Report Number: ICRR0022393

1. Project Data

Project ID	Project Name
P102733	Water Sector Investment Project
Country	**Practice Area(Lead)**
Albania	Water

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
IBRD-83230	30-Jun-2019	71,325,309.37
Bank Approval Date	**Closing Date (Actual)**	
20-Dec-2013	31-Mar-2020	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	85,300,000.00	0.00
Revised Commitment	85,300,000.00	0.00
Actual	72,525,696.18	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
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2. Project Objectives and Components

a. Objectives

According to the Loan Agreement (LA, p.5) and the Project Appraisal Document (PAD, paragraph 11), the Project Development Objective (PDO) was "to (i) improve the quality of water and wastewater services in the Durres Water Utility (DWU) Service Area; and (ii) improve the financial performance of the DWU." This review will assess project performance against the following objectives:

- to improve the quality of water services in the DWU Service Area
- to improve the quality of wastewater services in the DWU Service Area

- to improve the financial performance of the DWU

Although the target values of some indicators were revised during project implementation, this review will not implement a split rating in assessing the project outcome because there were no changes to (i) the project objectives; (ii) the scope of the project; or (iii) the rating of the Outcome before or after the restructuring in 2017.

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

Yes

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

No

c. Will a split evaluation be undertaken?

No

d. Components

The project had four components:

1. **Priority Water Supply Investments** (US$60.24 million at appraisal*, US$49.15 actual). This component would finance the construction of six water supply production wells and a bulk water transmission pipeline. These would add supply capacity to address water shortages in the Durres Water Supply Service area. This component would also finance elevated reservoirs to link settlements and communes along the service area transmission pipeline route to the Durres water supply system. In addition, this component would finance the rehabilitation of the distribution network, and the provision of a leak detection equipment and pressure reducing valves to reduce water losses.

2. **Wastewater Network Investments** (US$13.65 million at appraisal*, US$16.60 million actual) This component would finance priority wastewater investments to enhance the existing sewerage network's capacity to handle the increased water supply in an environmentally and socially sustainable manner. These would include rehabilitating critical parts of the existing system to reduce sewerage overflows during heavy rains, separate storm water networks where needed; and construct secondary and tertiary sewerage networks in the beach areas. In addition, this component would finance high powered sewer cleaning equipment for network maintenance by the DWU and strengthen its capacity to operate and maintain the new Durres wastewater treatment plant that became operational in 2013 (ICR, paragraph 4(e)).

3. **Institutional Development Program, Utility Strengthening, and Water Demand Management** (US$5.27 million at appraisal*, US$1.35 million actual) This component would finance the design and implementation of a water demand management program through the implementation of an effective metering system and support the Performance Monitoring and Benchmarking Unit (PMBU) within the then Ministry of Transport and Infrastructure (MTI was later absorbed into the – Ministry of Infrastructure and Energy or MoIE) by creating a core set of indicators, enhance data collection and monitoring, and improve data use and dissemination. According to the Task Team, a core set of indicators included the number of households that have more hours of water supply, improved drinking water quality, reduced interruptions in water service delivery, upgrade in service levels. In addition, this component would prepare and implement a comprehensive business plan and Performance Improvement Plan to strengthen the institutional,

operational, commercial, and managerial capacity of DWU. This component would design a customer service survey and conduct a public awareness campaign. This component would also finance consulting services to deliver technical analysis and capacity building in energy efficiency and conduct annual DWU financial audits.

4. **Project Implementation Support** (US$0.93 million at appraisal*, US$1.21 million actual) This component would finance project support including salaries of staff, operating costs, equipment, technical reviews, and overall project supervision, monitoring, evaluation, and reporting.

* Excluding US$4.09 million and U$1.36 million of physical and price contingencies, respectively, and US$0.22 million of front-end fee.

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

Project Cost: At appraisal, the project cost was estimated at US$85.74 million. At project closure, the actual cost was US$73.84 million. The decrease in the project cost was due to the appreciation of the US dollar against the Euro, the currency in the loan agreement, which appreciated from Euro 1 = US$1.3648 at appraisal to US$1.0956 at project closing.

Financing: At appraisal, the International Bank for Reconstruction and Development (IBRD) loan was estimated at US$85.30 million. According to the information in the data sheet of the ICR, the loan disbursed US$72.52 million. (However, according to the information in Annex 3, the loan disbursed US$68.48 million).

Borrower Contribution: The government committed to contribute Euro 0.34 million, equivalent to US$464,032 using the 1 Euro=US$1.3646 exchange rate at appraisal noted above. The ICR reported that the government disbursed US$1.3 million after financing cost overruns contracts incurred from exchange rate losses as well as other minor works and equipment for the Durres City network (ICR, paragraph 59).

