expenses at US\$2.7 million and suggests that the Bank meet that expense. The Bank did not respond in its ICR.

⁶. The Bank was concerned about a number of issues, but primarily over the future viability of WASA (on which it did detailed work through a skilled senior specialist), but the government eventually backed down from the project on the grounds that it could not meet the Bank's requirements. The government perceived a substantial toughening of the Bank's conditionality to the point where further borrowing became impractical in its view.

⁷. It is worth noting that privatization itself is not the major objective, which is efficient provision of water sector services, with privatization the means of achieving this end where public service provision has proved inadequate.

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(Part II, Table 5, as summarized in Table 3). Of the 34 indicators only 12 were completed and 4 are ongoing. Moreover some of these completed indicators are not substantive but are merely administrative steps (such as appointment of advisors, start of an audit, completion of bidding documents, start of bidding, and setting up a steering committee), such that their completion is of relatively minor significance.

Table 3: Implementation Indicators (ICR)

Status	No. of items
Completed	12 (of which late, 9)
Not done	7
No data in ICR	8
Subtotal	15
Ongoing	4
NA	3
Total	34

- 4.2 The major initial achievement was largely avoiding the collapse of WASA and its services by the rapid mobilization of the emergency funds and purchase of critical supplies, but other activities suffered from delays, changed plans, and lack of support. Even so, operational improvements reported by the ICR are significant, including 30 percent increased water production, markedly reduced plant down-time, revenue collection up by 60 percent and staff reduction by 32 percent (from 3,507 to 2,394, but is now increasing again). Service delivery data is more mixed, as shown by the indicators in Table 4. Whereas the share of households connected to water supply has risen, as has the metered water and customer billing, the proportion of households with continuous supply has fallen markedly as available supplies are being allocated among more connections.8 The very low sewer connection ratio has not changed (many newer housing areas have private systems, but most are said to be failing or inoperative). This marginally improved performance, with some tariff increase, resulted in the working ratio (operating costs/revenue) almost breaking even at 97 percent in 1998–99, for the first time, against a target of 75 percent. During the OED mission, WASA staff reported progress on major construction schemes (which should have gone ahead during the project period had funds been available), which are expected to change these numbers substantially.
- 4.3 Other principle achievements are the development of a water resource management strategy, completion of a WASA restructuring study, delinking the Water Resources Agency (WRA) from WASA, and enactment of a law to establish a Regulated Industries Commission (with follow-up matters ongoing). Removing WRA's policy and strategy work leaves WASA to focus on production and service delivery. The major shortfalls included that once the Bank follow-up loan was dropped the major function of the IOA team in rehabilitation management became redundant and nothing was done on the various tasks to prepare for divestiture of WASA. On the drainage and flood control component, the drainage division of MoWT was not reorganized.

⁸. The costs to consumers of intermittent supplies are well recognized.

Table 4: Water Sector Service Indicators

Indicator	Start of Project 1995/96	End of Project 1999	Latest Year 2001/2002
Service Coverage and Quality			
Connected households / Total households ('000)	200/300	230/343	249/343
Share of registered households connected a/	59%	67%	73%
Share of households with continuous water supply b/	35%	43%	21%
Share of WASA water supply that is disinfected ^{c/}	99.99%	99.99%	99.99%
Share of households connected to sewerage system	13.2%	13.2%	13.4%
Efficiency of Service			
Metered/Total Supply (ML/D)	470/780	650/780	750/840
Accounted for Water (metered WASA production)	60%	83%	89%
Employees per thousand water supply accounts	1:17	1: 9	1:11

Source: WASA, April 2002

Notes: a/ No. of Registered WASA Customers x 100/No. of Households in Country.

b/ The recent decline in continuous supply resulted from redistribution of available supplies amongst more customers.

c/ A number of small rural intakes are not disinfected.

