1. Project Data

<table>
<thead>
<tr>
<th>Project ID</th>
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<tr>
<td>P132979</td>
<td>Kenya Water and Sanitation OBA Fund</td>
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<tr>
<td>Country</td>
<td>Practice Area(Lead)</td>
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<td>Kenya</td>
<td>Water</td>
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<tr>
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<td>Revised Commitment</td>
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<td>Prepared by</td>
<td>Reviewed by</td>
</tr>
<tr>
<td>Ihsan Kaler Hurcan</td>
<td>Vibecke Dixon</td>
</tr>
<tr>
<td>ICR Review Coordinator</td>
<td>Ramachandra Jammi</td>
</tr>
<tr>
<td>Group</td>
<td>IEGSD (Unit 4)</td>
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2. Project Objectives and Components

a. Objectives
   According to the Global Partnership on Output-based Aid Grant Agreement (p.7) dated September 5, 2014 and the Project Appraisal Document (PAD, p.5), the project objective was “to increase the number of people in low income areas with access to improved water supply and sanitation services.”

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
16-Feb-2018

c. Will a split evaluation be undertaken?
Yes

d. Components
According to the grant agreement (p.7) the Project consisted of two components:

A. Project Implementation Support. (Appraisal cost: US$2.34 million; actual cost: US$2.00 million)

This component included the following activities: (i) the preparation and supervision of subprojects; (ii) support to the Water Services Trust Fund (WSTF, project implementation entity) to hire a project manager; (iii) workshops and a publicity campaign; and (iv) audits, monitoring and evaluation activities including the hiring of an independent verification agent (IVA).

B. Provision of Subsidy to Water Service Providers (WSPs). (Appraisal cost: US$15.80 million; actual cost: US$23.78 million)

Under this component, grants were to be provided to WSPs for the implementation of subprojects upon the delivery of pre-specified outputs. The following types of projects were eligible for financing under the project: (i) network extensions to connect new customers to water and networked sanitation services; (ii) construction and rehabilitation of public water points; (iii) augmentation of water source and treatment and distribution of water; (iv) sewerage treatment and distribution; and (v) construction and rehabilitation of public toilets. The WSPs were to secure commercial loans from banks on market terms for the financing of these subprojects and be paid an output-based subsidy of up to 60 percent of each subproject cost with a cap of US$115 per beneficiary. Ten percent of the projected subsidy was to be paid to the WSP after the signing of the commercial loan, 65 percent after the completion of the subproject and independent verification of the pre-agreed output targets by the IVA, and remaining 25 percent after the demonstration of service delivery evidenced by three months of continuous billing and receipt of payments for services from customers.

Revised Components

There were no changes to the components during project implementation. However, ten subprojects that were supported by the project did not include the construction of public restrooms. Therefore, those activities and the related indicator were cancelled at the first restructuring.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates
**Project Cost:** The total project cost was originally estimated at US$18.14 million. In November 2020, the project closed with a total cost of US$24.61 million. (The total cost of the subprojects was US$14.67 million. The cost of the technical assistance activities and the output-based subsidies were US$9.94.)

**Financing:** At appraisal, the Global Partnership on Output-based Aid grant was estimated at US$11.84 million, consisting of US$2.34 million for project implementation support and US$9.50 million for capital investments. At the second restructuring in October 2019, US$0.73 million was cancelled and the grant amount decreased to US$11.11 million. At the same restructuring, the project funds were reallocated as follows: US$2.55 million for project implementation support and US$8.56 million for capital investments. The project disbursed US$9.94 million: US$2.00 million for project implementation support and US$7.94 million for capital investments. The project could not disburse US$1.17 million because of the following reasons: (i) a reduction in accrued interests on loans; (ii) the cancellation of subsidy to a WSP that used its own funds to finance its subproject because of a delay in receiving the commercial loan; (iii) the exchange rate gain of the US dollar against the Kenyan shillings; and (iv) implementation of fewer activities than projected, such as field trips and trainings. At project closing, all project funds were accounted for.

**Borrower’s contribution:** At appraisal, the borrower’s contribution was estimated at US$6.30 million. At project closing, the borrower’s contribution stood at US$14.67 million, which consisted of US$12.16 million of commercial loans, US$1.49 of capitalized interest during construction and US$1.02 million of WSPs own funds.

**Restructurings:** There were three project restructurings:

- **First Restructuring (Level 2 – February 16, 2018):** The project closing date was extended by 18 months from June 30, 2018 to December 31, 2019 to allow time for the completion of subprojects to be financed under the project. The time extension was required because of the delays in securing commercial loan commitments from banks to pre-finance the subprojects and the delays at the Ministry of Water and Irrigation in processing project funds from the National Treasury to the WSTF’s project account (Restructuring Paper, Report No: RES30088, p.5). The preliminary target values of indicators set at appraisal were revised to reflect the specific target values agreed by the WSTF and the WSPs after the preparation of the subprojects. The indicator related to public toilets was deleted due to no proposal from WSPs to construct public toilets.

- **Second Restructuring (Level 2 – October 29, 2019):** The project closing date was extended by five months from December 31, 2019 to May 31, 2020 to allow time for the completion of household connections and verification of output targets for subsidy payments. The project implementation was adversely affected by heavy rains in 2018, contractor delays in mobilizing resources and slow implementation of the resettlement action plans to compensate project affected people due to land acquisition and loss of assets (Restructuring Paper, Report No: RES36233, p.6). Because of the cancellation of two subprojects, US$0.73 million of project funds were cancelled and the target value for number of people benefiting from water connections was lowered from 94,5000 to 81,000. A new indicator was added to the results framework to monitor the project impact on mobilizing finance for development with a target value of US$12 million. Lastly, the subsidy disbursement schedule was revised to disburse funds to WSPs earlier in the construction stage and accelerate the disbursement rate. According to the revised scheme, the WSPs were to be paid 10 per cent of the subsidy upon securing the loan, 45 per cent upon verification by the IVA of completion of major works, and 45 per cent upon verification of the completion of household water and sanitation connections. The sustainability requirement to demonstrate service delivery as evidenced by three months of
continuous billing and receipt of payments for service under the project was deleted as a condition to receive 25 per cent of the subsidy amount.

- **Third Restructuring (Level 2 – May 14, 2020):** The project closing date was extended by six months from May 31, 2020 to November 30, 2020 to allow time for the completion of household connections and verification of output targets for subsidy payments. These activities were further delayed because of the onset of Covid-19 pandemic and the suspension of works in the largest subproject (Embu, US$4.5 million) between January and March 2020 following two incidents that resulted in two fatalities and one injury (Restructuring Paper, Report No:RES41417, pp.4-5).