Dates: The loan was approved on December 20, 2013 and became effective on May 14, 2014. The project Mid Term Review (MTR) was conducted in November 2014. The original loan closing date was June 30, 2019. After a nine-month extension, the loan closed on March 31, 2020. There were two Level 2 restructurings:

- The project was restructured on May 26, 2017 to introduce two new outcome and one new intermediate outcome indicators and make changes to the target values of one outcome and seven intermediate outcome indicators in the results framework (see Section 4, Achievement of Objectives below). The two new outcome indicators were (i) additional annual volume of appropriately collected, treated, and disposed wastewater, and (ii) beneficiaries of improved wastewater collection and transportation facilities. The new intermediate outcome indicator was the utility's total annual billed volume. The target values of the outcome and intermediate outcome indicators were revised to align with the implementation of the updated Durres Water Utility Business Plan (2016-2020). In this restructuring, the project financial and economic analyses were updated (see Section 5 Efficiency below).
- On February 21, 2019 the project was restructured a second time to extend the closing date of the project by nine months from June 30, 2019 to March 31, 2020 to complete contracted works affected by the initial procurement delays for the main bulk water supply system works, including the delay in obtaining related construction permits, and lack of initial coordination between the Project

Implementation Unit (PIU) and DWU (Restructuring Paper RES27214, paragraph 2) and reallocate funds among disbursement categories and distribute cost savings to cost overruns in the other categories.

3. Relevance of Objectives

Rationale

Country Context: Albania has substantial water resources, equivalent to an estimated 8,600 cubic meter per capita per year, but uses only 6 percent of that annually (PAD, paragraph 3). At appraisal, 91 percent of the urban population and 57 percent of rural residents were connected to a piped water network. However, inefficiencies in the water supply sector persisted, such as Non-Revenue Water (NRW—water produced that did not generate revenue) estimated at 64 percent in 2011 compared to an average of 38 percent for the rest of Europe, Central Asia and other developing countries. The average Albanian city supplied only 11.2 hours a day, well below the 24-hour European benchmark. Only 45 percent nationally and 50 percent in the coastal city of Durres, the second largest city and the primary port in Albania, were metered household water connections, undermining efficient billing and collection that was reflected in a 1.69 financial working ratio against the EU benchmark of 0.50. Wastewater collection service was limited, and effluent was discharged untreated into the environment. In Durres, where population increases to as much as 400,000 during peak tourist season, the water and sewerage services were not sufficient (PAD, paragraph 5). Wastewater service covered only 52 percent of the Durres service area while continually experiencing sewer network blockages, overflows of pumping stations, and flooding. Wastewater service was marked by age, poor design and construction, illegal connections from sewers to storm water drains and poor maintenance.

Alignment with Country Priorities: The PDOs are aligned with Albania's current National Water Supply and Sewerage Services Sector Strategy 2019- 2030 (ICR, paragraph 22, and footnote 10). The strategy aims at expanding the service coverage and improving the quality of water supply and sewerage services, orienting the water utilities toward cost control and full cost recovery, improving sector governance and regulation, investing in sector workforce capacity, and working toward convergence with the European Union (EU) water directives (ICR, paragraph 19). The government's second National Strategy for Development and Integration (NSDI) for 2014-2020 also included sector specific efforts to meet EU accession requirements, including investments in infrastructure to fuel growth by improving access to high-quality, affordable water supply and sewerage services available to all based on financial efficiency while protecting the environment (NSDI, p. 20). Although the PDOs were appropriately pitched to assist the country in increasing access to improved quality water and wastewater services delivered in the Durres area, the quality aspect of the services was not clearly defined. It is inferred from the PAD that more hours of water supply, improved drinking water quality, less interruption in water service delivery, and upgrade of service levels would result in improved water service quality (PAD, Annex 1, footnote 10). The PAD did not provide a definition for wastewater service quality.

Alignment with Bank Strategy: The PDOs remain relevant to the World Bank's current Country Partnership Framework (CPF) for Albania FY15 - FY19 by contributing to the achievement of the outcomes under Focus Area 3: Strengthening public sector management and service delivery. In particular, Objective (3)(d) in the CPF focuses on enhanced coverage of water and sanitation services (CPF, p.17). According to the Task Team, the FY15-FY19 CPF was extended to remain valid at project closing. The Bank undertook

a Systematic Country Diagnostic 2019 (SCD) Update to inform the preparation of the next CPF. Two of the five policy areas listed in the SCD to tackle constraints to growth and inclusion were addressed by the project. These were upgrading infrastructure and improving disaster resilience of investments and strengthening local government capacity to deliver services (SCD, p. 9).

Previous Bank Experience: The World Bank has invested in improving water and sanitation services in Durres and other cities and contributed to building institutional capacity in the sector (ICR, paragraph 5) for more than two decades. Prior World Bank operations in Albania included the Durres Water Supply Project (1994), the Water Supply Urgent Rehabilitation Project (2000), and the Municipal Water and Wastewater Project (2003). The World Bank also supported sector consolidation efforts and explored institutional utility models through technical assistance. A Feasibility Study of Regional Utilities in the Water and Wastewater Sector of Albania (Padeco Co., Ltd, 2009) and a Durres Options Study (2011) identified utility models for Durres and established the PMBU in the National Water Agency of the then MTI, now MoIE. Given the Bank's historical experience in the country and the sector, the PDOs were challenging. However, while the objective remained relevant throughout the project cycle and was a necessary response to a development gap in Albania, a significant shortcoming is the lack of clarity in the objective formulation around what outcomes would be achieved through improving the quality of water and wastewater services, and financial performance of the DWU. The causal chain between funding and outcomes was clear, albeit with most targets at output level, as the objective was closer to the output level, rather than the outcome level.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To improve the quality of water services in the Durres Water Utility Service Area.

