



1. Project Data

Project ID P131323	Project Name SRB CCA & Strategic Plan Implementation
Country Western and Central Africa	Practice Area(Lead) Water

L/C/TF Number(s) IDA-53210,IDA-53220,IDA-53230,IDA-53660	Closing Date (Original) 30-Jun-2021	Total Project Cost (USD) 195,559,306.36
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Bank Approval Date 05-Dec-2013	Closing Date (Actual) 29-Jun-2023
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	IBRD/IDA (USD)	Grants (USD)
Original Commitment	212,500,000.00	0.00
Revised Commitment	212,500,000.00	0.00
Actual	181,968,895.72	0.00

Prepared by Chikako Miwa	Reviewed by Vibecke Dixon	ICR Review Coordinator Ramachandra Jammi	Group IEGSD (Unit 4)
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Project ID P131353	Project Name SRB CCA & Strategic Plan Implementation (P131353)
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L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD) 14151600.32
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Bank Approval Date	Closing Date (Actual)
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05-Dec-2013

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	0.00	16,000,000.00
Revised Commitment	0.00	16,000,000.00
Actual	0.00	14,151,600.32

2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) of the Senegal River Basin Multipurpose Water Resources Development Project 2 (MWRD/PGIRE 2) was **"to improve coordinated management of water resources for socially, environmentally and economically sustainable development in the Senegal River Basin"** (Financing Agreement between Islamic Republic of Mauritania and International Development Association (IDA) dated February 26, 2014, Schedule 1, page 6). The PDO statement was the same in the ones in the PAD (para 43) and the IDA's Financing Agreements with: Republic of Mali dated February 27, 2014 (Schedule 1, page 6), Republic of Guinea dated March 3, 2014 (Schedule 1, page 6), and Republic of Senegal dated March 28, 2014 (Schedule 1, page 6), listed in chronological order.

The overall Program Development Objective was **"to enhance regional integration among the riparian countries of the Senegal River Basin through OMVS for multi-purpose water resources development to foster improved community livelihoods"** (PAD, para 42). OMVS is an acronym for the Organization for the Development of the Senegal River (Organisation pour la Mise en Valeur du fleuve Sénégal).

The Global Environmental Objective (GEO) was **"to strengthen trans-boundary water resources management in the Senegal River Basin including climate change adaptation and implementation of priority actions of the Strategic Action Plan"** (PAD, para 44).

In 2019, both the PDO and the GEO were revised. The revised PDO statement was **"to improve coordinated management of water resources in the Senegal River Basin"** (First Amendment to Financing Agreement between Islamic Republic of Mali and IDA dated October 28, 2019, page 1). The same revision was made to the PDO statements in the IDA's First Amendment to Financing Agreements with Republic of Mauritania dated November 26, 2019 (page 1), Republic of Senegal dated December 13, 2019 (page 1), and Republic of Guinea dated December 20, 2019 (page 1), listed in chronological order. The PDO was revised to improve the alignment of the PDO and the indicators of the project-funded activities that the project could be accountable for (Restructuring Paper 2019, page 7). The revised GEO statement was **"to strengthen OMVS capacity to integrate climate change into the coordinated management of water resources in the Senegal Basin"** (Restructuring Paper 2019, page 7). The Restructuring Paper 2019 (page 13) clarified the definition of "coordinated management" in the PDO and the GEO. The definition was the concerted development of water uses in the basin between OMVS member states, which was ensured through two main



mechanisms: (i) the Senegal River Basin Master Plan, approved by the Council of Ministers of the four member states in 2011, and which defined all activities financed by the project; and (ii) the Regional

Project Steering Committee (Comité Regional du Pilotage du PGIRE), comprised of representatives from the four member states, which approved the project annual implementation plan and budget.

The overall Program Development Objective was not revised throughout the project implementation. This ICR Review assesses the PDO (Objective 1 and Objective 1 Revision 1) and the Program Development Objective (Objective 2 and Objective 2 Revision 1) before and after the restructuring in 2019:

Objective 1. To improve coordinated management of water resources for socially, environmentally and economically sustainable development in the Senegal River Basin.

Objective 1 Revision 1. To improve coordinated management of water resources in the Senegal River Basin.

Objective 2. To enhance regional integration among the riparian countries of the Senegal River Basin through the Organization for the Development of the Senegal River for multi-purpose water resources development to foster improved community livelihoods.

Objective 2 Revision 1. Same as Objective 2.

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

18-Sep-2019

c. Will a split evaluation be undertaken?

Yes

d. Components

The estimates of the following project component costs are based on the PAD (paras 57-71). The appraisal estimates for the components exclude contingencies. The actuals are based on the ICR (table 1, page 9).

Component 1: Institutional Development (Estimate: US\$19.11 million, Actual: US\$18.38 million)

This component aimed at building capacity for OMVS and Member States to implement cooperative management and support institutional strengthening and project implementation. The component financed the following sub-components: (i) Updating the Inclusive Framework and strengthening the role of Guinea within OMVS (Sub-component 1.1, GEF-funded); (ii) Modernizing and reinforcing the institutional capacities of OMVS and related agencies (Sub-component 1.2); (iii) Strengthening the capacity of OMVS and agencies in the riparian states to lead climate adaptation efforts in the region (Sub-component 1.3, GEF-funded); and (iv) Supporting strategic management of the project such as providing funding to the Project



Coordination Unit (PCU) to manage the project and conduct Monitoring and Evaluation (M&E) and safeguards activities (Sub-component 1.4).

Component 2: Multi-Purpose Water Resources Development (Estimate: US\$174.23 million, Actual: US\$145.85 million)

This component aimed to promote income-generating activities and to improve livelihoods for the basin population by providing funding to national agencies of each Member State to invest in irrigation, water resources protection, sustainable fisheries management, and aquaculture (Sub-components 2.1 and 2.2). This component also included health activities to address water-related diseases and improve people's well-being (Sub-component 2.3) and pilot approaches to improve climate resilience (Sub-component 2.4, LDCF funded).

Component 3: Infrastructure Management and Planning (Estimate: US\$29.62 million, Actual: US\$24.99 million)

This component funded sub-components to support OMVS to improve climate resilient water resources planning and development in the river basin, including: (i) Dam management and hydropower development (Sub-component 3.1); (ii) Planning for climate resilience (Sub-component 3.2); and (iii) Development of navigation along the Senegal River Basin (Sub-component 3.3). The component also covered expenses for capacity building activities and program management support (ICR, para 12). During the 2019 restructuring, the project dropped activities related to the Environmental and Social Impact Assessment of the Koukoutamba hydropower dam that were originally included in Sub-component 3.1 at appraisal (ICR, paras 14 and 69). The activities were dropped because the dam's potential flooding areas overlapped with an offset sanctuary area for chimpanzee protection invested by the International Finance Corporation (IFC) (ICR, para 69).