**Dates:** The project was approved on November 13, 2014 after the signing of the Grant Agreement on September 5, 2014. The project became effective on December 3, 2014. The Mid-Term Review was conducted in February 2017. The original closing date was June 30, 2018. It was extended by two years and five months, and the project closed on November 30, 2020. The reasons for closing date extensions have been outlined in the project restructuring entries above.

**Disbursement Percentages:** The following disbursement percentages will be used in deriving the weights to be applied to the assessment of original and revised objectives in Outcome rating. The disbursed amounts are taken from the “Restructuring and/or Additional Financing” table on page 2 of the ICR.

<table>
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<tr>
<th>Project Objective Period</th>
<th>Disbursed Amount</th>
<th>Disbursement Percentage</th>
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<tbody>
<tr>
<td>Original Period</td>
<td>US$3.27 million</td>
<td>29.43 %</td>
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<tr>
<td>First Revision Period after February 2018</td>
<td>US$0.90 million</td>
<td>8.10 %</td>
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<tr>
<td>Second Revision Period after October 2019</td>
<td>US$6.94 million</td>
<td>62.47 %</td>
</tr>
<tr>
<td>Total</td>
<td>US$11.11 million</td>
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**3. Relevance of Objectives**

**Rationale**

The project objectives were highly relevant to the country context. The Government of Kenya aims at achieving universal access to improved water and sanitation services by 2030 under the country’s national development plan of Kenya Vision 2030. According to the latest water and sanitation services sector report* of Kenya’s Water Services Regulatory Authority (WASREB), water coverage in regulated areas increased from 53 percent in 2014 to 59 per cent in 2019 before dropping to 57 per cent in 2020 because of high population growth rate. At 31 liters per day, the average per capita water consumption per day is much below the 50-100 liters consumption estimated by the World Health Organization that would meet basic needs and prevent health concerns. In 2014, 15 per cent of the people in the regulated areas were connected to the sewage network. This ratio increased to 17 per cent in 2019 but dropped to 15 per cent in 2015. On the other hand, when non-network sanitation is included, the sanitation coverage steadily increased from 80 per cent in 2016—the earliest year the data were available—to 88 per cent in 2020. The objectives were adequately pitched for the development status in Kenya, and despite the innovative nature of the project design—commercial funds to be used for water and sanitation investments supported by output-based subsidies—and the lack of sufficient capacity at the 91 water service providers, it was
reasonable to expect the achievement of the objective because of the technical assistance support incorporated into the project design and the government’s commitment to the project.

The project objectives were aligned with the World Bank’s strategy as defined in the Country Partnership Strategy (CPS) for Kenya, FY14-FY18. (The CPS was extended beyond Fiscal Year 2018 under the performance review learning and the World Bank Group COVID-19 Crisis Response Approach Paper. The country partnership framework that will cover fiscal years 2021 and 2026 is under preparation.) The project sought to address the development problem of insufficient water and sanitation services in low-income areas by facilitating commercial loans to finance water and sanitation infrastructure investments through output-based subsidies and technical assistance. The first project objective to increase access to water corresponds to Outcome 5, Improved Social Service Delivery for Vulnerable Groups, Particularly Women of the CPS that aims to provide an additional 500,000 women with access to improved water sources (CPS, p.31). The second project objective to increase access to sanitation services corresponds to Outcome 8, Better Provision of Health and Sanitation Services by Counties of the CPS that aims at increasing the ratio of counties with improved sanitation services to 25 percent (CPS, p.34). Since poor access to water and sanitation services disproportionately impacts women and girls because of time loss in fetching water and health burdens, the project objectives were also aligned with the gender focus of the World Bank strategy (CPS, p.11).

The World Bank had sufficient country and sector experience in Kenya. The World Bank supported the development of the water sector through the Kenya Microfinance for Community Managed Water Project (P104075) between 2007 and 2013, which utilized output-based grants to increase water access in rural and peri-urban areas (PAD, p.14). The World Bank’s Water and Sanitation Service Improvement Project (P096367) was implemented between 2008 and 2019 and focused on increasing access to water and sanitation services by financing infrastructure investments. The Kenya Water and Sanitation OBA Fund for Low Income Areas Project—the subject of this review—was built on the experiences of these two projects and benefited from the World Bank-executed technical assistance activity, i.e., the Kenya Urban Commercial Financing for Water and Sanitation (P144507). The project’s approach was innovative in the sense that it only subsidized water and sanitation investments in low-income areas, excluding Nairobi, that were financed by commercial loans requiring water service providers to prepare bankable investment projects.

However, while the project objectives remained relevant throughout the project cycle and was a necessary response to a development gap in Kenya, a significant shortcoming was the lack of clarity in the objective’s formulation around what outcomes would be achieved through increasing access to water and sanitation services. The causal chain between funding and expected results was clear, albeit with most targets at output level, as the objective was closer to the output level, rather than the outcome level.

Overall, the relevance of the objectives is rated Substantial.


**Rating**

Substantial
4. Achievement of Objectives (Efficacy)

OBJECTIVE 1
Objective
To increase the number of people in low income areas with access to improved water supply service.

Rationale
Theory of Change for Objective 1
The project’s theory of change indicates that the project’s inputs, i.e., technical assistance and output-based grants, were to be used to support the water service providers in the preparation and implementation of bankable water investment subprojects and provide grants based on outputs to subsidize these subprojects. These activities would be expected to directly lead to the achievement of project outputs of increased numbers of household connections to the water network and public water points in low-income areas and improved upstream infrastructure to ensure water availability in project areas. In turn, these outputs would be expected to result in the outcome of more people in the targeted low-income areas having access to improved water. Overall, the causal pathways from inputs to outcomes were valid and direct, and the outcomes achieved could be attributed to the project's intervention. However, the expected outcomes were closer to output level in the results chain. The project's immediate impact on human development was captured by the theory of change as a long-term outcome, such as improved health and time saved for fetching water that could be used for money earning activities. Furthermore, the project's theory of change indicates that “improved sustainability of water supply” would be a long-term outcome of the project's intervention because the commercial financing requirement would be expected to ensure that only the subprojects that would be operated sustainably and generate revenue would be financed by commercial banks. Consequently, by facilitating commercial loans from banks for water infrastructure investments, the project's intervention could be expected to have a transformational impact on enabling an environment for private finance to support water sector as indicated in the theory of change (ICR, p.8).

Outputs
The project supported the preparation and implementation of seven water subprojects by six water service providers (WSPs)—Kisumu, Murang’a South (two subprojects), Murang’a Town, Mathira, Naivasha and Nol Turesh. The project's results framework captured the aggregate numbers of the following outputs:

- A total of 15,167 new households were connected to the water network. The original target at appraisal was 19,000.
- 40 public water points and yard taps were constructed. The original target was 140.