Rationale

Theory of Change: The quality aspect of services was not clearly defined, but it was implied as increased hours of water supply, improved quality of drinking water, less interruptions in water service delivery, an upgrade of service levels or a combination of these for water service (PAD, Annex 1, footnote 10). The project results chain would be initiated by construction or rehabilitation activities that would lead to outputs such as bulk water transmission pipeline, distribution network, production wells, elevated reservoirs in rural communities, piped and metered household water connections. These outputs would be expected to lead to intermediate outcomes such as increase in water production, improved water pressure to make water supply more reliably available beyond 6 hours a day, bulk water supply to villages, and reduced physical losses. The outcome indicators were the number of beneficiaries, and the number of new water connections. Both of these outcome indicators were at the output level. There were no outcome indicators for reduced NRW, improved quality of water, reduced interruptions in water service or upgrade in service levels (see Section 9, Monitoring and Evaluation (M&E) (a) Design below). Links among inputs, outputs, and outcomes were logical

and sequential. The outcomes, albeit incomplete, were attributable to the project's interventions. The theory of change (TOC) did not include underlying assumptions.

OUTPUTS:

- Constructed six wells, as planned, in Fushe Milot to supply water to the new pipeline.
- Constructed 64 km of bulk water pipeline against the target of 63 km.
- Constructed seven elevated water reservoirs as planned.
- Rehabilitated 23.30 km of water supply network. The target was 4 km set at the first restructuring (no target was set at appraisal). The Task Team clarified that the target set at appraisal was miscalculated,
- Purchased leak detection equipment as planned.
- The project team confirmed that 18 chambers for network monitoring and zoning equipped with flow meter, valves, and pressure reducing valves were constructed, as targeted.
- The project team also confirmed that pressure reducing valves were delivered.
- On June 21, 2021, the project team acknowledged that the ICR had no information about surveys and public awareness campaigns but provided the following: In 2018, under the Office of the Prime Minister, the National Agency for Water Supply and Sewerage and and Waste Infrastructure of Albania (or AKUM) directed a National Water Campaign. Door to door surveys of the service area checked existing customer contracts, debtors, meters, illegal connections, and registered unregistered families and private business.

OUTCOMES:

- The number of piped household water connections in the DWU service area which were expected to benefit from (i) more hours of water supply, (ii) improved drinking water quality, (iii) less interruptions in water service delivery, (iv) an upgrade of service levels or (v) a combination of these enhancements as a result of the project outputs (PAD, footnote 10 on p.19) was 87,885 against the target of 77,000 set at appraisal. This corresponds to 317,724 direct beneficiaries against the original target of 278,400.
- According to the ICR (paragraph 24) the water supply duration was expected to reach 12 hours by the summer of 2021. The project team confirmed that as of June 2021, the target to supply water up to 12 hours a day has been achieved. The team also provided additional information in support of achieving three other criteria: (i) DWU monitored water quality daily and confirmed meeting National Quality Standards; (ii) in the summer of 2019, no complaints in water service interruptions were received ; and (iii) service levels were improved by metering 95 percent of household connections (no targets provided) and improved water pressures in upgraded secondary networks.
- At appraisal, one of the expected outcomes of the project's intervention was to reduce physical water losses in the distribution network in Durres from 30 percent to 21 percent (PAD, paragraph 40). The ICR does not report on this.
- DWU reported reduced interruptions in water services reflected in the reduction of service interruption complaints from Durres residents from 50-100 daily during the summer to zero by the summer of 2019.
- The project's results framework did not include any indicator measuring NRW (consisting of both physical and commercial water losses) due to the absence of bulk and household meters at appraisal.

Billing ratio was included in the results framework as a proxy indicator to measure NRW (ICR, paragraph 50). At the time of the writing of the ICR, billing ratio was 26 percent (implying an NRW of 74 percent) against the revised target of 35 percent (implying an NRW of 65 percent) and revised baseline of 22 percent billing ratio. The original target for billing ratio was 50 percent (implying an NRW of 50 percent) and the original baseline was 32 percent billing ratio. The project team acknowledged the 4 percent reduction in NRW achieved at closing was less than the revised 13 percent target. An improved and optimal secondary distribution network would double the volume of water pumped into the system, but also increase losses, and NRW. DWU needed additional investments to optimize the secondary distribution network but the "Network Optimization Study" with detailed plans and cost requirements for this network was delayed. In addition, cost overruns financed critical interventions to make the primary distribution network fully functional. The project team added that DWU had secured financing to improve the secondary distribution network.