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

Project Cost: At appraisal, the project was estimated to be US\$240.50 million (PAD, table 3, page 32). At project closing, the actual cost was US\$204.45 million (Project/ICR team's response to IEG's inquiries received on May 10, 2024, hereafter, "Team's Response"). Data Sheet in page 3 and para 5). An undisbursed balance was US\$16.9 million (ICR, para 48). The difference between the US dollar amount at appraisal and the sum of the disbursed and undisbursed balance at closing was due to exchange rates variations between Special Drawing Rights and US dollar (Team's Response).

Financing: At appraisal, the project was planned to be financed through credits totaling US\$212.50 million from the International Development Association (IDA), a grant of US\$4 million from the Global Environmental Fund (GEF), and a grant of US\$12 million from the Least Developed Countries Fund (LDCF) (PAD Data Sheet). At project closing, the project was financed by IDA credits of US\$181.97 million, a GEF grant of US\$11.70 million, and a LDCF grant of 3.27 million (ICR, Data Sheet in page 3 and para 5).

Borrower Contribution: At appraisal, the borrowers' contribution was estimated to be US\$12 million (PAD Data Sheet). At project closing, the borrowers' contribution was a cumulative US\$13.40 million (ICR, para 5).



Dates: The project was approved on December 5, 2013, and became effective on June 24, 2014. The Mid-Term Review (MTR) was reported on January 22, 2018. The project closed on June 29, 2023, which was 24 months after the original closing date of June 30, 2021.

Restructurings: The project was restructured four times.

- **First restructuring (September 18, 2019):** The restructuring included: (i) revising the PDO by removing “for socially, environmentally and economically sustainable development” from the original PDO statement; (ii) refining the results framework including switching some indicators from PDO level to intermediate results level and vice versa, sharpening the definition of indicators to directly link the indicators to project activities and corporate indicators (e.g., land areas under sustainable land management practices) and lowering the targets to make them achievable; (iii) adjusting disbursement profile based on implementation delays; (iv) cancelling activities to conduct complementary studies for access roads and transmission lines for the Koukoutamba dam to develop it as a new hydropower; and (v) expanding the scope of the performance contract between OMVS and the implementing agencies (i.e., the Rural Development Agency for the Senegal River Valley (ADRS) in Mali, the Delta Management Holding Company (SAED) in Senegal, and the National Company for Rural Development (SONADER) in Mauritania) to enable them to carry out the pilot activities to improve climate resilience (ICR, paras 14 and 22).
- **Second and third restructurings (July 29, 2020, and December 21, 2022, respectively):** These restructurings extended the project closing date for a total of 24 months (i.e., an 18-months extension in 2020, and additional 6-months extension in 2022) to allow all the riparian countries to complete critical activities on fisheries and irrigation systems and operationalize new irrigation systems (ICR, para 23).
- **Fourth restructuring (May 26, 2023):** The restructuring reallocated funds between disbursement categories in all Credit and Grant Agreements to increase funding for the infrastructure components and to decrease funding for other disbursement categories with slow disbursement rates (ICR, para 24).

Split rating: IEG concurs with the ICR (para 28) that a split rating is deemed necessary due to the substantial reduction of the project scope during the first restructuring.

3. Relevance of Objectives

Rationale

Region and Sector Context: The Senegal River Basin covers a surface area of about 300,000 square kilometers (km²). The Senegal River originates in the mountainous and forested high plateau of northern Guinea, which represents 31,000 km² (11 percent) of the river basin area, and then flows to western Mali, which has the largest share of the river basin (155,000 km², 53 percent), southern Mauritania (75,500 km², 26 percent), and northern Senegal (27,500 km², 10 percent) (ICR, para 1). The four riparian countries of the Senegal River Basin ranked among the poorest countries in the world with approximately half of their population living below the poverty line and a Gross National Income per capita as low as US\$430 (Guinea) (PAD, para 2). Approximately 34 percent (12 million) of the estimated total riparian population (35 million) were living in the basin, mostly relying on subsistence or smallholder farming for their living (PAD, para 2).



The four riparian countries had been facing energy shortages, food insecurity, and limited river transport and navigation, while the basin's hydropower and irrigation potential were significantly underexploited. However, in the past, the construction of large dams for irrigation and hydropower contributed to negative impacts on the basin population, including water-related diseases (e.g., malaria and Neglected Tropical Diseases), reduced productivity of the fishing sector, and environmental degradation (PAD, paras 9-10). To address development challenges in the Senegal River Basin, the Organization for the Development of the Senegal River (OMVS: Organisation pour la Mise en Valeur du fleuve Sénégal) was established by Mali, Mauritania, and Senegal in 1972 and joined by Guinea in 2006 with the mandate of securing countries' economies and reducing the vulnerability of peoples' livelihoods through coordinated water resources and energy development (PAD, para 24). The World Bank's studies on OMVS highlighted inequalities in how the benefits and costs of development were shared both internationally and within the basin population (e.g., urban populations received benefits while traditional recessional farmers received negative impacts) (PAD, para 31).

Relevance to Government Strategies: At project closing, the objectives aligned with the four borrower countries' strategies and sector programs. First, the objectives aligned with Guinea's "Vision 2040 for a Prosperous and Emerging Guinea" which was approved in 2017 and informed the "National Economic and Social Development Plan 2016-2020." The National Plan of Social and Economic Development 2021-2025 is under development at the time of the ICR Review. Second, the objectives aligned with Mali's "Strategic Framework for Economic Recovery and Sustainable Development (*Cadre Stratégique pour la Relance Economique et le Développement Durable*) 2019-2023," which incorporated elements from the "Sustainable Recovery Plan (*Plan de Relance Durable*) 2013-2014." Third, in Mauritania, the project's objectives aligned with the Strategy for Accelerated Growth and Shared Prosperity (SCAPP) for 2016-2030, which was published in 2017 and approved by the Council of Ministers in January 2018 and by Parliament in April 2018. Fourth, the objectives aligned with Senegal's "Plan for an Emerging Senegal (*Plan Sénégal Emergent*) 2014-2023," which was adopted and implemented by the Government.

Relevance to the World Bank Assistance Strategies: At project closing, the project's objectives aligned with the latest Country Partnership Frameworks (CPFs) of the four borrower countries. First, the objectives aligned well with Guinea's CPF FY18-FY23, especially to Objective 6 (Increased agricultural productivity and access to markets) and Objective 7 (Better access to energy and water services through improved management of utilities) as the World Bank had notable comparative advantages in these sectors (Guinea CPF, pages 45 and 47). Second, the objectives aligned with Mali's CPF FY16-FY19, especially to Objective 2.3 (Improve infrastructure and connectivity for all Malians). Third, the objectives aligned with Mauritania's latest CPF FY18-FY23, especially to Objective 1.2 (Increase agriculture and livestock production in the face of climate change). Fourth, the objectives moderately aligned with Senegal's CPF FY20-FY24, especially to Objective 3.1 (Promote and protect resilient livelihoods, ecosystems, and infrastructures in the face of climate change), although the project was not mentioned in the narrative for the objective nor listed in the Results Framework. While the CPF stated continued support to OMVS, the World Bank's new project with OMVS under the CPF FY20-FY24 focused on improving interconnection and fostering a regional energy market to stabilize the network and reduce energy costs (Senegal CPF, page 76 and para 72), which was less relevant to the project's aim to enhance sustainable land and water management.