5. Findings

- 5.1 A number of the assessment's findings point to future projects of this type being good candidates for Adaptable Program Lending (APL) instrument, which was not available at that time. Thus APLs are intended to be flexible, and to provide an opportunity, inter alia, to test approaches where sensitive policy issues and political uncertainty make traditional instruments too risky.
- Hasty project preparation in response to the danger of WASA's imminent collapse resulted in insufficiently broad consultations and agreement and a lack of appreciation of political risks. Haste must also explain in large measure the confused documentation, which must have contributed to later misunderstandings. There was confusion in the project documents between the strategy of the project and the different descriptions of the project content in the MoP and the Loan Agreement (see Table 1, Annex C). These differences are significant and could not have helped implementation agencies and staff who were responsible for project execution to understand the work they were doing. Agreeing on the objectives of the operation would have been critical at the time the project was being prepared and negotiated, and more so during implementation with a change of government and with the Bank and government beginning to drift apart in their relationship. Such agreement must have been difficult without clear documents.
- A specific point of some importance and confusion was exactly when the long-term rehabilitation expenditure was expected to occur—during the IOA or later through privatization? The original intention of rehabilitation investment beginning a year into the IOA was later questioned by the Bank on the grounds that experience elsewhere had shown that investment before divestiture did not generate adequate returns to either the government or the private operator, and had especially limited the options open to the private operator.
- The Interim Operating Agreement was doomed from the outset, and more so once the government changed. The reasons have been eloquently described in the ICR (Box 2) and

cannot be improved. The assessment agrees with these comments but, in contrast with the ICR, regards the change of government just after the contract was signed as merely hastening the demise of what were inherently unsatisfactory arrangements. Field enquiries suggest that WASA's board had such serious and understandable misgivings about IOA implementation that the arrangement would have foundered in any case. The main complaints were: rehabilitation contracting and expenditure without adequate oversight and performance incentives; performance concerns (some inappropriate appointments to the consultants' team making it long in experience, of mainly British public sector water works, but short in energy, flexibility, and cultural sensitivities); and that the IOA team was not making progress on the main problem—a shortage of water supplies.

• The **political undercurrents** of the water situation were not adequately explored or understood by the Bank. In hindsight the soundness of the project strategy of privatization through the introduction of an overseas partner has been undermined by experience and controversy elsewhere. Privatization of a run-down and insolvent enterprise, before it has been rehabilitated, implies raising income if the investment costs are to be recovered and a satisfactory return on capital is to be made. Raising the price of domestic water supplies, even in a middle-income country such as Trinidad and Tobago, is bound to cause a political reaction. Expecting that this could be achieved successfully in a water utility managed by an entity of the former colonial power seems to be beyond reasonable probability, especially when aspects of the earlier privatization of the UK's own water utilities was being subjected to critical public comment in the press. The credibility of the strategy was undermined further by the inadequacies of the contractual arrangement between the government and its IOA partner, which allowed ample room for speculation on the propriety of the relationship. The WASA board reacted by closely controlling the situation.

Box 2: Interim Operating Agreement—Flawed and Handicapped (ICR para. 21)

"In retrospect, the IOA never really had much of an opportunity to succeed. One, neither the IOA, nor the chosen operator, had the support and the commitment of the WASA Board. The IOA was negotiated by the previous Government and at least some members of WASA's new Board started the process with a high level of skepticism and distrust. Two, this distrust was compounded by the fact that the contract itself was poorly designed, a fact now widely accepted within the Government and the Bank. The contractor had little at stake, the management fees [structure] was not effectively linked to performance measures as these had been left undefined. Though the contract did foresee six indicators to be included in the determination of fees, the contract did not specify these performance indicators, which were to be agreed during the contract period, with data generated by the contractor. At the same time, the contractor also had a significant upside with sole source rights to capital works initiated within the contract period. This combination of lack of accountability for results, low risks and a high potential upside for capital works compounded the natural distrust of the "foreign" contractor. Three, the legal and regulatory framework for WASA remained unchanged. Though TTWS took over management, it continued to be supervised by WASA's Board of Directors which had earlier supervised a public utility. With a private management arrangement a clearer separation of the Board's policy and oversight role and TTWS' management role was required and this did not take place. This ambiguity allowed the Board to interpret its role and duties broadly and at least some members of the Board sought to involve themselves actively in WASA management, leading to delays and conflicts, and not giving the management contractor the space and authority to manage. Finally, the situation was complicated by the fact that the World Bank financing for rehabilitation works expected to accompany the management contract was delayed, and eventually cancelled. This became a rallying point both for the contractor and the Government as another reason for less than expected improvements in WASA."