- Similarly, the project's results framework did not include any indicator measuring annual water production in physical quantity (cubic meter) due to the absence of bulk and household meters at appraisal. The total annual billed volume of water was added as an indicator at the first restructuring to calculate actual water production (ICR, paragraph 50). The total annual billed volume of water at the time of the writing of the ICR was 8.6 million cubic meters against the target of 10 million cubic meters. The baseline was 7.8 million cubic meters in May 2017 when the indicator was added to the results framework.

The project was successful in completing the water supply investments; however, the water transmission system was not fully commissioned at project closing and at the time of the writing of the ICR in May 2020. As explained above, an earthquake that hit the project area in November 2019 and the onset of Covid-19 resulted in a delay in the full commissioning of the system. The project team confirmed that the water transmission system was now commissioned and fully functional, achieving target. Complaints of water service interruptions were reduced to zero by the summer of 2019. The target average hours of water supply was achieved, the target beneficiaries exceeded, water quality standards met, and service levels increased even though the reduction in NRW was below target.

Overall, and with the additional evidence provided by the project team, the efficacy of the project to improve the quality of water services in the Durres Water Utility service area is rated Substantial.

Rating
Substantial

OBJECTIVE 2
Objective
To improve the quality of wastewater services in the Durres Water Utility Service Area.

Rationale
Theory of Change: The quality aspect of wastewater services was not defined. The project results chain would be initiated by rehabilitating existing sewerage system in Durres, removing direct outlets that released untreated sewage to the environment, collecting all dry weather flow to wastewater treatment plant for treatment before disposal, constructing secondary and tertiary sewerage networks in the beach area, and procuring high powered sewer cleaning equipment. These inputs would lead to outputs such as length of

completed or rehabilitated sewerage network. These outputs would be expected to result in a reduction in sewerage overflows during heavy rains and separate storm water networks; the high powered sewer cleaning equipment for network maintenance would strengthen DWU's capacity to operate and maintain the new Durres wastewater treatment plant; while secondary and tertiary sewerage networks would reduce blockages, enhance network efficiency, and deliver wastewater effluent for treatment to the newly commissioned wastewater treatment plant. Outcomes were expressed as the number of beneficiaries of new connections, and the additional annual volume of wastewater collected, treated, and disposed, which were at the output level. Links among inputs, outputs, and outcomes were logical and sequential. The outcomes, albeit with incomplete indicators, were attributable to the project's interventions. The TOC did not provide underlying assumptions.

OUTPUTS:

- Rehabilitated or constructed 35.80 km of sewerage network against the target of 17 km. The PAD noted an original target "to be confirmed" because specific works were to be decided during implementation. According to the project team, the additional km achieved included secondary and tertiary network based on detailed design that supported the achievement of 10 km of "clean" and "odorless" beach areas.
- According to the project team, the high-powered sewer cleaning equipment was delivered.
- The project was to finance goods and works, consulting, and training activities to strengthen DWU's ability to operate and maintain the Durres wastewater treatment plant (PAD, paragrap16). The project team commented that *Gesellscahft für Internationale Zusammenarbeit* (GIZ) financed these activities outside the project.

OUTCOMES:

- As a result of the project's intervention, 3,074 new households were connected to the sewer network. The target was 3,000 households.
- The number of people benefiting from improved wastewater collection and transportation facilities increased by 68,100. The target was 51,600 beneficiaries. The project team clarified that "improving wastewater quality" was defined as improved access to collection services and increase in the volume of wastewater collected, treated, and disposed that met quality standards.
- The additional annual amount of wastewater effluent appropriately collected, treated, and disposed increased by 1,905,000 cubic meters. The target was 1,835,400 cubic meters.
- The project team clarified that the completion of the works to separate storm water and wastewater networks enabled the 100 percent collection of wastewater along the sea front area and transported to the wastewater treatment plant. This outcome brought Durres municipality in closer compliance with the European Union's Urban Wastewater Treatment Directive and Albania's compliance with Chapter 27 on Environment under EU accession rules.

Overall, the efficacy of the project to achieve this objective to improve the wastewater services in the DWU service area is rated Substantial. The project was successful in increasing access to the wastewater network. The project team also confirmed other outcomes from the interventions – (i) the reduced overflows/flooding from the separation of sewerage and storm water systems; (ii) lack of customer complaints on issues associated with sewer blockages and overflows along the 10 km Beach Area; and (iii) network efficiency from meeting established standards.

Rating
Substantial

OBJECTIVE 3
Objective
To improve the financial performance of the Durres Water Utility.