The World Bank's Previous Experience in the Sector: The World Bank has been supporting coordination in water resource management in the Senegal River Basin for two decades, mostly through supporting OMVS. The World Bank supported OMVS to execute the Senegal River Basin Water and Environmental Management Project in partnership with UNDP and International Union for Conservation of Nature (IUCN) between 2004 and 2008. The project was funded by the Global Environmental Facility (GEF)



to develop the Trans-boundary Diagnostic Analysis (TDA) and Strategic Action Plan (SAP), which contributed to laying the foundation for more integrated land, water, and environmental management in the basin. Concurrently, the World Bank implemented the Senegal River Basin Multi-Purpose Water Resources Development 1 (P093826) between 2006 and 2013 as the first phase of two-phased Adaptable Program Loan (APL) with an overarching Program Development Objective “to enhance regional integration among the riparian countries of the Senegal River Basin through OMVS for multi-purpose water resources development to foster improved community livelihoods” (PAD, para 42). The first phase’s PDO at closing was “to improve management and use of water resources in the Senegal River Basin” (ICRR of P093826, page 2). This project, the Senegal River Basin Multipurpose Water Resources Development Project 2 (P131323), was the second and last phase of a series of two operations that aimed for the same overarching objective, although this project used the Investment Project Financing (IPF) instrument due to the discontinuation of the APL instrument.

In sum, the project’s objectives at project closing largely aligned with the strategies of the Governments and the World Bank assistance, except for a moderate alignment to Senegal’s CPF FY20-FY24. On the other hand, the relevance of the objectives was pitched at a level that does not adequately reflect a potential solution to the negative impacts on the basin population identified in the PAD (paras 9-10). While acknowledging the difficulty of the operational environment, shortcomings here were: (i) a reduced focus on development impact through the revision of the PDO statement at the first restructuring; and (ii) a lack of clarity around a results chain connecting how “improved coordination in water resources management” (PDO) would contribute to “improved community livelihoods” (the overall Program Development Objective). Improvements in community livelihoods may be longer term targets for the overarching program; however, tracking them and identifying them is an important aspect of a successful development operation, especially when an operation is the last phase of a series of operations. Overall, the relevance of objectives is rated substantial.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To improve coordinated management of water resources for socially, environmentally and economically sustainable development in the Senegal River Basin

Rationale

Theory of Change (ToC): A formal presentation of a ToC for the project was not required at appraisal. The ICR (page 9) presented a reconstructed ToC of the project based on the revised PDO at project closing. The ToC aggregated project activities and outputs by components, resulting in unclear results chains leading



towards outcomes and articulating how the ratings have been reached. Based on the PAD and the ICR, this ICRR postulates the ToC of Objective 1 as follows.

Objective 1 contained two elements: (i) improving coordinated management of water resources; which was envisaged to contribute to the higher-level objective of (ii) enhancing socially, environmentally and economically sustainable development.

Regarding the first element of improving coordinated management of water resources, the ToC postulated that activities such as updating the framework for partition of costs and benefits for water resource management for the Inclusive Framework and developing and updating analytical tools for water resources management would result in outputs such as the Inclusive Framework (covering Guinea and containing an updated partition framework for costs and benefits) finalized and the analytical tools available for use to improve quality of analysis for water resource management. These outputs are postulated to result in the outcomes such as the role of Guinea in OMVS strengthened, the framework for the partition of costs and benefits operationalized, and the analysis and the decision-making process for water allocation improved, contributing to an intermediate outcome of the improved coordinated management of water resources, which was envisaged to contribute to the second and higher objective of the PDO as follows. Regarding the second element of enhancing socially, environmentally, and economically sustainable development, the ToC postulated that: (i) project activities such as distributing long-lasting insecticide-treated malaria nets (LLINs) and providing awareness raising activities and mass treatments for the locally occurring Neglected Tropical Diseases (NTDs) would result in outputs such as numbers of vulnerable population (e.g., children and women) with the LLINs increased and a number of school-aged children treated against the NTDs increased; (ii) project activities such as providing training programs on climate change adaptation and resilience and implementing pilot activities to demonstrate climate change adaptation practices would result in an output that beneficiaries' awareness on climate change adaptation and resilience enhanced; (iii) project activities such as strengthening water user associations, rehabilitating hydraulic axes, conducting reforestation on riverbanks, and enhancing agroforestry on slopes would result in outputs such as irrigation schemes expanded and slopes stabilized; (iv) project activities such as building facilities for farming, landing, transport, processing, and conservation of fish would result in outputs such as qualities of fish products increased and values of sales of fish increased; and (v) project activities such as developing a financing system for maintenance of Diama dam would result in outputs such as the financing system operationalized. The above outputs are postulated to result in the outcomes such as the irrigation and drainage services expanded and the behavioral changes to use the LLINs enhanced, contributing to the PDO outcome of socially, environmentally, and economically sustainable development. Those PDO outcomes are postulated to contribute to the long-term outcomes of the regional integration of the riparian countries of the Senegal River Basin enhanced and the community livelihoods improved.

Critical assumptions included: (i) the political situation is stable in the riparian countries; (ii) stakeholders recognize the benefits of the project; (iii) the countries and communities are willing to maintain and scale up the achievements of the project; (iv) the project duration is sufficient to observe outcomes on socially, environmentally, and economically sustainable development; (v) potential conflicts in uses of water for multiple purposes are adequately addressed; and (vi) the project activities are sufficient to contribute to a reduction of water-related diseases in the target area.

The ToC was mostly sound, but ambitious to cover a wide range of outcomes at various levels including the regional level (e.g., transboundary water resource management), the country level (e.g., irrigation services, agricultural intensification, sustainable fishing management, maintenance of dams), and the community level (e.g., community livelihoods, water-related diseases). The results chains of the second element had gaps



among the outcomes of the second element (e.g., the irrigation and drainage services expanded and the behavioral changes to use the LLINs enhanced) and the PDO outcome of socially, environmentally, and economically sustainable development. The gaps were not adequately addressed by identifying and implementing measures to fulfill critical assumptions.

(i) Improved coordinated management of water resources

Output (ICR, paras 28-41 and pages 32-38):

- New framework for partition of costs and benefits were tested and validated at a technical level, **meeting the original target**.
- Mapping, modeling, and other analytical tools for water resources management were developed or updated, **meeting the original target**. These analytical tools included: Transboundary Diagnostic Analysis, water resources management models for the Diama and Manantali dams, the rainfall runoff model for the catchment upstream of Manantali, and climate risk models (PAD, pages 55-56). One of the analytical tools developed was the Water Evaluation and Planning (WEAP) in Guinea (ICR, page 39).

