



1. Project Data

Project ID P064836	Project Name TN-Urban Water Supply		
Country Tunisia	Practice Area(Lead) Water	Additional Financing P150033	
L/C/TF Number(s) IBRD-73390,IBRD-83950	Closing Date (Original) 30-Jun-2012	Total Project Cost (USD) 50,786,575.67	
Bank Approval Date 17-Nov-2005	Closing Date (Actual) 30-Jun-2018		
	IBRD/IDA (USD)	Grants (USD)	
Original Commitment	38,030,000.00	0.00	
Revised Commitment	52,712,342.11	0.00	
Actual	50,786,575.67	0.00	
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2. Project Objectives and Components

a. Objectives

The Project Development Objectives (PDOs) as stated in the Loan Agreement (Schedule 1, page 16):

"To assist the Borrower in: (a) improving the quality of the water supply and service delivery infrastructure in the Greater Tunis, Northern and Central Regions of Tunisia: and (b) enhancing its operational and management functions".



The PDOs as stated in the Project Appraisal Document (PAD) was broader and included the activities that would be undertaken to achieve these objectives. The PDOs as stated in the PAD (page 8);

(a) sustain the reliability and quality of water service in Greater Tunis and selected urban centers, through augmentation, upgrade and renewal of water infrastructure. and (b) enhance the competitiveness and sustainability of the National Public Water Supply Utility (SONEDE in French) operations, through modernization of management practices and information systems for better cost control, enhanced revenue and more responsive customer service.

This review is based on the PDOs stated in the Loan Agreement.

Additional Financing (AF) for the project was approved in August 2014, in response to the faster growth in demand for potable water in the selected regions. The revised PDO as stated in the AF Loan Agreement (Schedule 1, page 4):

(i) To ensure the continuity of water service twenty-four (24) hours per day, seven (7) days a week to the population in Greater Tunis and other targeted cities: and (ii) improve the financial viability of the Borrower.

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

19-Aug-2014

c. Will a split evaluation be undertaken?

Yes

d. Components

There were three components (PAD, pages 6-7). The actual cost of components is from the Implementation Completion and Results Report so as to incorporate the costs added to the project through AF. (ICRR, page 38).

One. Improvements to the Greater Tunis water supply system. Appraisal estimate US\$43.10 million. Actual cost US\$39.75 million. This component financed investments in treatment, transmission and distribution infrastructure networks in Greater Tunis. Activities included, expansion of treatment and storage capacity at the Ghdir-el-Gollah (GEG) water treatment plant, installation of sludge treatment for GEG's water treatment plant, rehabilitation of the transmission from the GEG's water treatment plant to the



Ras Tabia storage tank, and augmentation of storage, pumping and distribution capacities in selected peripheral subsystems, including in the growth areas of Mornag, Bir-el-Kassa, La Gazelle and Borj Touil.

Two. Improvements to water supply systems in other urban centers. Appraisal estimate US\$13.20 million. Actual cost US\$11.48 million. This component aimed at upgrading the storage, transmission and distribution systems in SONEDE's Northern and Central operating regions. In the Northern region, the systems in Draham, Ghardimaou and Rouhia were to be upgraded for allowing 5,000 new connections. In the Central region, the systems at Jammel, Kalaa Kbira, Nasrallah and Ouardanine were to be upgraded for allowing 11,000 connections.

Three. Management capacity building. Appraisal estimate US\$6.70 million. Actual cost US\$7.30 million. This component aimed at capacity building of SONEDE. Activities included: (i) preparing a corporate plan and an audit of SONEDE's organizational and human resources management; (ii) preparing a financial simulation model for setting performance and cost control goals; (iii) installation of a customer service software system for billing and replacing the obsolete payroll system with an integrated Human Resource Management and payroll system (to be funded by SONEDE).

These activities were added in the three components following the AF (ICR, paragraphs 13-15).

Component One. (i) Expanding the capacity of the new treatment facility of the plant in Greater Tunis to meet the growing demand and avoid water service interruptions in Greater Tunis by 2017; and (ii) rehabilitation and upgrade of the Greater Tunis water treatment plant and the existing water treatment facilities.