Outcomes
In the results framework, one indicator was defined for increase in the number of people with access to improved water.
• **Number of people in low-income urban areas provided with access to improved water sources under the project:** In the project area, an additional 84,408 people gained access to water through household connections and public water points installed under the project. The original target set at appraisal was 135,000 people.

Overall, the project's efficacy in achieving the project objective to increase the number of people in low-income areas with access to improved water supply service is rated Modest because of low achievement.

**Rating**
Modest

### OBJECTIVE 1 REVISION 1

**Revised Objective**
To increase the number of people in low income areas with access to improved water supply service (with amended indicators).

**Revised Rationale**
For the theory of change, please see Objective 1 above.

**Outputs**

At the first restructuring, target values of some of the indicators were revised down. The achievements of the outputs against the revised targets are as follows:

- A total of 15,167 new households were connected to the water network. The target was revised down to 17,104 at the first restructuring following the finalization of the subproject pipeline and the verification of the expected output targets by the independent verification agent.
- 40 public water points and yard taps were constructed. Because of the same reason given in the previous entry, the target value was revised down to 42.

**Outcomes**

The achievement of the only outcome indicator against the revised target was as follows:

- **Number of people in low-income urban areas provided with access to improved water sources under the project:** In the project area, an additional 84,408 people gained access to water through household connections and public water points installed under the project. Following the finalization of the subproject pipeline, the target value was revised down to 94,500 at the first restructuring.

Overall, the project's efficacy in achieving the project objective to increase the number of people in low-income areas with access to improved water supply service is rated Substantial.

**Revised Rating**
OBJECTIVE 1 REVISION 2

Revised Objective
To increase the number of people in low income areas with access to improved water supply service (with further amended indicators).

Revised Rationale
For the theory of change, please see Objective 1 above.

Outputs

At the second restructuring, target values of some of the indicators were further revised down. The achievements of the outputs against revised targets are as follows:

- A total of 15,167 new households were connected to the water network. The target was revised down to 14,500 at the second restructuring because of the cancellation of Thika WSP and Bomet WSP subprojects.
- 40 public water points and yard taps were constructed. Because of the same reason given in the previous entry, the target value was revised down to 40.

Additionally, the ICR reports the following outputs. These outputs were not captured by the results framework:

- **Kisumu WSP**: 1,519 new households were connected to the water network against the target of 1,500. The project activities included pipeline extension, too.
- **Murang’a South WSP**: 5,341 new households were connected to the water network under two subprojects against the target of 4,000. The project activities also resulted in a 6.2 kilometers (km) pipeline extension and construction of 14 public water points and seven yard taps in the town of Kenol Kabati under phase one and 3.7 km pipeline extension and the construction of two sedimentation tanks in the town of Sabasaba under phase two.
- **Murang’a Town WSP**: 1,285 new households were connected to the water network against the target of 1,266. The project activities also included the construction of a 14 km distribution line, one public water point, and one water storage tank.
- **Mathira WSP**: 1,417 new households were connected to the water network against the target of 1,400. The project activities also included the rehabilitation of a water tank and the replacement of 44 km of asbestos cement pipes and dilapidated galvanized iron pipes distribution network.
- **Naivasha WSP**: 1,596 new households were connected to the water network against the target of 1,500. The project activities also included the construction of a 54 km pipeline extension, one water storage tank, and ten public water points. Under this project, a pump house was rehabilitated, and four pumps were installed.
- **Nol Turesh WSP**: 4,009 new households were connected to the water network against the target of 4,000, and eight public water points and two water storage tanks were constructed.

Outcomes
The achievement of the only outcome indicator against the revised target was as follows:

- **Number of people in low-income urban areas provided with access to improved water sources under the project:** In the project area, an additional 84,408 people gained access to water through household connections and public water points installed under the project. After the cancellation of Thika WSP and Bomet WSP subprojects, the target value was revised down to 81,000 at the second restructuring. It was assumed that 5 people would gain access to water from a household connection, 286 people from a public water point and 40 people from a yard tap. However, the project's estimate of 5 people per household is different than the WASREB's estimate of 3.9 people per household (WASREB Impact 2019/20 report, p.45). It was also assumed that half of the beneficiaries would be women—42,204. Therefore, the project contributed to the achievement of target of increasing the number of women with access to improved water by 500,000 specified in the Country Partnership Strategy FY14-FY18.

The above indicator was closer to the output level and did not capture the development impact of the project's intervention. Based on the reports prepared by the independent verification agent (IVA) for each subproject and WASREB's annual reports, the ICR reports the following outcomes that were not captured by the results framework:

- The project is expected to have a positive impact on the household budgets by lowering the cost of water. The average cost of water in the serviced areas is US$0.85 per cubic meter compared to US$1.12 per cubic meter from private vendors. According to the IVA reports, the cost of water from private vendors in the Nol Turesh service area could be as high as US$10.0 per cubic meter (ICR, p.13).
- According to IVA reports, waterborne disease incidences, mainly diarrhea, decreased in the project areas (ICR, p.44). The decrease in the percentage of beneficiaries reporting the occurrence of diarrhea before and after the projects are as follows: (i) Naivasha, from 41.5 per cent to 35.2 per cent; (ii) Murang’a South from 36.5 per cent to 11.7 per cent; (iii) Murang’a from 17 per cent to 15 per cent; (iv) Kisumu from 22.5 per cent to 6 per cent; (v) Mathira from 36 per cent to 15.2 per cent; and (vi) Nol Turesh from 2 per cent to 0.02 per cent. The reduction in waterborne disease occurrences is expected to result in lower medical costs and increased productivity; hence, higher income for households.
- According to the WASREB’s Impact 2014/15 report, households in Kenya without a water connection spent an average 150 hours annually for fetching water (ICR, pp.44-45). Given that most of the WSPs supported by the project supply water above 20 hours per day—except Nol Turesh where average duration of water supply per day is seven hours and in Murang’a South 13, which is slightly higher than the target service standard of 12 hours per day (WASREB Impact 2019-20 Report, p.41)—it could be assumed that majority of the beneficiaries do not need to spend time for fetching water anymore and could use that time for productive purposes. However, project’s impact on eliminating the time required for fetching water was not captured in the surveys conducted by the IVA.

Overall, the project’s efficacy in achieving the project objective to increase the number of people in low-income areas with access to improved water supply service is rated High.

**Revised Rating**

High
OBJECTIVE 2

Objective
To increase the number of people in low income areas with access to sanitation service.