Outcomes (ICR, paras 28-41 and pages 32-38):

- The new framework for partition of costs and benefits in the river basin was finalized, validated at country level, and presented to the CoM, **meeting the original target**. Though this indicator was designed to measure an outcome-level result, this indicator measured an intermediate outcome at best due to its lack of reference to implementation of the new framework. Indeed, as of March 15, 2024, the CoM has not approved the new framework due to a lack of consensus among the Member States affected by a political factor (ICR, para 31). As a result, the Member States continue to use the old framework for partition of costs and benefits approved by the Council of Ministers (CoM) in 1981, while the new framework is used as references to inform breakdown of costs and benefits (Team's Response). The pending of the approval of the new framework poses a question regarding to what extent development challenges described in the PAD (page 54). Such development challenges included the issue of gaining political acceptance on revising the partition of costs and benefits and the inequality in sharing costs and benefits described in section 3.
- Improved tools are used in decision-making on water allocation during the meetings of the Permanent Water Commission, **meeting the original target**. The indicator aimed to measure the "use" of these tools, which implied informed decisions on approval of projects and on operational procedures for the dams (PAD, page 55).

In addition to the outcomes defined in the Results Framework, the project task team reported on the following achieved outcome which did not have any formal target.

- The new River Basin Masterplan 2050 (SDAGE 2050: Schéma Directeur d'Aménagement et de Gestion des Eaux) was prepared and adopted in 2023 by all Member States and OMVS (ICR, para 31 and Team's Response). The SDAGE 2050 included the Climate Investment Plan outlining concrete actions for climate adaptation and mitigation to set a new reference for coordinated water resources management in the basin (ICR, para 31). The project funded the process of updating SDAGE 2010 to



SDAGE 2050 in parallel to the framework for partition of costs and benefits by building in the same analytical studies (Team's Response).

(ii) Socially, environmentally, and economically sustainable development

Outputs (ICR, paras 28-41 and pages 32-38):

- 310 participants completed the climate change adaptation/resilience training program that was delivered to staff in OMVS National Cellules and National Agencies and to beneficiaries of the pilot programs, **not meeting the original target of 2,000** (Team's Response).
- 20 operational water user associations were created and/or strengthened (ISR sequence 11, cited in Team's Response), **not meeting the original target of 50** due to cancellation of monitoring of the indicator after the first restructuring. On the other hand, the alternative indicator introduced at the first restructuring, "Operational entities in charge of the management of an irrigation system (with a statute and rules and that meet regularly)" was more challenging to achieve (Team's Response).
- 45.50 kilometers (km) of hydraulic axes (i.e., canals supplying irrigation areas) were rehabilitated, **not meeting the target of 65.5 km** (Team's Response)
- 3,256 hectares (ha) of land were stabilized through agroforestry development and reforestation, **almost meeting the target of 3,527 ha**. This indicator was defined to measure the area of land planted with vegetation to help reduce soil erosion and improve slope stability (PAD, page 55).
- The value of sales of fresh and processed fish in project sites increased by 21 percent, **exceeding the target of 20 percent**. The information on increase in sales was based on surveys which took place in 2022, coordinated by States' focal points on fisheries. Data was collected in 12 fish markets and landing sites built by the project (3 per country), but the number of survey respondents was not reported (Team's Response). According to the ICR (para 34), the increase in sales of fresh and processed fish contributed to improving beneficiaries' livelihood, both in terms of income and protein intake in project areas. Although no specific nutritional study was carried out in the project area, it was postulated that more fish sold on the local markets and the absence of a structured cold chain would result in that more people in local communities had access to and ate fish, thereby increasing their protein intake (Team's Response). Nevertheless, to what extent the fish value increase contributed to improve livelihoods of target communities in all Member States in an equitable manner was unclear due to two reasons. First, the survey methodology to measure the results of the indicator was not solid. Second, the project did not complete construction of fish markets such as those in Ourosogui in Senegal and Rosso in Mauritania (ICR, para 94).
- 97 percent and 86 percent of school-aged children were treated against schistosomiasis and geohelminth, respectively. Only schistosomiasis and soil-transmitted helminths occur in all regions across the entire river basin (PAD, page 56). The proportion of target beneficiaries having received mass treatment for locally occurring Neglected Tropical Diseases (NTDs), increasing from the baseline of 75 percent, and **exceeding the target of 80 percent**.
- No financing system for the long-term maintenance of Diama dam was put into place, **not meeting the target** (Team's Response). The maintenance of Diama dam was funded by this project, while the broader question of creating a revenue stream for OMVS is being studied (Team's Response).
- 4.5 million of long-lasting insecticide-treated malaria nets (LLINs) were distributed, **meeting the original target of 4.5 million**. Although this indicator was designed as a PDO indicator, it measures an output.
 - 86.6 percent of children from 6 months to 59 months slept under LLINs the night before the survey, increasing from the baseline of 74 percent and **exceeding the original target of 80**



percent. The data sources of this and the following indicators were the malaria indicator surveys (PAD, page 51).

- 92 percent of women from 15 years old to 49 years old slept under LLINs the night before the survey, increasing from the baseline of 65.2 percent and **exceeding the original target of 80 percent.**

Outcomes (ICR, paras 28-41 and pages 32-38):

- Direct Project Beneficiaries were 4.5 million people, **meeting the original target of 4.5 million.**
 - 51 percent of the direct project beneficiaries were women, **meeting the original target of 51 percent.**
 - 9,000 direct project beneficiaries were benefiting from the pilot activities to build climate resilience, **exceeding the original target of 5,000.** Pilot activities for climate change adaptation demonstrated the benefits of, inter alia, climate-resilient agricultural practices, efficient wood burning stoves, small-scale biogas digesters to transform agricultural by-products and farm waste into biogas and fertilizer, and methods to transform the invasive Typha reed into biochar and construction materials (ICR, para 33). The hydrometeorological monitoring pilot project, implemented in Senegal, was accredited by the African Water Forum, and attracted benchmarking missions by other countries (ICR, para 33).
- 14,042 ha of area was provided with irrigation and drainage services, **exceeding the original target of 13,680 ha.** On the other hand, the relative contribution of each country against indicative country targets varied. Senegal and Mauritania largely exceeded their planned contributions towards achieving the target of this indicator, which offset the **modest delivery in Mali** (1,549 ha, 52 percent of its planned contribution) and the **negligible delivery in Guinea** (105 ha, 5 percent of its planned contribution) (ICR, para 39). These low deliveries of irrigation and drainage services in Mali and Guinea hindered the irrigation investments to generate the expected outcomes (ICR, para 39). The underperformances of service delivery in Mali and Guinea were caused by the project's implementation delays in: (i) construction of irrigation infrastructure, (ii) beneficiary identification in some irrigation perimeters, and (iii) provision of training and support to beneficiaries, due to fiduciary issues, the coups in Mali and Guinea, and the COVID-19 pandemic (ICR, paras 48, 93, and 94).

