



1. Project Data

Project ID P123204	Project Name UG-Water Mgmt & Dev. Project	
Country Uganda	Practice Area(Lead) Water	
L/C/TF Number(s) IDA-51270	Closing Date (Original) 31-Dec-2018	Total Project Cost (USD) 121,598,761.75
Bank Approval Date 26-Jun-2012	Closing Date (Actual) 31-Dec-2018	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	135,000,000.00	0.00
Revised Commitment	133,822,379.26	0.00
Actual	121,598,761.75	0.00

Prepared by Katharina Ferl	Reviewed by Dileep M. Wagle	ICR Review Coordinator Ramachandra Jammi	Group IEGSD (Unit 4)
--------------------------------------	---------------------------------------	--	--------------------------------

2. Project Objectives and Components

a. Objectives

According to the Financing Agreement of May 22, 2012 (p.5) the objective of the project was “to improve: i) integrated water resources planning, management and development; and ii) access to water and sanitation services in priority urban areas.” The objective in the Project Appraisal Document (PAD) (p. vii) was similar except that it also stated “the objective of the project was “to improve i) integrated water resources planning, management and development; and ii) access to water and sanitation services in priority areas. The project



will contribute to higher level goals of sustaining natural resources, improving service delivery, and increasing economic productivity.”

This validation will use the objective as stated in the Financing Agreement.

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

No

c. Will a split evaluation be undertaken?

No

d. Components

The project included three components:

The project included three components:

Component 1: Investment in Integrated Water Resources Development and Management (appraisal estimate US\$33.7 million, actual US\$18.8 million):

This component consisted of three sub-components:

Sub-component 1.1: Identification, preparation and implementation of selected priority investments through a participatory planning process in the Kyoga and Upper Nile Water Management Zones (WMZs): This sub-component was to finance (a) the preparation of WMZ strategies, and capacity building for the Kyoga and Upper Nile WMZs, and the establishment of consultation mechanisms via stakeholder Catchment Management Organizations (CMOs) in order to prepare integrated catchment action plans in these WMZ as a basis for identifying and implementing investments; and (b) priority investments in related infrastructure, catchment management and development measures. Also, financing was to be used for catchment investment grants to support priority investments identified by stakeholders. These were to include irrigation and flood structures, reforestation and wetlands restoration, soil conservation and small dams.

Sub-component 1.2: Improvement of the national water resources monitoring and information system: This sub-component was to strengthen and expand the existing monitoring network in the two WMZs and develop a comprehensive water information system (WIS) to facilitate and improve water resources investment, planning and management at the catchment level and increase access to improved data and related analytical tools to strengthen the country’s resilience to increased climate variability and change. Activities were to include enhancement of networks for water quality and pollution, hydro-meteorological, surface, and groundwater monitoring. The development of a comprehensive WIS was to involve all four WMZs and the center to ensure compatibility of systems installed across the country while other activities were to be limited to Kyoga and Upper Nile WMZs. In addition, appropriate software and analytical tools were to be developed, tested and installed as a part of the WIS that will, in particular, support the planning and decision support system (DSS) development and use by the WMZ planning teams. This sub-component was also to include: upgrading and modernizing the national reference water quality laboratory;



and installing or upgrading key elements of the water information system at the national level and in each of the WMZs

Sub-component 1.3: Kalagala Offset Sustainable Management Plan: This sub-component was to support priority investments related to the implementation of the environmental offset that complements the Bujagali Hydropower project. Activities were to include: afforestation and reforestation, restoration of native vegetation, conservation of sensitive habitats, restoration and protection of river banks, promotion of environmentally sustainable livelihood strategies, and enhancement of the capacities of the national and sub-national entities responsible for implementation of the management plan.