Rationale
Theory of Change for Objective 2

The project’s theory of change for Objective 2 indicates that the project’s inputs, i.e., technical assistance and output-based grants, were to be used to support the water service providers in the preparation and implementation of bankable sanitation investment subprojects and provide grants based on outputs to subsidize these subprojects. These activities would be expected to directly lead to the achievement of project outputs of increased numbers of household connections to the sewage network in low-income areas and improved upstream infrastructure to ensure wastewater treatment in project areas. In turn, these outputs would be expected to result in the outcome of more people in the targeted low-income areas having access to sanitation service. Overall, the causal pathways from inputs to outcomes were valid and direct, and the outcomes achieved could be attributed to the project’s intervention. However, the expected outcomes, similar to those of Objective 1, were closer to output level in the results chain. The project’s immediate impact on human development was captured by the theory of change as a long-term outcome, such as improved health. Furthermore, the project’s theory of change indicates that “improved sustainability of sanitation infrastructure” would be a long-term outcome of the project’s intervention because the commercial financing requirement would be expected to ensure that only the subprojects that would be operated sustainably and generate revenue would be financed by commercial banks. Consequently, by facilitating commercial loans from local lenders for sanitation infrastructure investments, the project’s intervention could be expected to have a transformational impact on enabling an environment for private finance to support the sanitation sector as indicated in the theory of change (ICR, p.8).

Outputs

The project supported the preparation and implementation of two sanitation subprojects by Embu and Nyeri WSPs. The project’s results framework captured the aggregate number of the following output:

- A total of 8,071 new households were connected to the sewage network. The original target at appraisal was 1,000, which was revised up to 7,906 at the first restructuring following the finalization of the subproject pipeline and the verification of the expected output targets by the independent verification agent. In the Embu WSP service area, 5,108 new households were connected to the sewage network against the target of 5,000 and in the Nyeri WSP service area 2,963 new households against the target of 2,906.

- Originally the project was expected to finance the construction of 30 public toilets. But this indicator was deleted at the first restructuring because of no proposal from WSPs to construct public toilets. The increase in the significant number of household connections

The following outputs are reported in the ICR or in the Borrower’s ICR without target values:

- Embu WSP: The project financed the construction of 32 km of sewer lines and six sewer treatment ponds. These investments increased the wastewater treatment capacity of the utility from 800 cubic meters per day to 2,000 cubic meters.
• Nyeri WSP: The project financed the construction of 23 km of sewer lines and one sewer pumping station. This resulted in the optimization of the 6,000 cubic meter per day capacity wastewater treatment plan by increasing the amount of wastewater treated daily from 3,000 cubic meters to 4,500 cubic meters.

Outcomes

In the results framework, one indicator measured the increase in the number of people with access to improved sanitation service.

• Number of people in low-income urban areas provided with access to improved sanitation facilities under the project: In the project area, an additional 40,355 people gained access to improved sanitation through household connections installed under the project. The original target set at appraisal was 15,000 people. Following the finalization of the subproject pipeline, the target value was revised up to 39,500 at the first restructuring. It was assumed that 5 people would gain access to improved sanitation from a household connection. However, the project’s estimate of 5 people per household is different than the WASREB’s estimate of 3.9 people per household (WASREB Impact 2019/20 report, p.45).

As was the case in the measurement of the outcome for Objective 1, the above indicator was closer to the output level and did not capture the development impact of the project’s intervention. Based on the reports prepared by the independent verification agent for each subproject, the ICR reports the following outcomes that were not captured by the results framework:

• In the Embu WSP project area, the occurrence of diarrhea incidence decreased from 36 per cent before the project to 3 per cent after the project.
• In the Nyeri WSP project area, the occurrence of diarrhea incidence decreased from 27 per cent before the project to 15 per cent after the project.
• The reduction in waterborne disease occurrences because of the project’s intervention is expected to result in lower medical costs and increased productivity; hence, higher income for households.
• Access to sewage network also resulted in a decrease in sanitation expenses. The before and after project surveys conducted in Nyeri showed that on average households spent US$8.7 less per month for sanitation because of the elimination of maintaining non-networked sanitation facilities, such as pits (ICR, p.45). Data for Embu were not available.

Overall, the project’s efficacy in achieving the project objective to increase the number of people in low-income areas with access to sanitation service is rated High*.

* Because the target value of the outcome indicator was revised upward at the first restructuring while project commitments remained the same, a split rating for this objective was not applied, and the achievement of this objective is assessed based on the revised outcome target.

Rating
High
OVERALL EFFICACY

Rationale
The project was modestly successful in achieving the target set for increasing the number of people with access to improved water supply. On the other hand, the project was highly successful in achieving the target set for increasing the number of people with access to sanitation services. Overall, the project’s efficacy in achieving the project objectives against the original outcome targets is rated Substantial.

Overall Efficacy Rating
Substantial

OVERALL EFFICACY REVISION 1

Overall Efficacy Revision 1 Rationale
The project was substantially successful in achieving the revised targets set at the first restructuring for increasing the number of people with access to improved water supply and highly successful for sanitation services. Overall, the project’s efficacy in achieving the project objectives against the revised outcome targets is rated Substantial.

Overall Efficacy Revision 1 Rating
Substantial

OVERALL EFFICACY REVISION 2

Overall Efficacy Revision 2 Rationale
The project was highly successful in achieving the revised targets set at the second restructuring for increasing the number of people with access to improved water supply and sanitation services. Hence, the project’s efficacy in achieving the project objectives against the revised outcome targets is rated High.

Overall Efficacy Revision 2 Rating
High

5. Efficiency

Economic Analysis
Because the pipeline of subprojects to be financed under the project was to be finalized after the start of project implementation, a “with project” and “without project” economic analysis was conducted at appraisal based on four sample subprojects with pre-feasibility studies. Of these four subprojects—Ruiru Juja, Meru, Murang’a Town and Mathira—the last two were later financed by the project. The assumptions used in the cost-benefit analysis were relevant. The benefits expected from the project’s intervention were health benefits from averted cases, decreased health expenditures, productivity gains because of improved health, avoided maintenance costs of non-networked sanitation facilities, productive use of time previously spent for fetching water, and income increase because of reduced cost of water (PAD, pp.66-67). Some other benefits were not included in the analysis because of difficulty in collecting data, such as increased school attendance due to better health. Project costs consisted of investment costs including interest during construction, annual operation and maintenance costs for the 25-year economic life of subprojects, interest cost for the term of financing, and administrative and technical assistance costs. The overall economic rate of return (ERR) calculated for the four sample subprojects at appraisal was 34 percent, and the net present value (NPV) was US$7.4 million at a discount rate of 10 percent. Subproject specific ERRs and NPVs were not reported in the project appraisal document.