Component Two. Rehabilitation and upgrading the Belli water complex in the South-East of Greater Tunis to reduce service interruption risks to cities in the Center-East region (including Nabeul, Monastir, Sousse and Sfax).

Component Three. Installation of 70,000 customer meters that were broken.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project cost. Appraisal estimate (inclusive of baseline cost, costs associated with physical and financial contingencies) US\$47.15 million. Revised estimate with AF US\$73.35 million. Actual cost US\$63.50 million.

Project financing. The project was financed by an IBRD credit of US\$38.03 million and an AF of US\$26.20 million. With this, the total loan for the project US\$64.23 million. A partial amount of the loan approximately US\$11.52 million was cancelled. With this the revised estimate was US\$52.71 million. Amount disbursed at closure US\$50.78 million.



Borrower contribution. Appraisal estimate US\$9.12 million. Their actual contribution was more than planned at US\$12.72 million.

Dates. The project approved on November 17, 2005, became effective on March 21, 2006 and was scheduled to close on June 30, 2012. AF was approved on August 19, 2014. The project was restructured five times during implementation.

The first restructuring on February 7, 2012, changed disbursement arrangements and increased the percentage of Bank expenditures to 100 percent for the still undisbursed portions of the project, at government request. The second on June 26 extended the closing date from June 30, 2012 to April 30, 2014, for completing ongoing activities. The third restructuring on May 20, 2014 extended the closing date from April 30, 2014 to June 30, 2015 for completing activities associated with the installation of the customer management system.

Following the AF for the project which revised the PDOs and expanded the scope of activities (discussed in section 2d), these changes were made through the fourth restructuring on August 19, 2014. (i) The closing date was extended from June 30, 2015 to June 30, 2018, for completing activities associated with installing the customer service information system; and (ii) the financial covenants of the loan to were modified to clarify the definitions of the 'total operating expenses' and 'total operating revenues' of SONEDE.

These changes were made through the fifth restructuring on November 13, 2017. (ii) Activities associated with rehabilitation of the potable water treatment stations at Ghdir-el-Gollah and upgrading of the Belli water complex were cancelled due to the unsuccessful bidding practices; (ii) Unallocated funds was to be used for purchasing household water meters deemed necessary for the financial sustainability of SONEDE; (iii) partial amount of the loan was cancelled; (iv) the results framework was revised; and (v) funds were reallocated between project categories. The project with AF closed on June 30, 2018.

Split rating. Since the PDOs were revised following AF, this review is based on a split rating of objectives, when 55 percent (US\$ 34.94 million) was disbursed before AF and after AF when 45 percent (US\$28.49 million) was disbursed.

3. Relevance of Objectives

Rationale

Original Objective. Before appraisal, Tunisia had achieved had achieved high access to water supply and sanitation services, with 96 percent having access to water services and about 80 percent having access to improved sanitation. Notwithstanding these developments, SONEDE was affected by an aging infrastructure,



increasingly scarce water resources, creeping cost increases linked to rural service, rigid labor structures, mounting maintenance and rural needs and low-return on new activities (such as rural services and desalination in coastal areas).

The PDO's were relevant to the government strategy articulated in the Tenth and Eleventh Economic Development Plans for the 2002-2006 and 2007-2016 periods. Both plans envisioned increase in the level of water sector investments. The expansion of good quality potable water supply services was also relevant to help Tunisia achieve the key environmental and health-related Millennium Development Goals.

The PDOs were well-aligned with two of the three key objectives of the World Bank's Country Assistance strategy (CAS) for the 2005-2008 period: (i) to improve the competitiveness of the Tunisian economy and its private sector; and, (ii) improve quality of social services, through improved delivery of water services and enhanced efficiency of public expenditure in the water sector. The PDO's are relevant to the Bank's current Country Partnership Framework (CPF) for the 2016-2020 period. The second pillar of the CPF identified the need for reducing regional disparities and improving access to water services for the most vulnerable in lagging regions. The CPF also highlighted the need for identifying policies to help SONEDE move towards financial sustainability.