Component 2: Infrastructure investment in urban water supply and sanitation/sewerage and catchment/source protection (four National Water and Sewerage Corporation (NWSC) towns and eight Directorate of Water Resources Management (DWRM) towns) (appraisal estimate US\$98.5 million, actual US\$99.9 million): This component consisted of two sub-components:

Sub-component 2.1: Town water supply and sanitation under NWSC: This sub-component was to construct, improve and expand priority water supply infrastructure and sanitation/sewerage services in the municipalities of Arua, Gulu, Ishaka-Bushenyi, and Mbale. It was also ensure the long-term availability and improved quality of water supply through enhanced source protection (e.g., supporting water resources management activities and other measures to protect and rehabilitate catchment areas). Coordination between DWRM and NWSC was to be strengthened to enable appropriate measures to be put in place for each of the systems financed under the project. Activities were to include: undertaking new or updating existing feasibility studies in each of the respective towns, including environmental and social due diligence (EIA/EMP and RAP, if needed); detailed engineering designs and the preparation of tender documents for the rehabilitation and construction of new water supply and sanitation infrastructure systems; source protection measures; appropriate pro-poor measures; and the rehabilitation or construction of priority investments.

Sub-component 2.2: Town water supply and sanitation implemented by DWRM: This sub-component was to construct, improve and expand existing water supply infrastructure and sanitation/sewerage services in eight towns: Butaleja-Busolwe, Budaka, Kadama-Tirinyi, Kumi-Nyero-Ngora, Rukungiri, Busia, Pallisa, Katwe-Kabatoro and Koboko. In a similar manner to sub-component 2.1 above, this support was also to ensure the long-term availability and improved quality of water supply through enhanced source protection (e.g., supporting water resources management activities and other measures to protect catchment areas), including coordination mechanisms between DWRM and DWD. As under the previous sub-component, activities were to involve updating or preparing feasibility studies; environmental and social due diligence (EIA/EMP and RAP, if needed); detailed engineering designs and tender documents; and rehabilitation or construction of priority investments.

Component 3: Strengthening Institutions for Effective Project Implementation (appraisal estimate US\$2.8 million, actual US\$2.8 million): This component was to finance five sub-components which were to enable the Ministry of Water and Environment (MWE) to provide oversight of the project through its Water Sector Liaison Division (US\$ 1.44 million). They were also support MWE directorates – Directorate of Water Resources Management (DWRM) (US\$ 0.56 million), Directorate of Water Development (DWD) (US\$ 0.56 million), and Directorate of Environmental Affairs (DEA) (US\$ 0.27 million) – and National Water and Sewerage Corporation (NWSC) (self-financed) to manage the day-to-day implementation of the project, including procurement of computers and vehicles, operations and maintenance, monitoring and evaluation, facilitation of project supervision and review missions, etc. These sub-components were also to support



capacity building activities for all key stakeholders, including Water and Sanitation Development Facilities (WSDFs), catchment management organizations and District officials in key areas such as training in procurement and implementation of the Environmental and Social Management Framework (ESMF) and Resettlement Policy Framework (RPF). Support for implementation of relevant aspects of the Water Sector Governance Action Plan (GAP) developed in 2009 and revised/updated in 2011 was also to be provided.

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

Project Cost: The project was estimated to cost US\$135 million. Actual cost was US\$121.59 million due to exchange rate fluctuations, with the original credit only being worth US\$123 million by December 2018.

According to ICR (p. 43) actual disbursement under component 1 was only 56 percent of the appraisal estimate due to procurement delays, resulting in a reduction of scope of the implementation of the WIS and the number of stations supported by the project. Also, water management funds from this component were reallocated to component 2 given water supply needs and readiness to start interventions.

Financing: The project was financed by a US\$135 million IDA credit of which US\$121.59 million was disbursed and approximately US\$1.16 million was cancelled. Due to exchange rate depreciation between the SDR and US Dollar the original credit was only worth US\$123 million by December 31, 2018 (8.9 percent less). The German Development Bank, Kreditanstalt fuer Wiederaufbau (KfW), financed US\$6.5 million for the Gulu Phase 1 works when it became clear that the Bank's financing was not sufficient to finance all works.

Borrower Contribution: The Borrower was not to make any contributions.