Rationale
Theory of Change: The objective was broadly defined. The improvement in the financial performance of the utility was to be measured by an improvement in its financial working ratio, i.e., the ratio of operating expenses to revenues. Under Component 3, the project was to design and implement a water demand management program through the implementation of an effective metering system and carry out public awareness campaigns. The expected outcomes of these activities were improved water demand management and water conservation that would be measured by the increase in the billing and collection ratios. The project was also to finance the preparation and implementation of a comprehensive business plan and a Performance Improvement Plan (PIP) along with trainings to operational staff of DWU. These activities were expected to strengthen the institutional, operational, commercial, and managerial capacity of DWU increasing the overall efficiency of the utility. Additionally, the project was to finance an energy audit and preparation of a preliminary energy saving management plan in order to decrease the energy cost of the utility. These outcomes were to result in an increase in revenues and a decrease in operating expenses that would improve the financial working ratio; hence, improvement in the financial performance of the utility. The causal pathways from inputs to outcomes were valid and direct, but the improvement in the financial working ratio could not be attributed only to the project's intervention, because the water tariff increases, which have a direct impact on the utility's revenues, are separately regulated by the Water Regulatory Authority. The TOC did not include any assumption regarding the role of the Water Regulatory Authority in tariff increases.

The project was to provide technical assistance support to the PMBU within the MTI for capacity building. The expected outcome was enhanced data collection and monitoring functions. These outcomes did not directly support the achievement of Objective 3.

OUTPUTS:

- Under the Water Demand Management Program, the project financed the installation of household meters. The ratio of households with individual metered connections increased to 85.40 percent from a baseline of 35 percent at appraisal. The original target was 90 percent, but it was revised down to 84.2 percent at the first restructuring due to the reorganization of administrative units in the country that resulted in an increase in the service area of DWU including rural areas.
- A Performance Improvement Plan was prepared and implemented.
- The ICR does not provide information about technical assistance trainings, energy audit and preliminary energy saving management plan, or public awareness campaign for water conservation. These activities were listed in the PAD but were completed under another Bank program that was under preparation (ICR, footnote 21).

OUTCOME:

- At the time of the writing of the ICR, billing ratio was 26 percent against the revised target of 35 percent and revised baseline of 22 percent billing ratio. The original target for billing ratio was 50 percent and the original baseline was 32 percent billing ratio. Given the revised baseline of 22 per cent, the project's success in increasing billing ratio to 26 per cent was negligible.
- The collection ratio increased to 91.30 per cent from a baseline of 72 percent. The target was 92 percent. In 2018, the government adopted legislative changes to criminalize the theft of water and illegal connections. This helped water utilities significantly boost their customer base in the first and second quarters of 2018. Bad debtors signed installment plans with the water utilities for gradual payment of old debts.
- The Financial Working Ratio (FWR) decreased to 1.30 at the time of the writing of the ICR in September 2020 from a baseline of 1.69 at appraisal. The original target was 0.85 but it was revised to 1.05 at the first restructuring because of trends in tariff levels approved by the regulatory authority and rising electricity costs (Restructuring Paper, Report No:RES27214, p.6). The FWR of the utility dropped down to 0.99 in 2018 improving its financial performance because of the increase in the collection rate as explained in the previous entry above. However, the FWR increased to 1.30 because the Water Regulatory Authority did not increase the tariffs, and the electricity cost, which constitutes 45 percent of the total cost of the utility, increased by 20 percent in 2019.

Overall, the efficacy of the project to achieve the project objective to improve the financial performance of DWU is rated Modest.

Rating
Modest

OVERALL EFFICACY
Rationale
The overall efficacy of the project in achieving its objectives is rated Substantial based on the additional evidence provided by the project team on June 21, 2021.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic and Financial Analyses. At appraisal, "with" and "without" the project economic analysis was conducted (PAD, paragraphs 37-38). Two methods of economic and financial analyses were used: (i) an

economic and financial cost benefit analysis for the investments in water supply, which constituted 80 per cent of the estimated project cost; and (ii) a partial financial analysis for the investments in water meters. The economic rate of return (ERR) for investments in water supply was calculated at 11 percent with a cost benefit ratio of 1.26. The financial rate of return (FRR) was estimated at 9.8 percent assuming conservative billing and collection scenarios. The internal rate of return for investments in meters was estimated at 31 percent.

At project closing, the ERR for investments in water supply was estimated at 10 percent with a benefit cost ratio of 1.2. The FRR reached 7 percent and a cost benefit ratio of 1.07. The partial financial analysis for investments in meters resulted in a 20 percent (ICR, Table 6). The assumed cost of capital at closing was 6 percent (ICR, Annex 4, paragraph 28). The achievements at project closing were lower than the estimates at appraisal.

The economic benefit was defined as the incremental increase in water consumption due to the project's intervention. At project closing it was assumed that the water consumption would be 11.55 million cubic meters in 2020 and gradually increase to and stabilize at 13.95 million cubic meters in 2028. However, at project closing in 2019, the actual water production at the Milot wellfield was about 2 million cubic meters far below the expected output of 7 million cubic meter in the second half of 2019 (ICR, Annex 4, paragraph 11). At the time of this review, the water production system was not yet fully operational. Furthermore, the economic analysis assumes that the NRW would decline from 50 percent to 20 percent in 20 years. This is an overly ambitious target given that at project closing the increase in the billing ration was negligible (see Section 4, Efficacy Objective 1 above). Other assumptions in economic analysis were adequately defined, such as economic price attributed to water, reduction in physical losses, project costs, electricity costs and operation and maintenance costs.