Revised Objective. The first revised PDO reflected the priorities of the government of ensuring continuity of water supply service 24 hours a day, seven days a week, to meet the fast growing demand for potable water. The second revised PDO, improving the financial viability of SONEDE was more focused and clear in terms of measuring outcomes that were directly attributable to the project.

However, while there is a clear alignment between the project's development objectives and the government and Bank strategies, the PDOs were pitched at a level that does not adequately reflect a potential solution to the development problem. While acknowledging the difficulty of the operational environment, a shortcoming here was that the objective was not defined such that its achievements would be plausibly traceable to improvements envisioned to arise from improved quality of water supply/enhanced operational and management functions/continuity of water service/improved financial viability and whether those improvements improved health or production and income outcomes or other factors affecting community livelihoods. While these may be long-term targets, tracking and identifying them is an important aspect of a successful development operation. This shortcoming applies to both the original and revised objectives and relevance of objective is therefore rated as Substantial.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

Objective 1



Objective

To assist the Borrower in improving the quality of the water supply and service delivery infrastructure in the Greater Tunis, Northern and Central Regions of Tunisia.

Rationale

Theory of Change. Activities associated with expanding water treatment and storage capacity and rehabilitating water treatment, transmission and storage infrastructure, aimed at increasing the supply of potable water. This in turn was expected to help SONEDE in providing additional water connections and thereby improve the quality of water services in Greater Tunis and selected urban centers in the Northern and Central regions.

Outputs (ICR, pages 26 and 27-30).

- The activities pertaining to the potable power plant in Greater Tunis were completed as targeted: These included, construction, rehabilitation and reinforcement of power supply to the potable water plant.
- The main pumping stations and storage tanks at Mornag, Borj Touil/ la Gazelle and Bir El Kassia were rehabilitated. The sludge treatment plant was operational in 2015 as targeted.
- 98 percent of raw water intake pumps were replaced at project closure. This was slightly short of the target of 100 percent.
- 760,000 new water connections were built in Greater Tunis as compared to the target of 780000. There was no baseline figure for this indicator.
- The storage, transmission and distribution systems in the secondary cities of SONEDE's North and Central operating region were completed as targeted.

Outcomes.

- The volume of water produced and sold by SONEDE in Greater Tunis was 138 million m³ per year at project closure (as compared to 104 million m³ per year at the baseline). This exceeded the original target of 110 million m³ per year but was short of the revised target of 153 million m³ per year.
- The volume of water produced and sold by SONEDE in the Northern and Central operating regions at project closure was 63.2 million m³ per year (as compared to 44.90 m³/year at the baseline). This was short of the original and revised targets of 67.30 million m³ per year and 72.20 million m³ per year respectively.

Given that the outcome targets were realized for the most part, this review concludes that the project significantly contributed to realizing the PDO.



Rating
Substantial

Objective 1 Revision 1 **Revised Objective**

To ensure the continuity of water service twenty-four (24) hours per day, seven (7) days a week to the population in Greater Tunis and other targeted cities:

Revised Rationale

Theory of Change. Activities associated with expanding the capacity of the new treatment facility in Greater Tunis, rehabilitation of the Greater Tunis water treatment plant and rehabilitation of the Belli station in the Northern and Central regions, in conjunction with the activities described above, were expected to ensure uninterrupted water supply delivery in the selected areas.

Outputs (para 24-26).

In addition to the outputs described above, which were also relevant to this objective, these outputs were relevant to this objective.

- The capacity of the new treatment facility in Greater Tunis was completed as targeted.
- The rehabilitation works at the Belli water treatment facility and the Belli water complex were completed as targeted.
- The pumping and storage facility in the Central region at Ouardanine was completed as targeted.
- The activities associated with rehabilitation of the Ghdir-el-Gollah and upgrading of the Belli station were cancelled due to procurement delays. According to the clarification provided by the team, despite the non-completion of activities associated with upgrading of the Belli station, the continuity of water services (24 hours a day and seven days a week) to the population in Greater Tunis and other targeted cities was ensured and was expected to be maintained due to the high dedication of the SONEDE staff dedicated to the maintenance of the water treatment plants.