Dates: The project was not restructured and closed on its original closing date of December 31, 2018.

3. Relevance of Objectives

Rationale

According to the PAD (p. 1), at the time of appraisal Uganda's economy was dependent on exploitation of natural resources such as water. Also, primary commodities accounted for more than 50 percent of exports. However, between 1995 and 2010 the agricultural sector's growth was limited due to, among other reasons, declining soil fertility and the sector's almost complete reliance on rainfall. Also, wetlands were shrinking quickly and deforestation became a national issue when 25 percent of the country's forests were deforested between 1990 and 2005. In addition, demand for water supply by municipalities continued to increase and water resources were not adequately protected. Inadequate management of water resources worsened the impacts of droughts. At the time of appraisal, the government developed the five-year National Development Plan (NDP) for 2011 to 2015/6, which focused on three key areas: growth, employment, and socio-economic transformation for prosperity. The NDP stated that improved water resource management was critical to these key areas.

The project supported the Government of Uganda's five-year National Development Plan for 2015/16-2019/20, which emphasized (p. 133) the importance of: i) improving water supply and sanitation services in



urban small towns as well as expanding and prioritizing services in rural and vulnerable areas; and ii) consolidating Integrated Water Resource Management (IWRM) as a key strategy to ensure water security given climate variability and climate change.

The objective of the project was in line with the Bank's most recent Country Partnership Framework (CPF) (2016-2020), especially Objective 3: "increased commercialization of agriculture", Objective 4 "enhanced resilience of the poor and vulnerable", and Objective 6 "improved access to urban services". The project was also aligned with the Bank's earlier Country Assistance Strategy for Uganda (2011-2015) and its two recommended areas of Bank support: i) enabling sound water resources management and development and ii) investing in improved access to and delivery of priority water and environmental services.

As regards sector experience, in 2010, the Bank prepared a Uganda Water Country Assistance Strategy (UWCAS) to support Uganda's water sector (PAD, p. 3). The UWCAS identified limited development of water infrastructure and inadequate water resources management - coupled with natural challenges of hydrological variability and trans-boundary water resources - as key reasons for the inefficient utilization of water, rising unmet demand declining water quality, and high vulnerability to water shocks. The Bank has played a catalytic role in introducing critical reforms in Uganda's water sector. For example, the Small Town Water Supply and Sanitation project piloted reforms that were rolled out to 79 towns and the Poverty Reduction Strategy Credit (PRSC) series supported a system of fiscal transfers to local governments that have been mainstreamed. Also, the project was to scale up support for Integrated Water Resource Management (IWRM), which had been introduced at a smaller scale in pilot catchments through the Nile Equatorial Lakes Subsidiary Action Program (NELSAP) and the Lake Victoria Environmental Management Project (LVEMP).

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To improve integrated water resources planning, management and development:

Rationale

The project's theory of change (TOC) envisioned that inputs, including investments to improve integrated water resources planning, investment and development, would result in outputs such as a water information system being installed and operational, catchment management plans being prepared, new/upgraded monitoring stations (hydrologic, hydromet and water quality) being installed, forest boundaries being demarcated and trees being planted. These outputs would in turn result in the outcome of improving integrated water resources planning, management, and development. However, the Results Framework included a PDO indicator ("area under integrated water resource management and development in selected catchments supported by the project") to measure the achievement of this objective. It is unclear how this



PDO indicator could have captured the sum of these outputs and how this PDO indicator was a relevant measure for the achievement of the objective. Also, the ICR did not state if these outputs were at sufficient scale to create a critical mass leading to the achievement of the planned outcome.