The Bank's role in the project was similarly fraught with uncertainty and missteps that resulted in it muddling through to a thoroughly unsatisfactory conclusion to the project. Three points stand out as reflecting loose Bank supervision and management oversight of the project. First, because the IOA contract was crucial to the project's success the Bank should have been closely involved in its design and detailed particulars. However, uncertainty remains as to whether the Bank was concerned sufficiently about this contract to want to have any influence. Even the ICR is contradictory on the point, referring in the summary (para, 8) to the Bank having "endorsed" the contract with reservations, but in the main text saying that there was "no evidence of any formal no-objection by the Bank" to the contract. Whatever actually happened, it is clear that the Bank did not adequately insist on, or hold out for changes in some of the areas where the contract was flawed (board role, single source contracting, lack of performance incentives and penalties, and poor arrangements for monitoring of performance). Second, the Bank failed during supervision to take effective action to rescue a bad situation. Its attempt to have the WASA board replaced, apparently to allow the project to proceed as planned, which would have removed all checks on the contractors' activities under a seriously one-sided contract, is difficult to understand in retrospect. Third, the Bank continued for too long to give positive signals on the prospects for follow-up financing for rehabilitation contracts, as its financing intentions became uncertain. Consequently, some significant costs were incurred that might have been avoided with more open communication on the point.

6. Ratings

6.1 Table 5 shows the ratings for achievement of objectives and contributing outputs.

Table 5: Ratings for Achievement of Major Objectives and Outputs

	Relevance	Efficacy	Efficiency	OUTCOME
Objectives				
Water Supply Sector: maintaining services and introducing reforms to improve services	High	Modest	Modest	Unsatisfactory
Drainage and Flood Control: initiating rehabilitation and enhanced maintenance of drainage and flood control facilities	Substantial	Modest	Modest	Unsatisfactory
Outputs				
Supplies and equipment	High	Substantial	Substantial	Satisfactory
Interim Operating Agreement	Substantial	Modest	Negligible	Highly Unsatisfactory
Preparing for transfer of WASA	High	Modest	Modest	Unsatisfactory
Water resources management strategy	High	Modest	Modest	Unsatisfactory
Project preparation (WASA)	High	Substantial	Substantial	Satisfactory
MoWT Strengthening	Substantial	Negligible	Negligible	Highly Unsatisfactory
Project preparation (MoWT)	Substantial	Substantial	Substantial	Satisfactory
Project as a whole		0 0	0 0	

Outcome

The outcome criterion is based on the ratings for three sub-criteria (relevance, efficacy, and efficiency) and is the extent to which the project's major relevant objectives were achieved, or are expected to be achieved, efficiently.

6.2 The outcome of the project is rated *unsatisfactory*. Although the collapse of WASA and deterioration of services was averted, the project did not achieve its major relevant objective of putting WASA on the chosen path to reform management, providing more reliable services, and meeting demands. There were substantial inefficiencies (wasted expenditure) in the process of achieving the modest result recorded. The drainage and flood control component was only partially implemented.

Relevance of Objectives

The extent to which the project's objectives are consistent with the country's current development priorities and with current Bank country and sectoral assistance strategies and corporate goals.

6.3 The relevance of the project objectives to the country's needs remains *high*, but the Bank is no longer supporting the water sector.

Efficacy

The extent to which the project's objectives were achieved, or expected to be achieved, taking into account their relative importance.

Despite the early success of avoiding WASA's collapse, the project overall had only *modest* achievements compared with objectives and expected outputs.

Efficiency

The extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives.

6.5 Efficiency is rated *modest*, although no economic rate of return is available. Project implementation was problematic throughout and the investments achieved are risky in the absence of substantial institutional improvements to ensure WASA's effective management of the facilities available. Expenditure on the management services was particularly unproductive given that the original management impact and outputs could not be achieved.

Institutional Development

The extent to which a project improves the ability of a country or region to make more efficient, equitable, and sustainable use of its human, financial, and natural resources through better definition, stability, transparency, enforceability, and predictability of institutional arrangements.

6.6 Institutional development impact is rated as *negligible*. Apart from the physical objective of preventing WASA collapse by providing supplies and equipment, institutional change was the major instrument for achieving the long-term objective. The major institutional change of introducing a private operator did not have the wide public and political support needed.

Sustainability

The resilience to risk of net benefit flows over time.