Referring to the ToC, the outcome of the first element (coordinated management of water resources improved) was substantially achieved. While limited evidence was provided regarding actual changes in implementing the framework for partition of costs and benefits and making decisions for water allocation, the Member States and OMVS approved SDAGE 2050 to enhance climate adaptation and mitigation in the basin. On the other hand, the higher-level outcome described in the second element (socially, environmentally, and economically sustainable development) was modestly achieved, due to lack of evidence of achievement of these higher-level objectives. While the provision of irrigation and drainage services were substantially expanded in Senegal and Mauritania, the service deliveries in Mali and Guinea were limited. Moreover, limited evidence was provided regarding: (i) changes in occurrences of water-related diseases in the target area; and (ii) changes in crop yields and livelihoods of target communities. Overall, the achievement of Objective 1 is rated a strong modest.

Rating
Modest



OBJECTIVE 1 REVISION 1

Revised Objective

To improve coordinated management of water resources in the Senegal River Basin

Revised Rationale

Theory of Change (ToC): A formal presentation of a ToC for the project was not required at appraisal. The ICR (page 9) presented a reconstructed ToC of the project based on the revised PDO at project closing. Based on the PAD and the ICR, this ICRR postulates the ToC of Objective 1 Revision 1 as follows.

Activities such as updating the framework for partition of costs and benefits for water resource management for the Inclusive Framework and developing and updating analytical tools for water resources management would result in outputs such as the Inclusive Framework (covering Guinea and containing an updated partition framework for costs and benefits) finalized and the analytical tools available for use to improve quality of analysis for water resource management. These outputs are to result in the outcomes such as the role of Guinea in OMVS strengthened, the framework for the partition of costs and benefits operationalized, and the analysis and the decision-making process for water allocation improved. The ToC also postulated that: (i) project activities such as distributing long-lasting insecticide-treated malaria nets (LLINs) and providing awareness raising activities and mass treatments for the locally occurring Neglected Tropical Diseases (NTDs) would result in outputs such as LLINs distributed to vulnerable population (e.g., children and women) and school-aged children treated against the NTDs; (ii) project activities such as implementing pilot activities to demonstrate climate change adaptation practices would result in an output of enhanced beneficiaries' awareness on climate change adaptation and resilience; (iii) project activities such as strengthening water user associations, conducting reforestation on riverbanks, and enhancing agroforestry on slopes would result in outputs such as irrigation schemes expanded and slopes stabilized; and (iv) project activities such as building facilities for farming, landing, transport, processing, and conservation of fish would result in outputs such as qualities of fish products increased and values of sales of fish increased. The above outputs are postulated to result in the outcomes such as the irrigation and drainage services expanded and the behavioral changes to use the LLINs enhanced. The above outcomes are postulated to contribute to the PDO outcome of improved coordinated management of water resources. The PDO outcome is postulated to contribute to the long-term outcomes of the regional integration of the riparian countries of the Senegal River Basin enhanced and the community livelihoods improved.

Critical assumptions included: (i) the political situation is stable in the riparian countries; (ii) stakeholders recognize the benefits of the project; (iii) the countries and communities are willing to maintain and scale up the achievements of the project; and (iv) the outcomes related to social, environmental, and economical improvements among beneficiaries in the target area prevent potential conflicts on multiple uses of water resources and strengthen the coordinated management of water resources.

The ToC was sound. A shortcoming was a lack of clarity around a results chain connecting how "improved coordination in water resources management" (PDO) would contribute to "improved community livelihoods" (Program Development Objective), as described in section 3.

The following paragraphs summarize achievements of outputs and outcomes in line with the revised objective and indicators. The achievements of the unrevised indicators are the same as those described under Objective 1.



Outputs (ICR, paras 28-41 and pages 32-38):

100 percent of the participants of the climate change adaptation/resilience training program that was delivered to staff in OMVS National Cellules and National Agencies improved knowledge of climate change, **exceeding the revised target of 75 percent**. This indicator was revised at the first restructuring in the following aspects. First, the unit of measurement and the target was changed from

- the number of training programs delivered (original target: 2,000) to the percentage of the training participants with improved knowledge of climate change (revised target: 75 percent of the participants scored at least 75 percent at the test). Second, the training programs excluded the beneficiaries of the pilot programs for climate resilience from target participants.
- 55 operational entities were in charge of the management of an irrigation system (with a statute and rules and that meet regularly), **exceeding the revised target of 25**.
- The rehabilitation of the Diama dam was completed, **meeting the target set at the first restructuring**. This indicator was added during implementation to measure the progress of the maintenance work of the dam.

Outcomes (ICR, paras 28-41 and pages 32-38):

- The value of sales of fresh and processed fish in project sites increased by 21 percent, **exceeding the original target of 20 percent, the target itself was not revised**. However, this indicator was designed as an Intermediate Results indicator at appraisal but reclassified as a PDO indicator at the first restructuring. To what extent the fish value increase contributed to improve livelihoods of target communities in all Member States was unclear due to two reasons. First, no information was provided regarding whether the increase in the fish value was adjusted for inflations and increases in price levels of the Member States. Second, the project did not finish construction of fish markets in Ourosogui in Senegal and Rosso in Mauritania (ICR, para 94).
- The OMVS Regional Steering Committee (Comité du Pilotage) composed of representative from all the Member States became operational, **meeting the target added at the first restructuring**. This indicator was added to clarify the definition of "coordinated management" in the PDO and GEO.

Referring to the ToC, the project substantially achieved the outcome regarding improving coordinated management of water resources. While limited evidence was provided regarding actual changes in implementing the framework for partition of costs and benefits and making decisions for water allocation, the Member States and OMVS approved SDAGE 2050 to enhance climate adaptation and mitigation in the basin. The project contributed to developing SDAGE 2050 through funding the process and providing analytical tools for water resource management and improving knowledge of climate change among the staff in OMVS National Cellules and National Agencies. Thus, the achievement of Objective 1 Revision 1 is rated substantial.

Revised Rating
Substantial

OBJECTIVE 2



Objective

To enhance regional integration among the riparian countries of the Senegal River Basin through the Organization for the Development of the Senegal River (OMVS) for multi-purpose water resources development to foster improved community livelihoods [The overarching GEO objective of the Senegal River Basin Multi-Purpose Water Resources Development Program]

Rationale

The likelihood that the overarching objective would be achieved in the future is medium. There has been progress towards enhancing the regional integration among the riparian countries of the Senegal River Basin for multi-purpose water resources development. The coordinated management of water resources through OMVS was improved by developing the new River Basin Masterplan 2050 (SDAGE 2050: Schéma Directeur d'Aménagement et de Gestion des Eaux) and the associated Climate Investment Plan and implementing the plans by OMVS Regional Steering Committee composed of representative from all the Member States. On the other hand, there has been limited evidence regarding improvements in community livelihoods. While the provision of irrigation and drainage services substantially expanded in Senegal and Mauritania, the service deliveries in Mali and Guinea were limited. In addition, the provision of training and support for beneficiaries to use irrigation to increase yields had suboptimal results.

The overarching development objective is not rated, based on the harmonized guideline between OPCS and IEG.