Outcomes.

- The outcomes pertaining to the volume of water produced by SONEDE in Greater Tunis and in SONEDE's north and central operating regions were also relevant to this objective. The ICR (page 14) notes that according to the technical audit of 2017, there were no water cuts in the project areas during project implementation.



- 6.82 million people (of which 50 percent were women) benefitted from the number of household connections in the targeted areas of the project works (beneficiaries were calculated on the basis of average people per household connection).

Given that outcomes were realized and there were no water cuts in the project areas, this review concludes that the project substantially contributed to realizing the PDO of ensuring continuity of water service delivery twenty-four hours, seven days a week to the population in Greater Tunis and other targeted cities.

Revised Rating
Substantial

Objective 2
Objective

To assist the borrower in enhancing its operational and management functions.

Rationale

Theory of Change, Activities such as preparing a corporate plan and an audit of SONEDE's organization and human resources management practices, preparing a financial simulation model for setting performance and cost control goals and installing a customer service software system for billing were aimed at capacity building of SONEDE and these were expected to improve the operational and management functions of SONEDE.

Outputs (ICR, para 22).

- The Financial Equilibrium Study financed by the Public-Private Infrastructure Advisory Facility and the Water Partnership Program, for assessing the tariffs increase level from 2018-2022, was completed in 2016 as targeted.
- The Corporate Plan and Organizational Audit was developed under the Organizational Audit for SONEDE financed by the European Union in 2016 as targeted.
- The Human Resource System was fully operational when the project closed.

Outcomes.

Activities such as financial equilibrium study and a corporate plan were output-oriented. In the absence of appropriate outcomes such as client satisfaction rates (as measured through periodic surveys), this review concludes that the project made a modest contribution to realizing the PDO of enhancing the operational and management functions of SONEDE.



Rating
Modest

Objective 2 Revision 1
Revised Objective

To improve the financial viability of the Borrower.

Revised Rationale

Theory of Change. Activities associated installing additional household connections and customer management system were aimed at improving the financial viability of SONEDE.

Outputs.

In addition to the outputs described above which were also relevant to this objective, the following outputs were relevant to this objective.

- 450000 household connections were rehabilitated/upgraded in Greater Tunis at project closure. This was short of the target of 480000 household connections.
- The Customer Management System for timely production of bills and monitoring of customers payment was not yet complete when the project closed.

Outcomes.

- SONEDE was expected to maintain a "working ratio" (defined as the ratio of total operating revenues to total operating expenses minus depreciation plus interest charges), either equal to 100 percent or above for the entire duration of the project. According to the ICR (page 25), working ratio calculated by SONEDE based on the data in the Audited Financial Statement of SONEDE, the working ratio was 111 percent in March 2018 (as compared to 121 percent at the baseline). This exceeded the target of 100 percent. The ICR also notes that the working ratio was consistently above 100 percent over the period 2014-2017 (116 percent in 2016 and 114 percent in 2017), showing that SONEDE covered operational costs through its revenue.

Revised Rating
Substantial



Rationale

Efficacy of the original objective, to improve the quality of the water supply and service delivery infrastructure in the Greater Tunis, Northern and Central Regions of Tunisia and the revised objective, to ensure the continuity of water service twenty four (24) hours per day, seven (7) days a week to the population in Greater Tunis and other targeted cities, is rated as Substantial, as the outcomes were largely realized. Efficacy of the revised objective, to enhance SONEDE's operational and management functions, is rated as Modest, as the activities were mainly output-oriented. Efficacy of the revised objective, to improve the financial viability of SONEDE is rated as Substantial, given that the outcomes were realized.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic Analysis. An economic analysis was conducted both at appraisal and at closure for the project's infrastructure investment activities (Component one and two), using the same methodology. These activities accounted for 77 percent of the cost at appraisal and 81 percent of actual project cost. The methodology entailed a comparison of benefits and costs "with" and "without" the project, based on the opportunity costs of alternative water supply. The benefits were assumed to come from the notion that without the project, households and users would either need to purchase water from vendors at high prices or need to invest in private wells and storage capacity. The avoidance of such costs was assumed to be the main benefit of the project. The other project benefits were assumed to come from the convenience of household connections which would allow households to consume a larger volume of water than under the alternative of either buying, storing or pumping water. The Net Present Value (NPV) at closure, based on the opportunity cost of 12 percent was 790 Tunisian Dinars (TD) as compared to the NPV of 277 million, at appraisal. The ex post Economic Internal Rate of Return (EIRR) was 48 percent as compared to the ex-ante EIRR of 43 percent. The ICRR (para 30) notes that the increase in EIRR at closure was mainly due to the increase in the number of beneficiaries, given that the assessment at completion captured the beneficiaries of both the original project and AF. while the appraisal estimate was based only on the beneficiaries under the original project.