Administrative and Operational Efficiency: The implementation of project activities was delayed at the start of the project for two years because of initial staff turnover, delays in procuring the main works financed under the project - the bulk water supply system - and delays in obtaining related construction permits. There was also a lack of sufficient coordination between the implementing agency and the DWU that delayed initial implementation. The core water investments under the first component were to be completed in the third year of project implementation. This was an overly optimistic expectation. The water service could become partially operational in 2019, six years after project approval.

Overall, the project efficiency is rated Modest because of significant project implementation delays and weaknesses in the assumptions used in economic analysis, such as increase in water consumption and decrease in the non-revenue water attributable to the project's intervention.

Efficiency Rating

Modest

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	✓	11.00	80.00 ☐ Not Applicable

ICR Estimate	✓	10.00	82.00 ☐ Not Applicable

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

6. Outcome

The relevance of objectives is rated Substantial. The efficacy of the project to achieve the first objective is rated Substantial because the project team provided additional evidence supporting the success of the project in improving the “the quality of water services” in the project area. The efficacy of the project to achieve the second objective to improve the wastewater services in the DWU service area is rated Substantial because the increase in access to the wastewater network and the amount of effluent processed in the wastewater treatment plant were achieved and the project team provided information about other outcomes that were achieved. The efficacy of the project to achieve the third objective is rated Modest because the target for the objective, revised during restructuring to ensure its achievement, was nevertheless not achieved. Overall efficacy is rated Substantial. Efficiency is rated Modest because of the significant delays in project implementation. The overall outcome of the project is rated Moderately Satisfactory.

a. Outcome Rating

Moderately Satisfactory

7. Risk to Development Outcome

The following pose risks to the project's outcome:

- **Financial viability of the utility**. In this project, DWU did not achieve the target for the indicator related to its financial sustainability. Expected cost reductions may not be realized since energy costs remained high. Large amounts of NRW remained acute. Tariffs may not increase as planned. Collection rates may drop for example as a result of implementing Covid 19 response protocols. Water supply works would only be fully commissioned in 2021. These factors may reduce revenues, increase costs, and worsen the utility’s financial conditions. DWU may be unable to cover its operating costs and finance O&M needs of the water and wastewater systems.
- **Technical risk to the availability and quality of water.** When the water supply system built under project becomes fully operational, the availability of water would be expected to increase from the current 9 hours to only 12 hours, against EU benchmark of 24 hours. Without sufficient pressure, the water system could not guarantee water quality because of increased risk from contamination (ICR, paragraph 4(b)). These factors would shorten the useful life of the newly built transmission line and the rehabilitated distribution network.
- **Government risk.** If the municipalities and communes in the Durres region are not consolidated under one utility, coordination between the utility and the communities it serves will be weak. Reduced coordination would affect the quality of water services. This risk could be mitigated by the government’s commitment to reform the sector. This commitment is evident in the national water and sanitation policies the government is pursuing such as (i) enforcing new legislations to boost customer base, eliminate water thefts, and improve collection efficiency; (ii) support nationwide

energy efficiency and reducing NRW by investing in programs to improve operational efficiency to generate savings and improve cost recovery; and (iii) financing these investments through the follow-on Bank financed Program for Results program under preparation.

- **Natural hazards.** Albania is an earthquake prone country. The 2019 earthquake hit the Durres region and adversely affected the project activities. Occurrence of such earthquakes poses a moderate risk for the sustainability of project outcomes.

8. Assessment of Bank Performance

a. Quality-at-Entry

At entry, the goal of improving water and wastewater services quality and the financial viability of utilities was of high strategic priority. The approach incorporated lessons learned from the Bank's presence in the sector and in Durres over the past two decades (PAD, paragraph 21). These included allocating sufficient resources to the entire investment needs of the project to improve service delivery rather than allocating funds within a larger project, ensuring government and the utility's commitment to sector reform through its support to institutional changes in the sector, and focusing on critical institutional reforms during implementation along with achieving physical targets. Project implementation arrangements were appropriately assigned to a separate unit because of capacity constraints in the DWU. Risks were identified and sufficient mitigation efforts were outlined.

However, the technical aspects of the project were not adequately assessed because the water distribution and sewerage networks to be rehabilitated or constructed were unknown and the targets for these two intermediate results indicators were “to be confirmed,” and determined during implementation. The financial and economic aspects of the proposed priority investments were inadequately assessed. Fiduciary aspects were not assessed adequately that led to coordination and transparency issues among the utility and the national government agencies delaying procurement (see Section 10, Other Issues, (b) - Fiduciary Compliance). The project was not ready for implementation and could have benefited from intensive capacity development to match the project's intentions (ICR, paragraph 61). Other preparedness issues such as permits for construction, land acquisition, procurement capacity, and other pertinent documentation were not prepared that delayed project implementation by almost two years at the start of the project (ICR, paragraph 62). In addition, the results indicators captured physical achievements and expansion of the services but not how the quality of the water and wastewater services would have improved (see Section 9, M&E below).