At project closing, the economic analysis was repeated based on the assumptions defined at appraisal. Project specific reliable values from the surveys conducted by the independent verification agent (IVA) and data from Kenya Demographic Health Surveys were used for ex-post economic analysis. The overall ERR calculated at project closing was 19.8 per cent and the NPV was US$13.9 million at a discount rate of 5 per cent that was lower than the discount rate of 10 per cent used at appraisal. The project team (email dated September 23, 2021) noted that “while the final ERR at 19 percent is indeed significantly lower than that at appraisal, the average ERR of water supply and sanitation projects financed by the World Bank worldwide between 1980 and 2004 was 9 percent” and informed that the 5 percent discount rate was proposed by the World Bank in the Discounting Costs and Benefits in Economic Analysis of World Bank Projects, which was published two years after the project was approved. At project closing, subproject level ERRs were also calculated. Four of these subprojects had ERRs lower than 10 per cent: Embu 9 per cent, second phase of Murang’a South 8 per cent, Kisumu 8 per cent and Mathira 4 per cent. The combined cost of these four subprojects constituted 60 percent of the overall investment cost. Remaining five subprojects had substantially higher ERRs: Nyeri 18 per cent, Naivasha 21 per cent, Nol Turesh 21 per cent, Murang’a Town 27 per cent and first phase of Murang’a South 28 per cent.

Financial Analysis

At appraisal, the financial analysis was based on financial returns accruing to the sample four water service providers. The assumptions used for financial analysis were defined conservatively, such as interest rate of 17 per cent, inflation rate of 7 per cent, and bill collection rate of 90 per cent. However, the assumption for construction period, i.e., two years, was overly optimistic. The Financial Internal Rate of Return (FIRR) estimated for the project at appraisal was 22 per cent, but without the subsidy provided by the project up to 60 per cent of the subproject cost, the project was not expected to generate positive returns.

Using the same methodology and actual figures, a financial analysis was conducted at project closing. The FIRR at project closing was calculated at 12.3 percent that was higher than the weighted average cost of capital of 9.6 per cent but significantly lower than the 22 per cent FIRR calculated at appraisal. The ICR states that “This could be explained by the fact that the four utilities considered at appraisal stage did not proceed with the program or scaled down their investments for various reasons. Meru Water Company and Ruiru-Juja subprojects, which demonstrated the highest potential, dropped from the project, while Murang’a Town Water Company cancelled some of the financing agreements due to political interference” (ICR, p.46). Similar to the
pattern in the subproject ERRs, the financial analysis conducted at subproject level resulted in a wide range of FIRRs: Mathira minus 2 per cent, Kisumu 4 per cent, second phase of Murang’a South 8 per cent, Embu 10 per cent, Nol Turesh 11 per cent, Nyeri 14 per cent, first phase of Murang’a South 16 per cent, Murang’a Town 20 per cent and Naivasha 22 per cent (ICR, pp.46-47). The difference in subproject FIRRs can be attributable to concentration of population in different service areas and per capita investment cost. The project team commented that “in the water sector generally most utilities benefiting from World Bank loans have negative returns and struggle to cover operating costs, so this project is quite a positive outlier” in achieving financial returns (email dated September 23, 2021).

Operational and Administrative Efficiency

Shortcomings in procurement and disbursement adversely affected project efficiency. The utilities did not have the capacity to draft terms of reference for the hiring of consultants for capacity building. This shortcoming was not addressed during project preparation and resulted in overall implementation delays “as [sub]projects could not secure financing until the technical assistance for developing financial proposals was in place” (ICR, p.21). Consequently, construction of subprojects was delayed resulting in a low disbursement rate because, according to the original disbursement schedule, 65 per cent of subsidies would be paid to the utilities upon the verification of the achievement of household connections and 25 per cent against demonstrated service delivery for three months. These inefficiencies in project implementation led to a total of 23 months of project closing date extension under two restructurings and changes in the disbursement schedule. Delays in processing of project funds by the Ministry of Water by two to three months slowed down project implementation and increased the interest costs the utilities incurred on commercial bank loans (ICR, p.21). The lack of capacity at the National Land Commission (NLC) responsible for land acquisition for public use resulted in payment delays to project affected persons (PAPs) in Embu, Nyeri, and Mathira. Following the appointment of the NLC Chairman and commissioners only in November 2019, payments to PAPs could be processed and project activities were completed. The devolution of power to local governments within the framework of the constitutional change in 2010 required the introduction of a new water law that was passed by the parliament in 2016. Because of this change, each county had to issue a letter of support to the subprojects in their jurisdictions so that the utilities could borrow under the new law. The disagreements between the Kiambu County administration and the Thika WSP and the failure of the county administration to process a grant to the Bomet Water Company under this new structure led to the cancellation of the subprojects of these two WSPs. Lastly, there were two fatalities during the implementation of the Embu WSP subproject one in September 2019 and another in January 2020 because of shortcomings in the implementation of operational health and safety measures (ICR, p.25). In addition to these irreversible human losses, these incidents resulted in a suspension of project activities that were further delayed by the onset of COVID-19 pandemic in March 2020.

Overall, although there were shortcomings in procurement, disbursement, flow of funds, and the implementation of safeguards policies that resulted in project implementation delays, and the economic rates of return of four subprojects corresponding to 60 per cent of the total investment cost was below 10 per cent, the project was completed without a cost over-run, and compared to the average ERR of 9 percent for water supply and sanitation projects financed by the World Bank worldwide, the overall ERR of 19 percent estimated at project closing was significantly high. Overall, the project’s efficiency in achieving the project objectives is rated Substantial, but barely so.

Efficiency Rating
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:

<table>
<thead>
<tr>
<th>Rate Available?</th>
<th>Point value (%)</th>
<th>*Coverage/Scope (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal</td>
<td>✔</td>
<td>34.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Applicable</td>
</tr>
<tr>
<td>ICR Estimate</td>
<td>✔</td>
<td>19.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

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

### 6. Outcome

The relevance of project objectives to country context and the World Bank Strategy for Kenya was substantial. The project’s efficacy in achieving the project objectives against the original and the revised outcome targets after the first restructuring is rated Substantial. The project's efficacy in achieving objectives against the revised targets after the second restructuring is rated High. The project’s efficiency in achieving project objectives was substantial, but barely so, because of shortcomings in operational and administrative efficiency of the project. A split rating was applied as shown in Table 2 below. Overall, the project’s outcome is rated Satisfactory.