Outputs:

- A Water Information System (WIS) was installed and is operational at the Ministry of Water and Environment (MWE) but not at the Water Management Zone (WMZ) office. Therefore, the target of WIS being installed and operational at the Directorate of Water Resources Management (DWRM) and one WMZ office was only partially achieved. The WIS is providing real time data and information on all investments in the water and sanitation sectors and has improved the process of issuing water permits. According to the ICR (p. 14) 25 water permits have been issued since the WIS was installed and 32 permits were assessed using data from the new hydrometeorological stations. However, since the ICR did not provide a comparative number of permits issued and assessed before the installation of the WIS, it is not clear to what extent this result is an improvement.
- Four participating Water Management Zones (WMZs) were developed and agreed on catchment management plans, achieving the target of four WMZs.
- 41 monitoring stations (hydrologic, hydromet and water quality) were upgraded or newly built, well short of the target of 71 monitoring stations. Data from these monitoring stations was expected to allow managers to predict changes in water and quality, allowing steps to be taken to mitigate negative impacts. However, due to a shortage of funds, this target was not achieved.
- Seven implementing agencies with Memorandum of Understanding effectively coordinated to manage the project and submitted quarterly reports, falling short of the target of 12 implementing agencies. According to the ICR (p. 38) the original target was set on the basis of incomplete information about what the project would support. However, soon after the project closed, three additional Memorandum of Understandings were signed.
- 660,000 tree seedlings were planted in degraded areas to prevent erosion and better manage flood waters.
- Four Catchment Management Plans (CMPs) and one Water Resources Strategy for Water Management Zones (WMZs) were developed and are now being implemented, achieving the target of four CMPs being prepared. The CMPs developed included Mpologoma, Victoria Nile, Albert Nile and Aswa in Kyoga WMZ and Upper Nile WMZ. Also, the Upper Nile WMZ developed a Water Resources Strategy with an action plan.

Outcomes:

- 5,590 hectares of area under integrated water resources management and development in selected catchments were supported by the project, achieving the target of 2,740 hectares.

The PDO indicator used to assess the project's objective was not well linked to the objective making the assessment of the extent of the achievement of the objective challenging. However, the project did produce some critical outputs, such as the installation of WIS, the development of WMZ and CMPs as well as a Water Resources Strategy that will have a long-term impact on the improvement of integrated water resources planning, management and development. Overall, the achievement of the objective was Substantial.



Rating
Substantial

OBJECTIVE 2

Objective

To improve access to water and sanitation services in priority urban areas:

Rationale

The project's TOC envisioned that inputs such as investments to improve access to water and sanitation services in priority urban areas would result in outputs such as new sewer connections being constructed, water treatment plants being operational, and distribution networks being installed or rehabilitated. These investments would also result in outputs such as new piped household water connections being made and waste water treatment plants as well as operational and fecal sludge treatment facilities becoming operational. These outputs would in turn lead to the outcome of increasing access to, and quality of, water and sanitation services. These inputs and outputs were relevant for achieving the objective. Also, the PDO-level indicators in the Results Framework ("people provided with access to improved water sources under the project" and "people in urban areas provided with access to improved sanitation under the project") were adequate to measure the achievement of the objective.

Outputs:

- 200 new sewer connections were constructed under the project, achieving only 15 percent of the target of 1,350 sewer connections.
- Five water supply sources in targeted catchments under source protection measures were supported by the project, well short of the target of 12 water supply sources. According to the ICR (p. 16) the target was not achieved due to: i) the agglomeration of towns in the Mbale water system that are sharing one water source and; ii) insufficient budget to finance all planned activities.
- 12 water utilities were supported by the project, achieving the target of 12 utilities.
- The number of piped household water connections benefiting from rehabilitation works increased from 14,332 connections in 2012 to 25,000 connections in 2019, surpassing the target of 22,249 connections.
- 6,345 new piped household water connections resulted from project interventions, well short of the target of 14,739 connections. According to the ICR (p. 16) the target was not met because distribution systems in some towns were completed towards the end of project implementation and connections to distribution systems take time since households have to first apply and then wait for the service provider to make the connection. However, since these systems were presumably supposed to have been completed at an earlier phase of project implementation, the delay in their completion would suggest a shortcoming in project implementation, and hence a failure to meet the PDO in this regard.
- 32 public toilets were built at schools, markets, and bus parks in nine towns.