Rating

Not Rated/Not Applicable

OBJECTIVE 2 REVISION 1

Revised Objective

Same as Objective 2

Revised Rationale

Same as Objective 2

Revised Rating

Not Rated/Not Applicable

OVERALL EFFICACY

Rationale

Objective 1 was modestly achieved due to insufficient evidence on outcomes. Objective 2 was not rated. Thus, the overall efficacy of the Overall Efficacy is rated modest.



Overall Efficacy Rating
Modest

Primary Reason
Insufficient evidence

OVERALL EFFICACY REVISION 1

Overall Efficacy Revision 1 Rationale

Objective 1 Revision 1 was substantially achieved. Objective 2 Revision 1 was not rated. Thus, the Overall Efficacy Revision 1 is rated substantial.

Overall Efficacy Revision 1 Rating

Substantial

5. Efficiency

Economic and Financial Analysis. At appraisal, the Economic and Financial Analysis (EFA) conducted in partnership with an investments team in the Food and Agriculture Organization showed an Economic Internal Rate of Return (EIRR) of 37.7 percent, a Financial Internal Rate of Return (FIRR) of 44.9 percent, and a Net Present Value (NPV) of US\$343.6 million over a period of 30 years at a discount rate of 12 percent (PAD, pages 165-168). The EFA at appraisal showed inflated rates and values because the EFA used very optimistic assumptions (i.e., 167 percent valorization of the irrigated areas) and the EFA model included some incorrect formulas (ICR, para 43).

At project closing, the EFA showed an EIRR of 34.7 percent, and FIRR of 26.8 percent, and a NPV of US\$275.3 million over a period of 30 years at a discount rate of 12 percent (ICR, paras 45-46). The EFA at project closing performed a sensitivity analysis by using reduced project lifespan to 25, 20, and 15 years, with a significant cost item of 10 percent for maintenance, which demonstrated the robustness of the results (ICR, para 45).

While the EIRR at project closing was at the same level as the EIRR at appraisal with a slight decrease, the disaggregated economic analysis (ICR, table 4, page 19) showed different trends in changes of the EIRRs among the Member States. In Senegal, the EIRR slightly increased from 38.4 percent at appraisal to 39.9 percent at project closing (ICR, table 4, page 19). On the other hand, in Guinea, Mali, and Mauritania, the EIRRs decreased from appraisal to project closing, especially in Guinea where the EIRR notably decreased from 29.5 percent at appraisal to 16.0 percent at project closing (ICR, table 4, page 19).

Aspects of Design and Implementation that Affected Efficiency. The project duration was extended for a total of 24 months to account for delays induced by the COVID-19 pandemic and to give an extra dry season to advance irrigation activities (ICR, para 50). Poor selection and contract management of contractors and supervising engineers by executing agencies and insufficient supervision by national cellules and OMVS led to implementation delays, especially in achieving the hydro-agricultural works (ICR, para 48). Consequently, the Project closed with a few remaining contracts and unfinished work and an undisbursed balance of US\$16.9 million (ICR, para 48). In Guinea, the award of four out of five irrigation development contracts to a single



company proven incapable of delivering the expected results, and the overpayment of said company is an example of administrative inefficiency under the project (ICR, para 50).

In sum, the project’s overall EIRR at project closing was approximately at the same range as the overall EIRR at appraisal. Some overambitious assumptions of the EFA at appraisal were revised at the EFA at project closing. While the EIRR in Senegal increased from appraisal to project closing, the EIRRs in Guinea, Mali, and Mauritania decreased during the same period. Some instances of administrative inefficiencies negatively affected completion of construction of infrastructure such as irrigation facilities in Guinea. Thus, overall, the efficiency is rated 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	✓	37.70	100.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	34.70	100.00 <input type="checkbox"/> Not Applicable

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

6. Outcome

Table 1. Overall Outcome Ratings.

Rating Dimension	Objective before Restructuring	Objective after Restructuring
Relevance of Objectives	Substantial	
Efficacy		
Objective 1	Modest	N/A
Objective 1 Revision 1	N/A	Substantial
Objective 2	Not Rated	N/A
Objective 2 Revision 1	N/A	Not Rated
Overall Efficacy	Modest	Substantial
Efficiency	Substantial	
Outcome Rating	Moderately Unsatisfactory	Satisfactory
Outcome Rating Value	3	5
Amount Disbursed (US\$ million)	111.55	85.39



Disbursement (%)	57%	43%
Weight Value	1.70	2.17
Total weights	4	
	(1.70 + 2.17 = 3.87, rounding up to 4)	
Overall Outcome Rating	Moderately Satisfactory	

a. Outcome Rating
Moderately Satisfactory

7. Risk to Development Outcome

Institutional support risk. There is a potential risk that monitoring of the project's development outcome at OMVS level might be discontinued after the dismissal of the Project Implementation Unit at project closing (ICR, para 91). To mitigate the risk, the World Bank prepared the Development, Resilience & Valuation of Water Resources for West Africa (DREVE) regional operation.

Government ownership risk. There is a potential risk that the framework for partition of costs and benefits updated by the project might not be used (ICR, para 92). The lack of buy-in from a Minister in one Member State delayed the framework to be adopted and implemented (ICR, para 31). To mitigate the risk, the project developed other tools to inform priority-setting and decision-making at basin level, such as various analytical tools for water resource management and the new Masterplan for the Senegal River Basin (SDAGE 2050) and its Climate Investment Plan (PIC) (ICR, para 92).

Financial risk. There is a potential risk that the project's unfinished work including construction of infrastructure (i.e., irrigation facilities in Mali and Guinea, and fish markets in Ourosogui in Senegal and Rosso in Mauritania) and beneficiary identification might not be financed by the Member States after project closure (ICR, para 94). To mitigate the risk, the Government of Mali formally requested that the project's unfinished irrigation work of 958 hectares be transferred to the Mali Dryland Development project (Projet de Développement de la Productivité et de Diversification Agricole dans les Zones arides et semi arides du Mali). The ICR stated no mitigation measures for other unfinished work and indicated that Member States might consider including the studies and completion of unfinished activities to new World Bank operations under preparation in case no financing was mobilized by the Member States.

8. Assessment of Bank Performance

a. Quality-at-Entry

The strategic relevance and approach were adequate, as described in section 3. The project was designed based on lessons from the first and preceding phase of the Senegal River Basin Multipurpose Water Resources Development Program with an aim to achieve a phased approach over 17 years to ensure continuity, scaling-up, and consolidation of outcomes (ICR, para 83). The project design reproduced what worked in the first phase (e.g., the technical focus of the project, its legal structure, implementation and monitoring arrangements, and project components) and integrated improvements



(e.g., putting a stronger focus on building capacity at all levels and for all components for greater and lasting outcomes, scaling up activities such as fisheries and irrigation to expand outcomes related to communities' livelihood, and entrusting the Organization for the Development of the Senegal River (OMVS) to implement GEF-funded pilots on climate resilience and to bring local activities into regionally integrated and coordinated approaches) (ICR, para 83). The poverty, gender, and environmental aspects were considered adequately. The identification of key risks and mitigation measures in the PAD (pages 39-40 and 121-126) was largely adequate.