Administrative and Operational Issues. There were moderate administrative and operational shortcomings. There were procurement delays due to a combination of factors including, delays associated with the mandatory review by the National Tender Board of Tunisia and inadequate use of technical and financial consultants for preparing tenders. There were delays on the part of SONEDE for developing an Environment Management Plan and delays in recruiting a director for information technology for overseeing the preparation of the Customer Management System. These factors were exacerbated by the tariff freeze imposed by the government between 2006-2009, which forced SONEDE to borrow commercially. These shortcomings were however rectified and with the exception of the Customer Management System and cancellation of activities



(associated with the rehabilitation of the Ghdir-el-Gollah treatment stations and upgrading of the Belli Station) due to procurement delays, all the remaining activities were completed at project closure.

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	✓	43.00	77.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	48.00	81.00 <input type="checkbox"/> Not Applicable

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

6. Outcome

Original Objectives. The original PDO's are substantially relevant to the Government and Bank strategy and is rated as Substantial. Efficacy of the first objective - to improve the quality of the water supply and service delivery infrastructure in the Greater Tunis, Northern and Central Regions of Tunisia - is rated as Substantial, as the outcomes were for the most part realized. Efficacy of the second objective - to enhance SONEDE's operational and management functions - is rated as Modest, as the indicators were output-oriented and in the absence of appropriate outcomes such as a customer satisfaction survey, there is no evidence that the expected outcomes were realized. Overall efficacy before restructuring is Modest. Efficiency is rated as Substantial in view of the project's economic viability. Outcome before restructuring is assessed as Moderately Unsatisfactory.

Revised Objectives. The relevance of the revised objective to the Bank and to the Government is Substantial, given that the objectives reflected the government's priority and was clear in terms of measuring outcomes. Efficacy of the two revised objectives - to ensure the continuity of water service twenty to the population Greater Tunis and targeted cities and to improve the financial viability of SONEDE is rated as Substantial, as the outcomes were realized. Overall efficacy after restructuring is Substantial. With efficiency rated as Substantial, outcome after AF is rated as Satisfactory.

Taking into account the ratings discussed above and weighting them by the shares of Bank disbursement before and after restructuring following AF ($0.55*3 + 0.45*5 = 3.90$), the overall rating is Moderately Satisfactory.



a. Outcome Rating
Moderately Satisfactory

7. Risk to Development Outcome

Technical risk. The ICR (para 50) notes that although the old treatment station at Ghdir-el-Gollah and the Belli treatment station are currently in operation by SONEDE have been providing uninterrupted services in the targeted areas since 2014, given that rehabilitation of these stations had to be cancelled due to procurement delays, there is risk associated with the possibility of service interruptions in the long term. This is particularly so given that the Belli substation operates at full capacity with no margin to increase water production. The ICR notes that rehabilitation of these stations is included in the follow-up project that is currently under preparation.

Institutional risk. There is risk to ongoing activities given that it is not clear whether there is adequate capacity on the part of SONEDE in preparing and reviewing tenders for activities associated with rehabilitation of the stations discussed above (ICR, para 50).