6.7 Sustainability of the benefits of project investments is rated *unlikely* in the present uncertain circumstances WASA faces. The controversial Point Lisas desalination plant has assured industrial water supply to that important industrial area and has eased domestic supply shortages for the time being (by transfers), but the water supply system as a whole is not in a stable state although heavy investments now in-hand could change this outlook.

Bank Performance

The extent to which services provided by the Bank ensured quality at entry and supported implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of the project)

Bank performance is rated *unsatisfactory*: in hindsight the attempt to combine rapid emergency assistance with long-term aid to the water supply sector was high risk. The short preparation period resulted in the details of the long-term proposal being poorly understood and not widely accepted in Trinidad, and implementation expectations were extraordinarily unrealistic. Quality at entry of the project was therefore poor. The concept of introducing outside management expertise and privatizing WASA was not acceptable to all stakeholders. The choice of the company to provide the expertise and the details of the arrangements were flawed in ways that the Bank, as the main source of experience in the area, should have handled better. When things went awry between WASA's board and the management firm, the Bank's position in supporting the firm (apparently in the interests of seeing the project plan go ahead) is difficult to justify. The Bank failed to provide reasonable staffing continuity and at the end was slow to advise the government that the expected finance for major water investments was not forthcoming (as the country lending program was reduced), such that much preparatory work became wasted effort.

Borrower Performance

The extent to which the borrower assumed ownership and responsibility to ensure quality of preparation and implementation, and complied with covenants and agreements, toward the achievement of development objectives and sustainability.

6.9 Political change notwithstanding, the performance of the borrower (both government and agencies) was *unsatisfactory*. It is not clear that at the outset the project objectives had the full commitment of concerned agencies, perhaps because the water supply situation was so fragile that any hope of improvement was seized upon. In particular there had not been a meeting of

⁹. In hindsight, the selection of a British company from a water utility that had not itself long been privatized and in a utility sector where the privatization process had been a source of some controversy, now seems risky and unfortunate.

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minds on WASA privatization—the key measure to improve the water supply situation for the long-term. Long implementation delays were the norm and the IOA was not given the high priority and thorough attention it deserved from those agencies and staff who should have shepherded it through. Necessary regulatory measures were not introduced and the industrial tariff for only one locality was revised, with no overall tariff reform strategy produced. The compliance of the government with project covenants was poor, although for 10 out of 15 covenants listed by the ICR there is no information provided. For the remaining five covenants, two were breached and for two there was only partial compliance. Audit reports did not meet Bank standards and were qualified in the case of WASA's accounts, as financial management continued to be weak.

7. Lessons

- 7.1 The experience of this project confirms a number of OED lessons.
- Distinguish between short-term and longer-term needs: assistance in a conventional project format should be limited to the immediate emergency and not also attempt to deal with longer term needs, although a series of Adjustable Program Loans may be a better instrument in such circumstances. The Bank is ill-equipped to respond promptly to emergency needs for financial aid and must employ shortcuts to its normal procedures to make assistance available with promptness. Hence it is difficult if not impossible to respond promptly to the emergency need while adequately preparing assistance for long term support. As in this instance there is a risk hat too rapid preparation of the assistance will lead to deficiencies in the longer-term arrangements. Fortunately such complex and politically difficult reform programs, with high risks and uncertainty, can now be supported more appropriately through the flexibility of APLs.
- Thorough political risk analysis is essential: thorough political risk analysis and, in the process, enlistment of broad political support (from across the entire political spectrum) for sensitive changes such as privatization and utility tariff modification, is essential if there is any chance of government changing and of this leading to a change in policy. The preparation of proposals and plans should involve all interested parties, not just those currently in authority.
- Management contracts need careful design: (a) contractors who bid on the preparation of a privatization arrangement should be excluded from bidding on supply and construction contracts, or on the privatization itself. Any benefits from contractor continuity throughout the process are likely to be overridden by lack of objectivity (between technical supervision and commercial interests), if not actual conflicts of interest, and understandable public suspicion and criticism; and (b) there must be a careful mix of incentives and penalties, with checks and balances, in management contracts to ensure performance by the contractor without suspicion of impropriety. Separate monitoring arrangements are advisable to maintain political and public credibility.
- Statements of objectives and expectations must be unambiguous: a greater degree of consistency in the Bank's project documentation is needed to improve understanding and agreement, especially in the statement of objectives and project description.