On the other hand, the project design was insufficiently coordinated with the other operations and investments supported by the World Bank Group to maximize development outcomes. For instance, the potential flooding area of the Koukoutamba hydropower dam in Guinea overlapped with an offset sanctuary area to protect chimpanzees supported by an investment by the International Finance Corporation (ICR, para 69). It resulted in the World Bank to withdraw from the development of the Koukoutamba hydropower dam and lower the project's support to green energy generation in the river basin (ICR, para 69). Moreover, the fiduciary aspects were not adequately designed, as described in section 10.b.

Overall, the quality at entry is rated satisfactory.

Quality-at-Entry Rating Satisfactory

b. Quality of supervision

The World Bank's supervision processes were adequate in general. The Bank team conducted regular supervision missions, adapting to COVID-19 by using virtual tools and when travel restrictions eased, undertook comprehensive missions to provide detailed guidance for improvements (ICR, para 85). They utilized virtual meetings, Google Earth, photos, and videos to monitor the Project during the pandemic and fragile and conflict-affected situations (FCS) that limited travel (ICR, para 85). The World Bank team adapted the project implementation arrangements adequately during supervision. Initially, the Bank team's communication about the project was mainly with the regional integration unit, leading to information asymmetry with Member States' Country Management Units (CMUs) and hindering the Bank's effectiveness. Subsequently, the task team improved communication with all CMUs, which was key to resolving implementation issues, particularly for irrigation investments in Mali (ICR, para 86).

On the other hand, the World Bank's supervision of fiduciary aspects was not adequate, as described in detail in section 10.b. Furthermore, the focus on development impact was reduced by the revision of the PDO statement at the first restructuring, as described in section 3.

Overall, the quality of supervision is rated moderately satisfactory.

The quality at entry is rated satisfactory, while the quality of supervision is rated moderately satisfactory. The overall Bank performance is rated moderately satisfactory, based on the harmonized guideline of OPCS and IEG.



Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The objectives were mostly clear, except for the definition of “coordinated management” in the PDO and the GEO. The decentralized data collection methods and proposed monitoring techniques (e.g., sentinel surveillance sites, Lot Quality Assurance Sampling (LQAS) surveys, and population-based surveys) were appropriate. The Theory of Change of the project at appraisal was largely sound and reflected to the results framework, though some links among outputs and outcomes were not clarified and the indicators in the original Results Framework did not encompass the outcomes related to “socially, environmentally, and economically sustainable development” in the original PDO statement.

b. M&E Implementation

The agencies responsible for M&E ensured attention to effective M&E implementation. The national implementing agencies (i.e., Senegal’s Delta Management Holding Company (SAED: Société d’Aménagement des Terres du Delta), Mauritania’s National Company for Rural Development (SONADER: Société Nationale de Développement Rural), Guinea’s National Directorate of Rural Engineering (DNGR: Direction Nationale du Génie Rural) and Mali’s National Department for Rural Development in the Senegal Valley (ADRS: L’Agence de développement rural de la vallée du fleuve Sénégal)) collected data at country level and shared them in the form of progress monitoring reports with the PIU, on a quarterly basis. The PIU had a dedicated expert in charge of M&E, who monitored the reporting systems, followed up to ensure progress report submission by the implementing agencies, and provided feedback and support as required. In addition to the data collection methodology planned at appraisal, the project used the Geo-Enabling initiative for Monitoring & Supervision (GEMS) monitoring system, which enabled the PIU to map out all the project sites (ICR, para 75). The weaknesses in M&E design were mostly corrected during implementation. The restructuring in 2019 revised the PDO statement to remove “socially, environmentally, and economically sustainable development” and clarified the definition of “coordinated management” in the objectives, which addressed the disconnect between the original PDO and the indicators in the Results Framework (ICR, para 77). Moreover, the restructuring added a new PDO indicator regarding the operationalization of OMVS regional steering committee, upgraded the level of the indicator on the increased values of sales of fish, and downgraded the level of the indicator regarding the distribution of the long-lasting insecticide treated malaria nets (ICR, para 18). The indicators in the Results Framework were mostly measured and reported, except for some IR indicators in the original Results Framework that were dropped at the 2019 restructuring. Nevertheless, the project was not able to collect critical data regarding changes in incomes and quality of life of the beneficiary populations as household surveys were not carried out (ICR, para 74).



c. M&E Utilization

The M&E findings were communicated to the various stakeholders and informed formal shifts in implementation direction including restructurings. On the other hand, the M&E data provided very limited evidence for the long-term outcome to improve community livelihood.

In sum, the weaknesses in the M&E design were mostly corrected during the M&E implementation, enabling the substantial utilization of the M&E findings. Overall, the M&E quality is rated substantial.

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

Environmental and Social Safeguards: The project was classified as category A in the Environmental Assessment classification of the World Bank, primarily due to the preparation of studies for large hydropower dams. At appraisal, the following safeguard policies were triggered: Environmental Assessment (OP/BP/GP 4.01), Natural Habitats (OP/BP 4.04), Pest Management (OP 4.09), Cultural Property (OP 4.11), Involuntary Resettlement (OP/BP 4.12), Forests (OP/BP 4.36), Safety of Dams (OP/BP 4.37), and Projects in International Waterways (OP/BP/GP 7.50) (PAD Datasheet). At project closing, the following two safeguard policies were also triggered in addition to those at appraisal: Indigenous Peoples (OP 4.10) and Projects in Disputed Areas (OP/BP/GP 7.60) (ICR, para 78). Environmental and social screenings of activities were conducted and environmental and social studies were developed, based on the Environmental and Social Management Framework, Resettlement Policy Framework, and the Pest and Pesticide Management Plan (ICR, para 78). The Project Implementation Unit (PIU) monitored closely that environmental protection measures were implemented and ensured that contractors abide by the requirements (ICR, para 78). On the other hand, no explanation was provided in the ICR regarding reasons for the addition of the triggered safeguard policies. Additionally, no evidence was provided by the ICR regarding that to what degree (i) the project was in compliance with each of these policies and (ii) the project completed the planned mitigation activities.

b. Fiduciary Compliance

Procurement: The PIU managed procurement for the GEF-funded activities, while the national implementing agencies (i.e., Senegal's Delta Management Holding Company (SAED: Société d'Aménagement des Terres du Delta), Mauritania's National Company for Rural Development (SONADER: Société Nationale de Développement Rural), Guinea's National Directorate of Rural Engineering (DNGR: Direction Nationale du Génie Rural) and Mali's National Department for Rural Development in the Senegal Valley (ADRS: L'Agence de développement rural de la vallée du fleuve Sénégal)) handled procurement for



credit-funded activities with oversight from PIU experts for irrigation and fisheries activities. Procurement plans were established annually for OMVS and each national implementing agency and managed by the PIU. The cascading capacity building on procurement from the procurement specialist at the OMVS to the PIU and then to the national implementing agencies successfully increased the level of confidence in procurement management, resulting in the increased thresholds for review for the second phase of the project (ICR, para 79).