Outcomes:

- 1,01,0000 people were provided with access to improved water sources under the project, surpassing the target of 245,792 beneficiaries. According to the ICR (p. 15) a cost-effective pro-poor water strategy was implemented which aimed to increase water coverage to the poor through the installation



of standpipes, which resulted in a lower connection fee cost for customers within 50 meters of the water main and reduced the water price without impacting the financial sustainability of the water companies.

- Only 14,410 people in urban areas were provided with access to improved sanitation under the project, well short off the target of 26,000 people.
- Overall, the project benefited 1,034,0000 beneficiaries, surpassing the target of 877,815 beneficiaries. According to the Bank team (May 7, 2020), the project’s M&E system reported the direct beneficiaries as the addition of the main activities under component 1 and component 2 and subtracted some beneficiaries to avoid double counting. However, the different beneficiary numbers are not directly consistent since in Arua and in Katwe beneficiaries included residents with improved both water and sanitation simultaneously, who were counted as one (despite benefitting from improved water and sanitation) for the purposes of the assessment.
- The cost recovery ratio for water supplies in DWD and NWSC towns supported by the project improved from 1 to 1.10, achieving the target of 1.10.

The project did not achieve critical targets for outputs such as constructing new sewer connections. Therefore, the objective of improving access to sanitation services was not achieved. Also, the project was not able to deliver outputs such as water supply sources in targeted catchments and new piped household water connections.

Even though the project surpassed the envisioned target of providing people with access to improved water sources by over four times, it is unclear to what extent this achievement can be solely attributed to the project and if the target was set at a sufficiently ambitious level since the original target was set for piped water connections, whereas the achievement was recorded for water delivery via stand-pipes, which was not part of the original design, and which do not necessarily meet the same service delivery standards.

Rating
Modest

OVERALL EFFICACY

Rationale

While the achievement of the project’s first objective “improved integrated water resources planning, management and development” was Substantial, the achievement of the second objective “improved access to water and sanitation services in priority urban areas” was only Modest. As such, the project’s overall efficacy is rated Modest.

Overall Efficacy Rating
Modest

Primary Reason
Low achievement



5. Efficiency

Economic efficiency:

The PAD (p. 16) conducted an economic analysis, which examined the benefits and costs of infrastructure investments to improve WSS services in order to assess whether it was likely that the economic benefits justify the costs. The analysis calculated an economic internal rate of return (EIRR) of WSS investments included in the project. The EIRR was approximately 15 percent and the net present value (NPV) was about US\$ 24.6 million. Further, the sensitivity analysis showed that if the main outcomes were underachieved, the project would still be viable. For example, under a hypothetical 10 percent reduction in the number of beneficiaries, the project would still achieve a 13% EIRR.

The ICR (p. 18) conducted an economic analysis for interventions under the Upper Sipi water supply investments of component 1 and component 2. The analysis calculated an overall economic rate of return (ERR) of 41 percent and an NPV of US\$210.6 million. The ICR (p. 48) stated that this analysis did not estimate a value to the improvement in the quality of potable water, which replaced unprotected surface water from current sources and wells and the averted damage of the aquifer by water protection actions implemented. Also, according to the ICR (p. 18) higher than expected benefits resulted from 24/7 water supply and a one-time increase in value of houses newly connected to water supply networks.

The ICR stated that investments under sub-component 1.1 (US\$1.61 million) had an ERR of 55 percent and a NPV of US\$17.52 million. Investments under sub-component 2.1 (US\$38.77 million) had an ERR of 6 percent and a NPV of 0.89 million and investments under sub-component 2.2 (US\$22.43 million) had an ERR of 53 percent and a NPV of US\$175.44 million. According to the ICR (p. 48) the return from sub-component 1.1 was higher since newly established water supply replaced poor water from unprotected sources and reduced the water cost due to reliance on private vendors. The return from sub-component 2.1 was lower due to the analysis not including significant benefits from the improved water quality, reduced intermittent water supply, and associated coping costs.