13 Annex A

Annex A. Basic Data Sheet

TRINIDAD AND TOBAGO: WATER SECTOR INSTITUTIONAL STRENGTHENING PROJECT (LOAN $3784\text{-}\mathrm{TT}$)

Key Project Data (amounts in US\$ million)

	Appraisal estimate	Actual or current estimate	Actual as % of appraisal estimate
Total project costs	33.1	36.2	109
Loan amount	25.0	24.1	96
Cofinancing	0.1	0.1	100
Cancellation	-	0.9	-
Date physical components completed	Dec 31, 1997	Dec 31, 1998	-
Economic rate of return	NA	NA	

Cumulative Estimated and Actual Disbursements

	FY95	FY96	FY97	FY98	FY99	FY00
Appraisal estimate (US\$M)	12.5	22.0	24.6	25.0		
Actual (US\$M)	3.4	9.3	13.5	19.8	22.2	24.1
Actual as % of appraisal	27%	42%	55%	79%	89%	96%
Date of final disburseme	ent:					

Project Dates

	Original	Actual
Initiating memorandum	March 1994	March 18, 1994
Negotiations	June 1994	June 29, 1994
Board approval	August 1994	August 2, 1994
Signing	August 1994	August 23, 1994
Effectiveness	August 1994	November 21, 1994
Closing date	June 30, 1998	June 30, 1999

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Staff Inputs (staff weeks)

State of Project Cycle	Actual Weeks	Actual US\$ ('000).
Preparation	3.8	14.6
Appraisal	3.4	13.4
Negotiations	6.4	18.5
Supervision	64.7	260.1
Other	8.0	41.6
Total	86.3	348.2

Mission Data

	Date (month/year)	No. of persons	Staff days in field	Specializations represented	Implementation Status	Development Objectives	Types of problems
Identification/ Preparation	2/94	2	12	Privatization Financial	-	-	-
Appraisal	3/94	1	8	Privatization	-	-	-
Supervision	3/95	2	4	Sanitary, Financial	S	S	-
	7/95	2	7	Sanitary, Financial	S	S	-
	10/95	2	3	Sanitary, Financial	NA	NA	-
	2/97	2	7	Sanitary, Financial	S	S	-
	5/98	3	7	Privatization Sanitary	U	U	-
	11/98	3	7	Privatization Economist Guarantee Spec.	U	U	-
Completion	12/99	2	7	Financial Economist	U	U	-

Other Project Data

Borrower/Executing Agency:

FOLLOW-ON OPERATIONS					
Operation	Credit no.	Amount	Board date		
		(US\$ million)			
None					

15 Annex B

Annex B. Supplementary Tables

Table B1. Project Cost Breakdown (US\$ million)

Items	Appraisal	Actual (ICR)	Act./Appr.%
Reorganization of Water Sector Management			
Water Resources Management Strategy	4.8	3.0	63
MPU and PUC	0.6	0.4	67
Subtotal	5.4	4.3	79
Private Sector Reorient. of Water Services			
Strategic Plan and Advisory Assistance	3.8	1.9	50
Interim Management Support	0.7	0.0	0
WASA Rehabilitation Project	3.7	6.4	173
WASA Emergency Operation Fund	11.6	19.4	167
Sub-total Sub-total	19.8	27.7	140
Drainage and Flood Control Institutional	Support and Project Prep	aration Assistanc	e
Project Institutional. Support	1.5	0.9	60
Project Preparation Activities	6.3	2.9	46
Sub-total Sub-total	7.8	3.9	50
Grand Total Cost	33.1	36.2	109

Annex C. Comments on Statements of Project Objectives

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The project objectives and description of parts of the project differ between the two key project documents, the Memorandum of the President (there was no appraisal report, only a technical annex in the MoP) and the Loan Agreement. While noting that the project objectives could have been presented more clearly, the ICR did not itself succeed in clarifying the design intentions, but relied on the existing description and its confusing language. Unfortunately, material differences between various statements of objectives and project descriptions are not unusual in project documents. Legal documents sometimes rephrase the description in the appraisal report and in the process the precise intentions of the project designers may be obscured. Such discrepancies are less cause for concern when the legal documents merely provide for a wider interpretation of intent and content than a more precise designer's typology. Such flexibility in language can avoid or at least mitigate problems later if changes are needed if implementation runs into difficulties, since small changes can be accommodated without compromising the project's legal basis. The differences in the various documents for the WSIS project are compared below for both the statements of objectives and the description of the parts (or components) of the project.