<table>
<thead>
<tr>
<th>Relevance of Objectives</th>
<th>Original objectives</th>
<th>First Revision</th>
<th>Second Revision</th>
</tr>
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<tbody>
<tr>
<td><strong>Efficacy</strong></td>
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<td>Substantial</td>
<td>High</td>
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<tr>
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<table>
<thead>
<tr>
<th>Outcome Rating Value (a)</th>
<th>Satisfactory</th>
<th>Satisfactory</th>
<th>Satisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Disbursed (US$ million)</td>
<td>3.27</td>
<td>0.90</td>
<td>6.94</td>
</tr>
<tr>
<td>Disbursement (%) (b)</td>
<td>29.43%</td>
<td>8.10%</td>
<td>62.47%</td>
</tr>
<tr>
<td>Weight Value (a)x(b)</td>
<td>1.4715</td>
<td>0.405</td>
<td>3.1235</td>
</tr>
<tr>
<td>Total weights</td>
<td>5.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overall Outcome Rating**

Satisfactory (5)

### 7. Risk to Development Outcome

**Financial:** The financial viability of the water service providers (WSPs) constitutes a moderate risk for the sustainability of water supply and sanitation services. Excluding Nol Turesh and Embu, where revenue
collections rates are 77 per cent and 83 percent, respectively, other water service providers supported under the project have revenue collection rates equal or higher than the target rate of 85 per cent set by WASREB. All eight utilities have operation and maintenance (O&M) coverage rates of 100 per cent or above with an average rate of 114 per cent. These rates are high compared to other countries with similar economic development level, but lower than the target set by WASREB, i.e., between 130 and 150 per cent, to achieve full O&M coverage including debt payments and cost of small investments. However, the high ratio of non-revenue water (NRW) constitutes a concern for financial sustainability. The average NRW ratio in eight WSPS is 41 per cent. This target set by WASREB is 20 per cent. If measures are not taken, high ratio of NRW may force the WSPs to invest more in new water production facility that could adversely affect their financial situation.

**Technical:** Technical risk to development outcome is low. Subprojects were implemented using proven water supply and sanitation technologies. The eight WSPs have sufficient technical capacity to operate and maintain the newly built infrastructure. Unless the financial situation of the WSPs deteriorate, it is a reasonable expectation that the WSPs will adequately operate and maintain the systems.

**Government ownership:** The Government of Kenya is highly committed to achieve universal access to piped water and sanitation services. After the devolution of power to the counties following the adoption of new Kenyan constitution in 2010, there were some political conflicts between the county administrations and the boards of the WSPs. Such conflicts are not widespread, and the counties are also committed to maintaining the achievement in water and sanitation coverage and further increasing it. The risk to the sustainability of project’s achievements because of weak government commitment is low.

### 8. Assessment of Bank Performance

**a. Quality-at-Entry**

At project entry, the goals of improvement of public health and reduction of poverty by expanding water and sanitation services in the low-income areas in accordance with the targets set in the national Kenya Vision 2030 program was of high strategic priority. The project’s approach was straightforward, i.e., construction of water supply and sanitation networks and installation of household connections, and public water points and toilets. The subsidies provided by the project were to help the WSPs to pay up to 60 per cent of the loans back to commercial banks while keeping the tariff affordable by poor households. The economic analysis at appraisal were sound and based on appropriate assumptions. The investment activities to be supported by the project were sufficient to achieve the project objectives to increase the number of people with access to water supply and sanitation services. The project was also to provide technical support to the WSPs for the preparation of bankable subprojects to be financed by commercial banks. But the WSPs had insufficient capacity to prepare terms of references for the selection of consultants who were to provide technical support to the WSPs. This capacity issue was not addressed at appraisal and led to substantial delays during project implementation. The expectation that the construction of each subproject would take two years was overly ambitious. The subsidy payment scheme—10 per cent at the time of the signing of the commercial, 65 per cent after the completion of the civil works and 25 per cent after the demonstration of service delivery for three months—that was designed based on the assumption that the subprojects would be completed within two years was not realistic and proved to be a major obstacle for disbursing project funds during implementation. The monitoring and evaluation design was sufficient to measure the project’s results, which were closer to the
output level in the results chain (see section 9. M&E Design, Implementation and Utilization below). The results framework did not capture the human development impact of the project’s intervention although such information was to be available through the surveys to be conducted by the independent verification agent (IVA) for each subproject. The risks were adequately assessed, and mitigation measures were identified, except the social and environmental risk. As the subproject pipeline was not finalized at appraisal, only an Environmental and Social Safeguard Framework and a Resettlement Policy Framework were prepared at appraisal. The lack of institutional capacity to implement the World Bank’s safeguards policies was not adequately identified at appraisal (see section 10.a Safeguards below). The project benefited from the lessons learned from prior projects implemented in the water sector in Kenya, such as utilization of commercial loans for financing capital investments in water infrastructure and targeting creditworthy WSPs so that commercial loans could be secured.

Because of moderate shortcomings in identification, preparation, and appraisal of the project, the quality-at-entry is rated Moderately Satisfactory.

**Quality-at-Entry Rating**
Moderately Satisfactory

### b. Quality of supervision

There was continuity at the project team. One of the last two task team leaders (TTL) of the project was with the project from appraisal to project closure as co-TTL or TTL. Supervision missions were regularly held every six months until the onset of COVID-19 in March 2020 after which the project team virtually supervised project implementation by communicating with subproject teams and weekly calls with WTSF. The candor and quality of performance reporting in the Implementation Status and Result Reports and Aide Memoires were high. Because the expected project results were closer to the output level in the results chain, the project team’s focus was on the achievement of the outputs rather than the human development impact of the project’s intervention; surveys conducted by the independent verification agent provided such development data, which were briefly reported in some aide memoirs as positive social impacts. The project team’s supervision of fiduciary and safeguard aspects of the project was adequate. Project team closely followed the implementation of safeguards policies and required the project implementation entity and WSPs to take necessary measures to ensure compliance. Although there was steady improvement in the implementation of safeguards policies during project implementation, issues with payments to project-affected persons continued through to project closing because of lack of key staff at the National Land Commission (see section 10.a Safeguards below). Following the passage of a new Water Act in 2016, the project team proactively commissioned a legal opinion that helped create a framework for continued borrowing by the WSPs, which were placed under the newly formed counties in line with the devolution of powers defined in the new constitution (ICR, p.22).

The quality of supervision is rated Satisfactory.