Operational efficiency:

The project did not experience any significant implementation delays and closed on its original closing date. However, according to the ICR (p. 10) when the detailed designs for priority investments were developed it showed that costs were higher than expected and the project's financial resources were not sufficient to cover all investments as originally planned. According to the Bank team (April 11, 2020), in addition to the exchange rate fluctuation, the increased sub-project cost estimates were also linked to the level of preparation at the time of appraisal and framework nature of the project design. Although some studies and information were available to inform the project design at appraisal, it was not until the detailed design phase that the client had all the key elements of the proposed sub-projects to develop a more accurate cost estimate. Furthermore, the original cost estimate did not include enough contingency to accommodate the uncertainty at appraisal. However, overall this did not have any negative impact on the project's efficiency.

Taking everything together, the project's overall efficiency rating was Substantial.

Efficiency Rating

Substantial



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

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	15.00	73.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	41.00	100.00 <input type="checkbox"/> Not Applicable

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

6. Outcome

Relevance of objective was High given its alignment with the Bank’s most recent Country Partnership Framework (2016-2020). The achievement of the project’s first objective was Substantial while the achievement of the project’s second objective was Modest resulting in an overall Efficacy rating of Modest. Efficiency was rated Substantial. Therefore, the project’s overall outcome rating is Moderately Satisfactory.

a. **Outcome Rating**
Moderately Satisfactory

7. Risk to Development Outcome

Technical: Continuous Bank support and financing will ensure the sustainability of the achieved project outcomes. A new Bank project, the Uganda Integrated Water Management and Development Project (US\$280 million), was approved by the Board in June 2018, and is building on this project’s outcomes. The project aims to improve access to water supply and sanitation services, integrated water resources management, and operational performance of water and sanitation service providers. The project will also finance the originally planned activities, which the Water Management and Development project was not able to finance.

Political/Governance: Integrated Water Resource Management has become a key activity of the Ministry of Water and Environment (MWE) (ICR, p.28), which will also have a positive impact on the sustainability of project outcomes. Also, the MWE is using WIS data on the status and evolution of water resources and uses to inform decision making on operational management, regulation, planning, monitoring, and risk management. However, the risk of government having weak fiduciary capacity as identified in the PAD (p. 9) did materialize and resulted in procurement related delays. This might continue to be a risk for future project implementation.

Financial: Tariffs for supplying water and sanitation services do cover operational costs, depreciation and some minor investments, indicating that the established system is financially sustainable. However, financing will be required for larger investments that might be necessary in the future.



8. Assessment of Bank Performance

a. Quality-at-Entry

The Bank team conducted wide consultation with the government and development partners working in the water sector. Furthermore, according to the PAD (p. 9), the Bank conducted a detailed analysis to assess the sector and based the project design on the Bank's Uganda Water Country Assistance Strategy (UWCAS) which identified two broad areas for engagement: i) capacity development for effective integrated water management and development; and ii) investments in improved access to and delivery of water, sanitation, and environmental services.

The Bank team identified stakeholder and government risks as High in the PAD. The high stakeholder risk was related to inadequate or ineffective stakeholder participation and capacity. The high government risk was related to fiduciary aspects of the project (procurement, financial management and safeguards) for which the Ministry had limited experience and capacity. According to the Bank team (April 11, 2020) the Bank tried to mitigate these risks by implementing a strong capacity-building program all levels (local, national and watershed), which was to include a platform for stakeholder engagement and developing a stakeholder communication strategy. In addition, tools and guidelines were developed with the support of the Bank and other donors to bring international standards and good practices to Uganda. Also, mitigation measures for financial management and procurement included: (i) capacity building activities for procurement and financial management of both MWE and NWSC designed as per specific assessments conducted by the Bank teams; and (ii) close supervision from Bank teams that included targeted assistance based on client demand and hands on training when needed.