When the legal document does not capture the essence of the main project description confusion may result and in contentious relationships such differences are likely to amplify or even cause misunderstandings. As an example, the main urgent objective of the WSIS project (with the largest single expenditure category) according to the MoP—supplies to stave off the collapse of WASA and its services—does not appear in the Loan Agreement project objectives and only shows up in the description of parts of the project in Part B as item (d), and after 17 earlier items. Also, it became apparent during implementation that there was no commitment by the Bank to assist the rehabilitation phase of the project, although the MoP expressly states (para. 9 b) that the "WASA component of the [rehabilitation] program would start as soon as a private sector manager has been chosen." But there is no indication as to how rehabilitation was to be financed, unless it was to be by extraordinarily rapid processing of a Bank follow-up loan. Confusion about how rehabilitation was to be financed began in the project documents and contributed to implementation problems and to the souring of relations between government, the private sector management, and the Bank.

Table C1 compares the structure of the project <u>objectives</u> statements in the MoP and the Loan Agreement and indicates a surprising degree of discord over what the project was supposed to achieve.

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¹. Even the MoP is not consistent on a critical point in omitting in its summary the first objective of the main text, a) i).

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Table C1: Two Versions of the Project Objectives Compared

	Memorandum of the President (page 3 and Tech. Annex page 27)	Loan Agreement
Main objective	To assist in implementing the short-term stabilization program	To strengthen the institutional framework of the Borrower's water sector through actions aimed at:
Secondary objectives	a) Reorganization of water sector management	(a) Integrating different aspects of water resources management;
b) Private sector reorientation of water services c) Drainage and flood control project institutional		(b) Improving environmental planning and management;
		(c) Introducing private sector operators
	support and project preparation assistance	in the provision of water services; and
	NA	(d) Separating operating responsibilities from regulatory and planning responsibilities

The description in the Loan Agreement of the <u>parts</u> of the project (or components) was also complex and a source of confusion (Box C1), and again did not follow the form of the project outlined in the Memorandum of the President.

Box C1: Parts of the Project (Loan Agreement extracts)

Part A: Reorganization of Water Sector Management

- 1. Strengthening of PUC....including the participation of the private sector.
- 2. Strengthening of MPU-PIU [which is responsible for] public utility companies being restructured through the participation of the private sector;
- 3. **Development of the Borrower's water resources management strategy**, including the basic framework for future programs in land use planning (sic?)...
- 4. Strengthening of WRA [in WASA]...

Part B: Private Sector Participation in Water Services

Reorganization....aimed at the introduction of private operators in the provision of water supply and wastewater services, through: (a) design and implementation of a strategic plan for private sector participation in WASA [eight detailed steps omitted]; (b) interim management support for WASA; (c) preparation of a rehabilitation program for the WASA water supply and distribution systems and facilities and of environmental mitigatory measures, as needed; and (d) establishment and operation of a WASA rehabilitation emergency operational fund, for the provision of critical equipment, spare parts and operating supplies during the period of transition to private sector operation.

Part C: Drainage and Flood Control Institutional Support

- 1. Strengthening of MOWT-PIU [responsible for preparation and implementation of the Borrower's drainage and flood control program].
- 2. Preparation by the Borrower of a drainage and flood control program which will include enhanced maintenance and rehabilitation.

Note in particular the confusion and overlap between Parts A and B both of which are concerned with "reorganization" of water sector management. Part A provides various forms of strengthening, including by the private sector, and developing a management strategy, while Part B prepares and implements transfer of water sector operations to private management. The title of Part A—"Reorganization of Water Sector Management"— is, in effect, incorrect as the actions

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proposed were all to do with adding capacity to existing sector organizations, developing a management strategy (which was redundant as that had already been determined), and project planning, and nothing to do with reorganization per se.

The project descriptions, regardless of source, are not as clearly organized as they should have been if everyone was to readily understand the purpose of the project and the responsibilities of the different implementers. This deficiency must have contributed to misunderstandings, especially as relationships deteriorated.