On the other hand, some procurement contracts were not managed adequately in two key aspects. First, poor contract management practices led to several cases in Mali and Guinea to be investigated by the World Bank's Integrity Vice Presidency (INT) (ICR, para 81). In Guinea, awarding four of the five major irrigation investments to the same company resulted in a delivery of very marginal results in exchange of overpaid advances, negatively affecting the implementation of irrigation activities (ICR, para 81). The World Bank did not conduct further due diligence in Guinea, which was a missed opportunity to ensure that the company could meet the selection criteria for the combined value of the contracts (ICR, para 88). This additional scrutiny might have enabled the project to identify the company's other large commitments with the World Bank and other international financial institutions, prompting questions about its capacity to deliver on all investments within the set timeframe (ICR, para 88). The government of Guinea is in the process to reimburse the amount between the advance payments and the actual work delivered by project closure to the World Bank (ICR, para 81). The INT case in Mali is under a confidential investigation (Team's Response).

Second, the World Bank did not ensure that the transfers of activities from other projects to this project were formalized. The World Bank did not formalize the transfer of dam safety inspection of the Manantali dam and the Diama dam from the Senegal Sustainable and Inclusive Agribusiness Development Project (PDIDAS, P124018) and the Community-based Sustainable Land Management Project (P130271) to this project (ICR, para 89). In a letter dated November 2021, the World Bank asked OMVS to accept the transfer of responsibility for completing these two dam inspections under the project. Although there was no record of a formal response to this letter, OMVS proceeded with procuring the dam safety inspection of the Diama dam under this project (ICR, para 89). The informal transfer of ongoing safety inspection of the Manantali dam from the PDIDAS to the project limited the PIU's legitimate power to monitor the progress of the inspection by the Manantali Dam Holding Company (SOGEM: Société de Gestion de Eaux de Manantali), resulting in the delay of the inspection progress for over 18 months (ICR, para 89). At closing, the Diama dam safety inspection was completed; However, the Manantali Dam inspection was not yet completed due to the ongoing bathymetric assessment that was expected to be completed by March 31, 2024 (ICR, para 89). The final report of the Manantali dam safety inspection was expected to be submitted by OMVS to the World Bank before the end of April 2024 (ICR, para 89).

Financial Management: The financial management system functioned well and complied with the World Bank's requirements. On the other hand, some cases of late payments and overpayments were reported (ICR, para 82). In particular, the poor financial management at DNGR led to a large overpayment of a company, for which the government of Guinea initiated a reimbursement procedure (ICR, para 82). All audit reports were submitted in a timely manner without any qualified opinion (Team's Response).

c. Unintended impacts (Positive or Negative)

Not reported in the ICR.



d. Other

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Moderately Satisfactory	The Original Efficacy is rated modest due to insufficient outcome-level evidence on achievement of Objective 1.
Bank Performance	Satisfactory	Moderately Satisfactory	The Quality of Supervision is rated moderately satisfactory due to the shortcomings in supervision of fiduciary and administrative aspects.
Quality of M&E	Substantial	Substantial	
Quality of ICR	---	Substantial	

12. Lessons

The ICR (paras 95-101) provided seven lessons. Four of those lessons as well as two relevant recommendations from the ICR are presented here with rephrasing as these may be useful for the other projects on coordinated management of water resources at a regional level.

Solid institutional arrangement to strengthen communication between regional organizations for transboundary water resources management and their member states may help successful project implementations.

Based on lessons from the first phase of the series of the Senegal River Basin Multipurpose Water Resources Development Program, the project established National Cellules, in each Member State to monitor and coordinate project activities (ICR, para 96). The Project Implementation Unit (PIU) in the Organization for the Development of the Senegal River (OMVS) had specific focal points for each Member State and component and conducted regular meetings with “national cells” and Implementing Agencies to track project progress (ICR, para 96). Nevertheless, the lesson needs to be interpreted with an awareness regarding a potential tradeoff between advantages of having a PIU where high-performing consultants could accelerate implementation and disadvantages of missing opportunities to further strengthen OMVS as an institution (Team’s Response).

Effective communication between task teams and Country Management Units (CMUs) may contribute to the success of regional projects.

CMUs do not have regional projects in their portfolio, although the CMUs oversee the World Bank’s dialogues with the countries. It is vital for task teams to engage CMUs to leverage the Bank-country dialogue and address country-specific challenges. An example of this successful collaboration was seen in Mali, where the task team and CMU worked together to overcome implementation hurdles in irrigation investments, boosting the



project's delivery and increasing the area equipped from 200 hectares to 1,549 hectares by the project's end (ICR, para 97).

Inadequate monitoring of quality of procurement and contract management may cause critical challenges for procurement and contract management. Under the project, some implementing agencies struggled with awarding contracts and displayed poor management, particularly in Mali and Guinea; however, the PIU of OMVS faced difficulties monitoring procurement and contract management due to its limited capacity to collect relevant information (ICR, paras 71 and 98). To address the lesson, the ICR (para 98) recommended future projects to: (i) implement oversight mechanisms to ensure appropriate contract durations; (ii) verify the eligibility of companies for multiple contracts; (iii) approve advance payment amounts at the PIU level, which would be enabled by the legal transfer of project implementation responsibility from the Member States to OMVS; and (iv) the PIU and the World Bank to review procurement documents to ensure timelines align with the actual scope of works, considering seasonal constraints on ground activities.

Limited flexibilities in the fund reallocations and the use of remote supervision techniques may disrupt the implementation timeline and prevent on-site visits by the World Bank in FCS areas. The project experienced the impacts of coups and of limitations derived from FCS in two Member States, which impacted implementation timeline in these countries and limited the World Bank's capacity to visit the sites (ICR, para 100). To address the lesson, the ICR (para 100) recommended to introduce greater flexibility to reallocate funds from the affected Member States to those that were performing well and to use remote supervision techniques, such as progress monitoring apps or remote sensing, to facilitate earlier course corrections.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provides a detailed overview of the project. The narrative supports the ratings and available evidence. It is candid and aligned to the project development objective in general. The report follows most of the guidelines, tries to triangulate data to reach conclusions, and is focused on results. The quality of evidence and analysis is aligned to the messages outlined in the ICR. The ICR's lessons are clear, useful, and based on evidence. The Project/ICR team provided a comprehensive set of supplemental information to respond to IEG's inquiries. On the other hand, the project's theory of change aggregated project activities and outputs by components, resulting in unclear results chains leading towards outcomes and articulating how the ratings have been reached. Additionally, the ICR did not explain why the two safeguard policies were added during implementation nor provide evidence on the compliance of each triggered safeguard policies, as described in section 10.a. Thus, overall, the quality of the ICR is rated substantial.

a. Quality of ICR Rating



Substantial