**Quality of Supervision Rating**
Satisfactory
Overall Bank Performance Rating
Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The project objectives were clearly specified and the causal pathways from inputs to outcomes were valid and direct, but the expected outcomes of increased number of people with access to water supply and sanitation services were closer to the output level in the results chain. The development impact of the project was not captured by the results framework at appraisal, such as improved health and increased household income. The results framework did not include any indicator measuring the sustainability of water and sanitation services. The intermediate results indicators were to capture the number of new household connections to the water and sanitation networks and the number of public water points and toilets constructed under the project. These measurements constituted the basis for the number of people with access to these services. As the objectives were closer to the output level, the indicators measuring the increase in access to water supply and sanitation services adequately encompassed the outcomes of the project objective statement. The indicators were specific, measurable, achievable, relevant, and time-bound. Targets for the indicators were defined based on four sample subprojects to be revised after the finalization of the subproject pipeline during project implementation. The surveys to be conducted by an independent verification agent (IVA) before the start of each subproject to measure baselines, after the completion of household connections, and the verification of service delivery for three months for processing the subsidy payments were to support the M&E of the project. These surveys were expected to provide more granular data including the development impact of the project. Institutionally, the M&E design and arrangements were adequately embedded.

b. M&E Implementation
After the finalization of the subproject pipeline, the target values of the indicators were revised to reflect the outputs expected as a result of the project’s intervention. The indicator measuring the number of public toilets constructed under the project was deleted because no subproject included the construction of such toilets. New indicators were added to the results framework, such as “local private capital mobilized,” but this indicator was not relevant to assess the achievement of the project objectives, but useful to measure the effectiveness of the project in mobilizing finance for development. The IVA carried out the collection of baseline figures before the start of each subproject and verified the completion of project activities and household connections according to the revised disbursement schedule. Surveys conducted by the IVA included information about human development indicators, such as incidences of waterborne diseases and income increase from lower cost of water and lower household expenditure on sanitation, but these indicators were not added to the results framework. The indicators in the results framework were measured by the IVA using secondary data and verification in the field. As these indicators measured the number of new household connections to the water and sanitation networks and the number of public water points, their measurement was straightforward, and the data collected were reliable. However, when calculating the number of beneficiaries, it was assumed that there were on average five people in each household whereas the WASREB Impact 2019-20 report’s assumption is 3.9 people per household.
c. M&E Utilization

The M&E findings were properly communicated to project stakeholders of WTSF, WASREB, Ministry of Water, the commercial banks, and the World Bank. M&E activities resulted in two restructurings, while the third one was necessitated by the onset of COVID-19 pandemic and suspension of some project activities because of two fatalities. The M&E data were used to provide evidence of achievement of project results, but as these were closer to the output level, the focus was more on the outputs rather than the human development impact of the project's intervention, although IVA surveys provided an adequate channel to capture these development impacts. The M&E findings are expected to influence the formation of a fund to be used to facilitate commercial financing for water and sanitation investments.

Overall, as the project objectives were closer to the output level, the M&E system as designed and implemented was sufficient to assess the achievement of the objectives and test the links in the results chain; therefore, the M&E quality is rated Substantial, but there were shortcomings in capturing the human development impact of the project’s intervention and the sustainability of the services.

M&E Quality Rating
Substantial

10. Other Issues

a. Safeguards

The project was assigned an environment Category B under Environmental Assessment (OP/BP 4.01) and triggered the Involuntary Settlement (OP/BP 4.12) safeguard policy.

Environmental Assessment (OP/BP 4.01): The environmental impact of project activities was expected to be site specific, limited, and reversible. To screen subprojects and establish mitigation measures to address potential environmental impacts of the project, an Environmental and Social Management Framework (EMSF) was prepared and disclosed in Kenya by the Water Service Trust Fund (WSTF) and on the World Bank’s InfoShop on November 13, 2013. Subproject specific Environmental and Social Impact Assessments (ESIAs) were prepared after the finalization of subproject pipeline during project implementation, but some ESIAs did not initially specify how Environmental and Social Management Plans (ESMPS) were to be implemented (Aide Memoire February 2016, p.9). There were some shortcomings in the implementation of the environmental safeguard policy that were addressed in due course, such as fencing of the waste treatment ponds during construction and insufficient availability of personal protective equipment to workers. An environment, health and safety advisor was appointed to supervise the implementation of the safeguard policy, but two fatalities and one injury occurred at the Embu project site in September 2019 and January 2020. Following these incidents, the World Bank and the WSTF agreed on an action plan to improve the operational health and safety of project sites. Upon the completion of the measures listed in the action plan, the project activities resumed at Embu project site in March 2020. There
were also delays in restoring project-affected sites after works were completed. (Aide Memoire June 2019, p.4).

**Involuntary Settlement (OP/BP 4.12):** The project triggered this policy because of the possibility of land acquisition for the construction of water supply and sanitation infrastructure, such as elevated water tanks and treatment facilities. Although no permanent resettlement was expected because of the project activities, compensation was expected to be paid to persons affected by the installation of underground water and sewer pipes passing through their land. A Resettlement Policy Framework was prepared and disclosed in Kenya by the Water Service Trust Fund (WSTF) and on the World Bank’s InfoShop on November 13, 2013. Resettlement Action Plans (RAPs) were prepared for six subprojects that required compensation to 433 persons affected by the project (PAPs). The lack of capacity at the National Land Commission (NLC) that was legally mandated to acquire private land for public use led to substantial delays in processing payments to the PAPs. These delays adversely affected project implementation since project activities could not start prior to the completion of the payments. Upon the appointment of the NLC chairman and commissioners in November 2019, processing of payments to PAPs improved. At project closing, payments to 399 PAPs were completed, but 11 were still pending. Funds for those 11 PAPs were deposited to an escrow account at a commercial bank. The remaining 23 PAPs could not be traced. Funds for those PAPs were deposited with the NLC for future payments if they are claimed.

### b. Fiduciary Compliance

**Financial Management**

The Water Services Trust Fund (WSTF), the project implementation entity, was appraised to have sufficient financial management capacity to manage the grant. Its financial unit was headed by a qualified manager. While the funds were expected to flow simply through a designated account at the Treasury to the project account of WSTF at a commercial bank, there were significant delays in the flow of funds because of the Ministry of Water’s slow processing of each application. These delays slowed down the implementation of project activities and resulted in increased interest costs that the utilities incurred on commercial loans (ICR, p.21). The project’s interim financial reports were satisfactory to the Bank, but there were occasional delays in their submittal. According to the grant agreement (p.12), the recipient was to have the project’s financial statements audited upon the request of the World Bank, as such audits were not required for output-based aid projects (ICR, p.25). An audit report of the project’s financial statements was submitted to the Bank with delay in August 2019 covering the periods ending on June 30, 2016, 2017, and 2018. A second audit report covering the period ending June 30, 2019 was submitted in December 2020 with one year delay and the last audit report covering the period ending on June 30, 2020 was submitted in December 2020 before the submission deadline. All three audit reports were unqualified, but the first report raised the possibility of ineligible expenditures due to insufficient information from the utilities and the WSTF (Aide Memoire, February 2020, p.3) or lack of supporting documents for such expenditures. The second and third audit reports highlighted the following weaknesses in the financial management: (i) incorrect presentation and disclosure of financial statements; (ii) failure in disclosing pending bills; and (iii) misclassification of expenses; (iv) noncompliance with the new value-added tax of 14 per cent declared during the COVID pandemic; (v) failure in following the subsidiary agreement in processing payments to three water service providers; and (vi) failure to record a payment of project management gratuity in the general ledger although it was posted in the cashbook. The WSTF’s action plan to address these shortcomings was found acceptable by the World Bank. However, a potential misuse of project funds.
because of irregular award of a contract was also noted in the final audit report (see the section on Procurement below). At project closing, all project funds were accounted for.