Quality-at-Entry Rating

Moderately Unsatisfactory

b. Quality of supervision

The Bank team conducted 13 supervision missions over the course of the six-year implementation period. Project team’s initial focus was on addressing the preparedness issues that delayed project implementation, such as issuance of construction permits, low procurement capacity and preparation of

detailed engineering design. The Bank team provided support to increase the project implementation agency's capacity to achieve fiduciary and safeguard compliance, and implementation of these aspects were reported as improving over time (ICR, paragraph 64). But a social safeguards specialist was only appointed two years after project start. This delay stalled the implementation of the Resettlement Action Plan for the defined areas of the production wells and routing of the main transmission line. Therefore, one well had to be relocated. Following the Mid-Term Review, changes were made in the results framework, components, and implementation arrangements. However, the revised results framework remained focused on outputs rather than outcomes. The Bank's focus was more on the outputs rather than outcomes. The objective level indicators did not sufficiently capture the outcomes to support the achievement of objectives to improve the quality of water supply and wastewater services (see Sections 4, Efficacy above and 9, M&E below).

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The theory of change documented how key activities and outputs would lead to outcomes. However, the indicators did not adequately capture the project outcomes. There was only one indicator, i.e., duration of water supply, to capture improvement in quality of water services. Most of the outcomes expected from the project's interventions, such as improved water quality, less water interruptions, prevention of flooding, prevention of beach pollution, were not captured in the M&E design. Indicators were mostly output indicators rather than outcome indicators. There were no outcome indicators for the technical assistance activities. A proxy indicator was used, i.e., the ratio of billed water, to calculate the amount of non-revenue water due to absence of bulk and household meters at the time of project preparation. There was no proxy indicator in the original Results Framework to measure the annual water production amount (see M&E Implementation below). Baseline figures were not defined for some indicators. The PMBU was to be responsible for the M&E, and the project was to support both the Performance Monitoring and Benchmarking Unit (PMBU) and DWU to improve their M&E systems. A customer service survey would be conducted every 18 months to assess improvements in service provision and ways to further enhance DWU performance (PAD, paragraph 33). A periodic customer service survey would gather data disaggregated by gender and socio-economic status to compare impacts and reactions from different user groups (PAD, paragraph 50).

b. M&E Implementation

The PMBU implemented the project's M&E system as planned. The Task Team confirmed that planned baseline data were collected. Indicators in the Results Framework were measured and reported. In order to address the shortcomings in the Results Framework, two new outcome and one new intermediate

result indicators were introduced at the first restructuring. The target values of one outcome and seven intermediate outcome indicators in the results framework were amended (see Section 4 Efficacy above). The two new outcome indicators were (i) additional annual volume of appropriately collected, treated, and disposed wastewater, and (ii) beneficiaries of improved wastewater collection and transportation facilities under the project. The new intermediate outcome indicator was the utility's total annual billed volume, which was used as a proxy to measure water production. The target values of the outcome and intermediate outcome indicators were revised to align with the updated Durres Water Utility Business Plan 2016-2020 and implementation. M&E functions and processes were to be incorporated into the system of the DWU. However, the shortcomings in the Results Framework to capture the project's achievement in improving the quality of water and wastewater services and the outcome of technical assistance activities were not corrected during project implementation. the ICR did not report whether the planned surveys mentioned in design were conducted or not.

c. M&E Utilization

There was no evidence that the M&E findings were communicated to the various stakeholders. Shifts in implementation were informed by the Mid Term Review. M&E data informed some of the evidence of targets achieved by the project but not those that related to outcomes to achieve improved quality of water and wastewater services because these were not identified and therefore not monitored. M&E findings were fed into the follow-on project, a Bank-financed Program for Results program currently under preparation.

Overall, M&E quality is rated Modest. There were significant weaknesses in the design and implementation of the M&E system making it difficult to assess the achievement of the stated objectives and test the links in the results chain.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was classified as Category B according to OP 4.01 (Environmental Assessment), as there were no associated significant, sensitive, diverse, unprecedented, or irreversible impacts. An Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) were disclosed as required. The project triggered OP/BP 4.12 Involuntary Resettlement due to land acquisition and potential temporary or permanent displacement of people living or conducting economic activities along the water transmission pipeline route to Durres or around other target areas for water or wastewater investments. A Resettlement Policy Framework (RPF) and Resettlement Action Plan (RAP) were disclosed as required. The project triggered OP/BP 4.04 Natural Habitats because pipeline transmission main crossed a forest area at Ishimi Hills and about 9,000 meters fell within the protected area. The project was expected to have temporary construction phase impacts only and would be mitigated by measures indicated in the EMP. The project also triggered OP/BP 7.50 Projects on International Waterways because of the nature of the water supply and wastewater collection investments and the location of the project area along the eastern coast of the

Adriatic Sea. As of May 5, 2013, the project had complied with this policy. None of the riparian countries expressed any objections to the project within the 45-day notification period (PAD, data sheet).