According to the ICR (p. 21) most of the project's infrastructure activities were to be identified through a consultative process on which findings the Catchment Management Plans (CMPs) were to be developed. Once these CMPs were to be developed, preparation of feasibility studies and detailed designing of activities were to start. However, the consultative process only started after project effectiveness. Therefore, the first detailed designs and cost estimates of potential investments were only ready in 2015. Also, the cost estimates showed that the project's financing was not sufficient to include all the towns that were included in the design.

The project's Results Framework had shortcomings such as not encompassing all aspects of the PDO (see section 9a for more details).

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision

The Bank team experienced limited turnover among team members. Also, the ICR (p. 26) stated that the Bank team conducted 12 supervision missions throughout the six years of project implementation. The supervision mission team included Bank experts from relevant areas such as water resource management,



water and sanitation services, procurement, financial management, civil engineering, safeguards and social development. The Bank team put adequate emphasis on visiting individual towns that were geographically separated to strengthen implementation support.

Furthermore, according to the ICR (p. 27) Aide memoires were sufficiently candid and of high quality.

The Bank team also stated (May 7, 2020) that non-compliance issues in regards to safeguards were resolved through close supervision, monitoring of agreed action plans, specific training, and management meetings to reinforce policy requirements.

Mitigation measures taken for weak procurement capacity were not sufficient. The ICR (p. 22) stated that the procurement of the Water Information System (WIS) and of the hydromet equipment took much longer than planned. This delay resulted in reduction of geographical scope of WIS implementation and fewer stations that the project could support.

The Bank missed the chance to restructure the project to allow for the Results Framework to better reflect the project's achievement after the project scope was reduced. This had already been discussed during the Mid- Term Review, because the Bank was planning to restructure the project when considering the government's request for additional financing. When the additional financing did not happen, the restructuring was abandoned, since there was very little time left until project closing.

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The project's objectives were clearly specified. The indicators in the Results Framework were specific and measurable and included a baseline when possible. The project's theory of change and how key activities and outputs were to lead to outcomes was logical. However, it is not entirely clear how PDO indicator 1 "area under integrated water resources management and development in selected catchments supported by the project" was linked to the first objective "improve integrated water resources planning, management and development" and was a relevant measure for the achievement of this objective.

The ICR (p. 23) stated that targets for indicators measuring "area under integrated water resources management and development in selected catchments supported by the project" and "number of direct beneficiaries" were not set during project preparation since the areas to benefit were not known and the number of beneficiaries was to be based on the population in the selected areas.

According to the PAD (p. 12) all agencies involved in implementation of the project were to participate in the process of data collection, compilation, analysis and use. The Project Liaison Officer was to have the



overall responsibility for collating and presenting this information in results M&E progress reports which were to be prepared by each of the directorates involved in implementation and the NWSC on a regular basis.

b. M&E Implementation

According to the ICR (p. 23) the MWE established an active monitoring system to collect data on project activities at the district level. Quarterly progress reports were of moderately satisfactory quality and improved during the last two years of project implementation. The M&E team visited project sites on a regular basis and documented progress of activities and assessed the impact of these activities on beneficiaries. However, the Bank team did not restructure the project and adjust the targets once it became clear that the scope of the project had to be reduced. Also, it was planned that indicators, with targets “to be determined”, were to be defined during the restructuring. However since the project was not restructured, these undetermined targets were not set until the fourth year of project implementation.

c. M&E Utilization

According to the ICR (p. 24) the project’s M&E data was used for discussions during supervision missions and to identify implementation bottlenecks. For example, the Bank and the government used M&E data to understand delays in procurement processes. The Bank team confirmed (April 11, 2020) that the M&E data were used to inform decision-making with respect to assessing progress towards meeting project results indicators and project completion schedule. The Results Framework was used to inform Bank management, high level officials, and key stakeholders on overall project progress and was also used to inform the decision of a new operation (IWMDP) as well as its design.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was classified as category B and triggered the Bank’ safeguard policies OP/BP 4.01 (Environmental Assessment), OP/BP 4.04 (Natural Habitats), OP/BP 4.36 (Forests), OP/BP 4.11 (Cultural Resources), OP/BP 4.12 (Involuntary Resettlement), OP/BP 7.50 (International Waterways), OP/BP 4.09 (Pest Management) and OP/BP 4.37 (Safety of Dams).