**Procurement**

Procurement was conducted according to the World Bank guidelines and mostly followed competitive bidding. However, as noted in the Efficiency section above, procurement was substantially delayed at the start of the project because of lack of capacity at the utilities to draft terms of references for the hiring of consultants. The delay in the preparation of subprojects’ feasibility studies because of the issues in scheduling, coordinating, and supervising the activities carried out by individual consultants also resulted in delayed procurement. A review of the transfer of subsidies at Kisumu WSP revealed an irregular award of contract. The awarded bidder did not satisfy the following requirements in its bid: (i) a document showing line of credit from any bank to demonstrate access to sufficient liquid assets to complete the construction; (ii) insufficient information about the bidder’s representative and key personnel; and (iii) failure to demonstrate possession of construction equipment specified in the tender documents. Lastly, the addendum issued by WSTF in May 2019 that extended the contract for the independent verification agent (IVA) for twelve months did not comply with the terms of the contract; it was issued after the expiration of the contract and the IVA was not notified of such an extension according to the provisions of the contract.

**Disbursement**

Because of the delays in procurement and the payment of 90 per cent of the subsidies after the completion of subprojects, the disbursement was very slow. After the revision of the disbursement schedule, disbursement improved. At project closing, the project disbursed 73 percent of the funds. At the end of the disbursement grace period, which was four months after project closing, the disbursement rate increased to 90 per cent. However, in February 2021, the Ethics and Anti-Corruption Commission of Kenya opened an investigation because of the allegations of misappropriation of funds for the subproject implemented by Nol Turesh. At the time of the writing of this review, the investigation was ongoing.

c. **Unintended impacts (Positive or Negative)**

   None.

d. **Other**

   **Mobilizing Finance for Development**

   The project was successful in mobilizing financing for water and sanitation infrastructure investments in low-income urban areas. The project supported the water service providers (WSPs) in the preparation of ten projects, and eight of them secured commercial loans from three local banks on market terms amounting to US$12.16 million. The project supported WSPs in working with commercial banks, while addressing the unfamiliarity of banks’ staff in water sector and appraising water projects. The project had a transformational effect that at project closing there was a pipeline of US$15 million water and sanitation subprojects that could be financed by commercial loans and increased appetite of local banks to finance such cash generating sustainable projects.
11. Ratings

<table>
<thead>
<tr>
<th>Ratings</th>
<th>ICR</th>
<th>IEG</th>
<th>Reason for Disagreements/Comment</th>
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</thead>
<tbody>
<tr>
<td>Outcome</td>
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<td></td>
</tr>
<tr>
<td>Bank Performance</td>
<td>Satisfactory</td>
<td>Moderately Satisfactory</td>
<td>There were moderate shortcomings in identification, preparation, and appraisal of the project; therefore, the quality at entry is rated Moderately Satisfactory. The quality of bank supervision is rated Satisfactory. Overall, the bank performance is rated Moderately Satisfactory.</td>
</tr>
<tr>
<td>Quality of M&amp;E</td>
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<td>Substantial</td>
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<tr>
<td>Quality of ICR</td>
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12. Lessons

This review has drawn three lessons based on the ICR incorporating material in section 5. Lessons and Recommendations of the ICR.

**Provision of technical assistance support and output-based grants to water utilities can be a sustainable model for mobilizing private finance for water supply and sanitation infrastructure investments to increase access.** Through technical assistance, the project supported financially stronger and well-managed water service providers (WSPs) to prepare bankable water supply and sanitation subprojects to be financed by commercial banks. The banks determined financial and operational viability of each subproject to provide commercial financing. Although the output-based grants were not tied to the commercial loans, most of the WSPs used grants to pay off a part of the loans to decrease the financing costs and provide affordable services to customers by eliminating the need to raise tariffs. Availability of commercial financing for water supply and sanitation infrastructure investments also eases the debt burden on the central government and makes the use of limited government funds possible for increasing access in the service areas of financially weaker water utilities that could not secure commercial financing. Given the continued interest of commercial banks to continue lending in this model, a project pipeline of US$15 million was already identified at project closing that would be eligible for commercial financing.

**Rigid results-based financing criteria can adversely affect disbursement and project efficiency.** Originally, the disbursement of 65 per cent of the output-based grants was conditional upon the achievement of the household connections and 25 per cent upon the demonstration of service delivery for three months. However, to connect households to water supply and sanitation services, the WSPs invested in significant upstream water supply and sanitation infrastructure during which the WSPs could not benefit from the grants to pay off a part of the commercial loans reducing
some of the financing costs. This resulted in a very low disbursement rate until the last implementation year of the project, increased the financial burden on the WSPs because of accrued interest and lowered project’s efficiency.

An early identification of consultants to be hired under the project to support water utilities in the preparation of subprojects can prevent lengthy delays in project implementation. Consultants to be hired under the project were to provide technical assistance support to the WSPs in the preparation of bankable subprojects. However, the WSPs did not have the capacity to draft the terms of reference for hiring these consultants. Consultant procurement process took longer than expected and consequently led to delays in securing financing for subprojects, completing subprojects, and disbursing project funds. The WSPs could have also benefited from such pre-qualified consultants in reaching out to commercial banks early in project implementation and address the unfamiliarity of the banks’ staff with the water sector.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR is candid and provides a detailed overview of the project. The report is internally consistent; there is a logical linking and integration of various parts of the reports. While it is mostly consistent with the World Bank guidance, the sections on the implementation of environmental safeguard policy and the quality of bank supervision could have benefited from a more detailed discussion. While the report sufficiently emphasizes how activities inform results, it is focused on what occurred as a consequence of the project that were mostly at the output level. On the other hand, there is a genuine effort to provide information about the human development impact of the project’s intervention based on the data collected by the independent verification agency surveys. The evidence is credible and appropriately referenced. The ICR including its annexes presents a sufficient base to support the achievements in increasing the number of people with access to water and sanitation services. The economic and financial analyses are very well conducted and provides more information about the human development outcome of the project than the main text. However, the narrative in the efficiency section does not support a substantial rating; the shortcomings in operational and administrative efficiency are not adequately explained. The lessons are based on evidence and analysis and mostly respond to the specific experiences and findings of the project.

a. Quality of ICR Rating

Substantial