The social safeguards specialist was appointed after more than two years from project start. This delayed the implementation of the social safeguard instruments. For example, location of one of the wells had to be changed as the implementation of the RAP was stalled. The project avoided resettlement by changing the routes of some of the water and wastewater lines in some areas. DWU was reportedly handling complaints only in its own area, but not outside. Having a website and posting of the contact information for the communities was a weak point of the complaint system under the project. This approach resulted in direct complaints to the World Bank's social network account about the contractor who after completing the works delayed in laying back the local road to its original condition. In addition, no institutionalized presence, documentation, reporting, and response was present. This was brought to the attention of the PIU. The safeguards compliance improved in 2016 once the project hired a full-time social safeguards specialist, who followed up on related issues in the field, attending meetings with involved partners (contractor, supervisor, PIU, and DWU including the social safeguards specialist) to handle complaints (ICR, paragraph 56).The World Bank's Operations Portal indicated satisfactory compliance with OP/BP 4.04 Natural Habitats but this was not reported in the ICR.

b. Fiduciary Compliance

Financial Management: Financial management improved over time particularly after government counterparts (MoIE and National Agency for Water Supply and Sewerage and Waste Infrastructure of Albania) agreed to fund cost overruns incurred under ongoing contracts because of currency exchange rate losses during implementation, as well as other works and equipment at the network level in Durres City. Audit reports and interim financial reports were submitted to the World Bank on time. However, early compliance was marked by a delay in hiring a financial management specialist. The 2017 project budget allocation approved by the Ministry of Finance was below the expected expenditures for the year. The shortfall in budget allocation was expected to be solved in subsequent national budget revisions that year. Subsequent assessments were reported to be satisfactory because the financial software used for reporting was acceptable to the Bank. Reports were in the required format and content and were acceptable for financial reporting. Independent audit reports were unqualified but there were occasional delays in their preparation. The audit report for 2018 was outstanding due to late contracting of auditors. The audit report was submitted in March 2019.

Procurement: The procurement function was carried out by the PIU within the National Agency of Water Supply and Sanitation. There was no explanation when this function was transferred from the MTI to the National Agency of Water Supply and Sanitation. Project implementation carried substantial procurement risk. In the first two years of implementation, procurement was delayed because of staff turnover and low procurement capacity. Delays in obtaining construction permits for some of the work contracts attributable to the lack of coordination between national agencies and the PIU also contributed to procurement delays. Overall, procurement complied with the Bank policies (ICR, paragraph 58).

c. Unintended impacts (Positive or Negative)

None.

d. Other

None.

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Quality of M&E	Substantial	Modest	The M&E design and implementation had significant shortcomings in capturing the project outcomes related to the improved quality of water supply and wastewater services.
Quality of ICR	---	Modest	

12. Lessons

The ICR offered five lessons and recommendations as a result of the project operations (ICR, paragraphs 72-75). Two of those, with some editing, are provided below.

- **Insufficient project preparedness can lead to lengthy implementation delays at project start.** In this project, when assessing project readiness, strengthening institutional procedures around transparency and coordination may reduce fiduciary risks and encourage all stakeholders, including local communities to work toward achieving project objectives. Smooth and effective coordination between involved entities and stakeholders would facilitate procedures, overcome obstacles, and accelerate implementation. Initial implementation delays were due to missing procurement documents, preparation of the feasibility studies and project designs, preparation of main project bidding documents, and securing of construction permits.
- **A poor M&E system can make it difficult to establish attribution between the project's intervention and outcomes achieved.** In this project, the M&E system was poor because indicators capturing the project outcomes were missing, and there was a lack of accurate data at appraisal to inform target setting. These shortcomings handicapped the design of a results framework that could have clearly linked outcomes with the project interventions. A poorly designed M&E system not only limits attributing outcomes to the project but also disables triggers for corrective measures when implementation hurdles arise.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The report was consistent with the guidelines. The report provided a detailed narrative of what occurred as a result of the project and covered a wide range of issues. The report was relatively candid citing areas of shortcomings, particularly in preparing the operations. The quality of the evidence in the ICR was credited to the PIU with studies from other sources duly cited. The report accurately enumerated outputs according to the PDOs offering scant evidence in the narrative to support the ratings, raising a question if ratings and narrative were indeed mutually reinforcing. The report was internally consistent and various parts of the report were integrated. There was an effort to articulate how the ratings were reached by analyzing and interrogating the evidence. However, the report did not emphasize the outcomes of the project and did not highlight how activities informed the impact of the project interventions to achieve the PDOs. There were data gaps to support outcomes of the project interventions. Achievements in some outcomes were not reported because these were not captured in the results framework (see Sections 4, Efficacy and 9, M&E above). The ICR did not include information about whether the periodic beneficiary surveys were implemented or not. The lessons were based on the project's experience and mostly useful, but some were in the form of findings, and some did not specify events or actions. The report exceeded the recommended length of 15 pages.

a. Quality of ICR Rating

Modest