Financial risk. There is risk associated with the financial sustainability of SONEDE, given that it is not clear if SONEDE would be able to adjust tariffs to meet the increase in operating costs, due to the high cost of energy (ICR, para 50).

8. Assessment of Bank Performance

a. Quality-at-Entry

This project was prepared based on the lessons from a prior Bank-financed project with SONEDE and the National Sewerage Board (ONAS) (Water Supply and Sewerage Project) and an ongoing project with ONAS and the Ministry of Agriculture (Greater Tunis Sewerage and Water Reuse Project). Lessons incorporated in the Project's design included, making SONEDE the single borrowing agency accountable for execution to simplify supervision arrangements and attempting to strengthen SONEDE's capacity to outsource non-core tasks in infrastructure design and to increase SONEDE's exposure to technology and cost-optimization techniques (PAD, page 9). The implementation arrangements were appropriate, with SONEDE being the main implementing agency and the Project Implementation Unit established within SONEDE, responsible for day-to-day project implementation. SONEDE had the required technical and institutional expertise, having already implemented eight Bank-financed projects (PAD, page 10). Several risks were identified at appraisal, including High risk associated with government's limited progress in enacting sector policy and institutional reforms and the National Tender Board's procurement capacity. Several mitigation measures were incorporated at design, including, continuing policy dialogue



with the government on water supply and sanitation issues (PAD, pages 11-12). The arrangements made at appraisal for fiduciary and safeguards compliance were appropriate (discussed in section 10).

There were shortcomings in M&E design (discussed in section 9a).

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

There were 17 supervision missions over a project implementation period of twelve and a half years (from December 2005 to March 2018). The continuity of leadership on the part of the Bank was more or less maintained, with four Task Team Leaders during the implementation period (ICR, para 48). The supervision team included in addition to the Task Team Leader, financial management, procurement, environmental and social safeguards and water sector staff. The supervision team worked with SONEDE and the government in preparing and supervising implementation of the four revisions and the AF. The support provided by the team aided in safeguards compliance.

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The results framework was logical and the links between project activities, outputs and outcomes were clear. Of the six key outcomes indicators, the three key outcome indicators, the volume of water sold in project areas, the number of new connections built in the targeted areas and avoiding unplanned water shortage occurrences (that is, unscheduled interruptions due to water supply constraints as scheduled interruptions in the network, such as for repair purposes), were appropriate for monitoring performance with respect to the PDO of **improving** the quality of the water supply and service delivery infrastructure in the Greater Tunis, Northern and Central Regions of Tunisia. There were three key outcome indicators for monitoring performance with respect to the PDO of enhancing the operational and management functions of SONEDE. One of these three indicator, measuring client satisfaction rates through periodic surveys was appropriate. The project Implementation Unit, in collaboration with the



Directorate for Planning and General Studies, was responsible for data collection and monitoring project performance (ICR, page 11).

The remaining two results indicators, duration of bill collection rate and ratio of labor costs to sales, were clearly inappropriate, as the project had no activities with direct impact on bill collection and labor productivity (ICR, para 12, Table One).

b. M&E Implementation

Following the approval of AF, the number of indicators was reduced to three. Of these, the two indicators, the number of unscheduled interruptions due to water supply constraints and the number of beneficiaries were appropriate for monitoring performance with respect to the revised PDO of, to ensure the continuity of water service to the population in Greater Tunis and other targeted cities. The new indicator included for monitoring financial sustainability of SONEDE, working ratio, was appropriate. It is not clear why an indicator pertaining to monitoring client satisfaction rates measured through periodic surveys was dropped following AF.

There were however some shortcomings in M&E. The project indicators were broad and progress of capacity building activities were monitored only for selected activities.

c. M&E Utilization

The ICR (para 41-42) notes that the reports provided by the Project Implementation Unit helped in keeping the government and the Bank informed about implementation progress and these reports were used during the restructurings for extending the closing date and reallocating funding between categories.

The ICR provides little details but notes that "use of the M&E framework by the implementing agencies and the government seemed to be limited". (ICR. para 42).