The Bank team (April 21, 2020) clarified that during implementation, the environmental operational policies (OP/BP 4.04, OP/BP 4.36, OP/BP 4.37, OP/BP 4.09, OP/BP 4.11) were implemented under the overarching OP/BP 4.01, since they all contributed to the mitigation measures that were designed and implemented as Environmental and Social Management Plans. In summary, the implemented activities that required the application of these policies were monitored as part of the overall environmental performance and contributed to overall rating of OP 4.01 in the Bank’s operational portal.



The Bank team stated that OP/BP 4.01 and OP/BP 4.12 were monitored and reported on throughout project implementation and OP/BP 7.50 was fully and appropriately addressed during appraisal.

Also, when necessary, Resettlement Action Plans (RAPs) were mostly prepared and implemented before civil work activities started. However, in two sub-projects (Rukungiri and Bukedea – Upper Sippi) RAP payments experienced significant delays when contractors used compensation funds to start work due to budget constraints. According to the ICR (p. 25), this issue was addressed by the Bank through the conduct of close supervision and training and resulted in all RAPs being paid.

b. Fiduciary Compliance

Financial Management:

According to the ICR (p. 25) the project performed its financial management procedures satisfactorily and complied with the Bank's fiduciary requirements throughout project implementation. According to the Bank team (May 4, 2020) the project complied with the Bank's financial covenants.

The external auditor's opinions were unqualified and submitted on a timely basis. Also, the Management Recommendation Letters did not identify any internal control deficiencies or accounting issues. Furthermore, the ICR stated that the project had adequate internal controls for withdrawal applications at the Ministry of Water and Environment (MWE) and the National Water and Sewerage Corporation (NWSC). The Bank team stated (April 11, 2020) that the external auditor's opinion was unqualified on June 30, 2019.

Procurement:

According to the ICR (p. 26) the project performed its procurement procedures moderately satisfactorily. The project complied with the Bank's procurement guidelines and the Bank provided training and supported the counterpart in developing adequate procurement plans and documents. Also, the Bank conducted procurement meetings on a monthly basis and provided support to the MWE and NWSC to build capacity. However, the project experienced some procurement related delays, contributing to the decision to reduce of scope of the implementation of the WIS and the number of stations supported by the project.

c. Unintended impacts (Positive or Negative)

NA

d. Other



11. Ratings

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

12. Lessons

The ICR (p. 28-29) included several lessons learned:

- **Creating a sense of ownership is important for the design and sustainability of investments.** This project benefited from community participation in the development of the CMPs and in the selection process for investments to be made under the project. Even if these consultations slowed implementation down, it created a sense of community ownership which will be important for the sustainability of these investments.
- **Starting to build capacity within the counterparts during project preparation is critical for ensuring a successful project implementation.** This project was the first Bank project to be implemented by the MWE and NWSC. Staff needed a significant amount of training in critical areas such as preparing infrastructure designs, procurement, financial management and safeguards resulting in implementation delays.
- **Timely coordination with development partners is beneficial for achieving development outcomes.** Also, ensuring better timing of the financing and that all parallel contracts and financing close simultaneously benefits project implementation. In this project, the Bank team coordinated with the KfW when it became clear that Bank financing was not sufficient for the Gulu Phase 1 works.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provided a detailed overview of project preparation and implementation. The ICR was concise and included an adequate Economic analysis. Also, the ICR was sufficiently outcome driven and included useful lessons which could have benefited from being more specific. However, the ICR did not include any information on the risks identified during preparation and how the Bank mitigated these risks. Also, the ICR did not indicate



the assessment instrument and mitigation plan for each safeguard policy triggered and did not provide evidence that all planned mitigation activities were carried out.

Overall, the quality of ICR rating is Substantial.

a. Quality of ICR Rating
Substantial