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was classified as Category B for environmental purposes. Other than Environmental Assessment (OP/BP 4.01), Involuntary Resettlement (OP/BP 4.12) was triggered (PAD, page 22). The ICR (para



44) notes that the AF project did not trigger the Involuntary Resettlement safeguards as the AF-financed investments did not require land acquisition or new right of way.

Environmental Assessment. An Environmental Assessment conducted at appraisal concluded that there was the possibility that some adverse impacts could occur from the operation of water treatment facilities and potable water wells in case of defective design, implementation and operation (PAD, page 21). An Environmental Management Plan was developed to mitigate the temporary effects and publicly-disclosed (PAD, page 23). The ICR (para 44) notes that compliance with environmental safeguards was inadequate in the early years of implementation due to delays in implementing the recommendations from the final environmental impact study by SONEDE. The ICR (para 44) notes that these issues were resolved and compliance with environmental safeguards was deemed to be satisfactory at project closure.

Involuntary Resettlement. The PAD (page 20) notes that there could be limited land acquisition from public or private owners for project activities associated with construction of storage tanks and pipelines. A review of SONEDE's land acquisition procedures conducted at procedures concluded that these procedures were satisfactory (PAD, page 93). The ICR (para 45) notes that most of the works were on SONEDE-owned land. The ICR provides little details but notes that "SONEDE dealt effectively and in time with the few cases of displacement caused by infrastructure works on family-owned land".

b. Fiduciary Compliance

Financial Management. An assessment of the financial management arrangements conducted at appraisal, concluded that the financial management arrangements were satisfactory and the financial management was rated as Low (PAD page 21). The ICR (para 46) notes that there were issues with the external audit reports in 2011/12 and 2013/2014 and delays with the submission of the audit report in 2016. The ICR (para 46) also notes that although some of the financial management issues were resolved through an auditor, some issues would require a medium and long term follow up.

Procurement. An assessment was conducted at appraisal to assess the procurement management capacity of SONEDE. SONEDE had implemented eight prior Bank-financed projects and the procurement risk was rated as Low (PAD, page 52). The ICR (para 46) notes that there was compliance with procurement. The ICR does not report any case of mis-procurement.

c. Unintended impacts (Positive or Negative)

d. Other



11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of M&E	Modest	Modest	---
Quality of ICR		Substantial	---

12. Lessons

The ICR (pages 22-23) draws four lessons from the experience of implementing this project. Of these, the three most important are, with some adaptation of language.

(1) Outsourcing non-core tasks for infrastructure and design can help in devising better cost-effective options. A lesson derived from prior water supply projects in Tunisia was the notion that outsourcing of SONEDE's noncore infrastructure tasks would aid in exposing SONEDE to new and better cost-effective technology for water treatment plants. Although this lesson was identified at appraisal, the lesson was not heeded during implementation. Several of the delays, which eventually led to cancellation of the tenders associated with rehabilitation of the treatment plants planned under the AF, could be attributed to the lack of in-house expertise for keeping up with changes in technologies for water treatment plants.

(2) New technology and mobile payments can help in improving collection efficiency. In this project, SONEDE installed 93,000 classical water meters that could be read/monitored remotely, in the households that did not have functioning meters. An independent technical audit in November 2017 showed a sharp increase in collection and thereby contributed to SONEDE's financial position.

(3) Conducting customer satisfaction survey and beneficiary assessments can help in improving service delivery. Although an indicator aimed at customer satisfaction surveys was selected at appraisal, the surveys were not carried out during the project. Regular beneficiary assessment could help the national public utility improve its service delivery by better understanding the customer's needs and respond to the needs of different categories of customers.

13. Assessment Recommended?



No

14. Comments on Quality of ICR

The ICR is well-written and clear. It candidly discusses the difficulties faced in implementing activities associated with rehabilitation of the treatment plants planned under the AF, due to the inadequate in-house capacity. The ICR is consistent with the guidelines and appropriately conducts a split rating of objectives. The ICR draws good lessons from the experience of implementing the project.

The discussion on financial management issues is not clear and the ICR provides no details on the deficiencies of M&E utilization.

a. Quality of ICR Rating
Substantial